

# Gas and Electricity Connections

Industry Review Results

**2005-2006**

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## **Introduction**

We undertake an annual review of the gas and electricity connections sectors to assess the nature and level of competition. This fact sheet outlines the findings of the 2005/06 connections industry review (CIR) and draws comparisons with the findings of our 2004/05 and 2003/04 reviews.

## **Gathering of information for 2005/06 CIR**

Information was gathered from licensed gas and electricity distributors in the following ways:

- All gas transporters (GTs) were required under either standard condition 24 (for independent gas transporters (IGTs)) or standard special condition A26 (for gas distribution networks (GDNs)) of their gas transporter licence granted or treated as granted by the Gas and Electricity Markets Authority (the "Authority") under section 7 of the Gas Act 1986 to complete a formal information request concerning the number and value of connections undertaken or adopted by them during the calendar year 2005.
- All electricity distribution network operators (DNOs) and independent distribution network operators (IDNOs) were required under standard condition 24 of their distribution licence granted or treated as granted by the Authority under section 6(1)(c) of the Electricity Act 1989 to complete a formal information request concerning the number and value of connections undertaken or adopted by them during the financial year 2005/06.
- All DNOs and IDNOs were also required to provide information on their performance against voluntary connections standards of service which they have adopted in relation to services provided in the competitive connections market.

## **Background - Gas**

There are eight GDNs in Great Britain, all of which were previously owned by National Grid Gas plc (NGG) (formerly known as Transco plc). In June 2005 NGG sold four distribution networks to three different companies. The GDN responses for the 2005/06 CIR were received from the four licensed distribution companies.

There are currently five active IGTs in Great Britain. IGTs operate on a national basis and own and operate their own gas networks (mainly new housing developments).

Both GDNs and IGTs can adopt connections undertaken by independent connection providers (ICPs).

## **Background - Electricity**

There are fourteen electricity DNOs in Great Britain. DNOs complete most of their connections within their own distribution services areas (DSA) but can compete to provide connections outside of their DSA.

Following changes to the Electricity Act 1989 by the Utilities Act 2000, any person can now apply for a licence to operate existing or newly built distribution networks. These new licensees do not have DSAs and are known as IDNOs. Ofgem has granted four IDNO licences to date. The information contained in this CIR corresponds to the three IDNOs which were licensed during the 2005/06 reporting period.

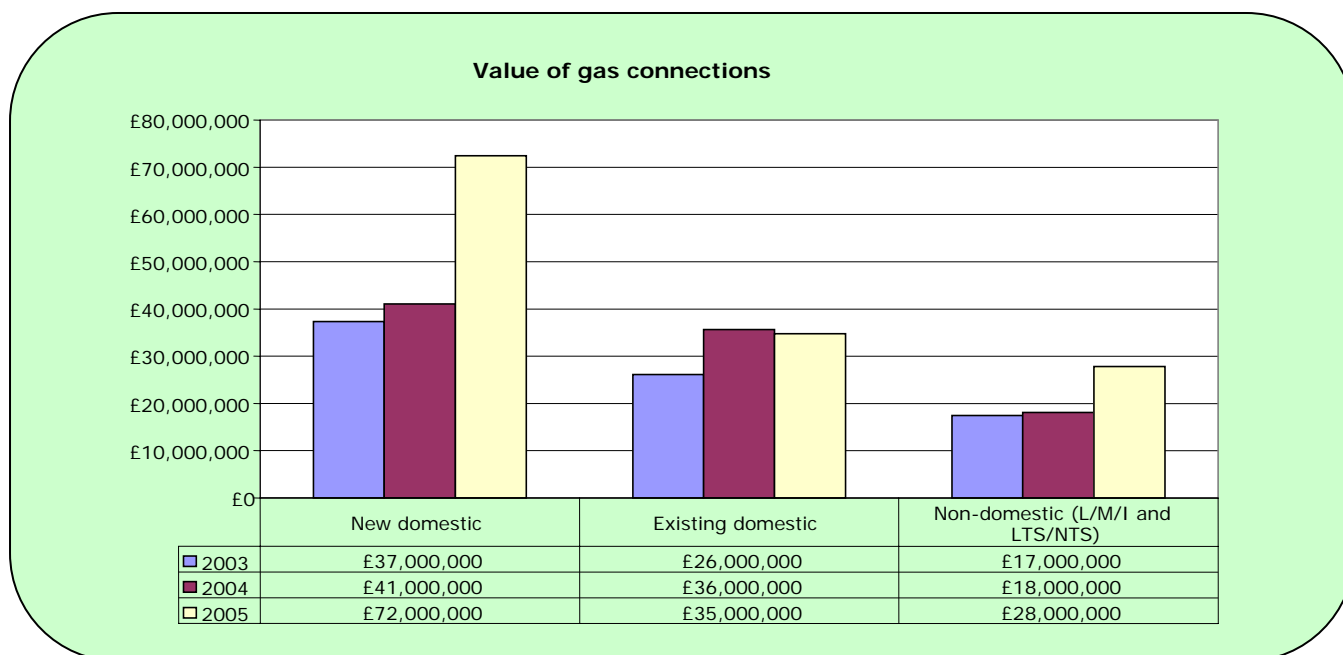
The CIR for 2005/06 is the first to include IDNO activity. The development of activity by IDNOs will be monitored in future CIR documents.

Both DNOs and IDNOs can adopt connections undertaken by ICPs.

## Gas transporters' responses to information request

### Total value of gas connections

- In 2005 the total approximate value<sup>1</sup> of the gas connections sector was £135m, of which £103m was GDNs and £32m was IGTs
- In 2004 the total approximate value of the gas connections sector was £95m, of which £63m was GDNs and £32m was IGTs



### Total number of gas connections

#### 2005

- 233,858 gas connections were undertaken

#### GDN connection breakdown

- 119,026 were provided by GDN businesses (50.9%)
- 25 were undertaken by connections businesses affiliated to GDNs (0.01%)
- 3,981 were undertaken by ICPs not affiliated to GDNs (1.7%)

#### IGT connection breakdown

- 24,705 were provided by IGT businesses (10.6%)
- 41,508 were undertaken by connections businesses affiliated to IGTs (17.7%)
- 44,613 were undertaken by ICPs not affiliated to IGTs (19.1%)

<sup>1</sup> Value is the revenue of the total up-front charges each company has levied on new gas connections in the relevant calendar year.

## 2004

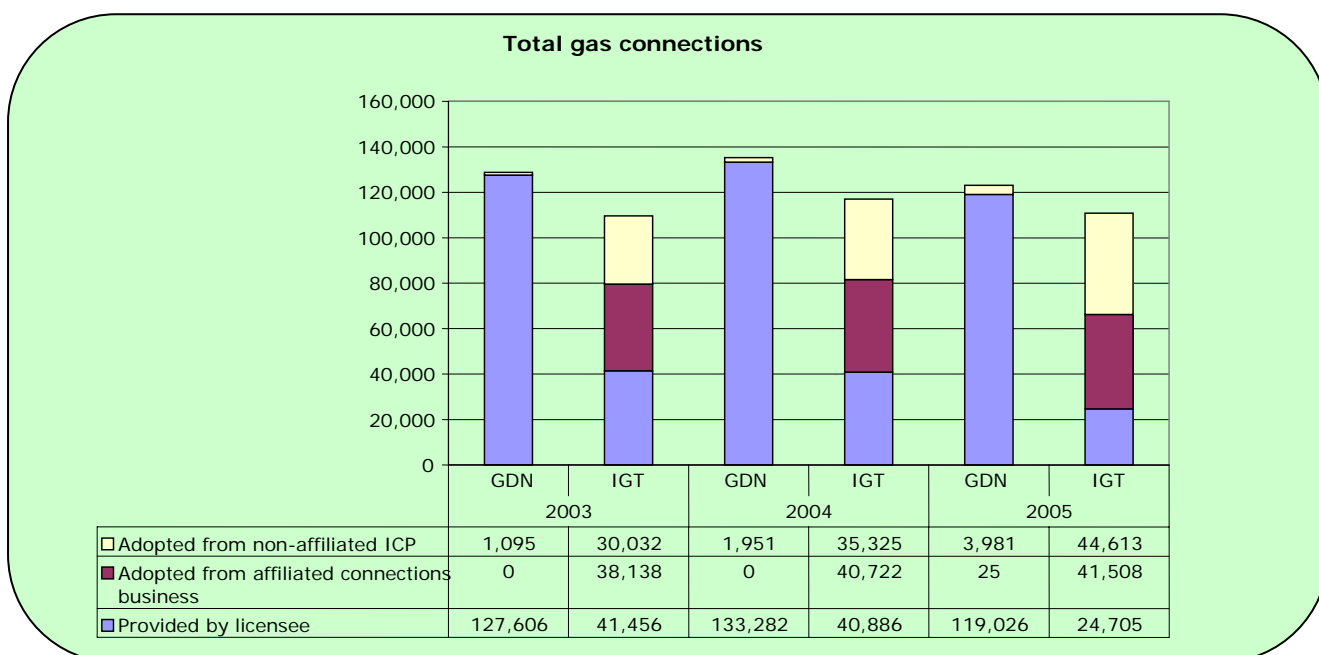
- 252,166 gas connections were undertaken

### GDN connection breakdown

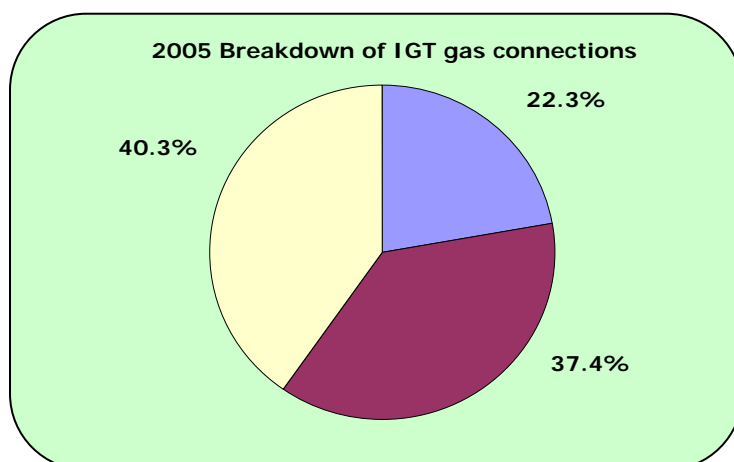
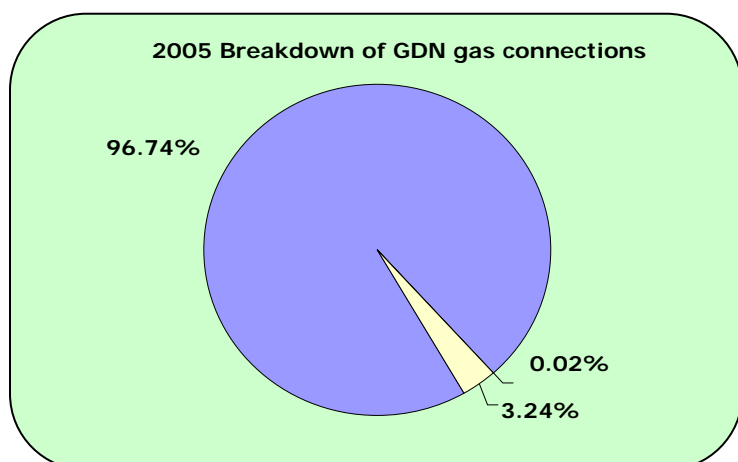
- 133,282 were provided by GDN businesses (52.9%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 1,951 were undertaken by ICPs not affiliated to GDNs (0.8%)

### IGT connection breakdown

- 40,886 were provided by IGT businesses (16.2%)
- 40,722 were undertaken by connections businesses affiliated to IGTs (16.2%)
- 35,325 were undertaken by ICPs not affiliated to IGTs (14.0%)



The pie charts below show the breakdown of gas connections procured/provided by GDNs and IGTs in 2005.



## Industry breakdown

### New domestic gas connections

#### 2005

- 154,500 new domestic connections were undertaken

#### GDN connection breakdown

- 45,851 were provided by GDN businesses (29.7%)
- 25 were undertaken by connections businesses affiliated to GDNs (0.02%)
- 3,121 were undertaken by ICPs not affiliated to GDNs (2.0%)

#### IGT connection breakdown

- 23,064 were provided by IGT businesses (14.9%)
- 38,082 were undertaken by connections businesses affiliated to IGTs (24.6%)
- 44,357 were undertaken by ICPs not affiliated to IGTs (28.7%)

#### 2004

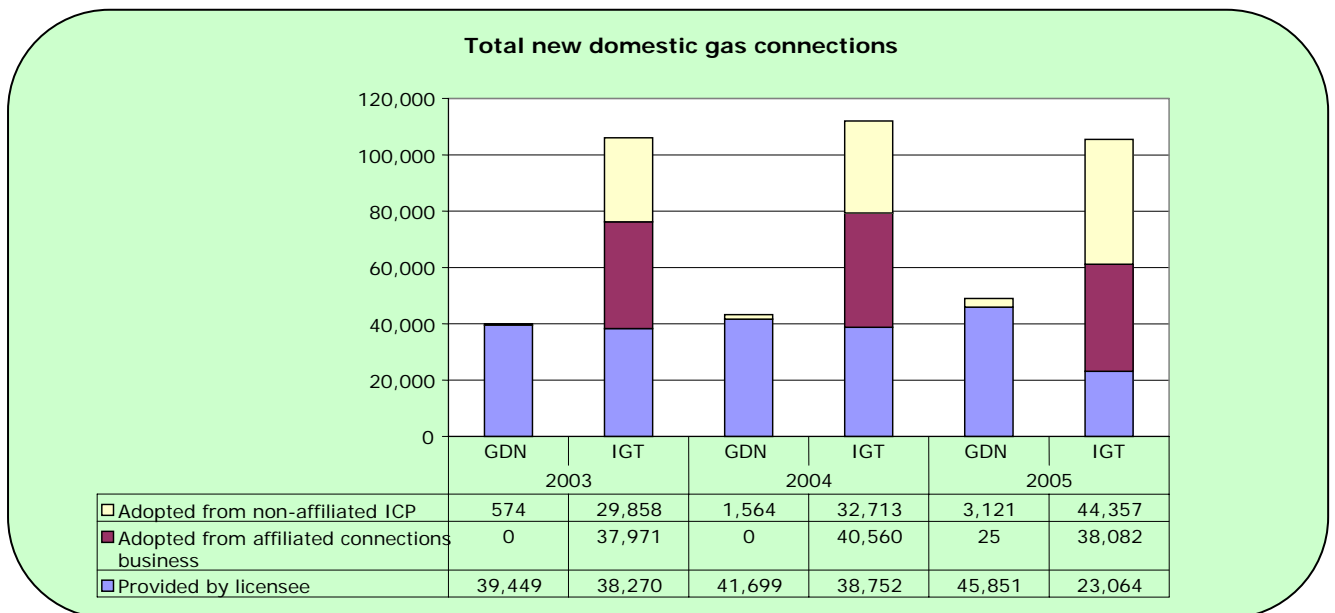
- 155,288 new domestic connections were undertaken

#### GDN connection breakdown

- 41,699 were provided by GDN businesses (26.9%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 1,564 were undertaken by ICPs not affiliated to GDNs (1.0%)

#### IGT connection breakdown

- 38,752 were provided by IGT businesses (25.0%)
- 40,560 were undertaken by connections businesses ICPs affiliated to IGTs (26.1%)
- 32,713 were undertaken by ICPs not affiliated to IGTs (21.1%)



## Existing domestic gas connections

### 2005

- 67,577 existing domestic connections were undertaken

#### GDN connection breakdown

- 62,725 were provided by GDN businesses (92.8%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 218 were undertaken by ICPs not affiliated to GDNs (0.1%)

#### IGT connection breakdown

- 1,320 were provided by IGT businesses (2.0%)
- 3,288 were undertaken by connections businesses affiliated to IGTs (4.9%)
- 26 were undertaken by ICPs not affiliated to IGTs (0.1%)

### 2004

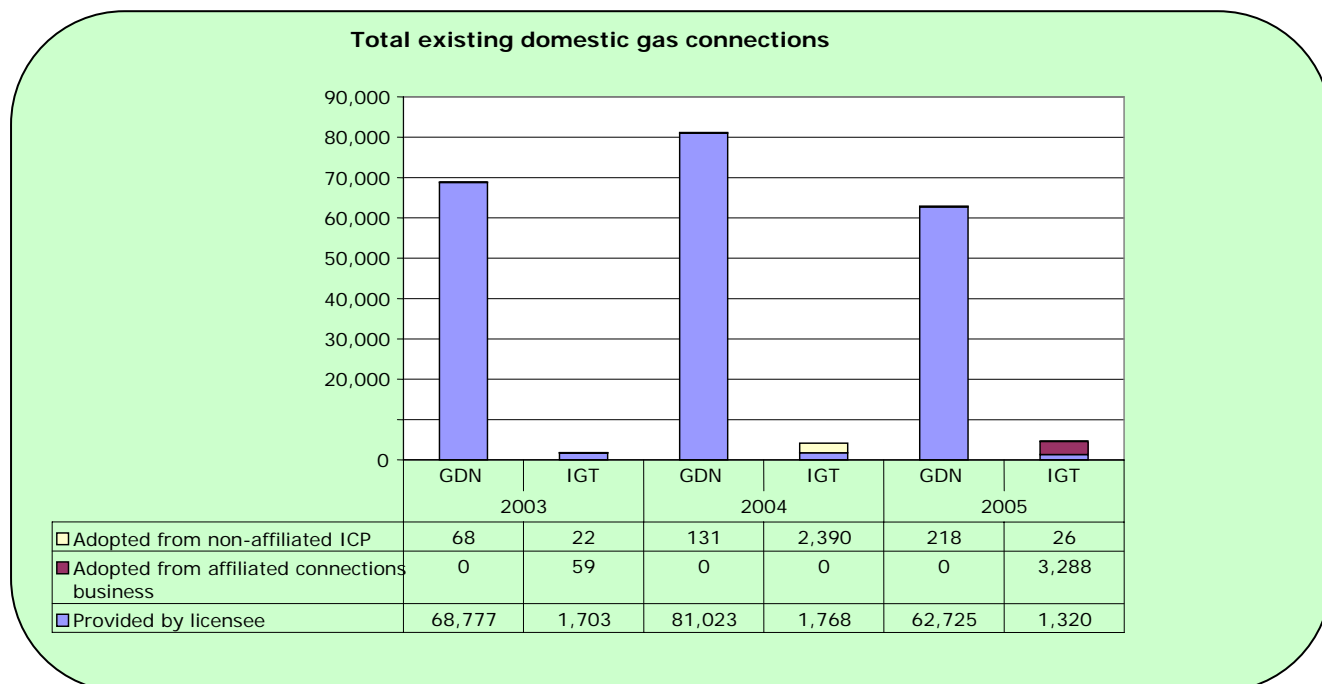
- 85,312 existing domestic connections were undertaken

#### GDN connection breakdown

- 81,023 were provided by GDN businesses (95.0%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 131 were undertaken by ICPs not affiliated to GDNs (0.2%)

#### IGT connection breakdown

- 1,768 were provided by GDN businesses (2.1%)
- 0 were undertaken by connections businesses affiliated to IGTs (0%)
- 2,390 were undertaken by ICPs not affiliated to IGTs (2.8%)





## Non-domestic (L/M/I)<sup>-2</sup> and (LTS<sup>3</sup>/NTS)<sup>-4</sup> gas connections

### 2005

- 11,781 non-domestic (L/M/I) and (LTS/NTS) connections were undertaken

#### GDN connection breakdown

- 10,450 were provided by GDN businesses (88.7%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 642 were undertaken by ICPs not affiliated to GDNs (5.4%)

#### IGT connection breakdown

- 321 were provided by IGT businesses (2.7%)
- 138 were undertaken by connections businesses affiliated to IGTs (1.2%)
- 230 were undertaken by ICPs not affiliated to IGTs (2.0%)

### 2004

- 11,566 non-domestic (L/M/I) and (LTS/NTS) connections were undertaken

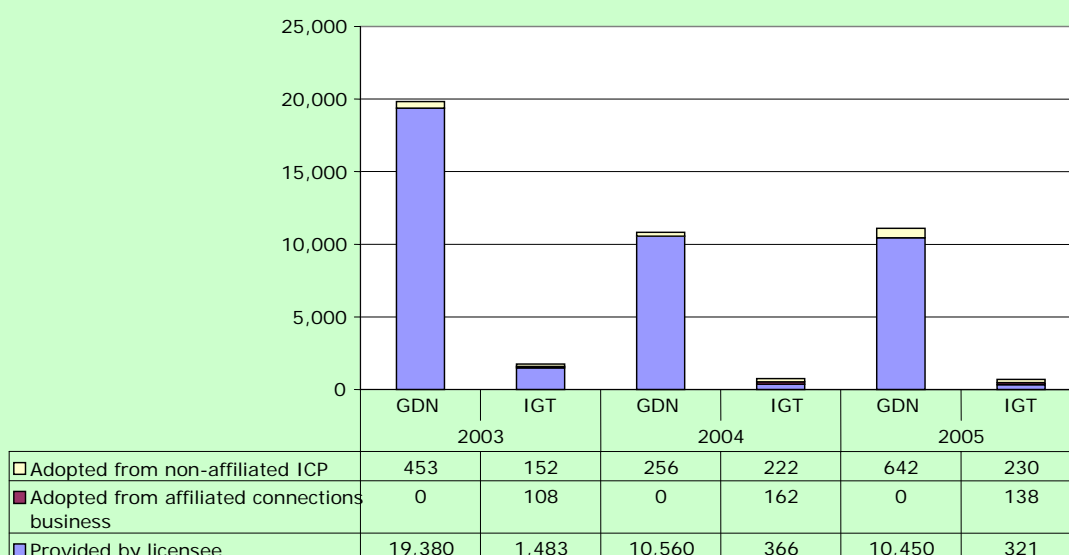
#### GDN connection breakdown

- 10,560 were provided by GDN businesses (91.3%)
- 0 were undertaken by connections businesses affiliated to GDNs (0%)
- 256 were undertaken by ICPs not affiliated to GDNs (2.2%)

#### IGT connection breakdown

- 366 were provided by IGT businesses (3.2%)
- 162 were undertaken by connections businesses affiliated to IGTs (1.4%)
- 222 were undertaken by ICPs not affiliated to IGTs (1.9%)

**Total non-domestic (L/M/I) and (LTS/NTS) gas connections**



<sup>2</sup> Non domestic L/M/I (Low, medium, intermediate pressure).

<sup>3</sup> LTS (Local Transmission System) is a network of pipelines operating at pressures between 7 bar and up to 38 bar.

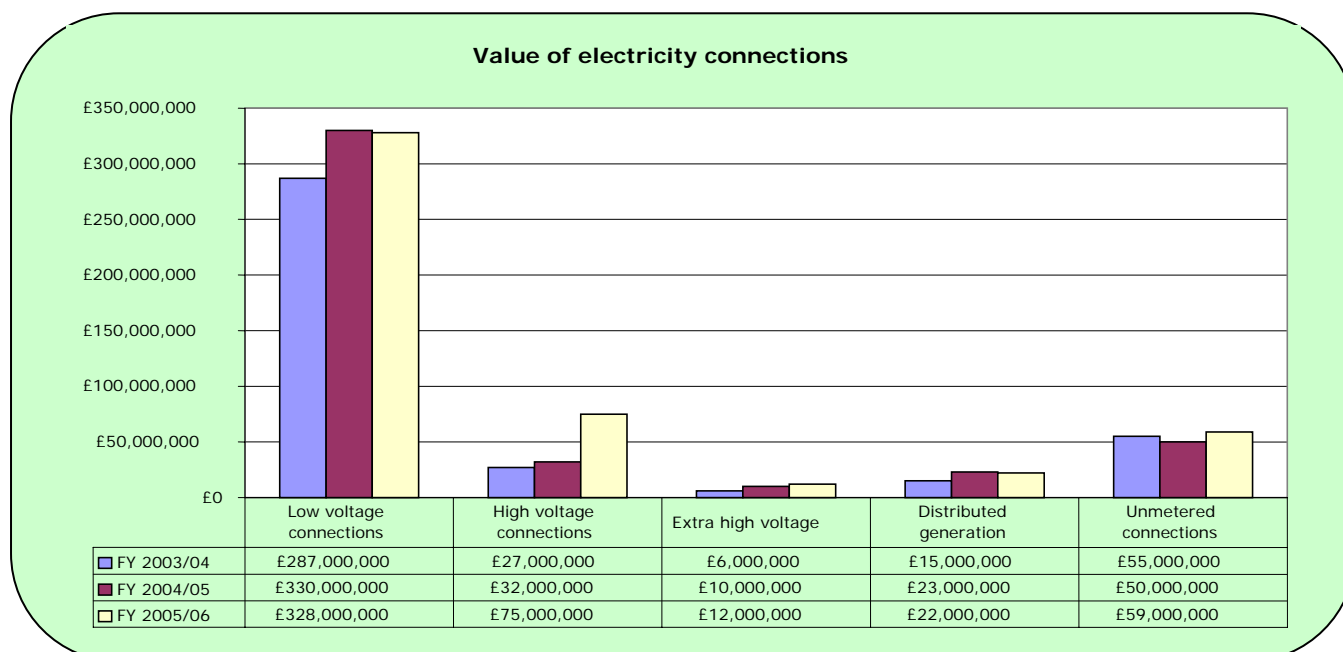
<sup>4</sup> Non domestic NTS (National Transmission System).



## Electricity DNOs'/ IDNOs'<sup>5</sup> responses to information request

### Total value of electricity connections

- In Financial Year (FY) 2005/06 the total approximate value<sup>6</sup> of the electricity connections sector was £497m
- In FY 2004/05 the total approximate value of the electricity connections sector was £445m



### Total number of electricity connections

#### **FY 2005/06**

- 495,989 electricity connections were undertaken

#### **FY 2004/05**

- 421,897 electricity connections were undertaken

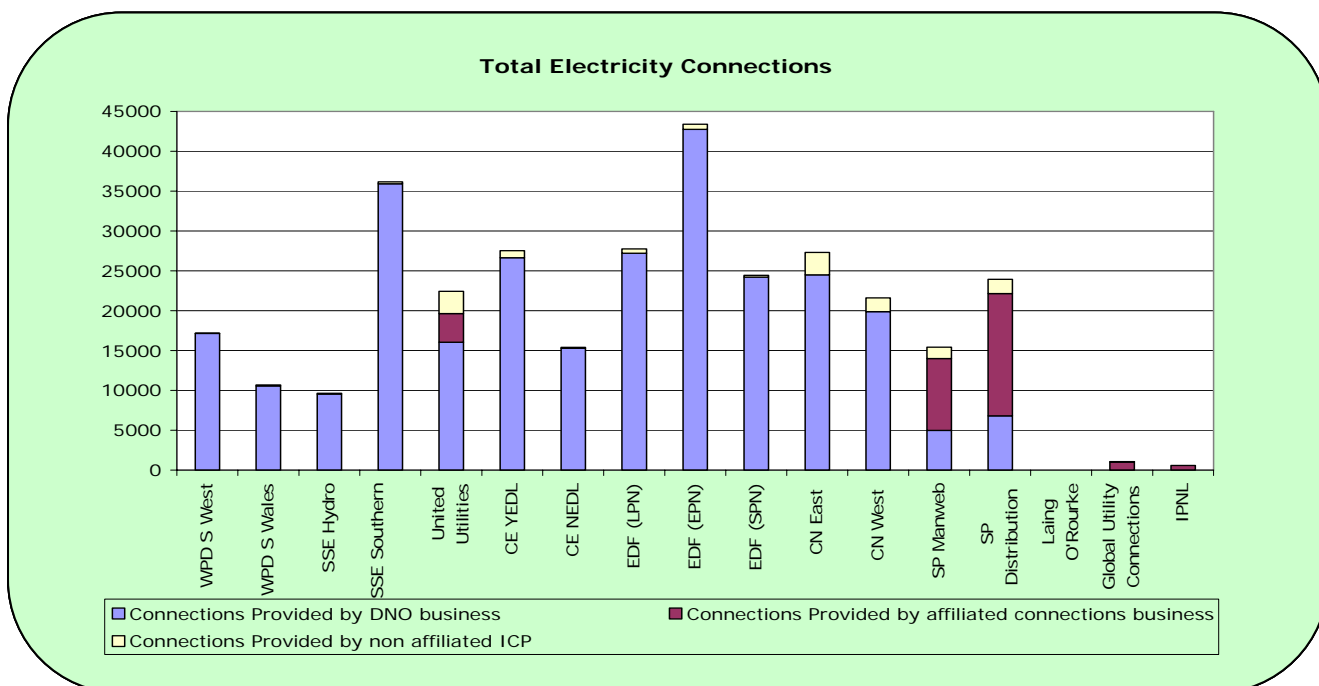
The tables below show the breakdown of how electricity connections were provided and the respective percentages.

<sup>5</sup> IDNOs were introduced to the market during FY 2004/05, therefore no data for IDNOs has been recorded prior to FY 2005/06.

<sup>6</sup> Value is the revenue of the total charges each company has levied on new connections in the relevant financial year.

	FY 2004/05		FY 2005/06	
	Number of Connections	% of Connections	Number of Connections	% of Connections
<b>Connections by DNOs within their own DSA<sup>7</sup></b>	378,961 (155,840 of which were unmetered)	89.8%	450,336 (169,306 of which were unmetered)	90.8%
<b>Connections undertaken by affiliated connections businesses and ICPs</b>	39,198 (669 of which were unmetered)	9.3%	41,411 (92 of which were unmetered)	8.4%
<b>Connections by DNOs outside their own DSA</b>	3,738	0.9%	2,499	0.5%
<b>Connections undertaken by IDNOs</b>	N/A	N/A	1,643	0.3%
<b>Total</b>	<b>421,897</b>	<b>100%</b>	<b>495,889</b>	<b>100%</b>

Total electricity connections per DNO/IDNO during FY 2005/06



<sup>7</sup> Distribution services area

## Low Voltage (LV) metered connections<sup>8</sup>

### LV Connections undertaken within DSA

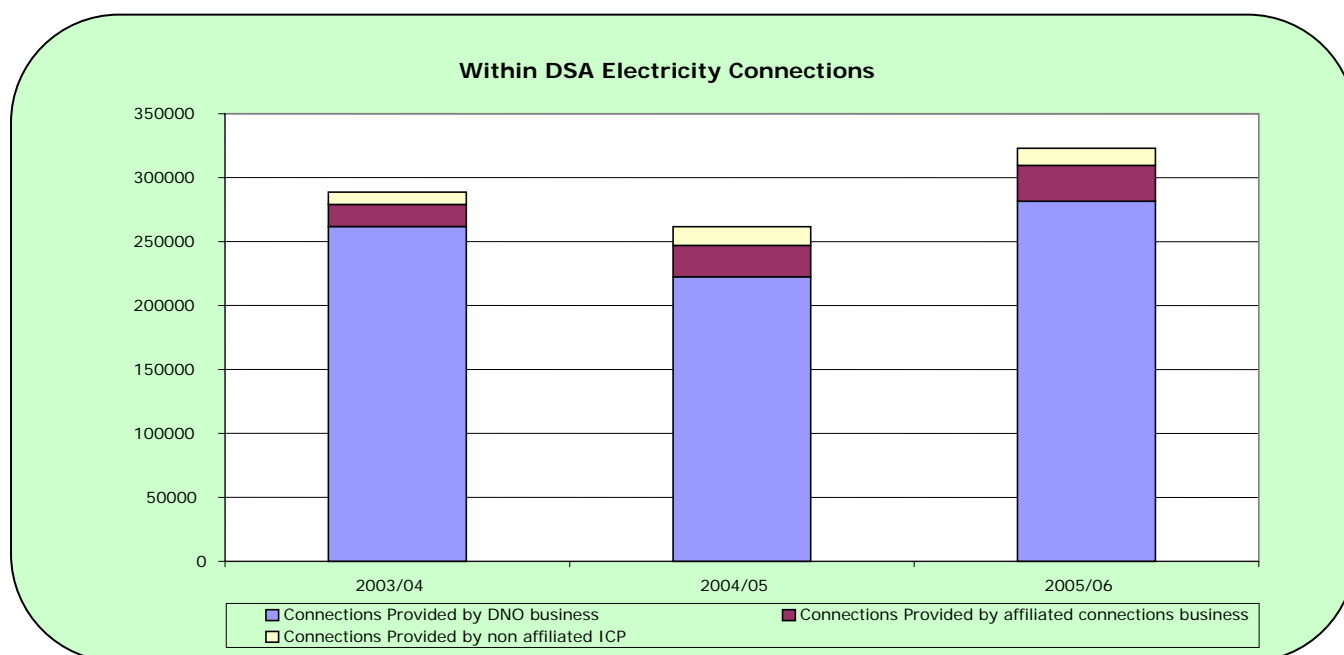
LV connections have been broken down into connections undertaken within DSA and connections out of this area. IDNOs do not have specific DSAs and as such are treated as out of area connections for the purpose of the low voltage category.

#### FY 2005/06

- 322,323 LV connections were undertaken
- 281,030 of these connections were provided by DNO businesses (87.2%)
- 27,942 of these connections were undertaken by affiliated connections businesses (8.7%)
- 13,351 of these connections were undertaken by non-affiliated ICPs (4.1%)

#### FY 2004/05

- 264,726 LV connections were undertaken
- 226,262 of these connections were provided by DNO businesses (85.5%)
- 24,458 of these connections were undertaken by affiliated ICPs (9.2%)
- 14,006 of these connections were undertaken by non-affiliated ICPs (5.3%)



<sup>8</sup> Please note SSE Southern Electric Distribution plc and SSE Scottish Hydro-Electric Power Distribution Limited did not provide a breakdown of low voltage and high voltage electricity connections, therefore all low and high voltage connections have been included into the low voltage category, as was the case for the 2004/05 CIR.

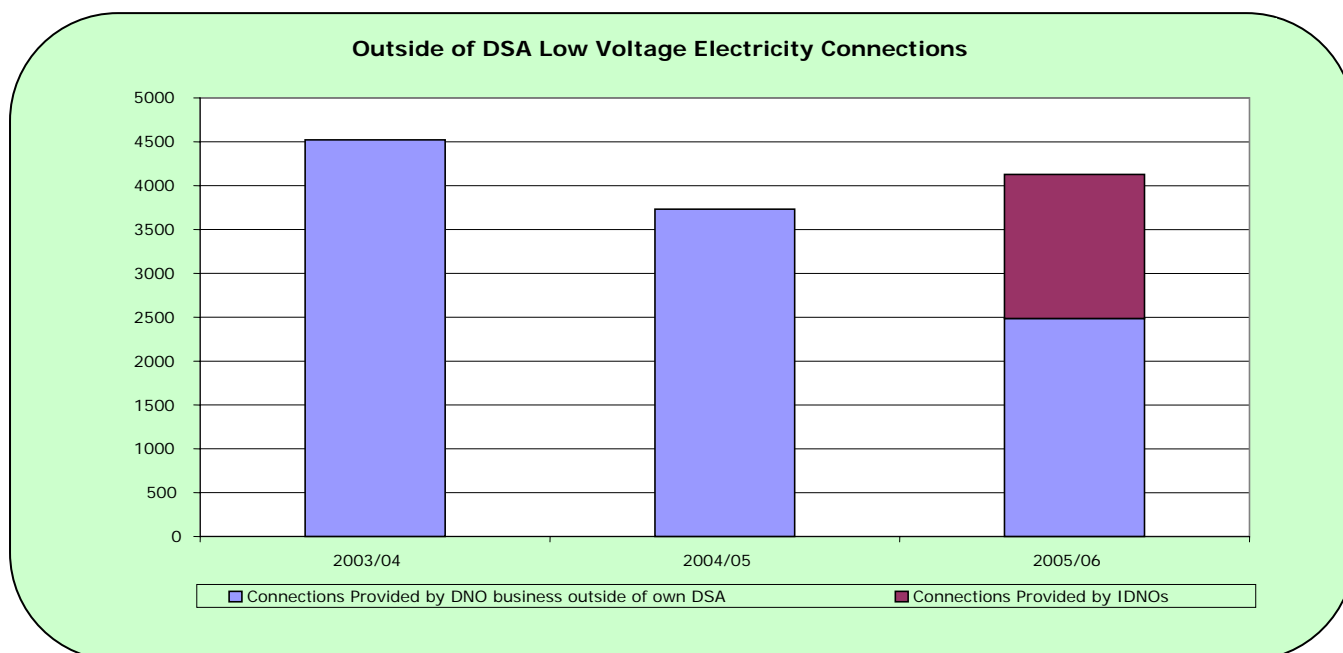
## LV Connections undertaken outside of DSA

### **FY 2005/06**

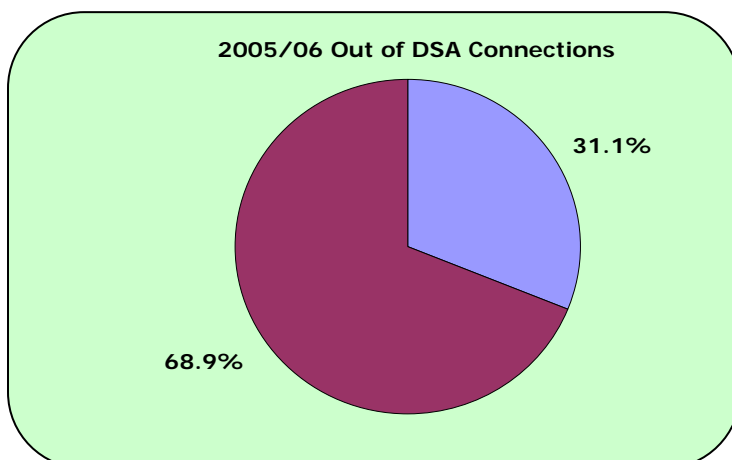
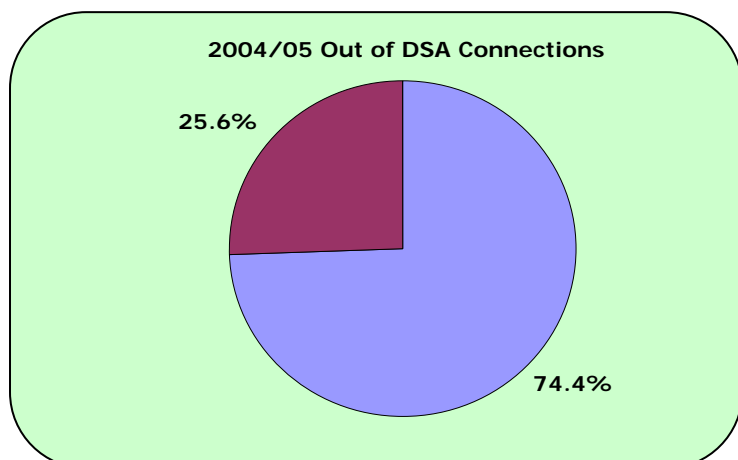
- 4 DNOs provided a total of 2,486 LV connections outside their DSA. Of these 1,285 (51.7%) connections were adopted by the host DNO and 1,201 (48.3%) are being operated as an independent distribution network
- 2 IDNOs provided a total of 1,642 LV connections. All of which are being operated as an independent distribution network

### **FY 2004/05**

- 5 DNOs provided a total of 3,731 LV connections outside their DSA. Of these 2,777 (74.4%) connections were adopted by the host DNO and 954 (25.6%) are being operated as independent distribution networks



The pie charts below show the percentage of out of DSA connections either adopted by the host DNO or operated as an independent distribution network.



- Percentage of outside of DSA LV connections operated as independent distribution networks
- Percentage of outside of DSA LV connections adopted by host DNO

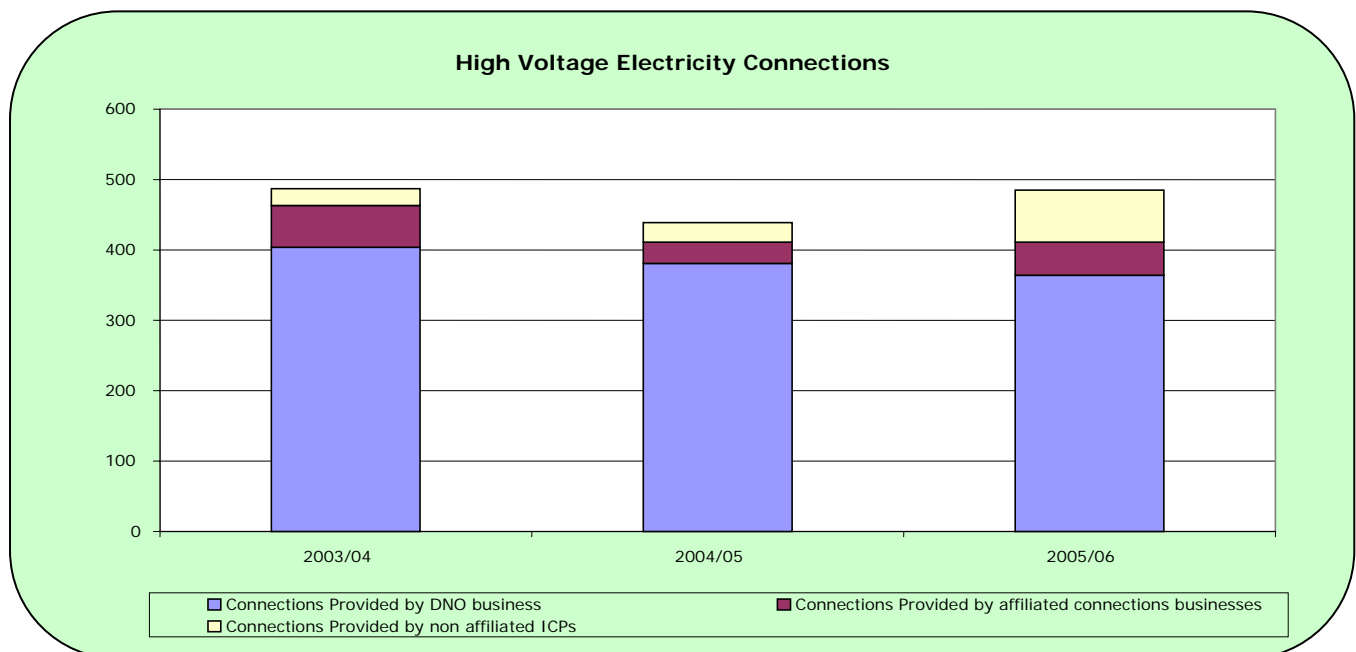
### High Voltage (HV) metered connections

#### **FY 2005/06**

- 486 HV connections were undertaken
- 365 of these connections were provided by DNO businesses (75.1%)
- 47 of these connections were undertaken by affiliated connections businesses (9.7%)
- 74 of these were undertaken by non affiliated ICPs (15.2%)
- 1 HV connection was undertaken by an IDNO (0.2%)

#### **FY 2004/05**

- 446 HV connections were undertaken
- 388 of these connections were provided by DNO businesses (87.0%)
- 30 of these connections were undertaken by affiliated connections businesses (6.7%)
- 28 of these connections were undertaken by non affiliated ICPs (6.3%)



### Extra High Voltage (EHV) metered connections

#### **FY 2005/06**

- 11 EHV connections were undertaken
- No connections were provided by ICPs

#### **FY 2004/05**

- 15 EHV connections were undertaken
- No connections were provided by ICPs

## Distributed Generation (DG) metered connections

### **FY 2005/06**

- 68 DG connections were undertaken
- 5 of these connections were provided by ICPs (7.4%)

### **FY 2004/05**

- 201 DG connections were undertaken
- 7 of these were provided by ICPs (3.5%)

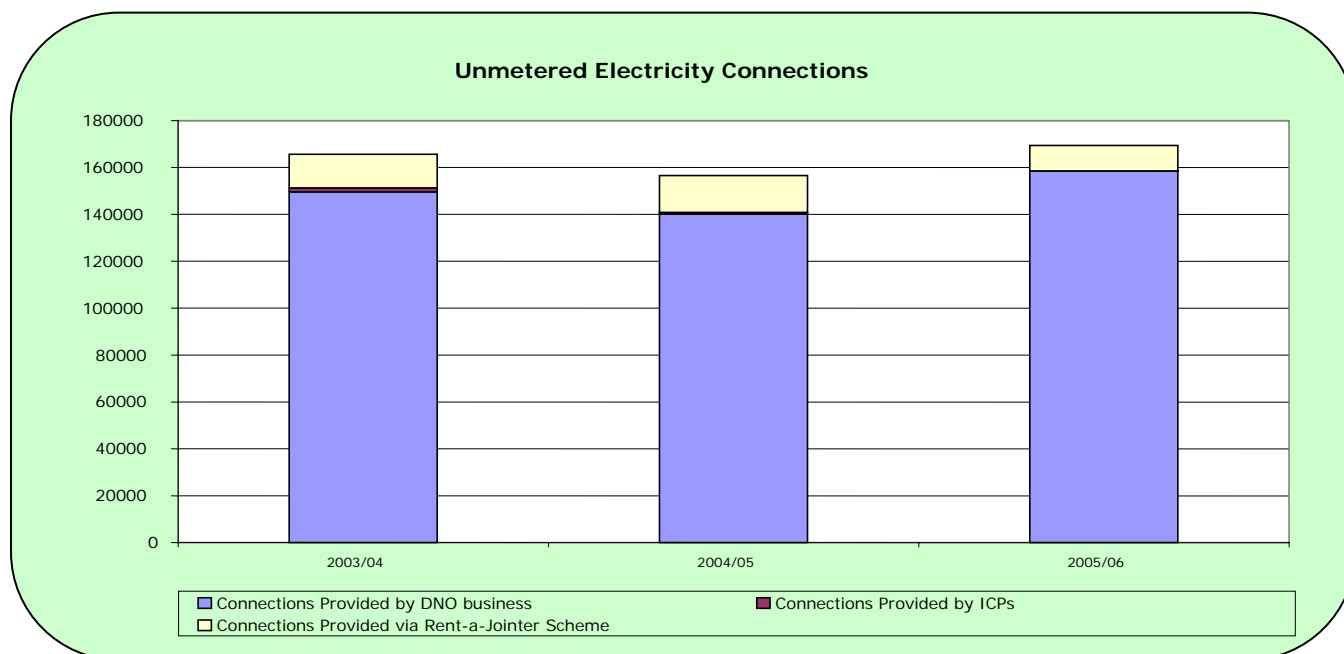
## Unmetered connections

### **FY 2005/06**

- 169,398 unmetered connections were undertaken
- 92 of these connections were provided by ICPs (0.1%)
- 10,833 of these connections were provided via the rent-a-jointer scheme or similar (6.4%)

### **FY 2004/05**

- 156,509 unmetered connections were undertaken
- 669 of these connections were provided by ICPs (0.4%)
- 15,677 of these connections were provided via the rent-a-jointer<sup>9</sup> scheme or similar (10.0%)



<sup>9</sup> The rent -a- jointer scheme enables ICPs and Local Authorities to hire a DNO jointer for a set period of time to carry out live working associated with unmetered connections

## Competition in Connections - Voluntary Standards of Service

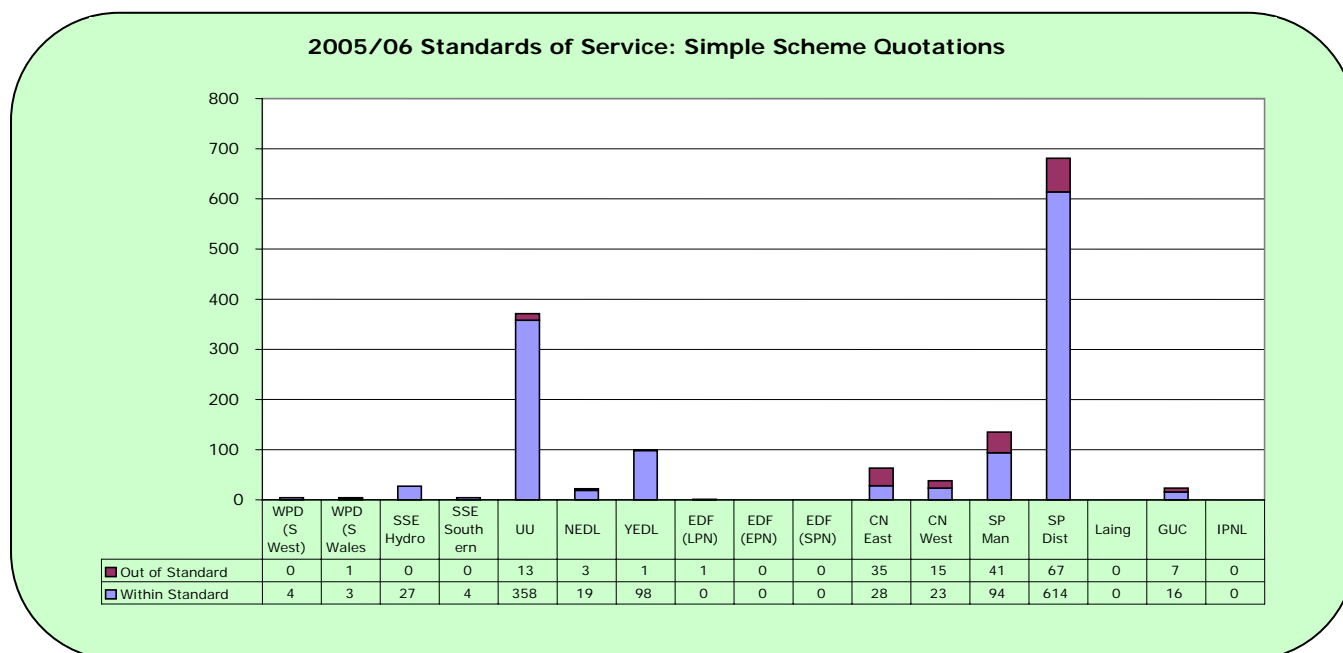
The graphs below illustrate the performance of each DNO and IDNO against the voluntary standards of service in the provision of electricity connections undertaken in the competitive environment. These standards were introduced in line with the recommendations of the Electricity Connections Steering Group (ECSG). The graphs indicate areas where competition is developing, showing the number of connection quotations requested and the number of design approvals issued.

In the 2004/05 CIR the performance of each DNO against the voluntary standards of service was presented showing the average number of days for quotations to be issued. For FY 2005/06, the graphs compare the number of quotations provided, and the number done so within the standard timescales.

### Providing Quotations

#### Simple scheme (standard – formal quotation to be issued within 15 working days)

*Simple schemes are new low voltage mains and services for domestic, commercial or industrial projects.*



#### **FY 2005/06**

- 3 DNOs met the standard timescales for issuing quotations in all cases
- 10 DNOs did not meet the standard timescales for issuing quotations in all cases
- 3 DNOs and 1 IDNO did not have any requests for providing quotations

#### **FY 2004/ 05**

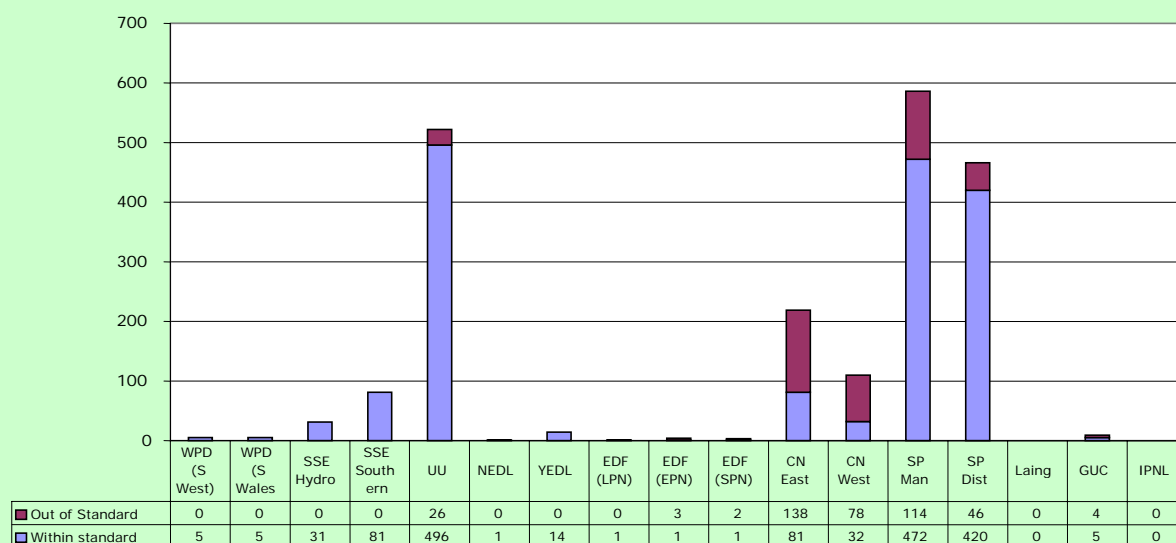
- 9 DNOs met the standard timescales issuing quotations within an average of 15 working days. 5 DNOs did not meet the timescales



### Complex scheme (standard – letter to be issued within 20 working days)

*Complex schemes are new infrastructure schemes requiring a substation.*

2005/06 Standards of Service: Complex Scheme Quotations



#### **FY 2005/06**

- 7 DNOs met the standard timescales for issuing quotations in all cases
- 8 DNOs did not meet the standard timescales for issuing quotations in all cases
- 1 DNO and 1 IDNO did not have any requests for providing quotations

#### **FY 2004/ 05**

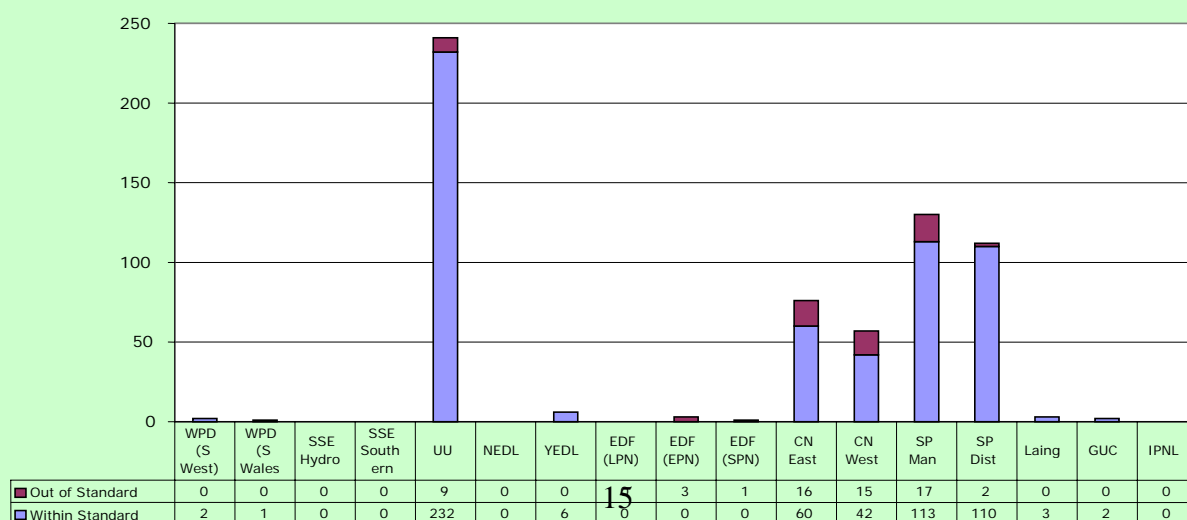
- 7 DNOs met the standard timescales issuing quotations within an average of 20 working days. 7 DNOs did not meet the timescales

### Complicated scheme (standard – letter to be issued within 10 working days)

*Complicated schemes are new infrastructure schemes which require HV or EHV reinforcement schemes.*

*This standard requires the host DNO/IDNO to send a letter to the ICP within 10 working days with the quotation date to be agreed for specific schemes.*

2005/06 Standards of Service: Complicated Scheme Quotations



## FY 2005/06

- 4 DNOs and 1 IDNO met the standard timescales for issuing quotations in all cases
- 7 DNOs did not meet the standard timescales for issuing quotations in all cases
- 5 DNOs did not have any requests for providing quotations

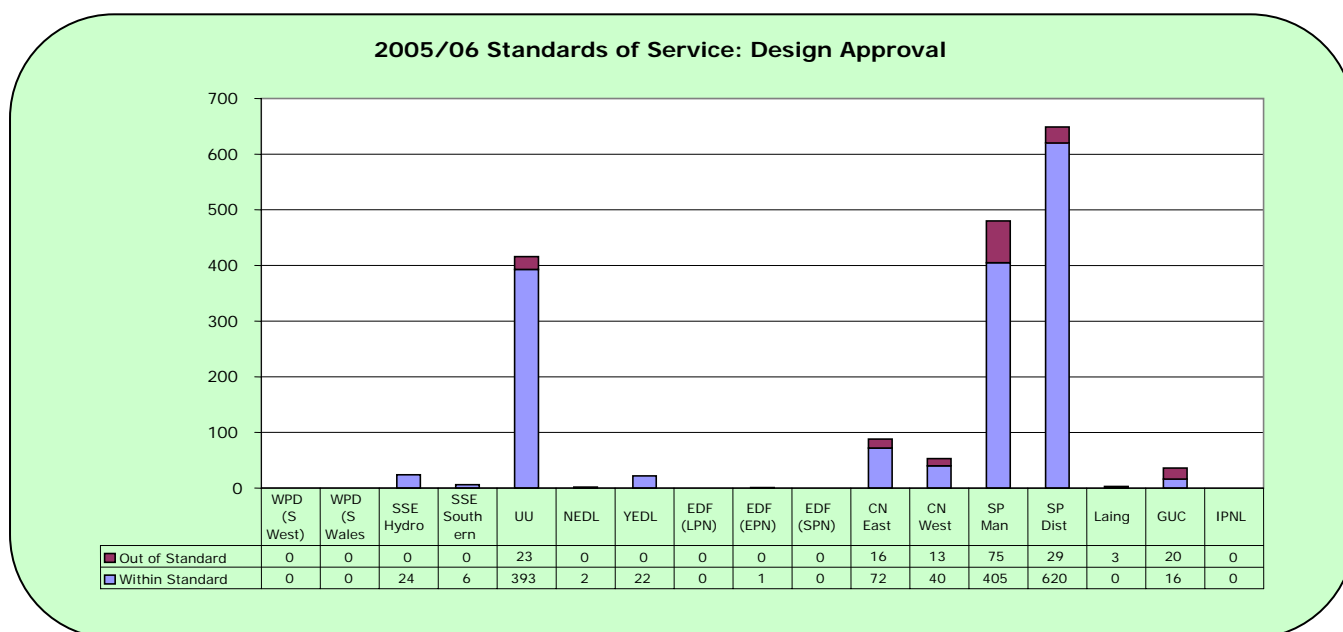
## FY 2004/ 05

- 10 DNOs met the standard timescales issuing letters within an average of 10 working days. 4 DNOs did not meet the timescales

## Design Approvals

### Design approval (standard – approval or rejections within 10 working days)

*The graph below outlines the number of design approvals granted/rejected by a DNO/IDNO within the standard.*



## FY 2005/06

- 5 DNOs met the standard timescales issuing acceptances/rejections in all cases
- 6 DNOs and 1 IDNO did not meet the standard timescales issuing acceptances/rejections in all cases
- 5 DNOs did not have any requests for acceptances/rejections

## FY 2004/05

- 8 DNOs met the standard timescales issuing acceptances/ rejections within an average of 10 working days. 6 DNOs did not meet the timescales

## Physical Connections

*The table below shows the percentage of physical connections undertaken by host distributor to agreed timescales.*

<b>DNO/ IDNO</b>	<b>% of timescales met</b>
WPD S West	100%
WPD S Wales	100%
SSE Hydro	100%
SSE Southern	100%
EDFE LPN	100%
EDFE EPN	100%
EDFE SPN	100%
CN East	100%
CN West	100%
SP Distribution	99%
SP Manweb	98%
UU	98%
YEDL	98%
NEDL	95%
Laing O'Rourke	0%
GUC	No Data Submitted
IPNL	No Data Submitted

### **Looking forward**

We are undertaking a Competition in Connections Review which will address a wide range of issues in the current connections market for both gas and electricity.

The Competition in Connections Review was launched in May 2006 when an initial consultation letter<sup>10</sup> was published. This letter outlined our current understanding of competition in connections issues and put forward a number of areas where competition could be developed further. Respondents were invited to provide their views on the scope of the Competition in Connections Review.

The responses<sup>11</sup> received to the consultation letter were used to inform the scope of our consultation document. The consultation document is due to be published during the week commencing 28 August 2006 and will be located on the Ofgem website<sup>12</sup>.

We intend to publish proposals for the Competition in Connections Review in early 2007.

### **Getting a Connection**

Information on obtaining a connection to a gas and/or electricity supply can be found on the Ofgem website:

<http://www.ofgem.gov.uk/ofgem/shared/template1.jsp?assortment=/workingforcustomers/cust04>

### **For queries please contact:**

Nicola Love  
Connections Policy Manager  
0207 901 7036  
[nicola.love@ofgem.gov.uk](mailto:nicola.love@ofgem.gov.uk)

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<sup>10</sup> 81/06 – Open Consultation Letter: Review of Competition in Gas and Electricity ‘The Review’  
[http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15489\\_CinC\\_Review\\_Letter.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/connections](http://www.ofgem.gov.uk/temp/ofgem/cache/cmsattach/15489_CinC_Review_Letter.pdf?wtfrom=/ofgem/work/index.jsp&section=/areasofwork/connections).

<sup>11</sup> Ofgem Competition in Connections Review Workshop  
[http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/connections&levelids=,1\\_14160#top14160](http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/connections&levelids=,1_14160#top14160).

<sup>12</sup> The consultation document will be located on the following webpage  
<http://www.ofgem.gov.uk/ofgem/work/index.jsp?section=/areasofwork/connections>

## **Glossary – Gas**

GDN	Gas distribution network
IGT	Independent gas transporter
ICP	An ICP is an independent connections provider that is not affiliated to any distribution business
Affiliated connections business	In relation to any person means any holding company of such person, any subsidiary of such person or any subsidiary of a holding company of such person in each case within the meaning of section 736, 736A and 736B of the Companies Act 1985
Non-affiliated ICP	A third party that is not classed as an affiliated ICP
New domestic gas connection	A connection to a newly built domestic premise that has not previously had a gas supply, typically new housing developments
Existing domestic gas connection	Connections to an existing domestic premise that has not previously had a gas supply, also known as a one-off connection
LMI	Low, medium, intermediate pressure non-domestic gas connection
LTS	Local transmission system is a network of pipelines operating at pressures between 7bar and up to 38bar
NTS	National transmission system
Up-front charges	Charges paid by the customer up-front of completing the connections works

## **Glossary – Electricity**

DNO	Distribution network operator
DSA	Distribution services area
IDNO	An IDNO is an Independent Distribution Network Operator. The term IDNO is used to define any electricity distributor other than the distribution network operators that came into existence on 1 October 2001
ICP	An ICP is an independent connections provider that is not affiliated to any distribution business
Affiliated connections business	In relation to any person means any holding company of such person, any subsidiary of such person or any subsidiary of a holding company of such person in each case within the meaning of section 736, 736A and 736B of the Companies Act 1985
Non-affiliated ICP	A third party that is not classed as an affiliated ICP
LV	Low voltage is 1kV or below
HV	High voltage is over 1kV up to 22kV
EHV	Extra high voltage is over 22kV or connection directly to 66kV substation
DG	Distributed generation is where a generator is connected directly to distribution systems, including any other customer with regular export capacity
Simple scheme	New low voltage mains and services for domestic, commercial or industrial projects
Complex scheme	New infrastructure schemes requiring a substation
Complicated scheme	New infrastructure schemes which require HV or EHV reinforcement schemes
ECSG	Electricity connections steering group
Up-front charges	Charges paid by the customer up-front of completing the connections works