

The Renewables Obligation

Ofgem's second annual report

February 2005 44/05

Summary

This document describes the administration of the Renewables Obligation in England and Wales and in Scotland in the second year of its operation (April 2003 – March 2004). It includes information on the generating stations accredited under the schemes, details of the Renewables Obligation Certificates (“ROCs”) issued under both schemes and details of compliance by generators and by licensed suppliers in the second obligation period. It also describes some of the operational issues that have arisen during the second obligation period.

The Renewables Obligation Order, which came into force in April 2002, requires licensed electricity suppliers to source at least part of their electricity from renewable generation. The amount of the Renewables Obligation starts at 3% of total electricity supplied to customers in Great Britain in 2002/2003 and reaches 10.4% in 2010/2011. A licensed supplier can meet its Renewables Obligation by producing ROCs to Ofgem or making a buy-out payment or a combination of both.

The Renewables Obligation is complex and its administration continues to involve considerable resource within Ofgem. Ofgem will continue to administer the scheme as efficiently and effectively as possible.

By and large, most operators of accredited generating stations have developed and improved their understanding of the requirements since the start of the obligation. 505 stations were accredited at the start of the second obligation period and 616 by the end of the period. Ofgem has not rejected any applications for accreditation and has not withdrawn the accreditation of any generating stations during the second obligation period.

7,546,787 ROCs were issued under the scheme in the period in question and 51,943 were revoked with 45,893 replacement ROCs being issued. Almost 42% of the ROCs issued were in respect of electricity from landfill gas generation with on-shore wind generation contributing around 16% of ROCs issued.

The total Renewables Obligation across Great Britain was 13,627,412 MWh for the second obligation period.

Suppliers’ performance in terms of the production of ROCs and/or the payment of buy-out varied. Out of 77 supply licensees in England and Wales, 40 had a Renewables Obligation and ten of those met their obligation wholly through producing ROCs. 15

suppliers made buy-out payments for 100% of their obligation. For Scotland, 29 out of 72 supply licensees had a Renewables Obligation. 17 of those met their obligation wholly through producing ROCs and five suppliers paid 100% buy-out. British Gas Trading Ltd was the only large supplier to fulfil both obligations entirely using ROCs.

Four supply licensees failed to produce the required number of ROCs or make the full alternative payment to the buy-out fund prior to 1 October 2004.

23 suppliers received buy-out distribution totalling £158,462,320 under the Renewables Obligation in England and Wales and 22 received buy-out distribution of £16,488,755 in Scotland.

The document also highlights some of the issues that have arisen in operating the scheme and discusses briefly some of the amendments that have been introduced in the 2004 RO review.

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1. Introduction

- 1.1 The Government's aim for renewable energy is that it should make an increasing contribution to UK energy supplies in the years to 2010 and beyond. The intention is that renewables will have a key role to play in the Government's wider Climate Change Programme as sourcing 10% of electricity from renewable sources could result in an annual saving of around 2.5 million tonnes of carbon emissions in 2010¹. The Government's renewable energy policy has five key aims, one of which is to assist the UK to meet national and international targets for the reduction of emissions including greenhouse gases. (The other aims can be found in DTI's Statutory Consultation on the Renewables Obligation².)
- 1.2 Section 32 of the Electricity Act 1989 provides that the Secretary of State may by order impose an obligation on suppliers falling within a specified description ("the Renewables Obligation"). This power has been devolved to the Scottish Executive in respect of suppliers in Scotland. The Renewables Obligation Order 2002 ("RO") and the Renewables Obligation (Scotland) Order 2004 ("ROS") ("the Orders") were made under section 32 of the Electricity Act 1989 ("the Act"). The Gas and Electricity Markets Authority ("the Authority") is responsible for the administration of the provisions of the orders.
- 1.3 The Orders place a legal obligation on each licensed electricity supplier to produce evidence that either it has supplied a specified proportion of its electricity supplies from renewable energy sources to customers in Great Britain, or that another electricity supplier has done so, or, that between them, they have done so.
- 1.4 Section 32B of the Act allows for "green certificates" to be issued under section 32 Orders. Such certificates certify that a generating station has generated from renewable sources an amount of electricity **and** that it has been supplied to

¹ Department for the Environment , Transport and the Regions (2000). Climate Change: The UK Programme

² Available at http://www2.dti.gov.uk/energy/renewables/policy/key_stages.shtml

customers in Great Britain. These are known as Renewables Obligation Certificates (“ROCs”) (issued under the RO) or Scottish Renewables Obligation Certificates (“SROCs”) (issued under the ROS). These certificates can be purchased separately from the electricity in respect of which they were issued.

- 1.5 Suppliers are required to produce evidence of compliance with their Renewables Obligation to the Authority before a specified day each year. This statutory deadline is 1 October each year. Evidence can be via ROCs or SROCs. Alternatively, a supplier can discharge its Renewables Obligation, in whole or in part, by paying the buy-out price. The RO and the ROS came into effect on 1 April 2002 and are scheduled to stay in place until 31 March 2027. An obligation period runs from 1 April to 31 March each year.
- 1.6 The Renewables Obligation is a significant part of the Government’s Climate Change Programme and the Energy White Paper endorsed the importance of the scheme as the Government’s main policy measure to encourage the development of renewable forms of energy in the United Kingdom. The Government has reinforced its commitment to the scheme by recently consulting on an increase in the level of the Renewables Obligation for the years between 2010/2011 and 2015/2016. The increase will come into effect on 1 April 2005 if Parliament approves it.

Ofgem’s role under the RO and the ROS

- 1.7 The Orders set out Ofgem’s remit to administer the Renewables Obligation. Ofgem’s functions under the Orders include:
 - accrediting generating stations as being capable of generating electricity from eligible renewable sources
 - issuing ROCs and SROCs and revoking these as necessary
 - establishing and maintaining a Register of ROCs and SROCs and registering the transfer of ownership of ROCs and SROCs

- monitoring compliance with the requirements of the Orders
- adjusting the buy-out price by the RPI each year
- receiving buy-out payments and distributing the buy-out fund
- receiving late payments and distributing the late payment fund, and
- reporting annually on the operation of and compliance with the requirements of the Orders.

1.8 Ofgem carries out these functions according to the provisions of the Orders and as efficiently and effectively as possible. It cannot act beyond the scope of the matters laid down in the Orders, eg Ofgem has no remit over the operation or regulation of the ROC market itself. Amendment of the Act or the Orders is a matter for DTI and the Scottish Executive.

1.9 The current estimated annual ongoing costs to Ofgem of running the schemes are approximately £600,000. This includes staffing; technical, legal and IT support; audits of generating stations; audits of suppliers; systems support; and maintenance of the bank accounts.

Key features of the Renewables Obligation

1.10 All licensed suppliers have to produce evidence that they have supplied a specified proportion of their electricity supplies to customers in Great Britain from eligible renewable sources. The relevant percentages are set out in Schedule 1 to the Orders. The first was 3% of total supplies in 2002/2003, the second was 4.3% in 2003/2004 and these rise to 10.4% in 2010/2011. The percentages thereafter currently remain at 10.4% until the last period ending on 31 March 2027 but this may change. The Government has recently consulted on increasing the targets each year from 10.4% in 2010/2011 to 15.4% in 2015/2016 and this could come into effect on 1 April 2005 if Parliament approves the increase.

- 1.11 In order for ROCs³ to be issued, the generating station that generates the electricity must be accredited by Ofgem as capable of generating electricity from eligible renewable sources. The participation of a generating station in the scheme is voluntary and there are certain criteria that need to be met before a station can be accredited.
- 1.12 The Orders set out what sources of electricity are eligible renewable sources and also specify the exclusion of certain types of generating stations, eg stations incinerating waste. Time limits for eligibility are placed on stations co-firing, ie burning biomass and fossil fuel to generate electricity. Article 8 of each of the Orders provides the detail of what generating station will be considered to be capable of generating electricity from eligible renewable sources (and so capable of being accredited) by Ofgem.
- 1.13 On what basis and how ROCs are to be issued are two key, related features of the scheme. Again, the criteria and rules for these features that need to be met and complied with by generating stations are set out in the Orders. Certain measurements, eg of biomass fuel, and calculations are required to be undertaken. Article 9 of the Orders sets out the calculation requirements.
- 1.14 For ROCs to be issued Ofgem must receive, as the minimum information necessary, figures for gross output and input electricity before the end of the second month following the end of the month of generation. Article 4 sets out other criteria that must also be met before ROCs can be issued.
- 1.15 Article 5 details when and how Ofgem must revoke ROCs and when Ofgem has some discretion about revocation. It also sets out when and how Ofgem may issue replacement ROCs.
- 1.16 The Orders also set out the criteria for compliance by suppliers, eg how a supplier's total sales in England and Wales are to be calculated, the limits on certain types of ROCs that can be produced, eg co-firing ROCs and how many

³ The term ROCs is used to refer to the combination of ROCs and SROCs unless otherwise specified.
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ROCs can be carried forward from the previous obligation period. The relevant articles in the Orders are articles 3 and 6.

- 1.17 Article 6 requires suppliers to provide information to both DTI and Ofgem. Suppliers are required to furnish to DTI estimated figures relating to total sales of electricity to customers in England and Wales and/or Scotland during an obligation period by no later than 20 June following the end of the obligation period. Suppliers are required to inform Ofgem of the amount in MWh of RO and/or ROS and the amount of all electricity supplied to customers in England and Wales and/or Scotland during the obligation period before 7 August each year.
- 1.18 Article 7 allows a supplier to make buy-out payments instead of producing ROCs for all or part of its obligation. Article 12 provides for the total buy-out payments received by Ofgem together with any interest earned, known as the buy-out fund, to be distributed back to suppliers who have correctly produced ROCs in proportion to the total number of correctly produced ROCs for the obligation period. Following the amendment of the Orders on 1 April 2004, article 12 also provides for the late payment fund. A late payment is a buy-out payment received on or after 1 October. The late payment fund is distributed in the same way as the buy-out fund.
- 1.19 The calculation of the buy-out price is detailed in article 7 and requires Ofgem to take into account the annual retail prices index for each calendar year. The buy-out price was set at £30 per MWh for the first obligation period (April 2002 to March 2003), has been calculated at £30.51 for the second obligation period and £31.39 per MWh for the third period (April 2004 to March 2005).
- 1.20 The buy-out price is intended to act as a cap on the costs to be charged to consumers. In 2003/2004, the total Renewables Obligation across Great Britain was 13,627,412 MWh. The simple calculation of multiplying this by £30.51 gives a total cost to consumers of £415,772,340.12.

Administration of the Renewables Obligation

- 1.21 As administrator of the scheme, Ofgem has put in place a number of procedures and systems, including those to assess whether a generating station is eligible for accreditation or whether accreditation should be withdrawn, to decide whether ROCs should be issued or revoked and to assess a supplier's compliance with its Renewables Obligation.
- 1.22 The accreditation of a generating station involves an assessment of the accreditation application form and accompanying diagrams and declarations as well as any other evidence or information provided by the applicant, eg fuel supply and metering arrangements. When a generating station is accredited as being capable of generating from eligible renewable sources, Ofgem records the details in its Renewables Trading Information Management System (RTIMS) and notifies the generating station of its unique accreditation number. Accreditation does not guarantee the issue of ROCs although accreditation is required before any ROCs can be issued.
- 1.23 Ofgem may request certain information from accredited generating stations and may request the operator of a generating station to grant access to the premises to any person authorised by Ofgem and provide reasonable assistance to that person, including allowing that person to perform random checks. Such information requirements are set out in more detail in Ofgem's procedures for the Renewables Obligation. Revised procedures were published in July 2004 on Ofgem's website, www.ofgem.gov.uk.
- 1.24 In order to assess whether ROCs should be issued, certain information, ie the gross output and any electricity used by the accredited generating station, has to be provided to Ofgem for each month of generation within the two month timetable set out in the Orders. Other information also needs to be provided, eg sampling information, the energy contents of the fuels being used and the monthly article 4(10)(c) declaration. The onus is on the accredited generating station to ensure that this information is provided on time. Once Ofgem has checked the information and calculations provided by the generating station and carried out some sample checks, the information is used to issue ROCs via

RTIMS into the ROC Register⁴, Ofgem's web-based system for issuing and transferring ownership of ROCs. ROCs do not exist until they have been issued by Ofgem into the ROC Register.

1.25 As well as operating routine checks and controls, Ofgem carries out audits each year on a sample of generating stations. The sample is chosen partly at random but also taking account of particular factors which could include those generating stations with the most complexity or which attract the most ROCs. Ofgem normally authorises independent consultants to carry out these audits on its behalf but may request any station to provide access to Ofgem's own staff. The auditor is required to audit a sample of stations to check on whether:

- information that has been provided for accreditation is correct and the station has been properly accredited, and
- metering arrangements and meter readings/output volumes notified to Ofgem are such that the correct number of ROCs are being issued each month.

1.26 The Orders detail the procedure for revoking ROCs in specified circumstances such as fraud on behalf of a generator, the electricity not being supplied to customers in Great Britain or the ROC being inaccurate. Ofgem has discretion about whether it revokes ROCs in other circumstances, eg where Ofgem considers that the ROC should not have been issued or Ofgem has reasonable doubts as to the accuracy or reliability of the information relied upon for the issue of the ROC. Ofgem must revoke the appropriate number of ROCs from those issued to the generating station in the particular month, revoking the highest sequence numbers first. Ofgem may issue replacement ROCs in certain circumstances which are, again, set out in the Orders. Ofgem uses RTIMS and the ROC Register in carrying out these functions.

1.27 The ROC Register is also used by suppliers to produce ROCs to Ofgem before the specified day as part of their compliance report. A compliance report has to

⁴ Registration and Operational Procedures for the ROC Register are available on Ofgem's website, www.ofgem.gov.uk.

be completed for both the RO and the ROS and suppliers can only produce ROCs that are in their accounts on the ROC Register. Each compliance report allows suppliers to record what their Renewables Obligation is and the amount of any buy-out payments being made. Ofgem set up bank accounts for the receipt of buy-out payments from suppliers and the distribution of the buy-out fund, including any interest, to ROCs-compliant suppliers. The buy-out fund is distributed to suppliers according to the number of ROCs that each supplier correctly produces to discharge its obligation compared to the total amount of eligible electricity supplied represented by the total number of ROCs correctly produced to the Authority for the obligation period.

- 1.28 The late payment fund, including any interest, is distributed to suppliers who complied with their RO in the relevant obligation period through producing ROCs and payments are made on the basis of the same proportions as apply to the buy-out fund distribution.
- 1.29 Ofgem calculates each supplier's obligation based upon the amount of electricity it supplied to customers in Great Britain during the obligation period, as set out in article 6 of the Orders. Suppliers are required to provide such information to Ofgem before 7 August after the end of each obligation period.

Interactions with other policy instruments

- 1.30 Many of the generating stations accredited for the purposes of the Orders are also accredited under the Climate Change Levy exemption for renewables. As the eligibility criteria and basis for calculations for Renewables Levy Exemption Certificates ("LECs") are different to those for ROCs, Ofgem issues ROCs before Renewables LECs in the majority of cases where stations are accredited for both schemes.
- 1.31 The main interaction to date has been in regard to the Non-Fossil Fuel Obligation Orders ("NFFO") and the Scottish equivalent, the Scottish Renewable Obligation Orders ("SRO"). These instruments, made by the Secretary of State under the Act, were the primary means used by the Government to implement its renewable energy policy prior to the introduction of the Renewables

Obligation. Five NFFO cover England and Wales and three SRO cover Scotland. These required the Public Electricity Suppliers (“PESs”) to purchase electricity from renewable generators and provided for this electricity to be purchased at fixed prices for long term contract periods (typically 15 years). The last contracts are due to terminate in 2018. 581 NFFO contracts were issued under the last three of the NFFO with 255 stations currently commissioned at the date of publication. 109 SRO contracts were awarded under the SRO with 47 stations currently commissioned at the date of publication.

1.32 The power purchaser under each NFFO contract is the Non Fossil Purchasing Agency Limited (“NFPA”). The PESs established NFPA in England and Wales to enable them to carry out their obligations to collectively contract with renewable generators and so comply with NFFO. By entering into power purchase agreements at fixed prices with renewable generators, the PESs became eligible to be compensated for the differences between the Pool price (the reference price) and the contract prices through a levy, the “Fossil Fuel Levy”, on electricity sales. This levy is paid by all electricity consumers.

1.33 With the implementation of the New Electricity Trading Arrangements and the Renewables Obligation, arrangements were put in place by the Government to maintain the existing NFFO and SRO contracts. These arrangements include NFPA (now acting on behalf of the PES supply successor companies) carrying out an auction that is open to all licensed electricity suppliers in Great Britain for the NFFO electricity and accompanying ROCs (and Renewables LECs). A subsidiary of NFPA carries out a similar auction for SROCs only from SRO projects which the Scottish PES supply successor companies (“SSSCs”) administer. Once the premium prices under the contracts have been paid to generators and administration costs for the auctions have been met, the Fossil Fuel Levy account receives the additional proceeds from these auctions. This has enabled Ofgem to set the Fossil Fuel Levy rate at zero following the introduction of the Renewables Obligation.

1.34 The Orders set out specific eligibility requirements in respect of generating stations situated at a location where a NFFO or SRO contract provides or provided for the building of a generating station. Provisions in the Orders, in

relation to the interaction with NFFO and SRO were changed, following consultation by DTI and the Scottish Executive, from 1 April 2004.

1.35 The Orders refer to the situation where a NFFO or SRO contract provided for the building of a generating station at a particular location and either the contract was terminated⁵ or the specified station has not been commissioned. The Orders provide that a generating station that is situated at the location, or which is owned or operated by a person who was a party to the contract or who is a connected or linked person⁶ to any such party, is an excluded generating station (except for where, during the month in question, the electricity generated by the generating station is sold pursuant to another NFFO or SRO contract).

The annual report

1.36 This report fulfils the requirement on the Authority to produce an annual report in relation to the second obligation period (1 April 2003 to 31 March 2004) under the Orders. This report incorporates information on both the RO and ROS and uses the term RO to denote both the RO and the ROS and the terms ROCs to denote both ROCs and SROCs unless otherwise indicated.

1.37 Chapters 2, 3, 4 and 5 fulfil the reporting requirements of providing details on:

- the total number of ROCs issued by Ofgem during the second obligation period
- that number broken down by the technologies of the different types of eligible generating stations
- the total number of ROCs correctly produced to Ofgem during the second obligation period
- the total number of ROCs remaining on the ROC Register for use in the next period

⁵ Due to the operator of the generating station to which it applied having committed an unremedied breach of the contract (and the last period in the tables contained in schedule 1 to the NFFO which relates to the contract has not expired).

⁶ The terms connected person and linked person are defined in the Orders.

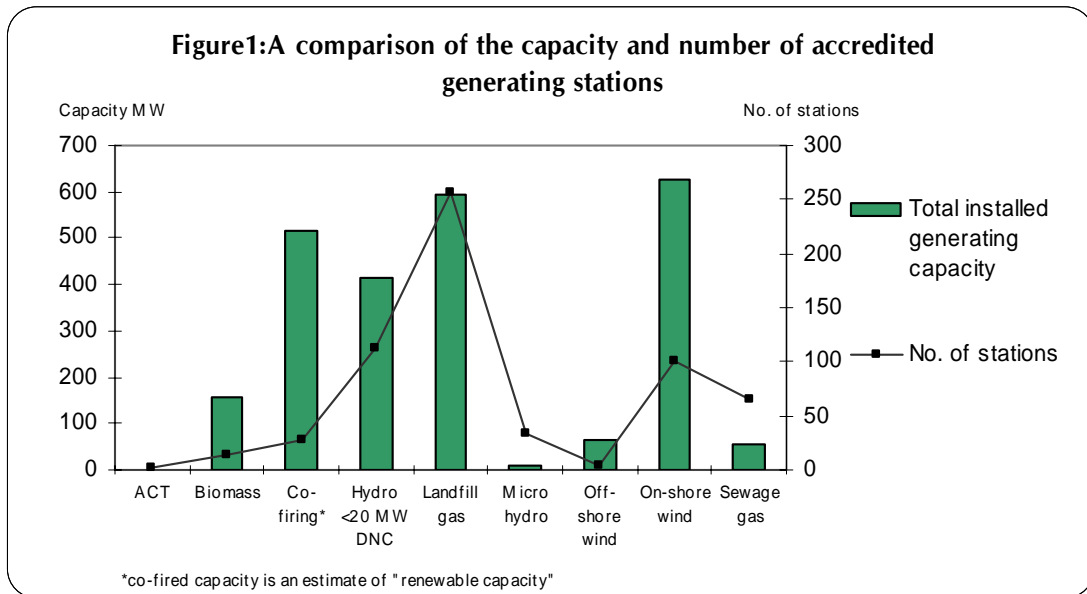
- the extent of compliance by each individual licensed supplier
- how each individual licensed supplier has complied with their obligation (produced ROCs, made buy-out payments or a combination of both)
- the amount of distributed buy-out fund and late payment fund each licensed supplier has received
- summaries of the outcomes of any enquiries or investigations regarding implementation of the RO and compliance by suppliers and operators of generating stations, and
- any other matters which Ofgem considers relevant to the implementation of the Orders.

1.38 Chapter 6 focuses on the 2005 review of the RO and the ROS consulted on by DTI and the Scottish Executive respectively and looks forward to the 2006 review.

2. Compliance by operators of generating stations

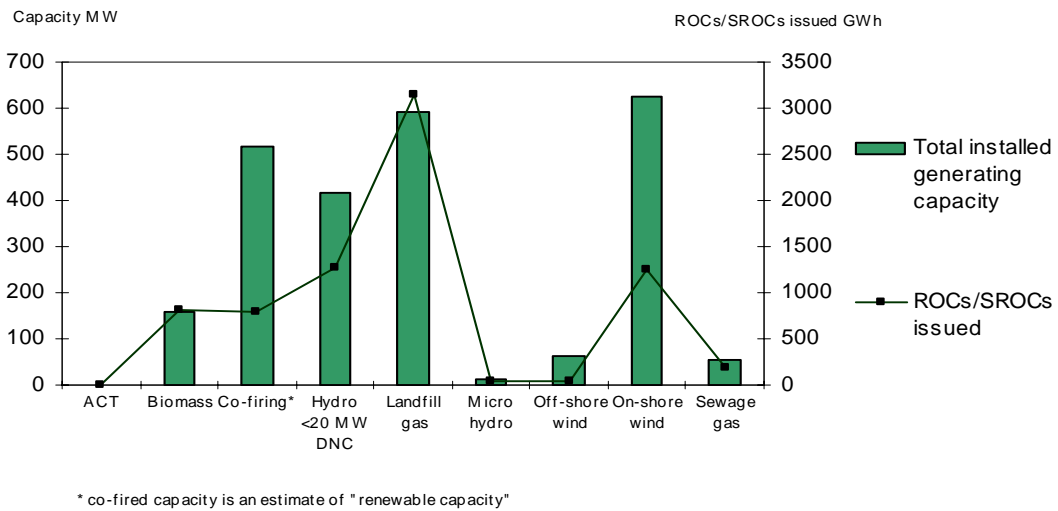
Accreditation of generating stations

- 2.1. Ofgem accredited 111 generating stations during the second obligation period with 56 of these being newly commissioned stations since the beginning of the RO. At the end of the first obligation period there were 505 accredited generating stations and 616 at the end of the second obligation period. Table A1 in Appendix 1 shows the breakdown of these stations by technology and country as of 31 March 04 with the majority being landfill gas stations located in England. Figure 1 provides a comparison of the capacity and number of accredited generation stations, 257 of which were landfill gas generating stations, with over 100 accredited for on-shore wind and hydro (those generating stations with a declared net capacity of 20MW or below and which are not micro hydro) respectively. The capacities accredited for landfill gas and on-shore wind are very similar at around 600MW, which demonstrates that landfill gas generating stations accredited under the RO tend to be smaller in capacity than on-shore wind generating stations. Sewage gas and micro hydro generating stations are also generally smaller whilst co-fired and biomass generating stations are among the larger capacity generating stations Ofgem accredits, although the statistics represented here for co-firing reflect an estimate of the renewable capacity based on the biomass element.



2.2. Figure 2 compares the accredited capacities for each technology to the number of ROCs issued. It is clear that some generating stations are able to operate closer to their capacities more consistently than others. In the second obligation period, the relatively smaller landfill gas generating stations obtained more benefit from the scheme in terms of ROCs issued than any other single technology, receiving significantly more than the combined number of ROCs issued to hydro and on-shore wind, the next two largest beneficiaries. Yet the relative total capacities of these three technologies are not very different. Biomass and sewage gas also show high monthly generation of electricity in relation to their capacities.

Figure 2:A comparison of the capacity of and ROCs and SROCs issued for accredited generating stations



2.3. Generating stations located in England accounted for around 70% of the accredited generating stations in the second RO period and they made up just under 60% of the accredited capacity in that year as Figures 3 and 4 demonstrate. In contrast the proportion of generating stations located in Scotland was almost 10% lower than the proportion of generating capacity for the country. This reflects the difference in the technology split between the two countries – the majority of eligible renewable generation coming from landfill gas in England and hydro in Scotland. Generating stations in Wales accounted for about 10% of both the number of stations accredited and the capacity.

Figure 3: A comparison of the number of accredited generating stations by location

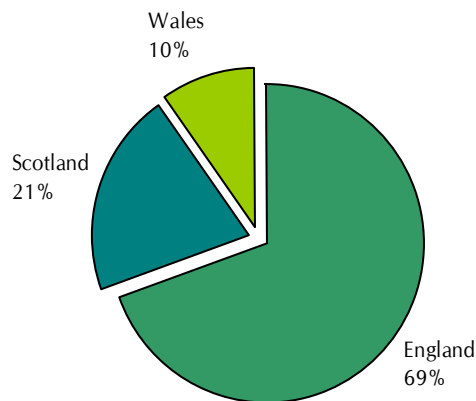
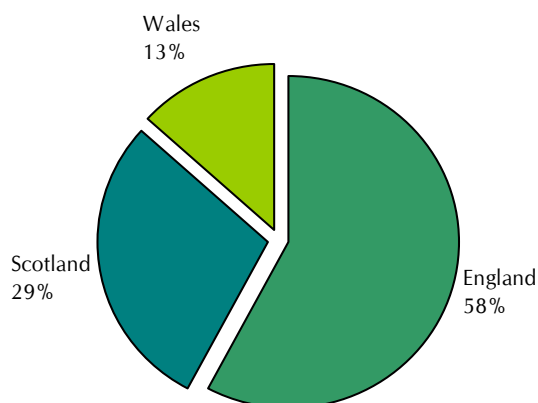


Figure 4: A comparison of the capacity of accredited generating stations by location*



*Co-fired capacity is an estimate of "renewable capacity"

2.4. 12 NFFO and two SRO stations were accredited in the second obligation period as shown in Table A3 in Appendix 1. This compares to 66 non-NFFO and 31 non-SRO stations being accredited in the same period. NFFO generating stations made up 7.7% of the accredited RO capacity this year and SRO generating stations made up 1.2% of the accredited ROS capacity.

2.5. Tables A5 to A8 in Appendix 1 provide detailed information on the technology, capacity and commissioning of accredited stations. Figures 5 and 6 represent some of this information. At the start of the RO, the accredited generating stations were mainly made up of landfill gas, wind, sewage gas and hydro generating stations. Over the two years of the scheme the number of newly accredited landfill gas stations is still a significant but falling proportion of the number of stations accredited. During the second obligation period the technology under which most generating stations were being accredited was hydro. Co-firing has also increased since the start of the scheme. The proportion of accredited on-shore wind generating stations increased over the first period but was lower in the second period than the first period.

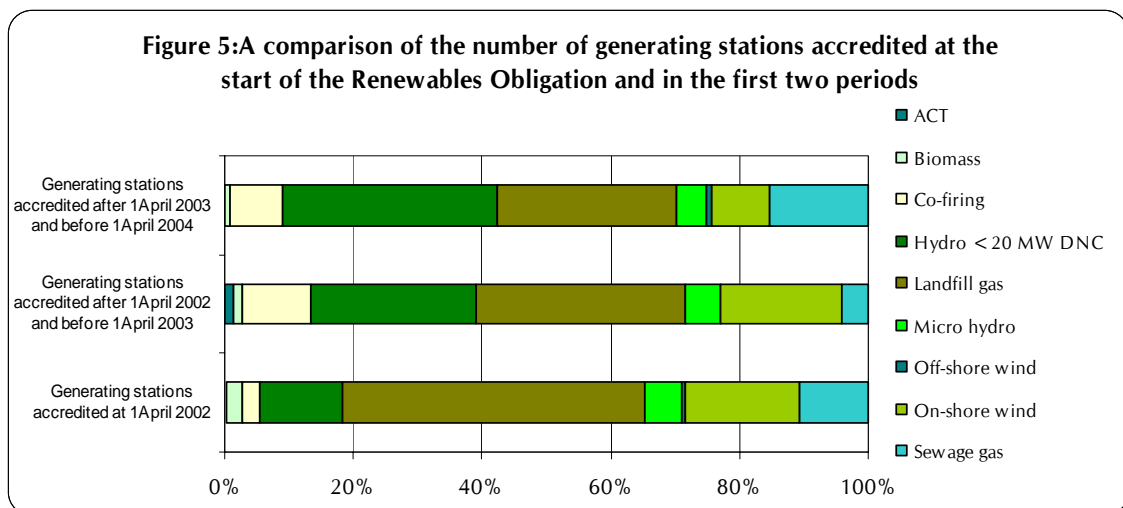
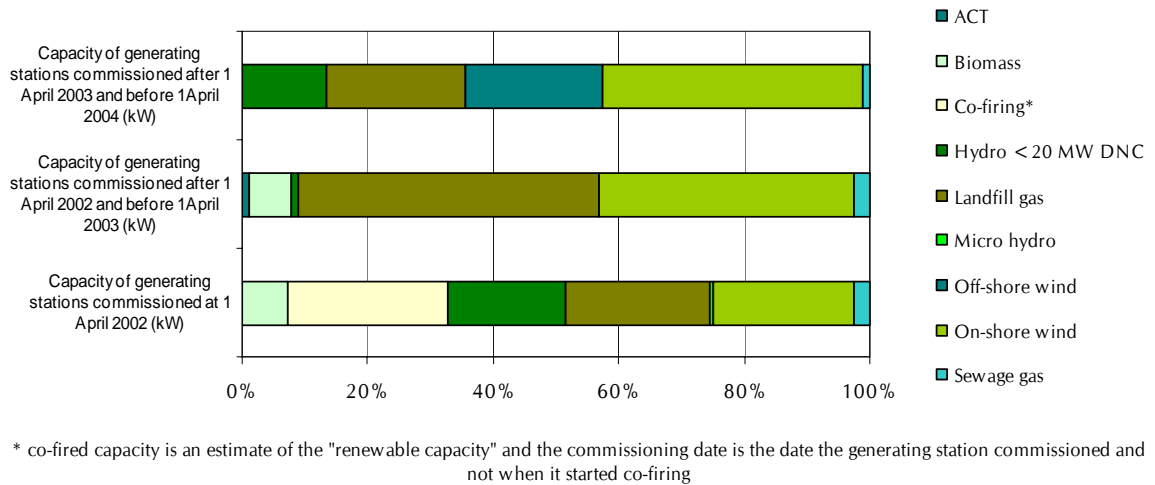


Figure 6: A comparison of the capacities of generating stations commissioned before the start of the Renewables Obligation and in the first two periods



- 2.6. Landfill gas and on-shore wind made up the majority of eligible renewable capacity commissioned during the first obligation period. Most of the capacity commissioned during the second obligation period was accredited under these two technologies as well as under hydro (mainly due to refurbishment of existing stations) and off-shore wind.
- 2.7. Table A9 in Appendix 1 provides some detail on those stations classified as "co-firing biomass with fossil fuel". It shows the maximum renewable qualifying percentage achieved in any month during the second obligation period and an estimate of "renewable" capacity for each co-fired station.

Compliance by generating stations

- 2.8. Ofgem carried out 30 audits of accredited generating stations throughout the second obligation period. While most of the outcomes were satisfactory approximately one third of the audits (ten in total) demonstrated significant data errors. These errors include sampling and metering issues. A summary of the audit results is provided in the table below.

Table 1: A summary of the outcomes of audits of RO generating stations audited throughout the second obligation period

Technology	No. audited	Types of significant data error
Advanced Conversion Technology	1	None
Biomass	2	Inaccurate metering, full information not provided in Accreditation Questionnaire, inadequate sampling
Co-firing	6	Inaccurate metering, inadequate sampling, under reporting input electricity
Hydro	6	None
Landfill gas	5	Use of estimates, full information not provided in Accreditation Questionnaire, under reporting input electricity
On-shore wind	6	Under reporting input electricity
Sewage gas	4	Inaccurate metering, full information not provided in Accreditation Questionnaire, under reporting input electricity

2.9. Given the complexities of the Orders, it might be expected that generators, especially the smaller and independent ones, would have experienced some confusion and misunderstanding at the start of the scheme. It is disappointing that in the second year of the obligation the audits continue to demonstrate significant errors by generators both in the completion of the Accreditation Questionnaire and the submission of information for ROC issue purposes. Following the publication of Ofgem's revised procedures in July 2004 and given that generators now have two full years' experience of the rules set out in the Orders, Ofgem would expect the scope for such misunderstanding and confusion to reduce.

- 2.10. The audits continue to demonstrate that generators are not always completing the Accreditation Questionnaire correctly and so Ofgem has revised the form and the accompanying guidance notes with the aim of reducing the occurrence of common mistakes.
- 2.11. Some of the generating stations audited had not been advising Ofgem of certain information of relevance to the issue of ROCs, eg that data was in fact estimated, that they had diesel standby generators or that biomass sampling was not carried out in the particular month of electricity generation for which the ROCs were being claimed. Ofgem will accept estimated output data in exceptional cases, but only where this is agreed in advance and the estimated data is notified in time. However, the sampling and measurement of biomass and other fuels must always be carried out in respect of the fuel burned in the month in question. Ofgem's Administration Procedures on the Renewables Obligation which include guidance on fuel sampling and measurement, available on Ofgem's website, www.ofgem.gov.uk, provide more detail.
- 2.12. Ofgem expects generators to provide accurate and complete information and to notify Ofgem of any changes to the information originally provided. This is so that Ofgem can properly assess the accreditation, including where reassessment might be required, and properly issue the correct number of ROCs each month. While the majority of generators have been forthcoming with such information, this has not always been the case. Indeed, certain information has only come to light as a result of the audits with Ofgem refusing to issue ROCs until satisfied of the reliability and accuracy of the information being presented to it.
- 2.13. Ofgem increased the percentage size of the sample for audits in the second obligation period and will continue to review what size and type of sample it considers necessary to ensure the integrity of the scheme going forward.

Rejection of applications for accreditation

- 2.14. Ofgem did not reject any applications for accreditation under the RO in the second obligation period.

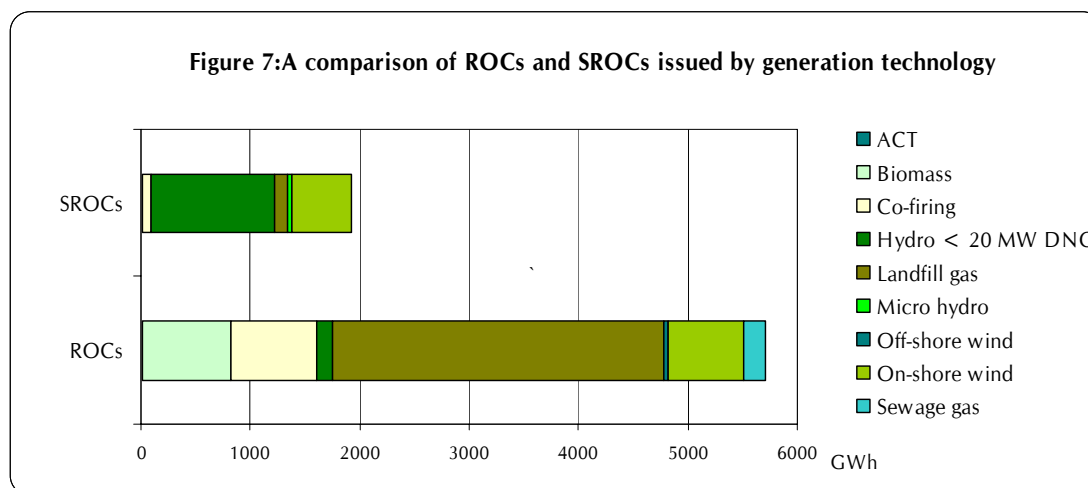
Withdrawal of accreditation

- 2.15. Ofgem did not withdraw accreditation from any generating stations in the second obligation period.

3. Certificates issued

ROCs and SROCs issued

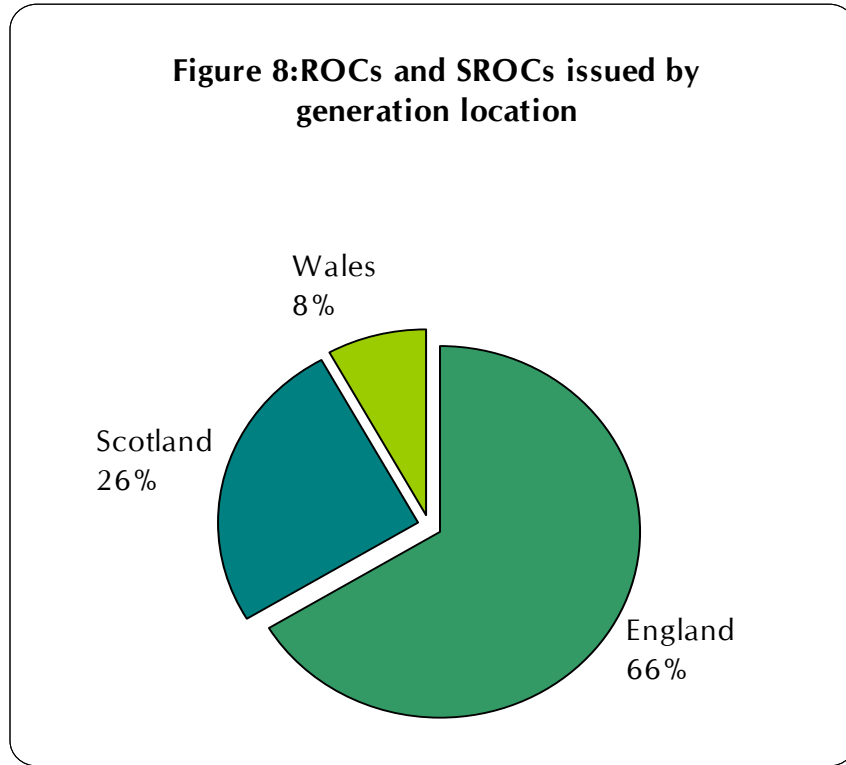
3.1 Ofgem issued 7,546,787⁷ ROCs with respect to electricity generated between 1 April 2003 and 31 March 2004. This was made up of 5,617,445 ROCs and 1,929,342 SROCs. Appendix 2 includes various tables showing further detail on ROCs and SROCs issued in the second period. For example, the breakdown by generation technology, ie the description of generating station, of the ROCs and SROCs issued is shown in Table B1 with the breakdown by month being shown in Table B2. Figure 7 emphasises the difference in the number of ROCs issued under each of the Orders. The vast majority of ROCs issued in 2003/2004 were for landfill gas; on-shore wind, co-firing and biomass were also issued with significant numbers of ROCs. Smaller contributions were made by hydro and sewage gas. This compares with SROCs being issued mainly to hydro and on-shore wind generating stations.



3.2 Figure 8⁸ shows that renewable generating stations located in England received two thirds of all ROCs issued in the second obligation period compared to a quarter and a twelfth for accredited generating stations located in Scotland and

⁷ This number is different to previously published numbers as certificates will have been issued on a back-dated basis. Each ROC represents one MWh of eligible renewable electricity generated.

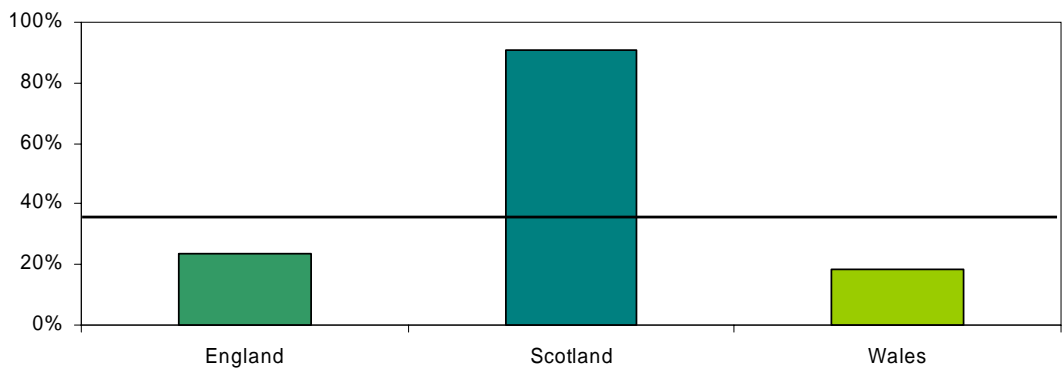
Wales respectively. This is significantly more than the proportion of generating capacity in England shown in Figure 4 and reflects the amount of landfill gas in England compared to the amount of hydro and on-shore wind in Scotland and Wales.



3.3 In comparison to the last obligation period the number of ROCs issued to generating stations located in Scotland has gone up by just over 90%, mainly as a result of more hydro generation. Much of this additional hydro generation was due to the refurbishment of stations built prior to 1990. The black horizontal line of Figure 9 shows the average increase in ROCs issued from the first obligation period to the second equating to approximately 35%. Both England and Wales received a smaller proportion of the total ROCs issued than they did in the first Renewables Obligation year.

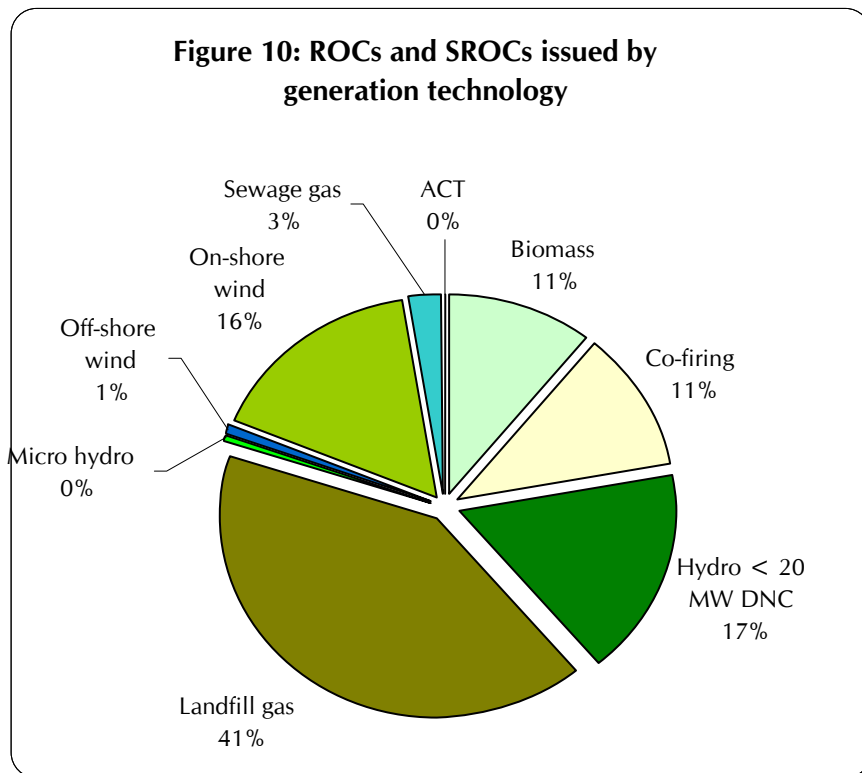
⁸ Please note that all percentages have been rounded.
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Figure 9: The percentage change in ROCs and SROCs issued to each country from the first Renewables Obligation period to the second Renewables Obligation period



3.4 Figure 10 below shows the percentages of ROCs issued by each technology for both the RO and the ROS. Landfill gas generation attracts over 40% of the ROCs issued in the second obligation period with hydro and on-shore wind receiving 17% and 16% respectively. Co-firing generation and biomass attracted just over 10% of the total ROCs each.

Figure 10: ROCs and SROCs issued by generation technology



3.5 Figures 11, 12 and 13 represent the percentages of ROCs issued by technology for each country in Great Britain. The majority of ROCs were issued for landfill gas generation in England and on-shore wind in Wales while hydro generating stations received the largest number of ROCs in Scotland. In comparison with the first obligation period the proportion of ROCs issued to biomass and co-firing generating stations has increased in England, whilst wind and landfill gas has decreased. With the introduction of North Hoyle off-shore wind farm half way through the 2003/2004 obligation year, off-shore wind ROCs issued to generating stations located in Wales have increased from 0% to 7%.

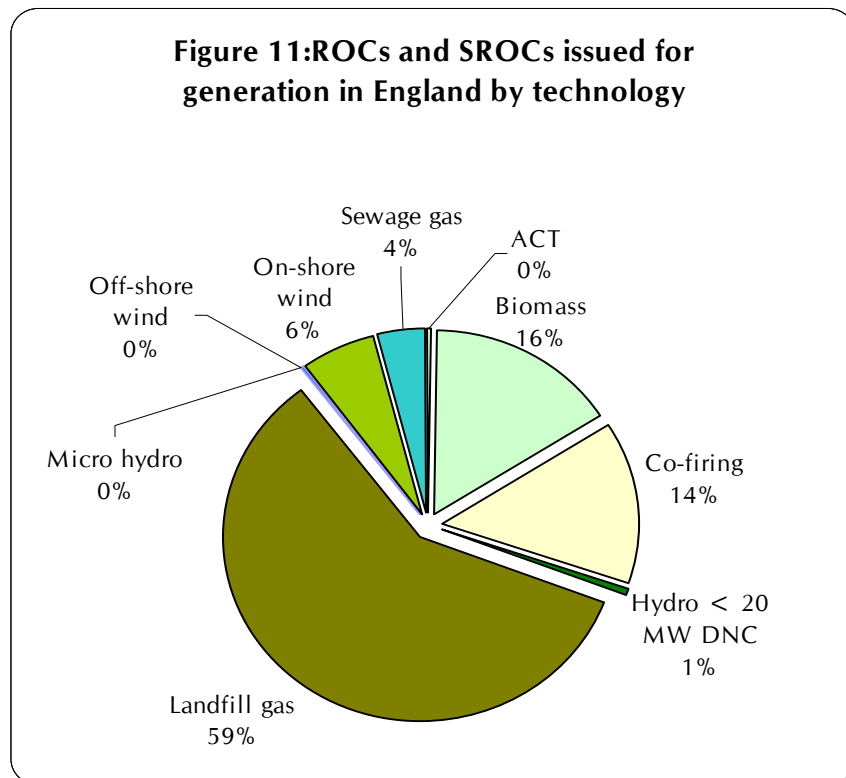


Figure 12:ROCs and SROCs issued for generation in Scotland by technology

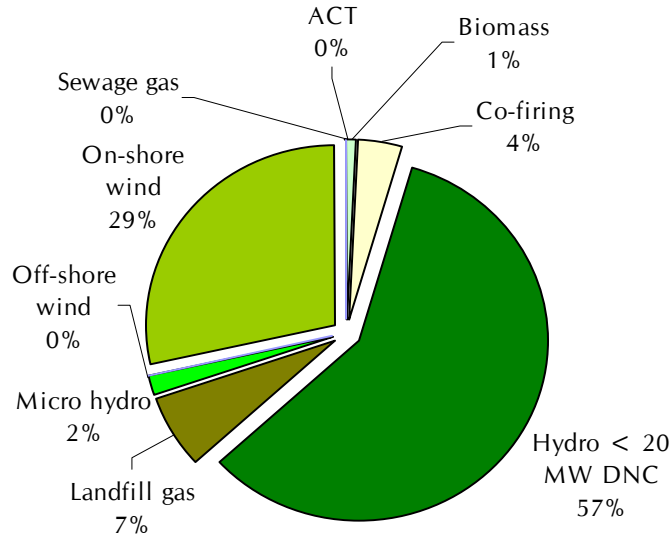
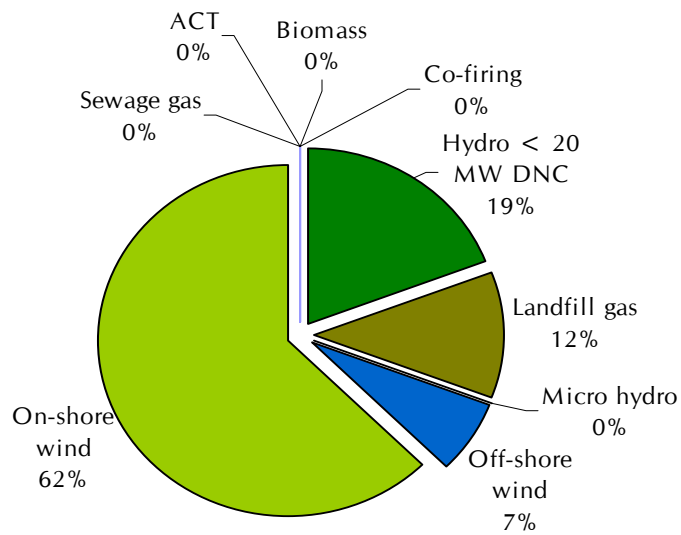
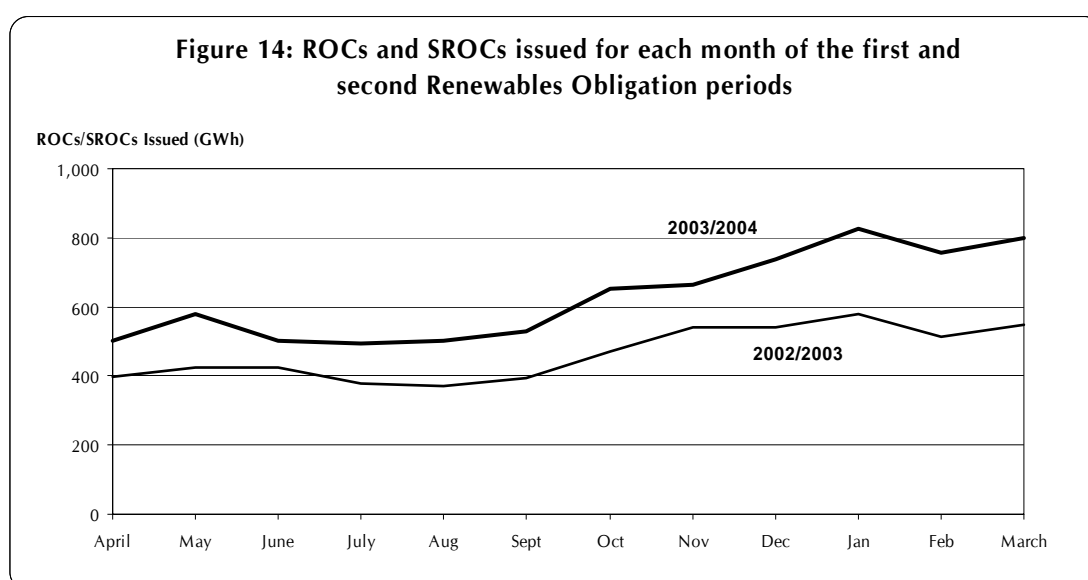


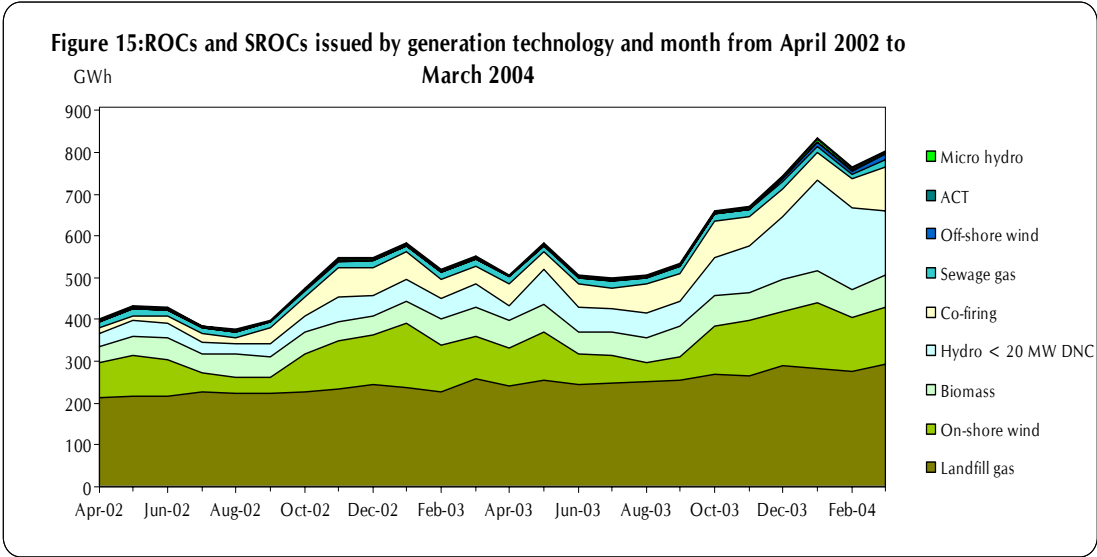
Figure 13:ROCs and SROCs issued for generation in Wales by technology



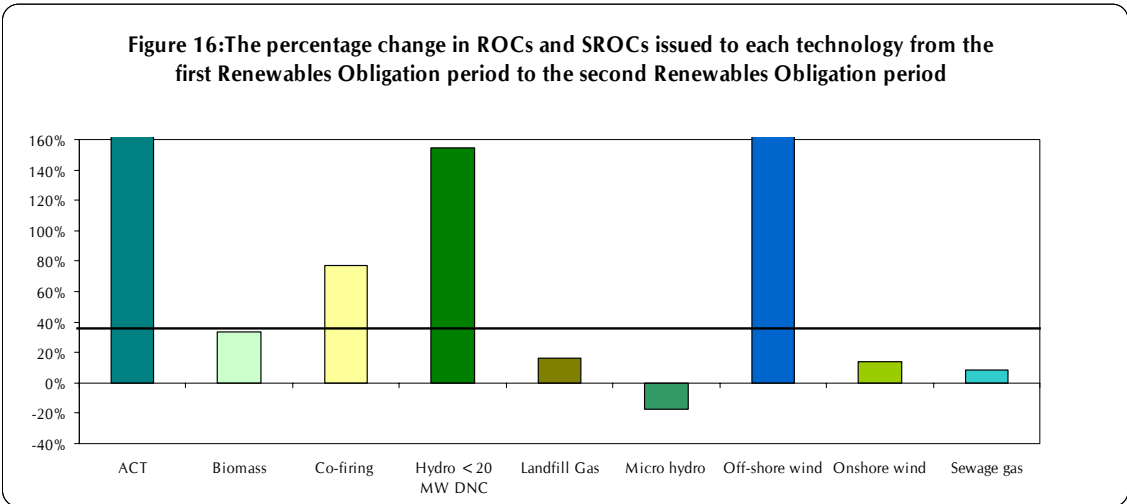
3.6 Figures 14 and 15 compare the ROCs issued in each month of the first two obligation periods. There is a clear upwards and seasonal trend with more ROCs being issued in winter months. The difference between the two lines also increases towards the end of the obligation period, indicating an increasing rate of growth in the issue of ROCs. Whether this is a result of comparative winter weather conditions or an overall trend is not yet clear.



3.7 The origins of the seasonal trend are demonstrated clearly in Figure 15. ROCs issued to landfill gas at the bottom of the chart steadily increased over the two years. On-shore wind just above is clearly more productive from October through to June. Hydro shows perhaps the most dramatic change over the two years. From October 2003 the number of ROCs issued to this technology increased to the extent that for each month from November 2003 to March 2004 the number of ROCs that were issued was over double the average monthly issue for the technology prior to November 2003.



3.8 The result of this was that over the two obligation periods the number of ROCs issued to hydro increased by almost 160% as shown in Figure 16. Off-shore wind and ACT each increased by a larger amount but these technologies were issued with very few ROCs in the first obligation period. Micro hydro was the only technology to receive fewer ROCs this period than last period and this was despite the increase in ROCs issued for hydro generation under the RO. Co-firing generation also increased by over half; in comparison increases in on-shore wind, landfill gas and sewage gas generation were below the 35% average increase for all technologies.



ROCs and SROCs revoked

- 3.9 Ofgem revoked 43,072 ROCs and 8,871 SROCs in the second obligation period. 45,893 replacement ROCs were issued. 3,765 ROCs and 2,285 SROCs were revoked and not replaced.
- 3.10 23 separate ROC ranges were revoked. Ofgem publishes the sequence numbers of revoked ROCs, the reasons the ROCs were revoked and the sequence number of any replacement ROCs on its website.
- 3.11 The reason 13 of the ROC ranges were revoked was Ofgem administrative error. Three of the ROC ranges had no replacement ROCs issued because either the station was not eligible in the relevant month or all the required information had not been received.
- 3.12 Ten of the 23 revoked ROC ranges were issued in respect of a generating station which incorrectly calculated its renewable output.

ROCs and SROCs issued in the first obligation period – an update

- 3.13 Appendix 3 includes various tables showing further detail on ROCs and SROCs issued in the first period. The statistics have been updated to take account of certificates issued on a backdated basis.

4. Compliance by suppliers

- 4.1 Obligations placed on suppliers by the Orders are relevant requirements. If any supplier fails to meet or is likely to contravene a relevant requirement under the Act, the Authority will consider making a compliance order or imposing a financial penalty.
- 4.2 Ofgem started corresponding with all licensed suppliers in June 2004 to remind them of their obligations and to start to put in place the necessary arrangements for compliance. A workshop for suppliers was held on 8 July 2004.

Total Renewables Obligation for England and Wales and for Scotland

- 4.3 For the second obligation period, the total Renewables Obligation for electricity supplied to customers in England and Wales was 12,387,720 MWh, and for electricity supplied to customers in Scotland was 1,239,692 MWh.
- 4.4 The total numbers of ROCs and SROCs correctly produced to Ofgem before the 1 October 2004 statutory deadline were 6,914,524 for England and Wales and 695,620 for Scotland.
- 4.5 The total buy-out payments received before the 1 October 2004 statutory deadline were £157,956,798 for England and Wales and £16,436,835 for Scotland.
- 4.6 The total buy-out funds for the second obligation period to be distributed, including interest, were £158,462,320 for England and Wales and £16,488,755 for Scotland.
- 4.7 This meant that each supplier who correctly produced ROCs or SROCs under the RO received £22.92⁹ back per certificate and each supplier who correctly

⁹ All the amounts in this paragraph have been rounded.
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produced SROCs or ROCs under the ROS received £23.70 back per certificate, giving a difference of £0.78.

- 4.8 The total late payment funds for the second obligation period to be distributed, including interest, were £4,182 for England and Wales and £0 for Scotland.
- 4.9 This meant that each supplier who correctly produced ROCs or SROCs under the RO received £0.0006 back per certificate from the late payment fund.
- 4.10 21,992 ROCs and 40,831 SROCs issued during the second obligation period were not produced before 1 October 2004 and have not been deleted and remain on the ROC Register for use in the next obligation period.
- 4.11 Registered holders of ROCs may request Ofgem delete certain ROCs from the ROC Register under Schedule 2 (5)(d) of the Orders. 0 ROCs and 3,520 SROCs issued in respect of the second obligation period were deleted from the ROC Register at the request of the registered holder.
- 4.12 The table below shows the residual balances of Ofgem's Renewables Obligation bank accounts following distribution of the buy-out funds and the late payment fund on 25 October 2004. The small amounts arise from Ofgem rounding down buy-out distribution payments to the nearest pound and interest earned on the small surpluses carried over.

Table 2: Residual balances

RO buy-out fund	£11.71
ROS buy-out fund	£10.83
RO late payment fund	£9.70

Licensed suppliers who had an obligation

- 4.13 Out of 77 licensed suppliers in England and Wales, 40 had a Renewables Obligation under the RO because they were supplying in England and Wales

and out of 72 licensed suppliers in Scotland, 29 had a Renewables Obligation under the ROS as they were supplying in Scotland. 28 had an obligation under each of the Orders. The tables in Appendix 4 provide the amounts of the Renewables Obligation under each of the Orders for each supply licensee.

- 4.14 Powergen Retail Ltd had the largest obligation in England and Wales at 1,924,753 MWh (4.3% of its total sales) followed by London Energy plc and British Gas Trading Ltd. ScottishPower Energy Retail Ltd was the largest supplier in Scotland with an obligation amounting to 559,328 MWh with SSE Energy Supply Ltd having one of 328,983 MWh and British Gas Trading Ltd's obligation in Scotland coming to 143,045 MWh.
- 4.15 The tables in Appendix 4 also provide the compliance details for each licensed supplier according to each of the Orders. They highlight how each of these suppliers met their obligations, whether through producing ROCs, making a buy-out payment or a combination of both.
- 4.16 Tables D1 and D2 in Appendix 4 show that ten licensed suppliers in England and Wales and 17 licensed suppliers in Scotland met their obligations wholly through producing ROCs.
- 4.17 The tables also show which licensed suppliers met their obligations wholly by making buy-out payments.
- 4.18 The tables below summarise the headline RO and ROS figures for the first and second obligation periods.

Table 3: A comparison of RO compliance headline figures over the first and second obligation periods

	RO	
	2002/2003	2003/2004
Total obligation (TWh)	8,393,972	12,387,720
ROCs and SROCs produced (mlln)	4,973,091	6,914,524
Buy-out paid (£mlln)	£78,853,260	£157,960,978
Buy-out not paid (£mlln)	£23,773,170	£9,026,231
Percentage obligation met by ROCs or SROCs	59%	56%
Buy-out distributed and late payment fund (£mlln)	£79,251,930	£158,466,502
Buy-out paid per ROC or SROC produced (£)	£15.94	£22.92
What a ROC or SROC was "worth"¹⁰ to a supplier (£)	£45.94	£53.43

Table 4: A comparison of ROS compliance headline figures over the first and second obligation periods

	ROS	
	2002/2003	2003/2004
Total obligation (TWh)	867,596	1,239,692
ROCs and SROCs produced (mlln)	478,358	695,620
Buy-out paid (£mlln)	£11,210,730	£16,436,835
Buy-out not paid (£mlln)	£466,410	£162,801
Percentage obligation met by ROCs or SROCs	55%	56%
Buy-out distributed (£mlln)	£11,267,124	£16,488,755
Buy-out paid per ROC or SROC produced (£)	£23.55	£23.70
What a ROC or SROC was "worth" to a supplier (£)	£53.55	£54.21

- 4.19 In the second obligation year the percentage of suppliers' electricity sales subject to an obligation increased from 3% to 4.3%. This, combined with slightly higher electricity sales, resulted in a 47% increase in the overall obligations. The number of ROCs issued for the second obligation period increased by a third compared to the number of ROCs issued for the period 2002/2003. This created a greater difference in the number of ROCs issued to generating stations and the obligations set on suppliers compared to the previous obligation period.
- 4.20 The RO buy-out fund almost doubled from 2002/2003 to 2003/2004, in part due to the lower percentage of ROCs produced for the obligations compared to 2002/2003 and the amount of buy-out payments not made as a result of suppliers in administration, which fell from approximately £24 million in 2002/2003 to approximately £9 million. The increase in the buy-out price from £30 to £30.51 would also have had an effect.
- 4.21 There was also a large increase from £15.94 in 2002/2003 to £22.92 in 2003/2004 in the amount of buy-out distributed to suppliers for each ROC produced under the RO. When combined with the buy-out price that suppliers effectively avoid paying, a ROC produced against the RO was "worth" £53.43 to suppliers or £54.21 if produced against the ROS.

¹⁰ See paragraph 4.21 which represents a purely indicative figure.
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Figure 17:A comparison of the percentage of each supplier's RO that was satisfied by ROCs or SROCs

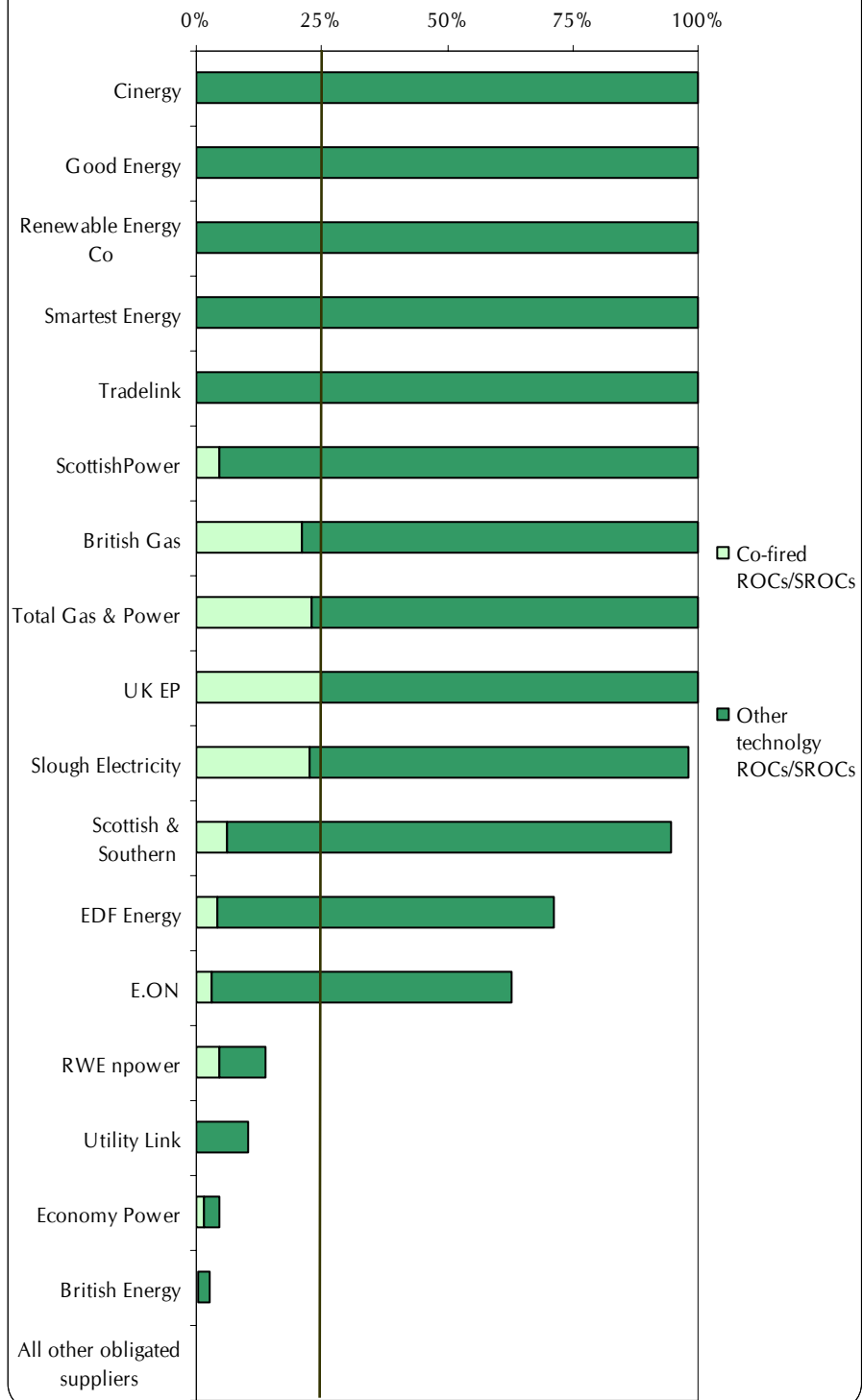
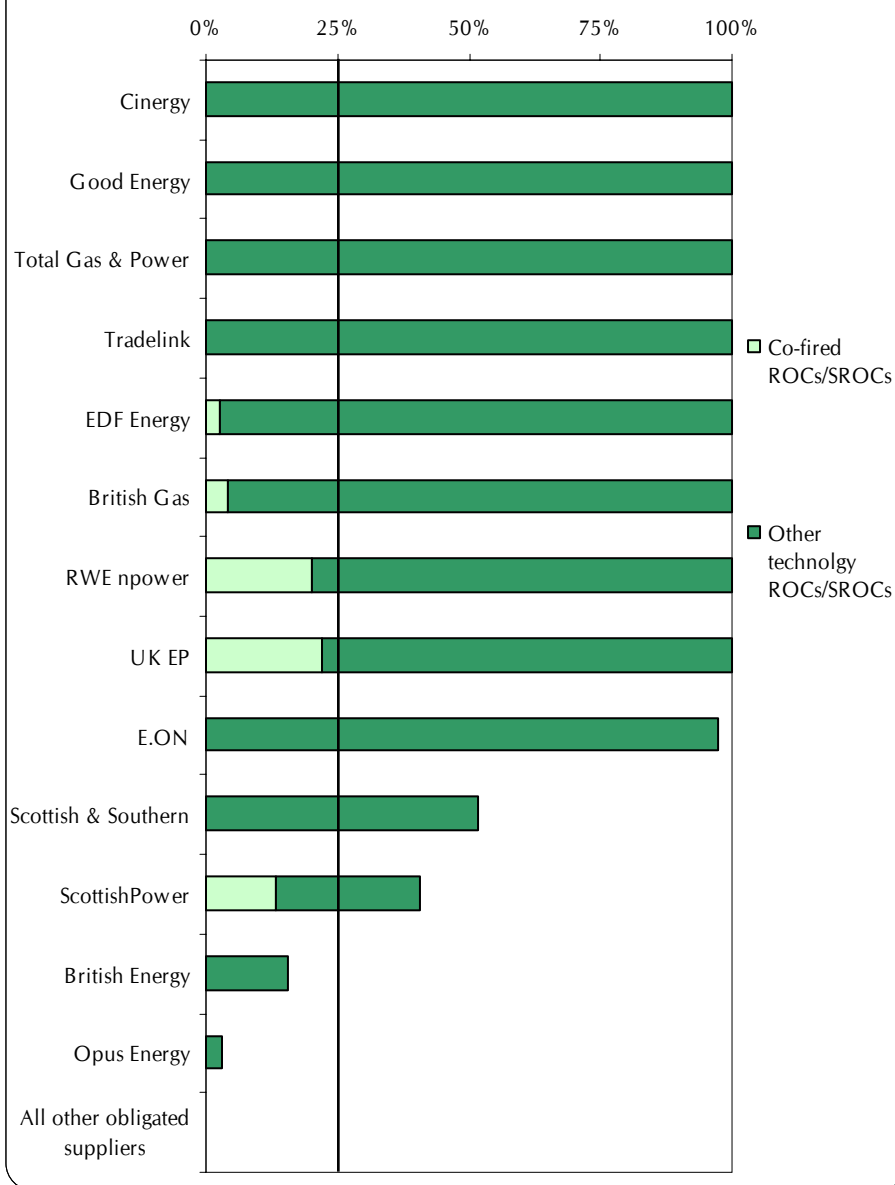


Figure 18:A comparison of the percentage of each supplier's ROS that was satisfied by ROCs or SROCs



4.22 Figures 17 and 18 represent what each supplier who correctly produced ROCs against its RO or ROS respectively produced in terms of co-fired ROCs. For ease of reference, these graphs group together each of the supply licences, against which there were Renewables Obligations, held by a group of companies. The detail by each licence is provided in Tables D3 and D4 in Appendix 4.

- 4.23 British Gas Trading Ltd (“British Gas”) was the only large supplier to fulfil both obligations entirely using ROCs. E.ON UK Plc (“E.ON”) had the largest RO at 2.73 TWh and also produced the largest number of ROCs - 1.71 million - to make up 63% of their obligation. RWE npower Ltd in comparison had an obligation slightly lower than E-ON’s at 2.43 TWh but fulfilled 14% of their obligation through producing ROCs.
- 4.24 Figures 19 and 20 compare the amounts received by each supplier (or group of suppliers) under the RO and the ROS. 23 licensed suppliers received buy-out distribution totalling £158,462,320 under the RO with 22 receiving buy-out distribution totalling £16,488,755 under the ROS. Tables D5 and D6 provide the detail of what each supplier received back under each of the Orders by percentage and amount. E.ON, British Gas and EDF Energy all received payments from the buy-out funds of between £34 and £40 million as shown in Figure 19. ScottishPower Energy Retail Ltd (“ScottishPower”) received the largest amount under the ROS - £5,378,605. Scottish and Southern Energy plc (“Scottish and Southern”) received £4,037,284 under the ROS.
- 4.25 There was approximately a doubling in the buy-out distribution payment British Gas received from the first obligation period to the second. The sums received by E.ON, EDF Energy and Scottish and Southern were also significantly higher in comparison to obligation period 2002/2003. In comparison ScottishPower and RWE npower Ltd received small increases in the amount of buy-out distributed.

Figure 19: A comparison of the buy-out fund distributed to suppliers under the RO

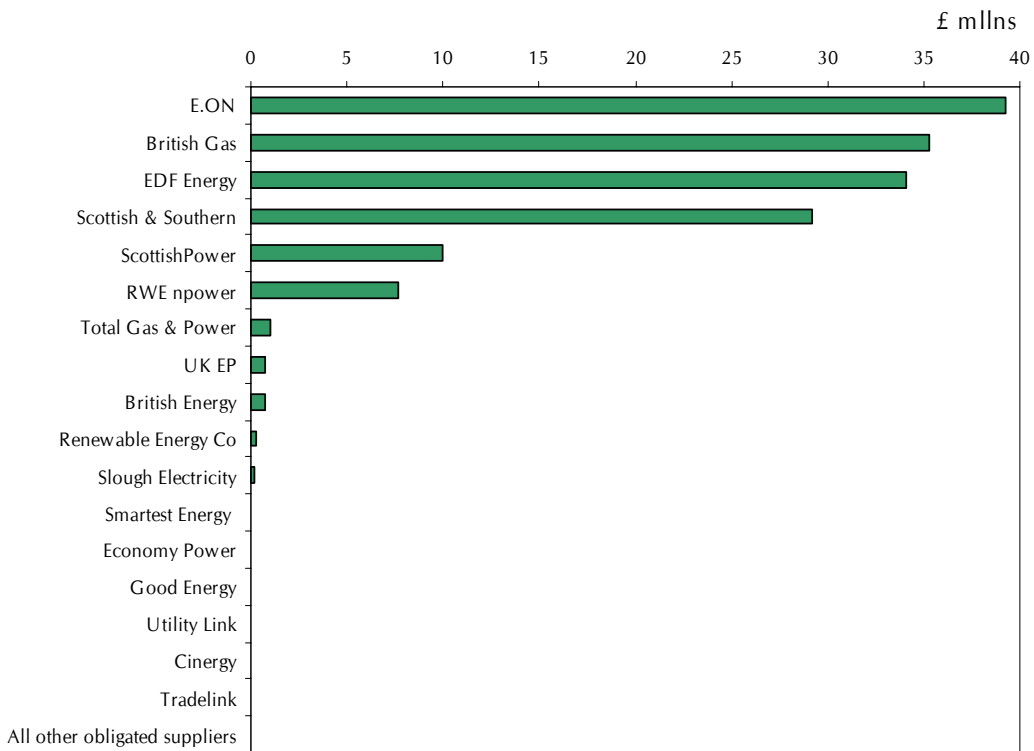


Figure 20: A comparison of the buy-out fund distributed to suppliers under the ROS

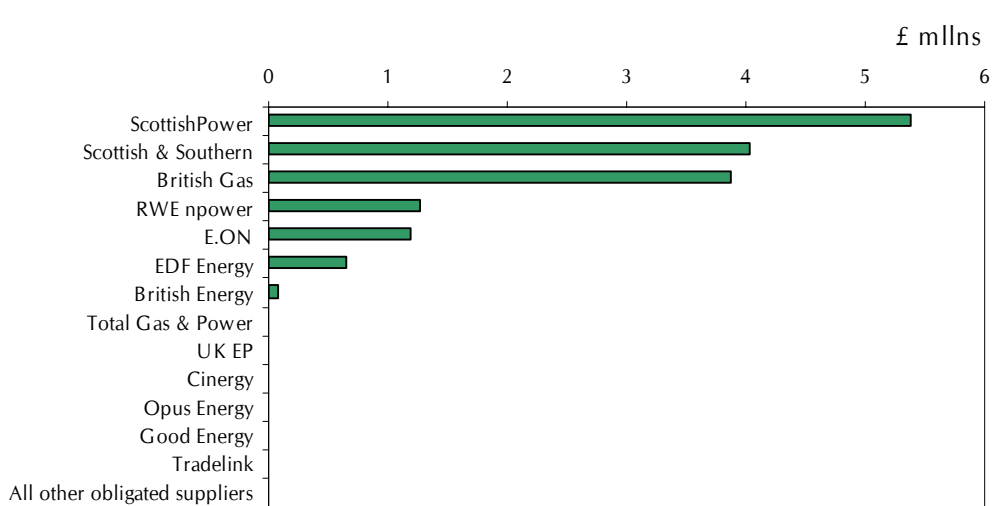


Figure 21: A comparison of the relative size of suppliers' ROs

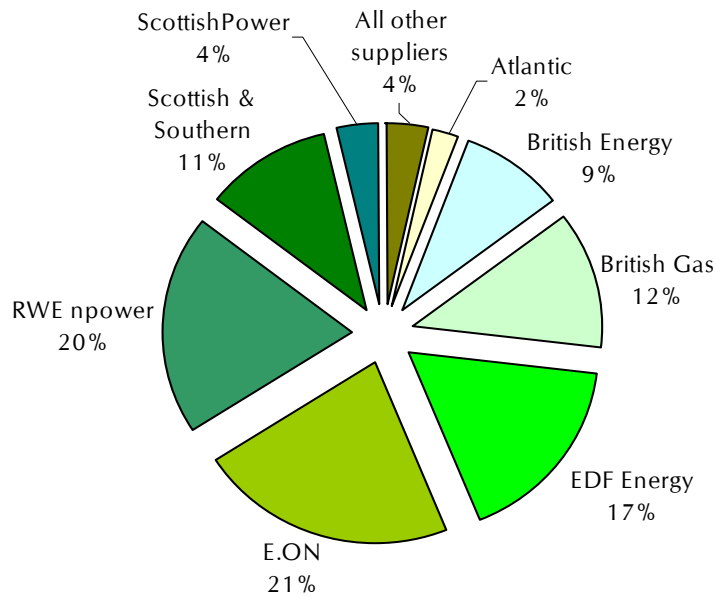
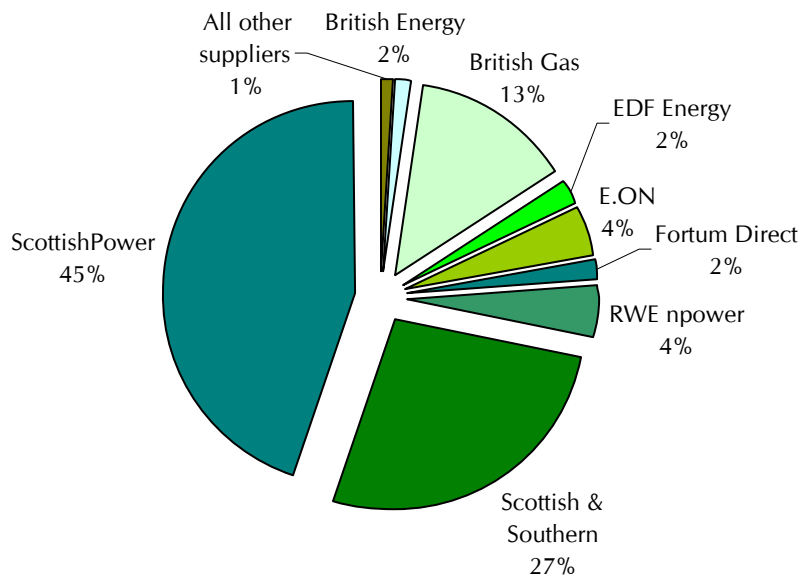


Figure 22: A comparison of the relative size of suppliers' ROSs



4.26 The majority of the 2003/2004 RO was split between six suppliers; in comparison the majority of the ROS fell on just three suppliers (see Figures 21

and 22). Larger suppliers generally complied with the ROS using 100% ROCs and the RO using varying percentages of ROCs, as shown in Figures 17 and 18. In contrast, ScottishPower complied with its RO using 100% ROCs and its ROS with less than 50% ROCs. Scottish and Southern produced a lower percentage of ROCs against its RO than its ROS.

4.27 ScottishPower received a total of £15.3 million buy-out distribution for the ROCs produced under both of the Orders. Had it complied with its ROS using 100% ROCs, it would only have received £6.1 million. In comparison, E.ON received £40.4 million and would only have received £39.7 million if it had put all its ROCs into the RO.

4.28 The ROS buy-out fund distributed per ROC is more affected by ScottishPower's actions under the ROS than by any other supplier who had a Renewables Obligation in Scotland. If it had complied with 100% ROCs/SROCs for its ROS, then the buy-out distributed per ROC would have been £6.17 less than the £23.70 that was distributed. The ROC value would have been £25.62 under the RO. Had E.ON complied with 100% ROCs for its RO, the ROC distribution value would have been £22.53 rather than the £22.92 that was distributed per ROC. The equivalent value would have been £27.92 under the ROS.

4.29 Had there been a single buy-out fund, ScottishPower would have received slightly less and E.ON slightly more buy-out distribution overall than they did.

Licensed suppliers who did not provide information to DTI on their sales volumes by 20 June

4.30 Article 6(5) of the Orders requires licensed electricity suppliers to provide DTI with their estimated figures relating to total sales of electricity to customers in England and Wales and Scotland during an obligation period by no later than 20 June immediately following the obligation period.

4.31 All licensed suppliers provided estimated sales figures to DTI. Two companies provided figures to DTI on a group rather than on supplier basis. British Gas

Trading Ltd and Electricity Direct (UK) Ltd are, therefore, in likely breach of article 6(5) of the Orders. Ofgem does not intend to pursue this matter further at this time.

Licensed suppliers who did not provide information to Ofgem on the amount of their obligation by 7 August

4.32 Article 6(6) of the Orders requires that, amongst other things, each electricity supplier must provide Ofgem with the amounts in MWh of its Renewables Obligations for the obligation period in question. One supplier, Slough Energy Supplies Limited, failed to provide this information to Ofgem by the due date. One supplier, UK Electric Power Limited, incorrectly calculated its Renewables Obligation.

4.33 Five electricity suppliers (shown in the table below) incorrectly rounded their Renewables Obligations and one electricity supplier, Economy Power Limited, incorrectly rounded its ROS. All these suppliers are likely to be in breach of article 6(6) of the Orders. Ofgem does not intend to pursue this matter further at this time.

Table 5: A list of suppliers who incorrectly rounded their Renewables Obligation or Renewables Obligation Scotland

BizzEnergy Ltd	Seaboard Energy Ltd
Economy Power Ltd	The Renewable Energy Company Ltd
London Energy Plc	

Licensed suppliers who did not provide information to Ofgem on the amount of electricity supplied by 7 August

4.34 Article 6(6) of the Orders requires that, amongst other things, the amounts of all electricity supplied to customers in England and Wales and in Scotland during

an obligation period is reported to Ofgem before 7 August immediately following the end of the obligation period. Suppliers who did not supply any electricity to customers during the obligation period are required to confirm this under Standard Licence Condition 19. 16 licensed suppliers failed to provide information to Ofgem as required by the due date.

Table 6: A list of suppliers who failed to provide information to Ofgem by 7 August 2004

730 Energy Limited	Pan-Utility Ltd
AES Energy Limited	Pentex Oil and Gas Limited
Affinity Power Limited	SME Energy Limited
Allied Domecq (Holdings) Plc	Telecom Plus PLC
Commercial Electricity Supplies Limited	The Team Group of Companies UK Limited
Enron Direct Ltd	Utilita Electricity Limited
Ineos Chlor Energy Limited	Utilitease Limited
International Power Plc	Zest 4 Electricity Limited

- 4.35 All but three licensed suppliers - Enron Direct Ltd, Pentex Oil and Gas Ltd and Utilita Electricity Ltd (who had no obligation) - subsequently provided the information in order to enable their obligations to be calculated.
- 4.36 While these suppliers are likely to be in breach of a relevant requirement, Ofgem does not intend to pursue this matter further at this time.

Licensed suppliers who did not copy to Ofgem the information provided to DTI

- 4.37 Article 11(1) of the Orders enables Ofgem to require licensed suppliers to provide it with such information as it may reasonably require that is relevant to whether the supplier is discharging its renewables obligation in any period. To enable Ofgem to be satisfied that a licensed supplier is discharging its obligation,

Ofgem requires suppliers to provide it with a copy of the estimated figures for total sales of electricity to customers in England and Wales and/or Scotland as provided to DTI by 20 June. Ofgem requested that this information be provided in relation to the second obligation period before 7 August 2004. 11 suppliers failed to provide the requested information. These suppliers are shown in the following table.

Table 7: A list of suppliers who did not copy to Ofgem the information provided to DTI

British Energy Generation Ltd	Fortum Direct Ltd
BizzEnergy Ltd	Opus Energy Ltd
BP Power Trading Ltd	SmartestEnergy Ltd
Cinergy Global Trading Ltd	Total Gas & Power Ltd
Corona Energy Retail 4 Ltd	Tradelink Solutions Ltd
Economy Power Ltd	

Licensed suppliers who had no obligation

4.38 37 licensed suppliers had no obligation under the RO and 44 had no obligation under the ROS either because they had no sales to customers in the second obligation period or because all their sales were to transmission connected customers only. Tables D7 and D8 in Appendix 4 show the suppliers without an obligation. Supply to transmission connected customers is not supply as defined in the Act and so is also not subject to the Renewables Obligation. The Energy Act 2004 contains provisions to amend the definition of supply in the Act so as to include supply to transmission connected customers, but these have not yet been commenced.

Checks undertaken on information provided to Ofgem

4.39 Ofgem performed a number of checks on the information provided to it by licensed electricity suppliers in relation to their compliance with the second obligation period.

- 4.40 Ofgem selected two suppliers at random to audit the figures provided. The selected suppliers were E.ON and Gaz de France Marketing Ltd (“Gaz de France”).
- 4.41 As this was the first time such audits were being carried out, Ofgem provided both suppliers with the opportunity to choose how they wished to provide the evidence being requested. The evidence requested included:
- information on any systems used to compile the total supply figures provided to Ofgem and how such systems are used, eg to issue, record and track invoices
 - any other information used to compile the supply figures in question
 - how updated figures were incorporated, eg any updated figures from the estimated total sales figures provided to the Department of Trade and Industry by 20 June
 - how sales figures for customers directly connected to the transmission network were removed from the figures provided to Ofgem (where applicable), and
 - how figures on electricity supplied under article 10 of the Orders were incorporated into the figures provided to Ofgem (where applicable).
- 4.42 Ofgem expects a supplier who is chosen for such an audit or, indeed, asked about figures provided to Ofgem to be co-operative and provide good quality information, to support the figures provided. Ofgem found that visiting the suppliers’ offices to see the reporting systems and reports used was the most efficient method of verifying the information provided. Ofgem expects, in the future, to visit offices of suppliers that are audited.
- 4.43 In the case of the audit on Gaz de France, one discrepancy in the supplied figures was noted but Gaz de France provided satisfactory evidence to show that it had highlighted this discrepancy internally before Ofgem notified it of the forthcoming audit. It also supplied satisfactory evidence to show that it was intending to notify Ofgem of the discrepancy once it had been resolved

internally. Ofgem considers that Gaz de France's approach was competent and professional.

- 4.44 In the case of E.ON, the evidence was produced through correspondence. Unfortunately, the original correspondence from E.ON was lacking in clarity and it became clear that there was an omission in the figures supplied. E.ON had not provided any sales figures relating to article 10 operator consumption yet Ofgem had received evidence that it had such sales. E.ON acknowledged that it had not submitted these figures due to an internal misunderstanding of what these supplies represented, ie it was under the impression that the scope of article 10 did not include "sell-and-buy-back" contracts. E.ON revised its submission (on which its obligation was calculated) and assured Ofgem that this was a genuine error, and that its processes would be improved going forward.
- 4.45 Ofgem will be carrying out audits each year. It expects all suppliers to ensure that their processes are fully auditable and that the processes incorporate an appropriately senior level of sign off of figures provided to Ofgem. As stated above, in future all audits will be conducted by a visit.
- 4.46 Ofgem also performed a comparison of sales figures provided by all electricity supply licensees in the second obligation period with those provided for the previous obligation period. Ofgem compared significant differences with data it holds on changes in customer numbers over the relevant period. These checks resulted in Ofgem corresponding with one supplier in relation to the large increase in its obligation. That supplier provided an explanation which was sufficient to enable Ofgem to be satisfied with the figures it provided.
- 4.47 Ofgem also asked DTI to compare the information held by DTI for statistical purposes with the figures supplied to Ofgem. These checks resulted in Ofgem corresponding with three suppliers to confirm the accuracy of the information provided to Ofgem. All three suppliers provided an explanation which was sufficient to enable Ofgem to be satisfied with the figures they provided.

Licensed suppliers who failed to produce the required number of ROCs or make the full alternative payment to the buy-out fund before 1 October 2004

4.48 Four suppliers failed to produce the required number of ROCs or make the full alternative payment to the buy-out fund before 1 October 2004. The following table summarises the details.

Table 8: A list of suppliers who failed to produce the required numbers of ROCs or make the full alternative payment to the buy-out fund before 1 October 2004

Supplier	Reason	
Atlantic Electricity and Gas Ltd	Company in administrative receivership	RO and ROS
Maverick Energy Ltd	Company in administrative receivership	RO and ROS
Slough Energy Supplies Ltd	Submitted buy-out payment after the statutory deadline	RO
Eledor Ltd	Insufficient buy-out payment made before the statutory deadline (a very small amount)	RO

4.49 As stated in paragraph 4.2, Ofgem began communicating with all licensed suppliers at the end of June 2004 to remind them of their obligations and to start to put in place the necessary arrangements for compliance.

4.50 This correspondence led to the Atlantic Electricity and Gas Ltd (“Atlantic”) and Maverick Energy Ltd (“Maverick”) Administrators (KPMG are the Administrators for both companies) indicating that there would be insufficient funds to enable Atlantic or Maverick to meet their obligations. Ofgem notified industry of this in its Information Note R/58, published on 6 August 2004, and of the estimated potential amount of any buy-out shortfall.

- 4.51 The Administrators confirmed to Ofgem that there would be no funds available at the end of the administration for unsecured creditors. Ofgem was satisfied that there were no further steps that could be taken by either company to comply with the Orders and that it would serve no practical effect to issue provisional or final orders in these cases. Ofgem subsequently gave notice under section 25 of the Electricity Act 1989 that it did not intend to issue provisional or final enforcement orders to the Administrators of Atlantic or Maverick for their likely breach of the Orders. Ofgem notified industry of this in its Information Note R/65 published on 30 September 2004.
- 4.52 On 1 October 2004, Ofgem confirmed that both Atlantic and Maverick had failed to discharge their ROs by not producing ROCs and / or paying the appropriate amount of buy-out before that date.
- 4.53 Slough Energy Supplies Ltd and Eledor Ltd made payments into the late payment fund of £4,179.87 and £0.90 respectively. These payments totalled £4,180.77.
- 4.54 The buy-out payment made by Eledor Ltd was short by a very small amount only.
- 4.55 Ofgem returned an excess buy-out payment of £6.02 to Fortum Direct Ltd in respect of its ROS.

Licensed suppliers who failed to produce the required number of ROCs or make the full alternative payment to the buy-out fund before 1 October 2003 – an update

- 4.56 On 1 October 2003, both TXU (UK) Ltd (“TXU”) and Maverick had failed to produce the required number of ROCs or make the full alternative payment to the buy-out fund.

- 4.57 The Authority found TXU and Maverick to have breached their obligations in respect of the first year of the RO in March 2004. The Authority, having taken account of the particular facts and circumstances of the contravention, concluded that it was not justified to impose a financial penalty in either case¹¹.
- 4.58 TXU had committed to make advance interim payments to suppliers with a valid claim who had sustained direct loss in consequence of the breach. Ofgem has been monitoring the situation regarding such payments and notes that TXU has now paid around £6 million to the majority of the affected suppliers. Ofgem also understands that TXU expects to be able to pay 99 pence in the pound to creditors in total.

¹¹ Ofgem issued Statements by the Authority on both breaches in March 2004. The Renewables Obligation, Ofgem's second annual report
Office of Gas and Electricity Markets

5. Issues raised

- 5.1. The administration of the RO during the second obligation period has highlighted some operational issues which are described in the following paragraphs.

Timetable for receipt of certain information

- 5.2. Ofgem has continued to deal with queries about the timetable for receipt of gross output and input electricity figures in order to be able to issue ROCs. Generating stations have two months after the month of generation in which to provide Ofgem with the necessary data if they wish to submit a claim for ROCs. All generating stations have been repeatedly informed of the two month deadline including in the ROC issue email wording, the service announcement on the ROC Register and on the ROC issue schedule which clearly states that ROCs (and Renewables LECs) are unable to be issued if monthly information is not received by the cut off date.
- 5.3. Article 4(10) of the Orders sets out the criteria for the issue of ROCs and article 4(10)(b) provides that certain information must be provided to Ofgem in order for Ofgem to assess whether the ROC should be issued and whether it should be satisfied that the information provided is accurate and reliable. Information about gross output and input electricity for the relevant month is necessary in order for Ofgem to assess whether ROCs should be issued
- 5.4. Article 4(12)(a) of the Orders provides that **where** the Authority issues ROCs, ie where all the criteria in article 4(10) have been met along with any other relevant criteria, it shall determine the amount of electricity which is to be regarded as having been generated from eligible renewable sources by a generating station in a particular month. It must use the most accurate figures for gross output and input electricity which are known to or estimated by it at the end of the second month following the end of the month in which the relevant electricity was generated, and must disregard any changes to those figures after this time.

- 5.5. Ofgem does not consider that article 4(12) of the Orders places a duty on it to estimate the most accurate figures for gross output and input electricity where the operator of the generating station does not provide such information in relation to a particular month. Ofgem may estimate the most accurate figures for gross output and input electricity where it is satisfied, within two months of the end of the month of generation, that there are reasonable grounds for the operator not being able to provide actual figures for gross output and input electricity.
- 5.6. Generating stations continue to fail to provide figures for gross output and input electricity before the end of the second month. In the event of a failure, generating stations can provide evidence to Ofgem to demonstrate that the figures were sent within the two month deadline or an explanation, for Ofgem's consideration, as to why the figures were not sent on time.
- 5.7. Ofgem will not generally consider administrative oversight by the operator of the generating station alone to be a good reason for it to accept figures after the end of the second month following the month of generation.
- 5.8. Ofgem deals with any missing or late monthly data circumstances on a case by case basis. However, by way of general guidance, it is likely that Ofgem would accept that the required information was sent to Ofgem within the deadline if evidence can be provided of: the sent email; the delivery receipt (to confirm the email was delivered to the receiver); the email being held by the server; and a copy of the automatic renewable@ofgem.gov.uk receipt; in each case showing matching dates, within the deadline.

Notification of issues with sending information

- 5.9. Some generating stations are not contacting Ofgem until very close to the end of the second month following the end of the month of generation to inform Ofgem of any problems with them submitting the required information.
- 5.10. Ofgem may estimate figures for gross output and/or input electricity where it is satisfied in any given case that there is a good and genuine reason why the operator of the generating station cannot provide accurate figures to Ofgem before the end of the second month following the month of generation. For

example, if the generating station will not be able to provide accurate figures to Ofgem because of metering equipment failure this would seem to represent a good and genuine reason.

- 5.11. The onus is on the operator of the generating station to contact Ofgem if it would like Ofgem to consider the use of estimated figures. If the generating station does not contact Ofgem before the end of the second month following the month of generation, Ofgem cannot use estimated figures. Ofgem must be satisfied of the basis of any estimate and must agree that basis in advance.
- 5.12. Any estimate should be agreed before the end of the second month following the month of generation. Ofgem asks that generating stations do not unnecessarily delay notifying Ofgem in such cases. For example, an operator should notify Ofgem of any failure in metering equipment as soon as possible after such failure is identified.

Article 10 operator consumption

- 5.13. For electricity to be eligible for ROCs, it must have been supplied to a customer in Great Britain by a licensed supplier. Article 10 of the Orders provides for electricity to be treated as if it has been supplied by a licensed supplier to a customer in Great Britain where it is sold by the operator of a generating station to a licensed electricity supplier and is then purchased from that supplier and consumed by the operator of the generating station. Such an arrangement is known as a 'sell-and-buy-back' contract.
- 5.14. It came to Ofgem's attention that the operators of some generating stations claiming ROCs under article 10 were not consuming the electricity referred to in their 'sell-and-buy-back' contracts. In November 2003, Ofgem undertook a review of all generating stations claiming ROCs under article 10 to check that the operators were consuming the electricity as required by the legislation. Of the 102 generating stations Ofgem reviewed, 79 were found to be claiming ROCs for electricity being consumed by the operator of the generating station. Ofgem dedicated considerable resource to working with the remaining 23 generating stations to obtain further information and provide guidance on a case by case basis.

- 5.15. Of the 23 generating stations where the operator was not consuming the electricity, some were claiming ROCs for electricity exported through an exempt distribution network. This electricity could be claimed as eligible under the terms of the Act provided it was being supplied to the customer on the exempt distribution network by a licensed supplier, ie the electricity was sold to the licensed supplier who then supplied the customer.
- 5.16. Some of the 23 generating stations involved in the review were also claiming ROCs for exported electricity. In this event, generating stations were given the option of being issued with ROCs on just their export electricity until the issues with article 10 were resolved and many took up this option. Since then, around half of these generating stations have provided further information, entered into the necessary contractual arrangements or made other arrangements to ensure that their electricity was supplied by a licensed supplier to customers in Great Britain. It required considerable administrative resource to revoke ROCs and issue replacement ROCs month by month to generating stations which fell into this category. Several months' worth of recalculation was involved.

Use of recycled fuel oil

- 5.17. The Orders define waste as having "the meaning given to it in section 75(2) of the Environmental Protection Act 1990 as that subsection will have effect once it has been amended by paragraph 88 of Schedule 22 to the Environment Act 1995, but does not include gas derived from landfill sites or gas produced from the treatment of sewage". The Environment Agency determined that recycled fuel oil ("RFO") is a waste for the purposes of the Waste Incineration Directive in 2003. This was brought to Ofgem's attention as several generating stations accredited as co-firing generating stations were using RFO for certain purposes only and, as far as Ofgem was aware prior to the Environment Agency's determination, there was not an issue. However, as waste incineration is not eligible under the Orders, Ofgem notified the stations that it knew were using RFO of the issue and stopped issuing ROCs accordingly. Ofgem then sought legal advice as to the meaning of the Orders in relation to RFO.
- 5.18. Having finalised its position, Ofgem is clear that RFO is waste for the purposes of the Orders. However, in the specific circumstances, Ofgem accepted that the

information about RFO had been provided on a good faith basis up until the point when Ofgem sent the notification referred to above. Ofgem did not revoke ROCs issued in respect of electricity generated in a month prior to Ofgem's notification of the issue to affected generating stations. Ofgem was prepared to accept, in these specific circumstances, the use of RFO in respect of electricity generated in a month prior to the same date, and subject to all other relevant criteria being met, issued ROCs accordingly.

Definition of a generating station

- 5.19. A number of the provisions of the Orders refer to a generating station. There is no definition of a generating station in the Electricity Act 1989 or the Orders although there is a definition of a hydro generating station.
- 5.20. Ofgem has published guidelines to assist in understanding what a generating station is for the purposes of the Orders and these are incorporated in Ofgem's Administration Procedures.
- 5.21. Ofgem is required by the Orders to accredit separately each generating station. Ofgem is also required to issue ROCs separately in respect of each accredited generating station. For these reasons, Ofgem needs to be satisfied that a station seeking accreditation and the issue of ROCs is indeed a separate generating station.

Amendments introduced in April 2004

- 5.22. DTI and the Scottish Executive each published a statutory consultation on proposed changes to the Orders in August 2003. These consultations resulted in amending orders being made on 1 April 2004.

Co-firing of energy crops

- 5.23. The consultation resulted in changes to rules on the co-firing of energy crops. Until 31 March 2009, a station fuelled partly by biomass and partly by fossil fuel is an eligible generating station. Electricity generated from the fossil fuel element will not be eligible for ROCs.

- 5.24. After 31 March 2009, a station fuelled partly by biomass and partly by fossil fuel will (unless it is only using fossil fuel for the specified purposes and within the specified limits stated in article 8(15) in which case it is not considered to be fuelled by fossil fuel for accreditation purposes) only be eligible if 25% or more of the energy content of the biomass element is derived from energy crops. Again, electricity generated from the fossil fuel element will not be eligible for ROCs.
- 5.25. After 31 March 2010, a station fuelled partly by biomass and partly by fossil fuel will (unless it is only using fossil fuel as set out in the brackets in paragraph 5.24) only be eligible if 50% or more of the energy content of the biomass element is derived from energy crops. Again, electricity generated from the fossil fuel element will not be eligible for ROCs.
- 5.26. After 31 March 2011, a station fuelled partly by biomass and partly by fossil fuel will (unless it is only using fossil fuel as set out in the brackets in paragraph 5.24) only be eligible if 75% or more of the energy content of the biomass element is derived from energy crops. Again, electricity generated from the fossil fuel element will not be eligible for ROCs.
- 5.27. After 31 March 2016, a generating station fuelled partly by biomass and partly by fossil fuel will be excluded (unless it is only using fossil fuel as set out in the brackets in paragraph 5.24).
- 5.28. In addition fossil fuelled generating stations that convert entirely to biomass will not be required to refurbish their main components.

Definition of micro hydro generating station

- 5.29. The definition of a micro hydro generating station was clarified so that only micro hydro stations that have always been in private ownership and have always been operated privately are eligible for ROCs without the need to refurbish.

Fuels used by a generating station

- 5.30. The amendments clarify that only the fuel used to generate electricity is relevant in determining whether a station is fuelled by a particular fuel. Standby

generation is now defined for article 8 purposes as “the generation of electricity by equipment which is not used frequently or regularly to generate electricity and where all the electricity generated by the equipment is used by the generating station”. Standby generation is a permitted use of fossil fuel within the limit defined in article 8(15) of the Orders which allows the generating station to use fossil fuel or waste for standby generation or the testing of standby generation capacity in certain circumstances without being considered as fuel used by the generating station to generate electricity. The limit is that the use of fossil fuel or waste for standby generation and other specified purposes in article 8(15) must not exceed 10% of the energy content of the energy source by which the generating station is fuelled¹². Standby generation must be used by the generating station and therefore has to be deducted as it is input electricity.

Input electricity

- 5.31. When a generating station uses input electricity which is 0.5% or less of the gross output of the station then input electricity can be disregarded for ROC issue purposes. In order to benefit from this provision the generating station must be able to provide metered figures for the total generation, ie gross output and imported and/or self generated electricity used by the generating stations, ie input electricity. For the avoidance of doubt, the definition of input electricity as being electricity used regardless of whether the station was generating electricity or not was the interpretation that Ofgem had always applied.

Definition of energy content

- 5.32. The definition of energy content of a fuel is “the gross calorific value of that fuel (as expressed by weight or volume) multiplied by the weight or volume of that fuel”.

Small generating stations

- 5.33. Specific arrangements were introduced for generating stations with a declared net capacity of 50 kW or less. Such generating stations must now accumulate

¹² There is a slight difference in regard to this calculation in the ROS. The Renewables Obligation, Ofgem’s second annual report
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output over an obligation period rather than over a month and ROCs will be issued on an annual basis.

Banking days

- 5.34. Ofgem must now amend the Register within five banking days (ten in September), rather than on the fifth banking day (tenth in September) following the receipt of a matching transfer request.

NFFO/SRO location

- 5.35. The Orders set out specific eligibility requirements in respect of generating stations situated at a location where a NFFO or SRO contract provides or provided for the building of a generating station.
- 5.36. Article 8(2A) of the RO¹³ applies where a NFFO or SRO contract provided for the building of a generating station at a specified location and the contract was terminated due to the operator of the generating station to which it applied having committed an unremedied breach of the contract and the last period in the tables contained in schedule 1 to the Non-Fossil Fuel Order which relates to the contract has not expired. This article provides that a generating station that is situated at the location and is the generating station that the contract applied to at the time it was commissioned, or which is owned or operated by a person who was a party to the contract or who is a connected or linked person to any such party, is an excluded generating station (except for where, during the month in question, the electricity generated by the generating station is sold pursuant to another NFFO or SRO contract).
- 5.37. Article 8(11) of the RO¹⁴ applies to an existing NFFO or SRO contract that provides for the building of a generating station at a specific location and the specified station has not been commissioned. This article provides that a generating station situated at the location which is owned or operated by a person who is a party to the NFFO or SRO contract, or a connected or linked person to any such party, is an excluded generating station (except for where,

¹³ Article 8(3) of the ROS

¹⁴ Article 8(13) of the ROS

during the month in question, the electricity generated by the station is sold pursuant to another NFFO or SRO contract).

- 5.38. Article 8(2A)(d) of the RO¹⁵ defines linked person for the purposes of 8(2A) and 8(11) as “in relation to a person who is a party to the applicable qualifying arrangement (“the first person”), another person (“the second person”) is a “linked person” where the second person has given or has arranged to give or has ensured or has arranged to ensure that the first person is given, a financial or other inducement relating to any right or interest in, or in respect of, the construction or operation of a generating station at the location.” Article 2(1) of the RO¹⁶ defines connected person as “ in relation to an owner or operator of a generating station, or a party to a qualifying arrangement, means a person connected to him within the meaning of section 839 of the Income and Corporation Taxes Act 1988”.
- 5.39. The Orders require operators of generating stations to provide Ofgem with a monthly declaration that they are not a person mentioned in article 8(2A)(b)(ii) or article 8(11)(b)(ii) of the RO¹⁷.

Revised Ofgem documentation

- 5.40. Following the introduction of the amendments Ofgem issued revised documentation.
- 5.41. Revised Administration Procedures and an Accreditation Questionnaire were published for generating stations with a declared net capacity of more than 50 kW. The changes introduced in April 2004 were included in these documents. Ofgem also took the opportunity to provide more information on areas of the RO, eg article 10 operator consumption, about which issues have been raised previously. The revised procedures include the article 4(10)(c) declaration which operators of non-NFFO and non-SRO generating stations must provide prior to the ROC issue (and those NFFO and SRO operators claiming additional

¹⁵ Article 8(3)(d) of the ROS

¹⁶ Article 2(1) of the ROS

¹⁷ Article 8(3)(b)(ii) or article 8(13)(b)(ii) of the ROS

metered output – see paragraph 5.42). The declaration states that, for the electricity for which ROCs are claimed, the operator:

- has not made that electricity available to any person in circumstances such that he knows or has reason to believe that the consumption of the electricity has resulted in it not having been supplied by an electricity supplier to customers in Great Britain
- has not consumed that electricity himself in circumstances that its consumption has resulted in the electricity not having been supplied by an electricity supplier to customers in Great Britain, and
- is not a person mentioned in article 8(2A)(b)(ii) or article 8(11)(b)(ii) of the Order¹⁸.

5.42. The operator of a NFFO and/or SRO generating station would need to provide the article 4(10)(c) declaration where ROCs are issued to the operator of the generating station in respect of any additional metered output.

5.43. Suppliers who purchase the output of NFFO stations via the NFPA auctions need to provide this declaration on behalf of those generating stations for each month that they were purchasing the relevant output as defined in the Orders. The two SSSCs need to sign a similar declaration in relation to their entitlement to the relevant electricity in regards to SRO contracts.

5.44. Ofgem published separate Administration Procedures and a simplified Accreditation Questionnaire for generating stations with a declared net capacity of 50 kW or less. All these documents were published on Ofgem's website (www.ofgem.gov.uk) in July 2004.

5.45. Ofgem published a template to be used by all generating stations for the submission of monthly or annual data. The use of the template enables Ofgem to process the data as efficiently as possible. It also ensures that generating stations provide all the information required for the ROC issue. The template also calculates whether the input electricity is 0.5% or less of the gross output of the station. The template is available on Ofgem's website.

5.46. Ofgem published a template for the submission of supply data for compliance purposes in June 2004. Ofgem also published separate Administration Procedures for licensed electricity suppliers in July 2004.

6. Review of the Renewables Obligation

The 2005 review

- 6.1 DTI published its statutory consultation on proposed changes to the RO in September 2004 and the Scottish Executive published an equivalent consultation in relation to proposed changes to the ROS at the same time. Responses were due by 1 December 2004.
- 6.2 The consultation proposed the following changes to the areas listed below:
- extend the profile of the Renewables Obligation from 2010/11 (10.4%) to 2015/16 (15.4%)
 - permit the recognition of Northern Ireland Renewables Obligation Certificates in Great Britain on the same basis as GB ROCs
 - introduce measures to secure the buy-out fund further in the event of a shortfall occurring (surcharges on late payments and mutualisation)
 - consider the introduction of a single recycling mechanism for the separate buy-out funds (the separate funds are England & Wales, Scotland and, from April 2005, Northern Ireland), and
 - introduce more flexibility for small generating stations (50 kW declared net capacity or less).
- 6.3 Ofgem is a statutory consultee and welcomed the opportunity to respond formally to the consultations. Ofgem's response should be available on DTI's website. The changes will be introduced on 1 April 2005 subject to Parliamentary scrutiny. Following this, Ofgem will review its procedures and guidance to ensure the changes are addressed as necessary.

The 2006 review

- 6.4 DTI published a consultation on the proposed terms of reference for the 2006 review in August 2004 and the Scottish Executive published an equivalent consultation in relation to proposed changes to the ROS at the same time. Responses were due by 30 September 2004.
- 6.5 DTI published the final terms of reference on 4 November. The areas to be covered in the review include:
- the effectiveness of the RO since it began in April 2002
 - all aspects of the working arrangements of the RO
 - the levels of the RO beyond 2015/16
 - the potential impact of the EU Emissions Trading Scheme on prices and the future cost competitiveness of renewable technologies
 - the position of CHP, and
 - energy from mixed wastes.
- 6.6 DTI expects to publish an initial consultation document on the review in early 2005 as does the Scottish Executive. This would appear to provide an opportunity for thorough consideration of both the monitoring and evaluation of the effectiveness of the RO in delivering on the Government's climate change and other policy aims. Ofgem is keen to contribute to such analysis and the surrounding debates in a constructive, open manner and will work with DTI and the Scottish Executive to ensure that the review is as full and rigorous as possible.

Appendix 1 - Statistics on accredited generating stations

Table A1:A comparison of the number of accredited generating stations

	England	Scotland	Wales	Total
ACT	2	0	0	2
Biomass	11	2	0	13
Co-firing	27	1	0	28
Hydro < 20 MW DNC	33	55	24	112
Landfill gas	234	14	9	257
Micro hydro	6	26	2	34
Off-shore wind	2	0	1	3
On-shore wind	47	30	24	101
Sewage gas	66	0	0	66
Total	428	128	60	616

Table A2:A comparison of the total installed generating capacity of accredited generating stations

	England (kW)	Scotland (kW)	Wales (kW)	Total (kW)
ACT	1,785	0	0	1,785
Biomass	145,425	12,677	0	158,102
Co-firing*	490,004	26,160	0	516,164
Hydro < 20 MW DNC	13,010	327,298	75,782	416,090
Landfill gas	545,685	29,564	17,621	592,870
Micro hydro	392	10,557	73	11,022
Off-shore wind	3,800	0	60,000	63,800
On-shore wind	155,290	299,044	171,046	625,380
Sewage gas	55,377	0	0	55,377
Total	1,410,768	705,300	324,522	2,440,590

* co-fired capacity is an estimate of the "renewable capacity"

Table A3:A comparison of generating stations accredited at 1 April 2002 and after 1 April 2002

	Non-NFFO	NFFO	Non-SRO	SRO	Total
Accredited at 1 April 2002	162	204	39	26	431
Accredited after 1 April 2002 and before 1 April 2003	31	12	23	8	74
Accredited after 1 April 2003 and before 1 April 2004	66	12	31	2	111
Total	259	228	93	36	616

Table A4:A comparison of the total installed generating capacity of generating stations accredited at 1 April 2002 and after 1 April 2002

	Non-NFFO* (kW)	NFFO* (kW)	Non-SRO* (kW)	SRO (kW)	Total (kW)
Accredited at 1 April 2002	564,421	629,672	93,782	164,136	1,452,011
Accredited after 1 April 2002 and before 1 April 2003	43,951	26,284	114,292	38,738	223,265
Accredited after 1 April 2003 and before 1 April 2004	434,378	36,148	291,301	3,487	765,314
Total	1,042,750	692,104	499,375	206,361	2,440,590

* co-fired capacity is an estimate of the "renewable capacity"

Table A5:A comparison of generating stations accredited at 1 April 2002 and after 1 April 2002 by technology

	Accredited at 1 April 2002	Accredited after 1 April 2002 and before 1 April 2003	Accredited after 1 April 2003 and before 1 April 2004	Capacity accredited at 1 April 2002 (kW)	Capacity accredited after 1 April 2002 and before 1 April 2003 (kW)	Capacity accredited after 1 April 2003 and before 1 April 2004 (kW)
ACT	1	1	0	1,560	225	0
Biomass	11	1	1	157,686	239	177
Co-firing*	11	8	9	170,863	2,644	342,657
Hydro < 20 MW						
DNC	56	19	37	132,266	110,137	173,687
Landfill gas	202	24	31	473,786	53,851	65,233
Micro hydro	25	4	5	9,622	642	758
Off-shore wind	2	0	1	3,800	0	60,000
On-shore wind	77	14	10	457,530	52,061	115,789
Sewage gas	46	3	17	44,898	3,466	7,013
Total	431	74	111	1,452,011	223,265	765,314

* co-fired capacity is an estimate of the "renewable capacity"

Table A6:A comparison of accredited generating stations commissioned before 1 April 2002 and after 1 April 2002 by technology

	Commissioned at 1 April 2002	Commissioned after 1 April 2002 and before 1 April 2003	Commissioned after 1 April 2003 and before 1 April 2004	Capacity commissioned at 1 April 2002 (kW)	Capacity commissioned after 1 April 2002 and before 1 April 2003 (kW)	Capacity commissioned after 1 April 2003 and before 1 April 2004 (kW)
ACT	1	1	0	225	1,560	0
Biomass	10	3	0	148,363	9,739	0
Co-firing*	28	0	0	516,164	0	0
Hydro < 20 MW DNC	99	6	7	377,160	1,750	37,180
Landfill gas	195	31	31	463,841	68,713	60,316
Micro hydro	32	0	2	10,506	0	516
Off-shore wind	2	0	1	3,800	0	60,000
On-shore wind	79	15	7	453,383	58,392	113,605
Sewage gas	58	3	5	48,705	3,466	3,206
Total	504	59	53	2,022,147	143,620	274,823

***co-fired capacity is an estimate of the "renewable capacity" and the commissioning date is the date the generating station commissioned and not when it started co-firing**

Table A7:A comparison of generating stations accredited at 1 April 2002 and after 1 April 2002 by country

	Accredited at 1 April 2002	Accredited after 1 April 2002 and before 1 April 2003	Accredited after 1 April 2003 and before 1 April 2004	Capacity accredited at 1 April 2002 (kW)*	Capacity accredited after 1 April 2002 and before 1 April 2003 (kW)*	Capacity accredited after 1 April 2003 and before 1 April 2004 (kW)*
England	324	36	68	954,514	53,502	402,752
Scotland	65	31	32	257,918	153,030	294,352
Wales	42	7	11	239,579	16,733	68,210
Total	431	74	111	1,452,011	223,265	765,314

*co-fired capacity is an estimate of the "renewable capacity"

Table A8:A comparison of generating stations commissioned at 1 April 2002 and after 1 April 2002 by country

	Commissioned at 1 April 2002	Commissioned after 1 April 2002 and before 1 April 2003	Commissioned after 1 April 2003 and before 1 April 2004	Capacity commissioned at 1 April 2002 (kW)*	Capacity commissioned after 1 April 2002 and before 1 April 2003 (kW)*	Capacity commissioned after 1 April 2003 and before 1 April 2004 (kW)*
England	357	35	36	1,276,801	73,752	60,215
Scotland	101	14	13	498,822	57,370	149,108
Wales	46	10	4	246,524	12,498	65,500
Total	504	59	53	2,022,147	143,620	274,823

* co-fired capacity is an estimate of the "renewable capacity"

Table A9: Estimation of co-fired generating stations' "renewable capacity"

Generating Station	Accreditation ID	Total installed generating capacity (kW)	Maximum renewable qualifying percentage achieved in any month to date	Estimate of "renewable capacity" (kW)
Aberthaw	R00036RBEN	1,552,500	0.43%	6,676
Alcan Lynmouth	R00038RBEN	420,000	0.00%	0
Avonmouth	R00010RBEN	5,750	97.97%	5,633
Beckton	R00003RBEN	11,400	97.12%	11,072
Beddington	R00045RBEN	2,520	81.58%	2,056
Cottam	R00015RBEN	2,000,000	0.01%	200
Crossness	R00004RBEN	5,900	94.56%	5,579
Deephams	R00042RBEN	3,320	82.84%	2,750
Didcot	R00018RBEN	2,100,000	0.06%	1,260
Drax	R00035RBEN	4,065,000	0.37%	15,041
Drakelow	R00007RBEN	333,000	0.00%	0
Eggborough	R00039RBEN	2,000,000	0.34%	6,800
Ferrybridge	R00005RBEN	2,035,000	4.47%	90,997
Fibrepower	R00034RBEN	12,000	94.06%	11,287
Fiddler's Ferry	R00006RBEN	1,995,000	6.41%	127,880
High Marnham	R00009RBEN	756,000	0.00%	0
Ironbridge	R00008RBEN	970,000	4.10%	39,770
Kingsnorth	R00014RBEN	2,034,000	1.70%	34,578
Longreach	R00040RBEN	2,300	100.00%	2,300
Maple Lodge	R00042RBEN	2,880	86.33%	2,486
Rugeley	R00019RBEN	1,000,000	0.50%	5,000
Shell Green	R00002RBEN	4,200	0.00%	0
Slough Electricity	R00001RBEN	88,100	88.17%	77,678
Tilbury	R00013RBEN	1,085,000	0.00%	0
West Burton	R00017RBEN	2,040,000	0.00%	0
Wilton International	R00044RBEN	196,650	20.83%	40,962
Cockenzie	R00004SBEN	1,200,000	0.00%	0
Longannet	R00001SBSC	2,400,000	1.09%	26,160
Estimate of total "renewable capacity"				516,164

Appendix 2 – Statistics on 2003/2004 ROCs and SROCs issued

Table B1:2003/2004 ROCs and SROCs issued by generation technology

	ROCs	SROCs	Total	Proportion of total
ACT	7,115	0	7,115	0.09%
Biomass	795,836	13,910	809,746	10.73%
Co-firing	721,357	74,794	796,151	10.55%
Hydro < 20 MW DNC	142,940	1,127,397	1,270,337	16.83%
Landfill gas	3,023,962	127,568	3,151,530	41.76%
Micro hydro	880	33,092	33,972	0.45%
Off-shore wind	43,812	0	43,812	0.58%
On-shore wind	688,806	552,228	1,241,034	16.44%
Sewage gas	192,737	353	193,090	2.56%
Total	5,617,445	1,929,342	7,546,787	100.00%

Table B2:2003/2004 ROCs and SROCs issued by month of generation

	ROCs	SROCS	Total
Apr-03	421,094	80,653	501,747
May-03	441,429	137,575	579,004
Jun-03	395,912	105,762	501,674
Jul-03	398,156	95,891	494,047
Aug-03	406,018	94,345	500,363
Sep-03	426,397	101,356	527,753
Oct-03	502,849	150,782	653,631
Nov-03	486,320	179,200	665,520
Dec-03	528,078	210,127	738,205
Jan-04	551,692	276,414	828,106
Feb-04	495,046	262,880	757,926
Mar-04	564,454	234,357	798,811
Total	5,617,445	1,929,342	7,546,787

Table B3:2003/2004 ROCs issued by generation technology and month

	ACT	Biomass	Co-firing	Hydro < 20 MW DNC	Landfill gas	Micro hydro	Off-shore wind	On-shore wind	Sewage gas	Total
Apr-03	139	68,335	44,915	5,835	231,191	73	156	54,884	15,566	421,094
May-03	550	65,658	34,554	13,004	241,524	115	224	69,367	16,433	441,429
Jun-03	647	51,472	47,331	7,611	232,038	73	257	39,472	17,011	395,912
Jul-03	793	55,191	43,446	7,898	236,161	77	144	36,664	17,782	398,156
Aug-03	838	61,330	61,042	6,214	237,733	23	207	22,263	16,368	406,018
Sep-03	696	69,166	63,303	5,140	244,691	66	143	26,564	16,628	426,397
Oct-03	717	74,473	80,599	7,396	255,716	62	247	65,718	17,921	502,849
Nov-03	736	68,022	62,488	13,425	252,672	83	1,682	71,997	15,215	486,320
Dec-03	631	76,373	60,404	16,048	276,664	67	6,362	73,571	17,958	528,078
Jan-04	457	74,092	58,469	25,367	275,431	69	11,141	90,892	15,774	551,692
Feb-04	471	61,150	65,600	21,270	260,806	55	8,671	67,354	9,669	495,046
Mar-04	440	70,574	99,206	13,732	279,335	117	14,578	70,060	16,412	564,454
Total	7,115	795,836	721,357	142,940	3,023,962	880	43,812	688,806	192,737	5,617,445

Table B4:2003/2004 SROCs issued by generation technology and month

	ACT	Biomass	Co-firing	Hydro < 20 MW DNC	Landfill gas	Micro hydro	Off-shore wind	On-shore wind	Sewage gas	Total
Apr-03	0	0	7,744	29,284	8,734	1,450	0	33,441	0	80,653
May-03	0	0	5,765	70,046	11,562	3,306	0	46,896	0	137,575
Jun-03	0	0	6,189	52,514	11,347	2,227	0	33,485	0	105,762
Jul-03	0	0	6,453	47,541	10,002	1,517	0	30,378	0	95,891
Aug-03	0	0	5,710	53,988	10,150	1,505	0	22,992	0	94,345
Sep-03	0	2,985	5,893	52,332	9,566	1,609	0	28,971	0	101,356
Oct-03	0	0	5,827	83,904	11,418	2,067	0	47,566	0	150,782
Nov-03	0	0	6,588	99,790	12,059	3,113	0	57,650	0	179,200
Dec-03	0	0	6,036	132,648	11,553	4,165	0	55,725	0	210,127
Jan-04	0	0	5,858	193,029	5,940	4,895	0	66,691	1	276,414
Feb-04	0	5,497	5,591	172,934	12,331	4,006	0	62,521	0	262,880
Mar-04	0	5,428	7,140	139,387	12,906	3,232	0	65,912	352	234,357
Total	0	13,910	74,794	1,127,397	127,568	33,092	0	552,228	353	1,929,342

Table B5:2003/2004 ROCs issued by location and month

	England	Scotland	Wales	Total
Apr-03	380,522	143	40,429	421,094
May-03	385,351	274	55,804	441,429
Jun-03	363,249	159	32,504	395,912
Jul-03	367,434	132	30,590	398,156
Aug-03	385,168	75	20,775	406,018
Sep-03	403,460	67	22,870	426,397
Oct-03	454,462	126	48,261	502,849
Nov-03	428,557	152	57,611	486,320
Dec-03	462,549	185	65,344	528,078
Jan-04	463,451	225	88,016	551,692
Feb-04	425,837	237	68,972	495,046
Mar-04	493,309	145	71,000	564,454
Total	5,013,349	1,920	602,176	5,617,445

Table B6:2003/2004 ROCs issued by location and technology

	England	Scotland	Wales	Total
ACT	7,115	0	0	7,115
Biomass	795,836	0	0	795,836
Co-firing	721,357	0	0	721,357
Hydro < 20 MW DNC	25,547	1,920	115,473	142,940
Landfill gas	2,953,690	0	70,272	3,023,962
Micro hydro	473	0	407	880
Off-shore wind	3,524	0	40,288	43,812
On-shore wind	313,070	0	375,736	688,806
Sewage gas	192,737	0	0	192,737
Total	5,013,349	1,920	602,176	5,617,445

Table B7:2003/2004 SROCs issued by location and month

	England	Scotland	Wales	Total
Apr-03	0	80,653	0	80,653
May-03	0	137,575	0	137,575
Jun-03	0	105,762	0	105,762
Jul-03	0	95,891	0	95,891
Aug-03	0	94,345	0	94,345
Sep-03	0	101,356	0	101,356
Oct-03	0	150,782	0	150,782
Nov-03	0	179,200	0	179,200
Dec-03	0	210,127	0	210,127
Jan-04	1	276,413	0	276,414
Feb-04	0	262,880	0	262,880
Mar-04	352	234,005	0	234,357
Total	353	1,928,989	0	1,929,342

Table B8:2003/2004 SROCs issued by location and technology

	England	Scotland	Wales	Total
ACT	0	0	0	0
Biomass	0	13,910	0	13,910
Co-firing	0	74,794	0	74,794
Hydro < 20 MW DNC	0	1,127,397	0	1,127,397
Landfill gas	0	127,568	0	127,568
Micro hydro	0	33,092	0	33,092
Off-shore wind	0	0	0	0
On-shore wind	0	552,228	0	552,228
Sewage gas	353	0	0	353
Total	353	1,928,989	0	1,929,342

Table B9:2003/2004 ROCs and SROCs issued by generation location and month

	England	Scotland	Wales	Total
Apr-03	380,522	80,796	40,429	501,747
May-03	385,351	137,849	55,804	579,004
Jun-03	363,249	105,921	32,504	501,674
Jul-03	367,434	96,023	30,590	494,047
Aug-03	385,168	94,420	20,775	500,363
Sep-03	403,460	101,423	22,870	527,753
Oct-03	454,462	150,908	48,261	653,631
Nov-03	428,557	179,352	57,611	665,520
Dec-03	462,549	210,312	65,344	738,205
Jan-04	463,452	276,638	88,016	828,106
Feb-04	425,837	263,117	68,972	757,926
Mar-04	493,661	234,150	71,000	798,811
Total	5,013,702	1,930,909	602,176	7,546,787

Table B10:2003/2004 ROCs and SROCs issued by generation location and technology

	England	Scotland	Wales	Total
ACT	7,115	0	0	7,115
Biomass	795,836	13,910	0	809,746
Co-firing	721,357	74,794	0	796,151
Hydro < 20 MW DNC	25,547	1,129,317	115,473	1,270,337
Landfill gas	2,953,690	127,568	70,272	3,151,530
Micro hydro	473	33,092	407	33,972
Off-shore wind	3,524	0	40,288	43,812
On-shore wind	313,070	552,228	375,736	1,241,034
Sewage gas	193,090	0	0	193,090
Total	5,013,702	1,930,909	602,176	7,546,787

Appendix 3 – Statistics on 2002/2003 ROCs and SROCs issued – an update

Table C1:2002/2003 ROCs and SROCs issued by generation technology

	ROCs	SROCs	Total	Percentage
ACT	173	0	173	0.00%
Biomass	574,828	33,266	608,094	10.89%
Co-firing	403,760	44,753	448,513	8.03%
Hydro < 20 MW DNC	136,085	362,487	498,572	8.93%
Landfill gas	2,620,211	96,533	2,716,744	48.66%
Micro hydro	1,151	39,769	40,920	0.73%
Off-shore wind	2,347	0	2,347	0.04%
On-shore wind	657,216	432,678	1,089,894	19.52%
Sewage gas	178,303	0	178,303	3.19%
Total	4,574,074	1,009,486	5,583,560	100.00%

Table C2:2002/2003 ROCs and SROCs issued by month of generation

	ROCs	SROCS	Total
Apr-02	336,159	60,114	396,273
May-02	359,450	66,753	426,203
Jun-02	347,229	76,950	424,179
Jul-02	323,182	56,958	380,140
Aug-02	318,830	52,034	370,864
Sep-02	329,030	64,874	393,904
Oct-02	375,803	94,457	470,260
Nov-02	432,438	109,465	541,903
Dec-02	441,827	99,910	541,737
Jan-03	463,221	114,867	578,088
Feb-03	408,128	105,491	513,619
Mar-03	438,777	107,613	546,390
Total	4,574,074	1,009,486	5,583,560

Table C3:2002/2003 ROCs issued by generation technology and month

	ACT	Biomass	Co-firing	Hydro < 20 MW DNC	Landfill gas	Micro hydro	Off-shore wind	On-shore wind	Sewage gas	Total
Apr-02	0	33,435	14,255	7,889	207,248	86	0	57,795	15,451	336,159
May-02	0	38,107	11,966	12,577	209,552	99	233	70,380	16,536	359,450
Jun-02	0	46,186	16,348	10,280	206,624	98	221	54,041	13,431	347,229
Jul-02	0	39,403	19,506	7,030	215,826	118	144	28,133	13,022	323,182
Aug-02	0	51,663	11,506	6,873	214,248	40	174	21,354	12,972	318,830
Sep-02	0	44,244	34,121	6,421	210,481	24	95	20,475	13,169	329,030
Oct-02	0	46,487	39,298	7,987	215,110	108	510	51,303	15,000	375,803
Nov-02	0	47,063	63,650	18,996	222,551	137	335	64,484	15,222	432,438
Dec-02	0	44,422	59,318	16,446	230,961	124	213	74,175	16,168	441,827
Jan-03	33	51,675	57,318	16,765	226,827	127	95	94,733	15,648	463,221
Feb-03	59	62,599	40,765	12,052	215,553	95	312	61,308	15,385	408,128
Mar-03	81	69,544	35,709	12,769	245,230	95	15	59,035	16,299	438,777
Total	173	574,828	403,760	136,085	2,620,211	1,151	2,347	657,216	178,303	4,574,074

Table C4:2002/2003 SROCs issued by generation technology and month

	ACT	Biomass	Co-firing	Hydro < 20 MW DNC	Landfill gas	Micro hydro	Off-shore wind	On-shore wind	Sewage gas	Total
Apr-02	0	3,657	458	22,512	5,012	2,571	0	25,904	0	60,114
May-02	0	5,988	439	23,818	4,754	2,856	0	28,898	0	66,753
Jun-02	0	4,687	422	27,127	6,624	3,630	0	34,460	0	76,950
Jul-02	0	6,144	241	22,345	7,903	3,274	0	17,051	0	56,958
Aug-02	0	3,644	2,392	19,924	8,350	3,006	0	14,718	0	52,034
Sep-02	0	3,587	3,961	26,184	9,765	2,599	0	18,778	0	64,874
Oct-02	0	5,559	4,826	32,056	8,799	2,632	0	40,585	0	94,457
Nov-02	0	0	5,538	40,099	8,732	4,352	0	50,744	0	109,465
Dec-02	0	0	6,292	33,178	9,729	3,640	0	47,071	0	99,910
Jan-03	0	0	6,523	35,982	8,888	3,904	0	59,570	0	114,867
Feb-03	0	0	6,440	35,624	8,284	3,752	0	51,391	0	105,491
Mar-03	0	0	7,221	43,638	9,693	3,553	0	43,508	0	107,613
Total	0	33,266	44,753	362,487	96,533	39,769	0	432,678	0	1,009,486

Table C5:2002/2003 ROCs issued by location and month

	England	Scotland	Wales	Total
Apr-02	293,549	257	42,353	336,159
May-02	307,479	256	51,715	359,450
Jun-02	308,525	282	38,422	347,229
Jul-02	299,955	282	22,945	323,182
Aug-02	300,558	251	18,021	318,830
Sep-02	310,810	207	18,013	329,030
Oct-02	340,391	116	35,296	375,803
Nov-02	376,497	189	55,752	432,438
Dec-02	381,687	283	59,857	441,827
Jan-03	391,939	242	71,040	463,221
Feb-03	360,686	269	47,173	408,128
Mar-03	390,037	262	48,478	438,777
Total	4,062,113	2,896	509,065	4,574,074

Table C6:2002/2003 ROCs issued by location and technology

	England	Scotland	Wales	Total
Biomass	173	0	0	173
ACT	574,828	0	0	574,828
Co-firing	403,760	0	0	403,760
Hydro < 20 MW DNC	20,725	2,896	112,464	136,085
Landfill gas	2,575,315	0	44,896	2,620,211
Micro hydro	772	0	379	1,151
Off-shore wind	2,347	0	0	2,347
On-shore wind	305,890	0	351,326	657,216
Sewage gas	178,303	0	0	178,303
Total	4,062,113	2,896	509,065	4,574,074

Table C7:2002/2003 SROCs issued by location and month

	England	Scotland	Wales	Total
Apr-02	0	60,114	0	60,114
May-02	0	66,753	0	66,753
Jun-02	0	76,950	0	76,950
Jul-02	0	56,958	0	56,958
Aug-02	0	52,034	0	52,034
Sep-02	0	64,874	0	64,874
Oct-02	0	94,457	0	94,457
Nov-02	0	109,465	0	109,465
Dec-02	0	99,910	0	99,910
Jan-03	0	114,867	0	114,867
Feb-03	0	105,491	0	105,491
Mar-03	0	107,613	0	107,613
Total	0	1,009,486	0	1,009,486

Table C8:2002/2003 SROCs issued by location and technology

	England	Scotland	Wales	Total
Biomass	0	0	0	0
ACT	0	33,266	0	33,266
Co-firing	0	44,753	0	44,753
Hydro < 20 MW DNC	0	362,487	0	362,487
Landfill gas	0	96,533	0	96,533
Micro hydro	0	39,769	0	39,769
Off-shore wind	0	0	0	0
On-shore wind	0	432,678	0	432,678
Sewage gas	0	0	0	0
Total	0	1,009,486	0	1,009,486

Table C9:2002/2003 ROCs and SROCs issued by generation location and month

	England	Scotland	Wales	Total
Apr-02	293,549	60,371	42,353	396,273
May-02	307,479	67,009	51,715	426,203
Jun-02	308,525	77,232	38,422	424,179
Jul-02	299,955	57,240	22,945	380,140
Aug-02	300,558	52,285	18,021	370,864
Sep-02	310,810	65,081	18,013	393,904
Oct-02	340,391	94,573	35,296	470,260
Nov-02	376,497	109,654	55,752	541,903
Dec-02	381,687	100,193	59,857	541,737
Jan-03	391,939	115,109	71,040	578,088
Feb-03	360,686	105,760	47,173	513,619
Mar-03	390,037	107,875	48,478	546,390
Total	4,062,113	1,012,382	509,065	5,583,560

Table C10:2002/2003 ROCs and SROCs issued by generation location and technology

	England	Scotland	Wales	Total
ACT	173	0	0	173
Biomass	574,828	33,266	0	608,094
Co-firing	403,760	44,753	0	448,513
Hydro < 20 MW DNC	20,725	365,383	112,464	498,572
Landfill gas	2,575,315	96,533	44,896	2,716,744
Micro hydro	772	39,769	379	40,920
Off-shore wind	2,347	0	0	2,347
On-shore wind	305,890	432,678	351,326	1,089,894
Sewage gas	178,303	0	0	178,303
Total	4,062,113	1,012,382	509,065	5,583,560

Appendix 4 – Statistics on supplier compliance

Table D1:Suppliers' compliance with the RO 2003/2004

Supplier licence	RO (4.3% of sales) (MWh)	Produced ROCs/SROCs	Money paid into buy-out fund (£)	Money paid into late payment fund (£)	RO met by ROCs/SROCs	RO met by buy-out	Remaining money that would have covered the RO (£)	Did the combination of ROCs/SROCs and buy-out cover the RO?
Atlantic Electric and Gas Ltd	273,473	0	0	0	0%	0%	8,343,661	No - In administration
BizzEnergy Ltd	88,803	0	2,709,380	0	0%	100%	0	Yes
BP Power Trading Ltd	176	0	5,370	0	0%	100%	0	Yes
British Energy Generation Ltd	1,078,225	30,506	31,965,907	0	3%	97%	0	Yes
British Gas Trading Ltd	1,440,666	1,440,666	0	0	100%	0%	0	Yes
Cinergy Global Trading Ltd	523	523	0	0	100%	0%	0	Yes
Corona Energy Retail 4 Ltd	5,027	0	153,374	0	0%	100%	0	Yes
EON UK Plc	791,745	769,366	682,783	0	97%	3%	0	Yes
Economy Power Ltd	49,588	2,258	1,444,038	0	5%	95%	0	Yes
Electricity Direct (UK) Ltd	100,883	100,883	0	0	100%	0%	0	Yes
Eledor Ltd	190	0	5,796	1	0%	100%	0	Yes
Enron Gas & Petrochemicals Trading Ltd	38	0	1,159	0	0%	100%	0	Yes
Gaz de France Marketing Ltd	170,990	0	5,216,905	0	0%	100%	0	Yes

Table D1:Suppliers' compliance with the RO 2003/2004

Supplier licence	RO (4.3% of sales) (MWh)	Produced ROCs/SROCs	Money paid into buy-out fund (£)	Money paid into late payment fund (£)	RO met by ROCs/SROCs	RO met by buy-out	Remaining money that would have covered the RO (£)	Did the combination of ROCs/SROCs and buy-out cover the RO?
Good Energy Ltd	1,878	1,878	0	0	100%	0%	0	Yes
London Energy Plc	1,661,882	1,182,002	14,641,139	0	71%	29%	0	Yes
Maverick Energy Ltd	22,372	0	0	0	0%	0%	682,570	No - In administration
Midlands Gas Ltd	96	0	2,929	0	0%	100%	0	Yes
npower Cogen Ltd	185,432	0	5,657,530	0	0%	100%	0	Yes
npower Cogen Trading Ltd	69,494	0	2,120,262	0	0%	100%	0	Yes
npower Direct Ltd	142,329	21,918	3,673,740	0	15%	85%	0	Yes
npower Ltd	1,389,569	213,956	35,867,953	0	15%	85%	0	Yes
npower Northern Ltd	394,619	60,771	10,185,702	0	15%	85%	0	Yes
npower Yorkshire Ltd	256,146	39,437	6,611,792	0	15%	85%	0	Yes
Opus Energy Ltd	14,587	0	445,049	0	0%	100%	0	Yes
Powergen Retail Ltd	1,924,753	942,200	29,977,692	0	49%	51%	0	Yes
ScottishPower Energy Retail Ltd	434,187	434,187	0	0	100%	0%	0	Yes
Seeboard Energy Ltd	429,767	305,668	3,786,260	0	71%	29%	0	Yes
Slough Energy Supplies Ltd	6,819	6,682	0	4,180	98%	2%	0	Yes
Smartestenergy Ltd	3,030	3,030	0	0	100%	0%	0	Yes
SSE Energy Supply Ltd	1,344,780	1,273,089	2,187,292	0	95%	5%	0	Yes

Table D1:Suppliers' compliance with the RO 2003/2004

Supplier licence	RO (4.3% of sales) (MWh)	Produced ROCs/SROCs	Money paid into buy-out fund (£)	Money paid into late payment fund (£)	RO met by ROCs/SROCs	RO met by buy-out	Remaining money that would have covered the RO (£)	Did the combination of ROCs/SROCs and buy-out cover the RO?
The Renewable Energy Company Ltd	10,556	10,556	0	0	100%	0%	0	Yes
Total Gas & Power	43,298	43,298	0	0	100%	0%	0	Yes
Tradelink Solutions Ltd	3	3	0	0	100%	0%	0	Yes
TXU Europe (AH Online) Ltd	6,738	0	205,576	0	0%	100%	0	Yes
TXU Europe (AHGD) Ltd	3,559	0	108,585	0	0%	100%	0	Yes
TXU Europe (AHST) Ltd	340	0	10,373	0	0%	100%	0	Yes
UK Electric Power Ltd	30,834	30,834	0	0	100%	0%	0	Yes
Utility Link Ltd	7,778	813	212,502	0	10%	90%	0	Yes
Western Gas Ltd	326	0	9,946	0	0%	100%	0	Yes
Wilton Energy Ltd	2,221	0	67,763	0	0%	100%	0	Yes
Total	12,387,720	6,914,524	157,956,798	4,181	56%	42%	9,026,231	No

Table D2:Suppliers' compliance with the ROS 2003/2004

Supplier licence	ROS (4.3% of sales) (MWh)	Produced ROCs/SROCs	Money paid into buy-out fund (£)	ROS met by ROCs/SROCs	ROS met by buy-out	Remaining money that would have covered the ROS (£)	Did the combination of ROCs/SROCs and buy-out cover the ROS?
Atlantic Electric and Gas Ltd	4,769	0	0	0%	0%	145,502	No - In administration
BizzEnergy Ltd	1	0	31	0%	100%	0	Yes
British Energy Generation Ltd	19,501	3,052	501,859	16%	84%	0	Yes
British Gas Trading Ltd	143,045	143,045	0	100%	0%	0	Yes
Cinergy Global Trading Ltd	123	123	0	100%	0%	0	Yes
Corona Energy Retail 4 Ltd	235	0	7,170	0%	100%	0	Yes
E.ON UK Plc	15,862	14,500	41,555	91%	9%	0	Yes
Economy Power Ltd	5,689	0	173,571	0%	100%	0	Yes
Electricity Direct (UK) Ltd	20,211	20,211	0	100%	0%	0	Yes
Fortum Direct Ltd	23,098	0	704,720	0%	100%	0	Yes
Gaz de France Marketing Ltd	109	0	3,326	0%	100%	0	Yes
Good Energy Ltd	4	4	0	100%	0%	0	Yes
London Energy Plc	25,278	25,278	0	100%	0%	0	Yes
Maverick Energy Ltd	567	0	0	0%	0%	17,299	No - In administration
npower Direct Ltd	8,742	8,742	0	100%	0%	0	Yes
npower Ltd	39,574	39,574	0	100%	0%	0	Yes
npower Northern Ltd	2,122	2,122	0	100%	0%	0	Yes

Table D2:Suppliers' compliance with the ROS 2003/2004

Supplier licence	ROS (4.3% of sales) (MWh)	Produced ROCs/SROCs	Money paid into buy-out fund (£)	ROS met by ROCs/SROCs	ROS met by buy-out	Remaining money that would have covered the ROS (£)	Did the combination of ROCs/SROCs and buy-out cover the ROS?
npower Yorkshire Ltd	3,267	3,267	0	100%	0%	0	Yes
Opus Energy Ltd	737	22	21,815	3%	97%	0	Yes
Powergen Retail Ltd	35,267	35,267	0	100%	0%	0	Yes
ScottishPower Energy Retail Ltd	559,328	226,910	10,142,073	41%	59%	0	Yes
Seeboard Energy Ltd	2,008	2,008	0	100%	0%	0	Yes
SSE Energy Supply Ltd	328,983	170,323	4,840,717	52%	48%	0	Yes
Total Gas & Power	612	612	0	100%	0%	0	Yes
Tradelink Solutions Ltd	2	2	0	100%	0%	0	Yes
TXU Europe (AH Online) Ltd	300	300	0	100%	0%	0	Yes
TXU Europe (AHGD) Ltd	121	121	0	100%	0%	0	Yes
TXU Europe (AHST) Ltd	1	1	0	100%	0%	0	Yes
UK Electric Power Ltd	136	136	0	100%	0%	0	Yes
Total	1,239,692	695,620	16,436,835	56%	43%	162,801	No

Table D3:ROCs produced under the RO

Supplier licence	Produced co-fired ROCs/SROCs	Produced 2002/2003 ROCs/SROCs	Produced ROCs/SROCs	RO met by co-fired ROCs/SROCs	RO met by 2002/2003 ROCs/SROCs	RO met by ROCs/SROCs
Atlantic Electric and Gas Ltd	0	0	0	0%	0%	0%
BizzEnergy Ltd	0	0	0	0%	0%	0%
BP Power Trading Ltd	0	0	0	0%	0%	0%
British Energy Generation Ltd	4,233	0	30,506	0%	0%	3%
British Gas Trading Ltd	323,229	1,485	1,440,666	22%	0%	100%
Cinergy Global Trading Ltd	0	0	523	0%	0%	100%
Corona Energy Retail 4 Ltd	0	0	0	0%	0%	0%
E.ON UK Plc	34,423	19,417	769,366	4%	2%	97%
Economy Power Ltd	735	2,258	2,258	1%	5%	5%
Electricity Direct (UK) Ltd	2,714	1,455	100,883	3%	1%	100%
Eledor Ltd	0	0	0	0%	0%	0%
Enron Gas & Petrochemicals Trading Ltd	0	0	0	0%	0%	0%
Gaz de France Marketing Ltd	0	0	0	0%	0%	0%
Good Energy Ltd	0	38	1,878	0%	2%	100%
London Energy Plc	72,872	7,300	1,182,002	4%	0%	71%
Maverick Energy Ltd	0	0	0	0%	0%	0%
Midlands Gas Ltd	0	0	0	0%	0%	0%
npower Cogen Ltd	0	0	0	0%	0%	0%
npower Cogen Trading Ltd	0	0	0	0%	0%	0%
npower Direct Ltd	21,912	4,738	21,918	15%	3%	15%
npower Ltd	39,586	8,007	213,956	3%	1%	15%
npower Northern Ltd	31,022	0	60,771	8%	0%	15%

Table D3:ROCs produced under the RO

Supplier licence	Produced co-fired ROCs/SROCs	Produced 2002/2003 ROCs/SROCs	Produced ROCs/SROCs	RO met by co-fired ROCs/SROCs	RO met by 2002/2003 ROCs/SROCs	RO met by ROCs/SROCs
npower Yorkshire Ltd	23,465	14,660	39,437	9%	6%	15%
Opus Energy Ltd	0	0	0	0%	0%	0%
Powergen Retail Ltd	45,601	23,800	942,200	2%	1%	49%
ScottishPower Energy Retail Ltd	20,000	35,258	434,187	5%	8%	100%
Seeboard Energy Ltd	17,690	6,194	305,668	4%	1%	71%
Slough Energy Supplies Ltd	1,548	134	6,682	23%	2%	98%
Smartestenergy Ltd	0	87	3,030	0%	3%	100%
SSE Energy Supply Ltd	80,000	2,033	1,273,089	6%	0%	95%
The Renewable Energy Company Ltd	0	1,230	10,556	0%	12%	100%
Total Gas & Power	10,000	0	43,298	23%	0%	100%
Tradelink Solutions Ltd	0	0	3	0%	0%	100%
TXU Europe (AH Online) Ltd	0	0	0	0%	0%	0%
TXU Europe (AHGD) Ltd	0	0	0	0%	0%	0%
TXU Europe (AHST) Ltd	0	0	0	0%	0%	0%
UK Electric Power Ltd	7,708	0	30,834	25%	0%	100%
Utility Link Ltd	0	0	813	0%	0%	10%
Western Gas Ltd	0	0	0	0%	0%	0%
Wilton Energy Ltd	0	0	0	0%	0%	0%
Total	736,738	128,094	6,914,524	6%	1%	56%

Table D4:ROCs produced under the ROS

Supplier licence	Produced co-fired ROCs/SROCs	Produced 2002/2003 ROCs/SROCs	Produced ROCs/SROCs	RO met by co-fired ROCs/SROCs	RO met by 2002/2003 ROCs/SROCs	RO met by ROCs/SROCs
Atlantic Electric and Gas Ltd	0	0	0	0%	0%	0%
BizzEnergy Ltd	0	0	0	0%	0%	0%
British Energy Generation Ltd	0	171	3,052	0%	1%	16%
British Gas Trading Ltd	6,612	0	143,045	5%	0%	100%
Cinergy Global Trading Ltd	0	0	123	0%	0%	100%
Corona Energy Retail 4 Ltd	0	0	0	0%	0%	0%
E.ON UK Plc	0	0	14,500	0%	0%	91%
Economy Power Ltd	0	0	0	0%	0%	0%
Electricity Direct (UK) Ltd	0	0	20,211	0%	0%	100%
Fortum Direct Ltd	0	0	0	0%	0%	0%
Gaz de France Marketing Ltd	0	0	0	0%	0%	0%
Good Energy Ltd	0	0	4	0%	0%	100%
London Energy Plc	727	0	25,278	3%	0%	100%
Maverick Energy Ltd	0	0	0	0%	0%	0%
npower Direct Ltd	1,741	0	8,742	20%	0%	100%
npower Ltd	8,364	0	39,574	21%	0%	100%
npower Northern Ltd	0	0	2,122	0%	0%	100%
npower Yorkshire Ltd	667	143	3,267	20%	4%	100%
Opus Energy Ltd	0	22	22	0%	3%	3%
Powergen Retail Ltd	0	0	35,267	0%	0%	100%
ScottishPower Energy Retail	74,794	0	226,910	13%	0%	41%

Table D4:ROCs produced under the ROS

Supplier licence	Produced co-fired ROCs/SROCs	Produced 2002/2003 ROCs/SROCs	Produced ROCs/SROCs	RO met by co-fired ROCs/SROCs	RO met by 2002/2003 ROCs/SROCs	RO met by ROCs/SROCs
Ltd						
Seeboard Energy Ltd	0	23	2,008	0%	1%	100%
SSE Energy Supply Ltd	0	1,247	170,323	0%	0%	52%
Total Gas & Power	0	0	612	0%	0%	100%
Tradelink Solutions Ltd	0	0	2	0%	0%	100%
TXU Europe (AH Online) Ltd	0	0	300	0%	0%	100%
TXU Europe (AHGD) Ltd	0	0	121	0%	0%	100%
TXU Europe (AHST) Ltd	0	0	1	0%	0%	100%
UK Electric Power Ltd	30	0	136	22%	0%	100%
Total	92,935	1,606	695,620	7%	0%	56%

Table D5: Distribution of RO funds for ROCs/SROCs correctly produced (£)

Supplier licence	Buy-out fund distributed	Late payment fund distributed	Late payment and buy-out funds distributed
Atlantic Electric and Gas Ltd	0	0	0
BizzEnergy Ltd	0	0	0
BP Power Trading Ltd	0	0	0
British Energy Generation Ltd	699,115	18	699,133
British Gas Trading Ltd	33,016,198	873	33,017,071
Cinergy Global Trading Ltd	11,985	0	11,985
Corona Energy Retail 4 Ltd	0	0	0
E.ON UK Plc	17,631,803	466	17,632,269
Economy Power Ltd	51,747	1	51,748
Electricity Direct (UK) Ltd	2,311,967	61	2,312,028
Eledor Ltd	0	0	0
Enron Gas & Petrochemicals Trading Ltd	0	0	0
Gaz de France Marketing Ltd	0	0	0
Good Energy Ltd	43,038	1	43,039
London Energy Plc	27,088,313	716	27,089,029
Maverick Energy Ltd	0	0	0
Midlands Gas Ltd	0	0	0
npower Cogen Ltd	0	0	0
npower Cogen Trading Ltd	0	0	0
npower Direct Ltd	502,301	13	502,314
npower Ltd	4,903,297	129	4,903,426
npower Northern Ltd	1,392,708	36	1,392,744
npower Yorkshire Ltd	903,790	23	903,813
Opus Energy Ltd	0	0	0
Powergen Retail Ltd	21,592,695	571	21,593,266
ScottishPower Energy Retail Ltd	9,950,400	263	9,950,663
Seaboard Energy Ltd	7,005,090	185	7,005,275
Slough Energy Supplies Ltd	153,133	4	153,137
Smartestenergy Ltd	69,439	1	69,440
SSE Energy Supply Ltd	29,175,782	771	29,176,553
The Renewable Energy Company Ltd	241,915	6	241,921
Total Gas & Power	992,273	26	992,299
Tradelink Solutions Ltd	68	0	68
TXU Europe (AH Online) Ltd	0	0	0
TXU Europe (AHGD) Ltd	0	0	0
TXU Europe (AHST) Ltd	0	0	0
UK Electric Power Ltd	706,632	18	706,650

Table D5: Distribution of RO funds for ROCs/SROCs correctly produced (£)

Supplier licence	Buy-out fund distributed	Late payment fund distributed	Late payment and buy-out funds distributed
Utility Link Ltd	18,631	0	18,631
Western Gas Ltd	0	0	0
Wilton Energy Ltd	0	0	0
Total	158,462,320	4,182	158,466,502

Table D6: Distribution of ROS buy-out fund for ROCs/SROCs correctly produced (£)

Supplier licence	Buy-out distributed
Atlantic Electric and Gas Ltd	0
BizzEnergy Ltd	0
British Energy Generation Ltd	72,343
British Gas Trading Ltd	3,390,695
Cinergy Global Trading Ltd	2,915
Corona Energy Retail 4 Ltd	0
E.ON UK Plc	343,703
Economy Power Ltd	0
Electricity Direct (UK) Ltd	479,075
Fortum Direct Ltd	0
Gaz de France Marketing Ltd	0
Good Energy Ltd	94
London Energy Plc	599,182
Maverick Energy Ltd	0
npower Direct Ltd	207,217
npower Ltd	938,050
npower Northern Ltd	50,299
npower Yorkshire Ltd	77,439
Opus Energy Ltd	521
Powergen Retail Ltd	835,958
ScottishPower Energy Retail Ltd	5,378,605
Seeboard Energy Ltd	47,597
SSE Energy Supply Ltd	4,037,284
Total Gas & Power	14,506
Tradelink Solutions Ltd	47
TXU Europe (AH Online) Ltd	7,111
TXU Europe (AHGD) Ltd	2,868
TXU Europe (AHST) Ltd	23
UK Electric Power Ltd	3,223
Total	16,488,755

Table D7:Suppliers with no RO

Supplier licence
730 Energy Ltd
Accord Energy Ltd
AEP Energy Services Ltd
AES Energy Ltd
Affinity Power Ltd
Allied Domecq (Holdings) Plc
Citigen (London) Ltd
Commercial Electricity Supplies Ltd
EDF Trading Ltd
Enizade Ltd
Enron Direct Ltd
Essential Power Ltd
Fellside Heat & Power Ltd
Fortum Direct
Ineos Chlor Energy Ltd
International Power Plc
Magnox Electric Plc
Norweb Energi Ltd
npower Northern Supply Ltd
npower Yorkshire Supply Ltd
Pan-Utility Ltd
Pentex Oil and Gas Ltd
Powergen Retail Gas (Eastern) Ltd
R S Energy Ltd
SEEBOARD Powerlink Ltd
Shell Gas Direct Ltd
SME Energy Ltd
South Wales Electricity Ltd
SSE Energy Ltd
SWEB Energy Ltd
Telecom Plus PLC
The Team Group of Companies UK Ltd
TXU Europe (AHG) Ltd
TXU UK Ltd
Utilita Electricity Ltd
Utilitease Ltd
Zest4 Electricity Ltd

Table D8:Suppliers with no ROS

Supplier licence	
730 Energy Ltd	Utilita Electricity Ltd
Accord Energy Ltd	Utilitease Ltd
AEP Energy Services Ltd	Utility Link Ltd
AES Energy Ltd	Western Gas Ltd
Affinity Power Ltd	Wilton Energy Ltd
Allied Domecq (Holdings) Plc	Zest4 Electricity Ltd
Citigen (London) Ltd	
Commercial Electricity Supplies Ltd	
EDF Trading Ltd	
Enizade Ltd	
Enron Direct Ltd	
Enron Gas & Petrochemicals Trading Ltd	
Essential Power Ltd	
Ineos Chlor Energy Ltd	
International Power Plc	
Magnox Electric Plc	
Midlands Gas Ltd	
Norweb Energi Ltd	
npower Cogen Ltd	
npower Cogen Trading Ltd	
npower Northern Supply Ltd	
npower Yorkshire Supply Ltd	
Pan-Utility Ltd	
Pentex Oil and Gas Ltd	
Powergen Retail Gas (Eastern) Ltd	
R S Energy Ltd	
Shell Gas Direct Ltd	
Smartestenergy Ltd	
SME Energy Ltd	
South Wales Electricity Ltd	
SSE Energy Ltd	
SWEB Energy Ltd	
Telecom Plus PLC	
The Renewable Energy Company Ltd	
The Team Group of Companies UK Ltd	
TXU Europe (AHG) Ltd	
TXU UK Ltd	

Table D9: ROCs and SROCs issued and correctly produced for RO or ROS compliance

	ROCs	SROCs	Total
Issued and correctly produced 2002/2003	4,449,885	1,001,564	5,451,449
Issued 2002/2003 and correctly produced 2003/2004	121,782	7,918	129,700
Deleted ROCs 2002/2003	1,267	0	1,267
Issued but not produced 2002/2003	1,140	4	1,144
Total issued 2002/2003	4,574,074	1,009,486	5,583,560
Issued and correctly produced 2003/2004	5,595,453	1,884,991	7,480,444
Deleted ROCs 2003/2004	0	3,520	3,520
Issued but not produced 2003/2004	21,992	40,831	62,823
Total issued 2003/2004	5,617,445	1,929,342	7,546,787