

## Summary of Findings

### NETA

The evidence of the first few months of NETA shows:

#### **Lower Prices**

- Wholesale prices under NETA are 20–25 per cent below those under the Electricity Pool – this is good news for electricity customers.

#### **Market Liquidity**

- Market liquidity is improving. The volume of trades has increased three-fold and the number of contracts has doubled compared to the same time last year under the Pool.

- For the first time since electricity privatisation, this is giving signals for future plant investment which will ensure long term security of supply.

#### **Efficient System Balancing**

- NGC is working well to keep the system in balance and has halved its daily balancing costs. The balancing mechanism is trading very small volumes of electricity – around 3 per cent of national demand. Price volatility, which is to be expected, is reducing and the spread of prices is narrowing.

### Smaller Generators

Evidence from those who responded to Ofgem's survey shows:

#### **Lower prices**

- Prices achieved by smaller generators are 17 per cent lower than under the Pool. This is a somewhat smaller reduction than for generation prices overall.

#### **Output falls**

- Smaller generators output has fallen substantially. Lower export prices are one factor but higher costs have also contributed.

#### **Performance Predictability**

- Other than wind power, the output of smaller generators does not appear to be significantly less predictable than that of other generators.

#### **Balancing and Settlement Arrangements**

- As expected, very few generators have chosen to participate directly in the balancing and settlement arrangements.

#### **Market Mechanisms**

- There is widespread concern about the availability of consolidation services<sup>1</sup> which have yet to become fully operational.

### The Way Ahead

#### **Protecting Customers' Interests**

- NETA has already brought great benefits to customers and any changes must not set these at risk. Ofgem's primary duty to protect customer's interests.

#### **Smaller generators under NETA**

- Under NETA reliability and predictability are rewarded – most customers want a secure electricity supply.
- Any generator, renewable or otherwise, will fare less well if it cannot predict its output.

- Some action has been, and can be, taken which has the effect of limiting the impact on less predictable generation but the principles of NETA cannot be changed.

#### **Supporting smaller generators**

- With lower prices for green energy, as for all energy, the Government may need to review whether targets can be met within current levels of subsidy and, in particular, the need for additional Government support for less reliable green energy.

1. Consolidation allows smaller generators to operate in NETA through another party to limit their exposure to imbalance costs

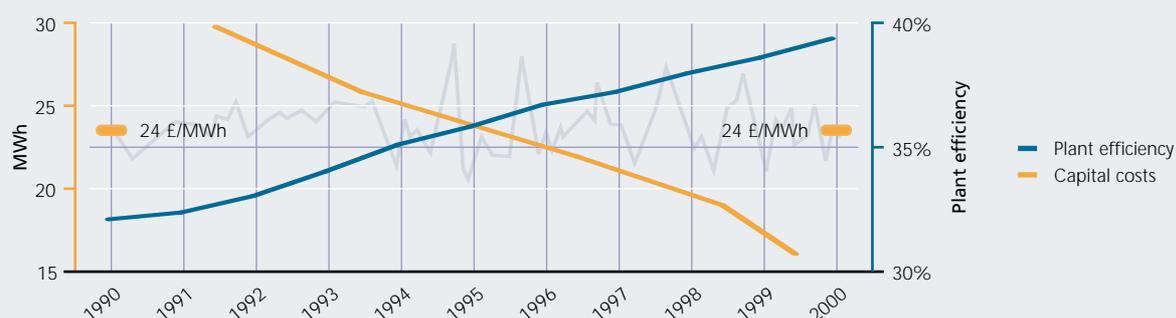
## Main Findings

### NETA

#### Prices

In the life of the Pool, reduced market concentration, lower input costs and increased plant efficiency did not bring the wholesale price reductions which might have been expected.

**Figure 1** Wholesale electricity prices under Pool, 1990-2000



The first three months of NETA reveal a very different position:

- Prices under NETA are lower than those available under the Pool.
- Prices for the first three months of NETA fell by 20-25 per cent and were less volatile than in the same period last year.

#### Liquidity

Traded markets have developed substantially, with the volume of trades up nearly three times and the number of contracts up more than twice. The types of contracts available have also increased substantially.

Three main power exchanges have been developed since NETA, two of which are trading significant volumes in short term markets. There has been no comparable development in the within-day market.

For the first time in electricity, a forward price curve is developing. The signals which this creates will influence future plant investment decisions and help secure long term supply.

#### Balancing and Settlement Arrangements

Three per cent of national demand is being met through the balancing and settlement arrangements – the majority being met through bilateral contracts and agreements as NETA anticipated.

NGC is reducing balancing costs – since NETA began daily system balancing costs have reduced by half (£1 million a day to £500,000). These efficiencies will be passed to customers.

On average, participants needing to buy electricity to balance their position have needed to pay £57.69/MWh and those needing to sell to balance their position were paid £5.40/MWh. With experience this spread is narrowing and volatility of prices is reducing.

#### Governance

The process to change the rules of NETA under the Balancing and Settlement Code (BSC) has operated as intended. Changes are made to market rules in a far more timely and efficient way than under the Pool.

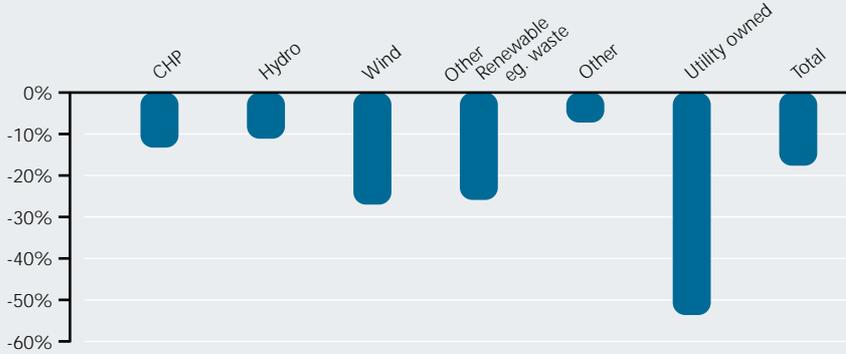
Ofgem cannot initiate modifications. Its role is to judge modifications proposed by others against defined criteria.

## Smaller Generators

The position of smaller generators in the first two months of NETA should be seen in the context of how NETA has performed as a whole since some – but not all – of the features affecting smaller generators are common to all generators.

### Prices

**Figure 2** Export prices of smaller generators



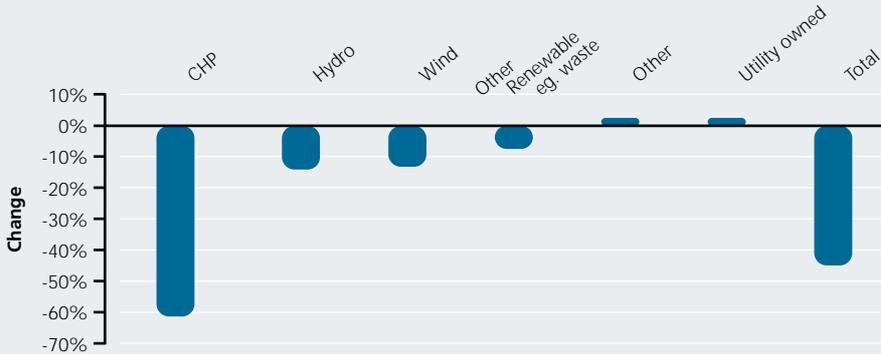
#### What is a smaller generator?

This term applies to a broad range of generating plant, from small wind powered generating stations to relatively large combined cycle gas turbine (CCGT) plant. They are not capable of exporting more than 100MWh per site.

From our survey the prices achieved by smaller generators are 17 per cent below prices last year.

### Output

**Figure 3** Smaller generators export output



#### Ofgem survey of smaller generators

- Over 500 survey forms issued
- Forms returned covered 106 sites
- Meetings with 22 smaller generators, trade associations and other participants

The output of smaller generators has fallen substantially, with export volume reduced by 44 per cent on last year.

There are a number of reasons for this. The lower prices achieved for electricity exported is clearly one factor but rising fuel costs have also made a significant contribution. Fuel costs have risen 14 per cent on last year. These have a particular impact on CHP.

Other than wind power, the performance of smaller generators does not appear to be significantly less predictable than that of other generators.

### Embedded benefits

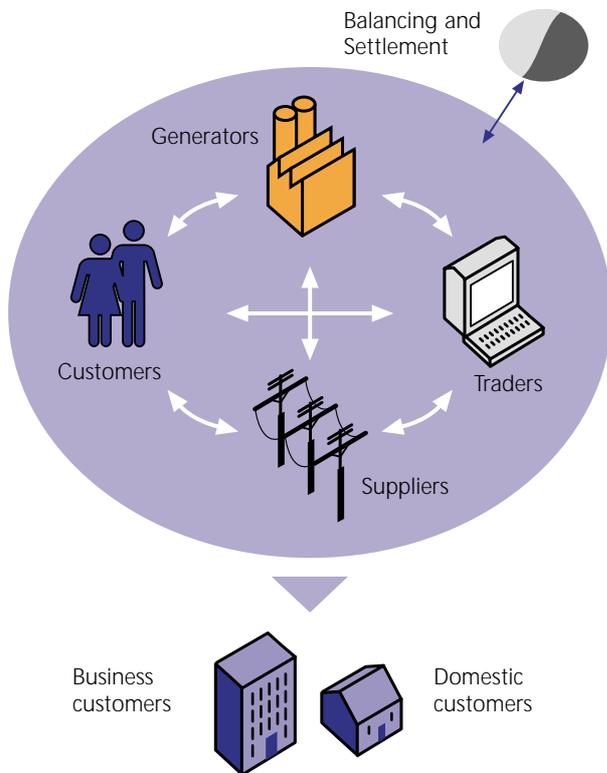
Under NETA, as under the Electricity Pool, smaller generators are permitted to by-pass the central arrangements and their output is treated as if it meets demand locally. This means smaller generators can receive the same benefits as 'embedded generators'<sup>2</sup> including an exemption from transmission charges, losses and other transmission system operation costs.

### Market Mechanisms

Some consolidation services were not fully operational which contributed to smaller generators completing contracts on what they felt were poor terms.

2. Embedded generators are generators connected at low voltage within local distribution systems that are connected to NGCs high voltage network

## What is NETA?



NETA (New Electricity Trading Arrangements) is a new wholesale market, comprising trading between generators and suppliers of electricity in England and Wales.

Under NETA, bulk electricity is traded forward through bilateral contracts and on one or more power exchanges.

NETA also provides central balancing mechanisms which do two things. They help National Grid Company (NGC) to ensure that demand meets supply, second by second; and they sort out who owes what to whom for any surpluses or shortfalls.

The majority of trading (97 per cent in the first few months) takes place in the forward contracts markets. A very small percentage of electricity traded (3 per cent in the first few months) is subject to the balancing arrangements.

- The Balancing and Settlement Code, which sets down the rules for central balancing mechanisms and governance, is managed by a separate company called ELEXON. All participants have to sign up to it.

## Chronology – Smaller Generators Under NETA

### Build-up to NETA Go-Live:

Among the many groups involved in NETA, the Programme probably spent the most time working with smaller generators. An expert group looked at the issues associated with smaller generators and changes were made to address their concerns – including new consolidation arrangements and raising the exemption threshold for

generation licences.

#### **21 February 2001**

Ofgem asked by the then Energy Minister, Peter Hain MP, to undertake a review of what impact the first two months of NETA had made on smaller generators.

#### **27 March 2001**

NETA Go-Live

#### **9 April 2001**

Draft terms of reference for the review were published, requesting comments by 23 April 2001.

#### **18 May 2001**

Based on comments received, final terms of reference were published. These defined the review period as starting from NETA Go-Live on 27 March 2001 to the end of May 2001.

#### **31 August 2001**

Review findings produced in a report to the Department of Trade and Industry (DTI).

**It should be recognised that the review has been undertaken after a very short period of operating under NETA.**