October 2000

Energy Efficiency Standards:

CHP projects for gas heated residential premises

Consultation proposals

Executive summary

This consultation paper sets out proposals to allow CHP schemes for residential premises with communal gas heating to count towards the Energy Efficiency Standards of Performance, which Ofgem has set for gas companies for 2000-2002 (SOP3). In general, such schemes are not at present eligible, because gas heated tower blocks and similar premises usually fall outside the stautory definition of Domestic Gas Premises to which SOP3 gas schemes are restricted.

Ofgem believes that there would be advantages in social and environmental terms and in terms of promoting CHP in allowing CHP schemes for residential premises with communal gas heating to count for SOP3. We would welcome comments by 28 November on this issue and on the draft determination which we intend to make to enable such CHP schemes to qualify.

Table of contents

1. Introduct	ion and background	1
2. Issues for	consideration	4
Potentia	l benefits	4
Meeting	the costs	4
Benefits	for landlords and tenants	5
Compet	ition Issues	5
CHP sch	emes not fuelled by gas	6
3. Conclusi	ons and next steps	7
Annex A	SOP3 Gas Determination March 2000	
Anney R	Draft Determination to cover CHP	

1. Introduction and background

- In March, Ofgem set Energy Efficiency Standards of Performance for gas and electricity supply companies (SOP3). These Standards run from 1 April 2000 to 31 March 2002 and require companies to put in place projects to promote the efficient use of gas and electricity for customers. Key aims of the Standards are to provide for gas and electricity suppliers to make an appropriate contribution towards the achievement of the Government's Climate Change targets for the UK, and to focus energy efficiency support on disadvantaged customers, particularly the Fuel Poor. Most companies have now made significant progress in bringing forward schemes to meet their SOP3 targets.
- 1.2 In line with the current statutory regime, SOP3 targets were set separately for individual gas and electricity supply licence holders. In electricity, SOP3 schemes have to be aimed at Designated Electricity Customers, ie, owners or occupiers of Designated Premises.
 Designated Premises include all domestic premises and any non-domestic premises which use less than 12,000 kWh of electricity per annum.
- 1.3 In the case of gas, SOP3 projects have to be for Domestic Customers, ie customers in premises which do not use more than 2,500 therms (73,250 kWh) of gas a year. Under the current statutory definition, a customer counts as a Domestic Gas Customer solely by reference to the volume of gas used, regardless of whether this is for domestic or non-domestic purposes*. A copy of the SOP3 determination for gas is at Annex A.
- 1.4 Ofgem's decision that SOP3 projects should be for Designated Electricity Customers and Domestic Gas Customers was taken following full consultation, and was intended to tie in with the current arrangements for supply price restraint in gas and electricity. The price

^{*} Ofgem has just consulted over proposals to re-define customer categories in gas and electricity based on common definitions for gas and electricity and related to whether the

restraints assume that suppliers will include an annual charge of £1.20 in their charges to Designated Electricity Customers and Domestic Gas Customers to cover the cost of SOP3. Overall, these arrangements are designed to ensure consistency as between who bears the cost of SOP3 and who can benefit.

- Under the present SOP3 arrangements there is a significant difference between gas and electricity in terms of the scope for CHP projects. CHP schemes for tower blocks or other premises which have communal electric heating systems count towards the SOP3 electricity targets on the grounds that they provide energy savings for Designated Electricity Customers. However, premises with a shared gas heating system, which uses more than 73,250 GWh a year, do not count as Domestic Gas Premises and hence energy savings for such premises do not count towards the SOP3 targets, unless the residents each have their own separate gas supply.
- 1.6 Ofgem has received separate representations from the Energy Saving Trust (EST) and the Combined Hear and Power Association regarding this different treatment of CHP under SOP3 as between gas and electricity. They have urged Ofgem to take steps to ensure that all CHP proposals are treated similarly under SOP3.
- 1.7 Under SOP, since 1994, there have been around a dozen CHP projects for electrically heated residential premises. In terms of the potential for CHP for gas heated premises, EST has indicated that around 4% of the SOP3 gas savings target could be met by CHP, accounting for some 10,000 housing units.
- 1.8 Ofgem is sympathetic to the idea that under SOP3 these should be a consistent approach towards CHP for gas and electricity. We therefore propose, subject to consultation, to make a supplementary determination to extend the criteria for SOP3 projects specifically to allow CHP schemes for any residential premises which have gas

customer uses energy mainly for domestic purposes and will be announcing decisions on this during the next round of consultation on the standard licence conditions.



2. Issues for consideration

Potential benefits

- 2.1 The main justifications for allowing CHP schemes for residential premises with communal gas heating to count for SOP3 are:
 - it will remove an apparent anomaly between gas and electricity;
 - it will widen the range of projects which gas suppliers can undertake – this would be in line with the present requirement on gas suppliers to take into account the desirability of demonstrating through their SOP3 programmes a variety of methods of achieving savings;
 - it will help to promote CHP in line with Government objectives and Ofgem's policy of removing unnecessary barriers to CHP and our wider environmental agenda as set out in our Environmental Action Plan*:
 - residents in gas heated tower blocks include the disadvantaged and it is consistent with Ofgem's Social Action Plan that suppliers should take steps to help such households;
 - ♦ CHP schemes can provide significant environmental gains which should be able to be pursued under SOP3.

Meeting the costs

2.2 Allowing CHP projects for tower blocks and other similar sites with communal gas heating systems to count towards SOP3 would involve gas companies providing direct financial support to landlords and indirect help to tenants even if they are not Domestic Gas Customers under the present statutory definition. This is open to the objection that it would benefit those who have not contributed to the cost of SOP3 at

^{* &}quot;Environmental Action Plan: A Discussion Paper" Ofgem July 2000.

the expense of those who have paid for SOP3 through their gas charges, ie it breaks the link between who pays for SOP3 and who benefits. In this case we do not believe this to be an overriding objection:

- the proposed change would be limited to allowing CHP for communal gas heating schemes; in all other respects SOP3 would be targeted at Domestic Gas Customers as now;
- if the supply price restraint in gas is lifted in April 2001, then for regulatory purposes there would no longer be any particular connection between the funding base for SOP3 gas projects and the customers to whom schemes are offered;
- residents of tower blocks etc or their landlords, insofar as they are designated Electricity Customers, are liable to contribute to the cost of SOP3 through their electricity changes. In the light of the increasing role played by duel-fuel supply and the fact that SOP3 should be viewed as a whole spanning gas and electricity, it is reasonable to take this into account as a contribution towards SOP as a whole.

Benefits for landlords and tenants

2.3 The benefits of CHP for gas heated tower blocks in the first instance are likely to fall to the landlord in terms of lower energy costs. Depending on the terms of the tenancy agreement, tenants also stand to benefit in the form of lower rents, reduced energy charges and improved comfort. Ofgem would expect that, when they bring forward CHP projects, companies will describe in their project submissions the arrangements proposed by landlords for ensuring that benefits are passed through to tenants, and the results of any consultation with tenants regarding the project.

Competition Issues

- 2.4 Consideration needs to be given to how the proposed change might impact on the Industrial and Commercial (I&C) gas market. Tower blocks and other similar premises with communal gas heating systems in most cases fall within the I&C market sector a market distinct from and at present more highly competitive than the Domestic gas market and not subject to price restraint. It is open to companies to operate in both sectors, though to a significant extent the two markets are served by different companies.
- 2.5 It would not be desirable if companies operating in the Domestic gas market, particularly British Gas Trading as dominant supplier, were to use the SOP3 scheme to help penetrate the I&C market, or to act in ways which weaken competition in either market. Therefore, companies should not make their offers of support for CHP conditional upon the site being required either before or after the project to take a gas supply from the company supporting the project or from any related company. Ofgem would expect to see documentary evidence to this effect in scheme submissions.

CHP schemes not fuelled by gas

2.6 The proposed change will allow CHP schemes for existing gas users to count towards SOP3. Within this it would be possible to allow not only gas-fuelled CHP projects but also CHP projects which use other fuels. In practice we would expect the most cost effective schemes to be based on gas-driven CHP units and do not believe that it is necessary to allow other forms of CHP, but we would welcome comments on this.

3. Conclusions and next steps

- 3.1 Ofgem believes that the best way to provide for CHP projects which supply gas heated tower blocks etc to count for SOP3 is to issue a supplementary determination specifically to bring this category of project within the scope of SOP3. A draft determination is set out at Annex B. Under this determination it would be open to gas companies to bring forward CHP projects, but there would be no obligation to do so.
- 3.2 As for all SOP3 projects, the assessment of energy savings from individual CHP projects will fall to EST. EST are currently consulting companies over the assessment methodology for CHP schemes in gas heated premises.
- 3.3 Ofgem would welcome comments on the policy of extending SOP3 to cover CHP for residential premises with communal gas heating and on the draft determination. It would also be helpful to have an indication from companies of the extent to which they would expect to take up the opportunity to bring forward this category of CHP project under SOP3.
- 3.4 Subject to the present consultation, Ofgem intends that a determination as per the attached draft should be issued, and come into effect, during December. The closing date for responses to this consultation is 28 November. Responses should be sent to:

Chris Barclay
Head of Energy Efficiency
Ofgem
16 Palace Street
London
SW1E 5JD

Tel: 020 7932 6359 Fax: 020 7932 5197

E-mail: chris.barclay@ofgem.gov.uk

STANDARD OF PERFORMANCE FOR THE PROMOTION OF THE EFFICIENT USE OF GAS

The Director General of Gas Supply ("the Director"),

- (a) in exercise of the power conferred upon him by section 33BB of the Gas Act 1986 ("the Act") and after the consultations required by that section, hereby determines the standard of performance in connection with the promotion of the efficient use of gas by consumers to be achieved by each licensee which holds a gas supply licence granted under section 7A of the Act ("the Supplier") as set out in Part I below;
- (b) in exercise of the power conferred upon him by section 33C of the Act, directs the Supplier to furnish information in accordance with Part II below;
- (c) in exercise of the power conferred on him by section 33D of the Act, gives to the Supplier the directions in Part III below; and
- (d) declares that the interpretation provisions in Part IV below shall apply to this document.

PART I

The Standard

1(1) The standard of performance ("the Standard") is that between 1 April 2000 and 31 March 2002 the Supplier shall have caused such Projects, selected as provided in paragraph 2, to be implemented in accordance with paragraph 3 as will achieve (whether before or after 31 March 2002) GWh Savings of Energy calculated in accordance with paragraph 4, of an aggregate amount produced by the application of the following formula ("the Formula")

The Formula

C x [16.84Ln(C) + 160.955] / 1000

Where:

C represents the number, expressed in thousands, of Consumers
who are customers of the Supplier
calculated in accordance with the rules set out below; and
Ln represents the natural logarithm

- (2) The date for the initial calculation of C (in paragraph 1 above) is 30 September 1999, and the Formula shall be applied (subject to paragraph 3 below) by reference to C as so calculated with effect from 1 April 2000.
- (3) If the figure for C calculated in relation to the Supplier as set out in paragraph 2 is less than 50, the Savings of Energy under the Standard required in respect of that Supplier shall be zero.
- (4) If a Supplier has a figure for C calculated in accordance with paragraph 1 of 50 or more, a further calculation shall be made of the number of Consumers who are customers of that Supplier at 30 September 2000, and the figure for C by reference to which the Formula is to be applied for that Supplier shall be the average number of such Consumers at 30 September 1999 and 30 September 2000 respectively.
- (5) In order to qualify for the Standard
 - (a) all Savings of Energy must be achieved by the efficient use of gas by Consumers;
 and
 - (b) at least three quarters of the Savings of Energy must be savings of gas supplied to Consumers.

Selecting Projects

- 2(1) The Supplier shall not select a Project unless the aggregate benefits of that Project to Consumers generally are expected to exceed the aggregate costs of the Project.
 - (2) Subject to sub-paragraph (1), in selecting Projects the Supplier shall take into account:
 - the interests of Consumers and in particular the interests of those Consumers who are elderly or disabled, who are in rural areas or who may have difficulty in meeting their obligation to pay for gas;
 - the desirability of demonstrating a variety of methods of achieving Savings of Energy; and
 - (iii) the effect of a Project on the physical environment.
- (3) The Supplier shall not select Projects under which a Consumer will use gas for a purpose for which he previously used another form of energy or will use another form of energy for a purpose for which he previously used gas unless the change produces greater savings in overall cost to the Consumer than are achievable by undertaking Projects using other forms of energy.
- (4) The Supplier, having prepared a specification of the Project and submitted that specification to the Energy Saving Trust to enable the Energy Saving Trust to express its views thereon, including its views on the extent to which the Supplier has met the criteria set out in sub-paragraph (1) to (3), shall not select a Project until either the Energy Saving Trust has expressed its views on that Project or three months has elapsed since the Project was submitted to the Energy Saving Trust.

Implementing Projects

3(1) The Supplier shall cause each Project to be designed and implemented in a way that maximises its contribution to the efficient use of gas. (2) The Supplier shall (so far as it is practicable to do so) provide such assistance and information as the Energy Saving Trust or its agents shall reasonably require for the purpose of assessing the Savings of Energy actually achieved in implementing Projects.

Calculation of Savings Achieved

- 4(1) The Savings of Energy achieved by a Project shall be calculated after it has been implemented, and subject to sub-paragraph (4), shall be the Savings of Energy actually achieved by implementing that Project.
- (2) Where, as a consequence of a Project being implemented, there is an increase in the consumption of gas or other forms of energy, that increase shall be taken into account in calculating the Savings of Energy.
- (3) Before a Project is implemented the Supplier may prepare a statement, in consultation with the Energy Saving Trust, of the method which it considers is appropriate for calculating the Savings of Energy to be achieved by the Project.
- (4) Where a statement of method has been prepared in accordance with sub-paragraph (3) and approved by the Director before 2 February 2002, the Savings of Energy achieved by the Project when it has been implemented shall be deemed to be the Savings of Energy calculated in accordance with that statement of method.

PART II

Reporting

- The Supplier shall on or before 30 June 2001, and on or before 30 June in each subsequent year send to the Director a report setting out:
 - (a) the level of performance of the Supplier against the Standard;

- (b) a description of each Project that it is proposing, has been arranged to be implemented or has caused to be implemented during the previous financial year including
 - (i) the type of Consumers involved;
 - (ii) the objective or objectives;
 - (iii) the name of the person by whom it was or is to be implemented; and
 - (iv) the Savings of Energy which the Project is to achieve;
- (c) an explanation of how Projects have been selected and how the criteria in paragraph 2 have been met;
- (d) the amount of money spent by the Supplier in preparing Projects and causing them to be implemented during the financial year to which the report relates.

PART III

 The Supplier shall give or send a copy of any report prepared in accordance with Part II to any person who requests it and make a copy available for inspection at its premises during normal working hours.

PART IV

Definitions

 In this document, words and phrases defined in the Act or the Licence shall (unless the context otherwise requires) have the same meaning;

"Consumer" means a gas consumer who is a Domestic Customer;

"Energy Saving Trust" means the Energy Saving Trust Limited, a company incorporated under the Companies Act 1985 and having registration number 2622374;

"Project" means (subject to paragraph 8) an arrangement or series of arrangements described in a specification which complies with paragraph 2(4), intended to promote the efficient use of gas by Consumers (but not necessarily all Consumers) and caused to be implemented after 1 April 2000 and before 31 March 2002 whereunder goods, services and financial incentives (or any of them) are provided to those Consumers.

"Savings of Energy" means

- (a) savings of gas supplied to Consumers and
- (b) savings of other forms of energy consumed by Consumers.
- If a material change is made to an arrangement or series of arrangements which constitute a Project, that arrangement or series of arrangements shall thereafter constitute a different Project.

McMcCarthy Director General of Gas Supply

4. Annex B

STANDARD OF PERFORMANCE FOR THE PROMOTION OF THE EFFICIENT USE OF GAS

This is a determination made by the Director General of Gas Supply ('the Director') in exercise of the powers conferred on him by section 33BB of the Gas Act 1986 ('the Act'), and after the consultations required by that section, in respect of the standard of performance in connection with the promotion of the efficient use of gas by consumers to be achieved by each holder of a gas supply licence granted under section 7A of the Act ('the Suppliers').

Whereas:

- (a) On 28 March 2000 the Director issued a determination ('the 2000 determination') pursuant to section 33BB of the Act specifying the standard of performance ('the Standard') to be achieved by the Suppliers during the period from 1 April 2000 to 31 March 2002;
- (b) The Director has concluded that it would be appropriate to extend the categories of arrangement which may qualify for the Standard and has accordingly resolved to issue a further determination supplemental to and amending the 2000 determination:

Now therefore the Director in exercise of the powers above referred to makes the following determination:

- 1. The Standard to be achieved by the Suppliers pursuant to the 2000 Determination shall be amended as follows:
 - (1) In Part I of the 2000 determination, paragraph 1(5) shall be amended to read:
 - (5) In order to qualify for the Standard in the case of a Project which comprises a CHP scheme, the Savings of Energy must be achieved as a result of the installation of the CHP scheme. In any other case, all Savings of Energy must be achieved by the efficient use of gas by Consumers and at least three quarters of the Savings of Energy must be savings of gas supplied to Consumers.
 - (2) In Part IV of the 2000 determination, the definition of 'Project' shall be amended to read:

'Project' means (subject to paragraph 8) either:

(i) An arrangement or series of arrangements described in a specification which complies with paragraph 2(4), intended to promote the efficient use of gas by Consumers (but not necessarily by all Consumers) and caused to be implemented after 1 April 2000 and before 31 March 2002, whereunder goods, services and financial incentives (or any of them) are provided to those Consumers; or

- (ii) a scheme or schemes described in a specification which complies with paragraph 2(4), which provides a gas-fired combined heat and power system to premises which are used wholly or mainly for domestic purposes and is caused to be implemented after the date of this determination and before 31 March 2002 ('a CHP scheme').
- (3) In Part IV of the 2000 determination, the definition of 'Savings of Energy' shall be amended to read:
 - (a) savings of gas supplied to Consumers,

duly authorised in that behalf

- (b) savings of other forms of energy consumed by Consumers, or
- (c) savings of gas resulting from the installation of gas-fired combined heat and power systems

	combined heat and power systems			
2.	This determination has effect on and from[]		
3.	Save as expressly amended by this determination, the pro 2000 determination remain in full force and effect.	ovisions of the		
Dated				
	ommon seal of the Director o affixed is authenticated by			