REVISED GUIDANCE ON
INFORMATION TO ACCOMPANY
NOTIFICATIONS UNDER
SECTION 14(1) OF THE ENERGY
ACT 1976 AND APPLICATIONS
UNDER SECTION 36 OF THE
ELECTRICITY ACT 1989

FINAL REGULATORY IMPACT ASSESSMENT

Final Regulatory Impact Assessment

December 2006
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1. Title of proposal

Guidance to power station developers on the background information to accompany notifications under Section 14(1) of the Energy Act 1976 and Applications under Section 36 of the Electricity Act 1989 promoting the use of Combined Heat and Power (CHP).

2. Purpose and intended effect

(i) The objective

The objective of this exercise is to simplify and update the existing Guidance to avoid imposing an excessive regulatory burden on power station developers whilst continuing to maximise the uptake of CHP where economically feasible. It is also important, from the perspective of Government and stakeholders alike, to restate the commitment to CHP, to remove any ambiguity and make sure that the process is as transparent and thorough as possible.

The Secretary of State for Trade and Industry may grant generating station development approval for onshore generating stations of >50 MWe output in England and Wales under section 36 of the Electricity Act 1989. This guidance will therefore apply in England and Wales to such applications.

So far as Scotland is concerned the granting of development approvals under section 36 of the 1989 Act in Scotland has been devolved to the control of the Scottish Ministers. In Northern Ireland, electricity generation development is the responsibility of the Northern Ireland Department of Enterprise, Trade and Investment. Similar guidance applies to Section 36 applications in Scotland and Northern Ireland.

Notifications under section 14(1) of the Energy Act 1976 however are still required to be made to the Secretary of State for Trade and Industry as that function remains a reserved matter. The guidance will therefore also apply to section 14 notifications.

1 Guidance on Background Information to Accompany Notifications under Section 14(1) of the Energy Act 1976 and Applications under Section 36 of the Electricity Act 1989
(ii) The background


Among other revisions intended to clarify and simplify the Guidance, the refreshed Guidance will contain new heat maps indicating potential local customers for heat from power stations.

The Government is committed to increasing the installed capacity of Good Quality CHP to at least 10GWe by 2010, enabling waste heat to be used more productively with industry and commerce, public services and community heating systems. The increased use of Good Quality CHP:

- reduces fuel costs;
- reduces emissions of carbon dioxide;
- increases security of supply; and
- in community heating, provides affordable warmth and contributes to combating fuel poverty.

(iii) Rationale for government intervention

The publication of this Guidance is one of a number of actions that were proposed in the Energy Review conclusions of July 2006. The measures set out in the report help to take forward our commitment to meeting two major long-term challenges in UK energy policy:

- tackling climate change by reducing carbon dioxide emissions; and
- delivering secure, clean energy at affordable prices.

Ensuring the fine balance between encouraging CHP and allowing developers the freedom to bring forward the most competitive development proposals in a liberalised market is a difficult task. The Government achieves this though the existing planning legislation and Defra incentives for Good Quality CHP. This Guidance is therefore the means of ensuring that CHP is kept firmly in the spotlight as proposals are developed. Recently there

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\(^2\) [http://www.dti.gov.uk/energy/review/page31955.html](http://www.dti.gov.uk/energy/review/page31955.html)
have been significant successes encouraging CHP and these are sited in the Guidance with an explanation of the commercial benefits for developers. At Grain, for instance, E.ON UK took the opportunity to investigate the possibility of providing a neighbouring industry with heat during the consideration of its section 36 application for a 1,200 MWe Combined Cycle Gas Turbine (CCGT). As a result of this investigation E.ON UK is now in negotiation with a neighbour about entering into an agreement that would result in the proposed new CCGT capacity qualifying as Good Quality CHP.

This Guidance reasserts the Government’s commitment to CHP and assists the developer in engaging with the key organisations that are sources of information on regional heat. For the first time it gives developers access to information on regional heat customers through Defra’s interactive heat maps. The Guidance includes clearer instructions on what information is required from developers. The Guidance will also include a revised and shortened list of relevant organisations that developers should contact, including the RDA energy leads.

Simplifying and updating the Guidance will ensure that applicants and other interested parties have a complete understanding of the process and the information they are required to provide in relation to CHP when applying for consent to build a power station under section 36 of The Electricity Act 1989 or to accompany a notification under section 14(1) of the Energy Act 1976.

3. Consultation

(ii) Within government

The proposals have been developed in conjunction with other Government Departments with an interest, primarily Defra and DCLG. Discussions concerning the proposed policy have also taken place with HM Treasury and the Devolved Administrations.

(ii) Public Consultation

A formal public consultation was carried out on the proposed Guidance in 2004. Copies of the document were circulated to developers, interested trade associations and environmental organisations. The document was also published on the Department’s external website. Six formal responses were received. The consultation responses did not lead to a concrete set of conclusions and as a result officials continued to actively engage stakeholders and Other Government Departments, culminating in a workshop in June 2006. That workshop concluded that updated Guidance would be useful if it was simplified, proportionate and up-to-date. In addition, developers welcomed the concept of Defra’s new heat maps, which are available for the first time with this Guidance.

Further informal consultation with industry and trade associations took place during the preparation of the final Guidance.

4. Options

On the basis that the underpinning legislation is necessary to encourage CHP where feasible, there are two basic options, which are to:

(i) retain the existing Guidance;

(ii) simplify and update the Guidance.

Further options were discussed at a June 2006 stakeholder workshop, including withdrawing the legislation and replacing it with a code of practice or making the requirements more onerous. However, these options were not deemed appropriate at this stage because relaxing the requirements to developers may lead to less stringent economic analysis of the potential for CHP to which the Government is strongly committed. Equally, more onerous requirements would put unnecessary burdens on developers who are responsible for site location and economic feasibility based on market needs.

Description of options

(i) The status quo would mean continuing to rely on guidance produced in March 2001 which contains out-of-date contact information and which does not capitalise on the latest online heat maps published by Defra3.

3 http://www.industrialheatmap.com
(iii) Updating and simplifying the Guidance and referring to new heat maps would make it easier for developers to identify CHP opportunities which are economically feasible, taking into account the possible environmental and social benefits.

5. Costs and benefits

(ii) Business sectors affected

The proposed Guidance applies to developers of onshore power stations applying for development consents under section 36 of the Electricity Act 1989 and to notifications under section 14(1) of the Energy Act 1976.

Large power station developers and those preparing notifications under section 14(1) of the Energy Act 1976 usually have dedicated teams working on the economic feasibility of a new power station development. In the course of the power station development process it is usual for consideration to be given to CHP, as a result of strong Government signals on this point, and because in some cases developers wish to develop CHP power station for economic or other reasons. Whilst the Government recognises that larger power stations are usually designed on the basis of their electricity generation output there are opportunities for using heat in different ways and, as the Government wishes to encourage CHP where feasible, the Guidance is aimed at ensuring this is the case. Those power station developers consulted in the development of this RIA agreed that where feasible they would bring forward a CHP power station if it was economically viable, but that this decision depended on a number of critical factors, such as long-term forecasts for gas and electricity prices.

Preparing an application for consent to build a power station differs greatly depending on the size and type of proposal. The information required covers, inter alia, the environmental impact of the power station. The requirement to consider CHP is one of a number of elements to be considered when preparing an application or notification. The total cost of preparing a notification under section 14(1) of the Energy Act 1976 or an application under section 36 of the Electricity Act 1989 has not been quantified.

The DTI consents management team look at each application or notification on its merit. This is to allow developers flexibility in the economic modelling and not to create unnecessary burdens if
CHP is evidently not feasible. Those developers consulted agree that they prefer this approach to producing evidence in a set template.

(ii) Benefits

Option (i): Retaining the existing Guidance would have no new benefits for developers since this is the status quo.

Option (ii): Updating the Guidance would reduce the administrative burden on developers per application. Updating the Guidance will ensure that:

- potential heat customers are more readily and easily identifiable from Defra’s heat maps, saving developer time identifying customers themselves;

- key sources of information on regional heat will be more quickly identified saving developer time;

- the Guidance has been simplified for power station developers to more clearly signpost the specific elements of the Guidance that DTI consent managers will be looking for in an application or notification;

- time will be saved calling out of date contact points; and

- a reduction in contact points from over ten to a simple list of four contacts per application.

It is estimated that the reduction in man-hours to fulfill the recommendations in the revised Guidance, calculated on the basis of savings of around one to two weeks identifying heat customers and of 2-15 hours in reduced call times is between £2,000 and £5,000 per application. According to National Statistics data, the average gross hourly pay of full-time employees in the UK “production and distribution of electricity” industry was £16.3/hour in 2006. It is standard to multiply this figure by 1.3 so as to reflect non-wage labour costs, which gives £21.2/hour. One then multiplies the total saving in man-hours (i.e., hourly saving per firm times the number of firms) by £21.2/hour to yield an industry-wide estimate.
The table below gives an estimation of the number of conventional Combined Cycle Gas Turbine (CCGT) and CHP power stations applied for over the last six years. It is useful to note that as a result of the conclusions of the Review of Energy Sources for power generation, published in October 1998, the Government put in place a stricter policy for power station consents, whereby applications for new natural gas-fired generation would be treated as counter to DTI's energy policy objectives of security and diversity and would generally be refused. The Government lifted the stricter consents policy on 15 November 2000 when plans for the New Electricity Trading Arrangements, that came into force in March 2001, indicated that the competition concerns of the 1998 review has been adequately addressed.

The number of power station applications varies significantly year on year but is at an average of 4 per year. On this basis the benefits of issuing this Guidance can be estimated at approximately 8,000 to 20,000 per year.

<table>
<thead>
<tr>
<th>Year</th>
<th>No. of applications</th>
<th>Type of generation – e.g. CCGT or CHP</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>3</td>
<td>3x CCGT</td>
<td>Not yet consented</td>
</tr>
<tr>
<td>2005</td>
<td>8</td>
<td>6x CCGT</td>
<td>2 consented, 4 under consideration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2x CHP</td>
<td>1 consented, 1 withdrawn</td>
</tr>
<tr>
<td>2004</td>
<td>2</td>
<td>2x CCGT</td>
<td>1 consented, 1 withdrawn</td>
</tr>
<tr>
<td>2003</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2002</td>
<td>1</td>
<td>1x CHP</td>
<td>1 consented</td>
</tr>
<tr>
<td>2001</td>
<td>2</td>
<td>1x CCGT</td>
<td>1 consented</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1x CHP</td>
<td>1 consented</td>
</tr>
<tr>
<td>2000</td>
<td>7</td>
<td>1x CCGT</td>
<td>1 withdrawn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5x CHP</td>
<td>4 consented, 1 withdrawn</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1x Dual firing</td>
<td>1 consented</td>
</tr>
</tbody>
</table>

The quantification of the benefits of re-issuing this Guidance have been calculated on the basis of the economic benefits of simplification. Although the re-issuing of this Guidance is primarily intended to simplify and update the Guidance, CHP can have significant economic benefits which the underpinning legislation is intended to maximize. The positive economic, environmental and social benefits of the use of CHP are outlined at Annex A.
## Summary of benefits

The following table summarises the possible impacts of each option:

<table>
<thead>
<tr>
<th></th>
<th><strong>Option (i) – Retain the existing Guidance</strong></th>
<th><strong>Option (ii) – Update and simplify the Guidance</strong></th>
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<tbody>
<tr>
<td><strong>Economic</strong></td>
<td>Continues existing regime where information is out of date and causes administrative burdens quantified as between £2,000 and £5,000 per application.</td>
<td>Administrative benefits of between £2,000 and £5,000 per application based on simplifying and updating the information and speedier identification of potential heat customers.</td>
</tr>
<tr>
<td><strong>Social</strong></td>
<td>–</td>
<td>As this Guidance is intended to simplify and update existing Guidance its social impacts have not been quantified. Please see annex A for an analysis of the benefits of CHP.</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>–</td>
<td>As this Guidance is intended to simplify and update existing Guidance its environmental impacts have not been quantified. Please see annex A for an analysis of the benefits of CHP.</td>
</tr>
</tbody>
</table>
(iii) Costs

Compliance costs

Option (i): Under the current regime developers do not benefit from Defra’s new heat maps, they therefore need to use staff time or specialist consultant to identify local heat customers. Depending on the size and specification of the development the time taken to identify heat loads can vary from approximately one week to two weeks. Contacting the out of date organisations listed in the current Guidance wastes developer time and is estimated to use between 2 and 15 hours of developer time per application. It is therefore estimated that there are potential costs associated with retaining the existing Guidance of between £2,000 and £5,000 per development.

Option (ii): Updating the Guidance will reduce the burden on developers per application; we do not believe it will add any further compliance costs on developers.

Other costs

The existing Guidance requires developers to submit information to accompany their notification or application. This burden is deemed necessary to illustrate that CHP has been fully considered. The proposed revision will significantly alter the time taken for developers to prepare the information because they will be able to identify heat customers from Defra’s heat maps. The economic analysis they are asked to prepare will be easier to judge for the same reason. The Guidance is clearer and up-to-date, reducing uncertainty.

We have not identified costs or burden on any other organisation. The named contacts in the Guidance are content to accept the additional responsibility of sharing information because of the benefits realised from early involvement in key regional infrastructure projects. We have not identified costs or burden on any other government departments or local authorities under HM Treasury’s New Burdens agreement.

6. The Small Firms Impact Test

In our view it is unlikely that the cost of complying with the proposed regulations will have a significant impact on small firms in the power generation industry. There are at present only very few small and medium sized firms (i.e. enterprises employing
fewer than 250 people full time) developing proposals in the energy sector of the size covered by this Guidance, and even fewer, if any, who then go on to construct projects.

7. Competition assessment

The market, for the purposes of undertaking the competition assessment, comprises energy-related companies who are looking to construct and operate onshore power generating stations. The electricity generation market in the UK is competitive and involves varied long-standing competitors and new market entrants. It benefits from a great degree of liberalisation compared with other EU energy markets. The gas supply market is similarly competitive. This Guidance and the regulation upon which it is based does not adversely affect the competitiveness of individual players or the markets as a whole.

8. Enforcement, sanctions and monitoring

The DTI electricity development consents team review each application or notification on its merit and is ready to advise developers on its procedures. If DTI does not consider that sufficient feasibility studies and economic analysis have been undertaken by a developer the Department can request that a developer does more work to identify heat clients.

9. Implementation and delivery plan

The Guidance will be issued via the DTI’s website and communicated to power station developers through an open letter to power station developers and one-to-one contacts with the industry. The key trade associations involved in electricity generation will be offered seminars on the new Guidance should they wish it.

Applications for consent will be monitored to keep track of the effect of the new Guidance.
10. Post-implementation review

The Energy Review Committed to introducing fundamental change to the planning system for major energy infrastructure projects and the Department’s proposals will be set out in a White Paper in 2007. The Department will use the opportunity of the proposals in the White Paper to keep the functioning of the requirements for information relating to CHP under review.

11. Summary and recommendation

Our objective is to put in place guidance to establish a clear, open and transparent application process to encourage CHP development in larger power station investment.

Option (i) the ‘do nothing’ option is unacceptable in our view, as the Department would be failing to up-date Guidance, which is out of date and does not make best use of modern heat maps. Option (ii), to update the Guidance is the preferred option as it will provide additional information to developers contributing to key Government energy targets, whilst reducing the overall regulatory burden on developers. We believe that the cost/benefit analysis above indicates that the option which best meets our objectives is this option.

12. Declaration and publication

I have read the Regulatory Impact Assessment and I am satisfied that the benefits justify the costs.

Signed by the responsible minister: the Parliamentary Under Secretary of State for Energy, Lord Truscott.

Date 15-12-2006
Annex A

Background on CHP benefits

CHP is a highly fuel-efficient technology, which puts to use the waste heat produced as a by-product of the electricity generation process. CHP’s overall fuel efficiency is around 70-90% of the input fuel - much better than conventional power stations which are only up to around 40-50% efficient. It enables a very wide range of energy users, from heavy industry down to individual homes, to save money and to reduce overall carbon emissions.

The Government has introduced a range of measures to support CHP, including:

- climate change levy exemption on fuel inputs to Good Quality CHP and on all Good Quality CHP electricity outputs;
- Enhanced Capital Allowances eligibility to stimulate investment;
- Beneficial carbon allowance allocation under EU Emission Trading Scheme (ETS)

In recognition of CHP’s environmental benefits, in 2000 the Government set a target to achieve at least 10 gigawatts (GW) of Good Quality CHP capacity by 2010. Installed capacity in the UK stood at 5.6 GW at the end of 2004, which is estimated to save around 4.5 MtC per year. In effect, existing CHP is delivering carbon savings in the range of around half to one million tonnes a year per GW of capacity, depending on the method of assessment.

In recent years the CHP industry has faced adverse economic conditions, due largely to the spark spread – the difference between the price received for the electricity and the cost of generation – which has not been large enough to provide an adequate return on investment. The disparity between gas and electricity prices in recent years has acted against CHP, which means that there is still room for support for CHP in the current market conditions. Government is therefore keen to see that CHP is fully supported wherever possible within the national and regional planning policy process.