

Evaluation of Legislation and Regulation Affecting New CHP Installations in Ireland

June 2006

Report commissioned by the CHP Policy Group. (Conducted by ERM Environmental Resources Management Ireland Limited (ERM Ireland), in association with Arthur Cox Solicitors)

1 Executive Summary

1.1 Introduction

ERM Environmental Resources Management Ireland (ERM Ireland), in association with Arthur Cox Solicitors, has undertaken an *evaluation of the existing legislation and regulation affecting new CHP facility installation in Ireland*.

This involved an intensive review of legislation and relevant industry codes pertaining to all aspects of CHP installation and operation (including electricity connection and distribution), and a review of the nationally determined procedures for planning and environmental approval of CHP facilities.

This review was supplemented by a wide range of consultations, the principle objective of which was to bring a range of perspectives to bear on the current legislative and procedural requirements and to identify areas where improvement could be made.

1.2 Permitting Authorities, Agencies and Bodies

The key statutory bodies that have legal responsibility for determining whether to grant permission or to approve licence applications for the development and operation of CHP facilities are:

- the Local Authority – to whom a planning permission application must be submitted (along with fire safety certification application), unless case specific pre-consultation with the planning authority indicates that no such permission is required;
- An Bord Pleanála – in instances where an appeal of the local planning authority’s decision is sought;
- Environment Protection Agency (EPA) - where an IPPC licence, Waste licence or Emissions Trading Licence is required;
- Commission for Energy Regulation (CER) – who issue the authorisations and licences required to construct a generating station, generate electricity and supply electricity, and also issue gas supply/shipping licences;
- Distribution System Operator (DSO) – currently ESB Networks, who issues the Electricity Connection Agreement to provide access to the distribution system; and
- Transmission System Operator (TSO) – currently ESB National Grid (although the function is expected to be vested in EirGrid in the future) who issues the Electricity Connection Agreement to provide access to the transmission system.

1.3 Regulatory Approvals

There are a large number of approvals that may need to be obtained in order to construct and operate a new CHP facility, each of which is required under a specific piece of legislation. These approvals are listed in *Table 1.1*.

Table 0.1 Regulatory approvals required

Activity	Licensing body	Required when:
Construction of a CHP Facility		
• Planning Permission (including EIS where required)	Local planning authority (LA) and An Bord Pleanála	Decision up to planning authority
• Authorisation to construct or reconstruct a generating station	Commission for Energy Regulation (CER)	Mandatory (at present)
Operation of a CHP Facility		
• Licence to generate electricity	Commission for Energy Regulation	Mandatory (at present)

Activity	Licensing body	Required when:
• Fire Safety Certification	Fire Authority (LA)	Mandatory
• IPPC Licence	Environment Protection Agency (EPA)	Needed only if total rated thermal input of 50MW or more
• Emissions Trading Licence	Environment Protection Agency	Need only if the site has a combined total rated thermal input greater than 20MW
• Waste Licence	Environment Protection Agency	Needed where waste is to be burned
• Water Extraction Licence	Local Authority	Needed only if using non-mains water source
• Gas shippers/suppliers Licence	Commission for Energy Regulation	Needed only if operator shipping gas to plant
• Standard Transportation Agreement and Entry Point Agreement	Bord Gais Eireann	Needed only if operator shipping gas to plant
Connection to the Electricity Grid		
• Electricity Connection Agreement with DSO	Distribution System Operator	Needed only if exporting or importing electricity to the distribution system
• Electricity Connection Agreement with TSO	Transmission System Operator	Needed only if exporting or importing electricity to the transmission system
Electricity Supply and Trading Arrangements		
• Electricity Supply Licence	Commission for Energy Regulation	Needed only if supplying electricity to final customers
• Accede to the Trading and Settlement Code	Electricity Supply Board (ESB)	Needed only if hold a Supply Licence or if wish to trade electricity

1.4 Key Recommendations

A number of recommendations have been developed to facilitate improvements to the CHP licensing process. These recommendations are based on an analysis of stakeholders' views, having regard for the statutory processes within which the development of the CHP industry currently operates.

Table 1.2 Recommendations

Recommendation	Responsibility of:
A <i>Provision of policy guidelines</i>	
A1.1 Policy guidelines should be issued to all local authorities by DEHLG in regard to setting out clearly permissible planning exemptions on the scale of development associated with CHP. These guidelines should be developed following consultation with the CER to ensure that they are consistent with the current and future policy direction of the CER. The guidelines should explicitly state what types of CHP facilities are exempt from the requirement to seek planning permission, including EIS application.	DEHLG
B <i>Provision of up-to-date advice to CHP applicants</i>	

Recommendation	Responsibility of:
B1.1 In order to facilitate future development of CHP and to assist potential developers in making investment decisions, funding should be made available to ensure that user friendly reference materials, such as those prepared as part of this study, are regularly updated and made available to potential developers.	SEI
B1.2 A user friendly, web-based information resource that can assist CHP applicants in understanding and negotiating the regulatory approvals process should be provided to the public, and regularly reviewed and kept up to date. Given the current rate of change in the industry, updates should be made on an ongoing basis while overall reviews should be undertaken at least quarterly until such time as a less regular review is deemed acceptable. Web links to this site should be provided from CER, SEI, ESB, EPA and local authority web sites.	SEI
C Recommendations on Regulatory and Licensing issues	
Clarification and redefinition of terms	
C1.1 Consideration should be given to revisiting the definition of CHP, as provided in the Electricity Regulation Act 1999, to set the overall process operating efficiency threshold at a more appropriate level in order to include those facilities that for all intents and purposes are CHP but which are not captured by the current definition. Following consultation with the ICHPA, we recommend that the definition of combined heat and power in the Electricity Regulation Act 1999 be replaced with the definition of high efficiency cogeneration in the Cogeneration Directive (8/2004/EC).	Government
Reduction of regulatory and non regulatory barriers / consideration of measures to encourage an increase in cogeneration	
C2.1 CHP should be granted greater recognition of the fact that it is more environmentally friendly and more efficient than conventional power generation, in order that it can take greater advantage of the full range of financial incentives and benefits awarded to renewable energy. Specific recommendations in relation to the manner in which this can be addressed are set out in recommendations C2.2 to C2.7, below. In addition, potential financial incentives might include the operation of a green credit system and/or financial recognition of the benefits of embedded generation.	Government /CER
C2.2 CHP fuel inputs should be exempt from any carbon tax.	Government
C2.3 Means should be investigated to enhance investment in, and accelerate reinforcement of, transmission and distribution systems in order to increase the capacity of the system. Key means of addressing this include finalising and passing the Critical Infrastructure Bill to facilitate development of required infrastructure and/or through prioritisation of investment in infrastructure in areas that will assist in meeting the targets of electricity to be generated by green sources, including CHP.	Government, CER and ESB
C2.4 CHP should be exempt from the Public Service Obligation Levy (PSO).	Government
C2.5 The costs of the ESB planning study and capacity statement should be reviewed, and consideration given to lowering or eradicating these costs. Costs incurred could instead be charged at the time of connection to the transmission or distribution system. This would allow applicants to investigate the option of CHP and thereby facilitate the consideration of CHP as an option without incurring the 'investigative' costs that consultation has indicated can be a barrier to consideration of CHP.	CER

Recommendation	Responsibility of:
C2.6 The content of the planning study reports that are prepared for applicants by ESB should be standardised, and should contain detailed information on the various development options available to them, prices for carrying out the works associated with each option, and likely timescales for the completion of the work. Consultation indicated that this would provide applicants with greater information from which to formulate their preferred generation option.	ESB
C2.7 Local Authorities should require that CHP be assessed as a possible source of heat and electricity for all new industrial estates and high density developments i.e. shopping centres, housing estates, prisons etc. including all Local Government developments e.g. offices, treatment plants and housing. Guidelines to this effect should be issued by DEHLG. To this end, the requirements of the Energy Performance and Buildings Directive (2002/91/EC) should be transposed in Ireland as a matter of priority and consideration should be given to circumstances in which it may be appropriate to extend the minimum requirements of the Directive.	DEHLG
<i>Streamlining of procedures at the appropriate administrative levels</i>	
C3.1 In the interests of limiting the number of consents and approvals that developers of CHP require, we recommend that the proposed new powers of the CER under section 16(3A) of the Electricity Regulation Act 1999 (proposed to be inserted by section 13(b) of the European Communities (Internal Market in Electricity) Regulations 2004) be implemented into Irish law and used to streamline, or if possible eliminate, the requirement for small scale CHP developers to obtain an Authorisation to Construct or Reconstruct a Generating Station.	Government / CER
<i>Ensuring rules are objective, transparent and non discriminatory</i>	
C4.1 Use of system charges should be based on average import/export volumes and not on maximum capacity as applying a standard charging methodology to all facilities discriminates against the particular operating characteristics of CHP.	CER
<i>Fast tracking planning and licensing procedures</i>	
C5.1 All applicants should avail of pre-consultation and scoping meetings available to them with the planning authority and EPA, and make use of the telephone information numbers at CER and the ESB, in order to ensure that applications, when submitted, contain all required information. This will enable applications to be processed within a shorter time span.	Applicant
C5.2 All organisations involved in assessing CHP applications should instigate a streamlined/condensed application process, and clearly publicise this, for plants of 5MW or less in size, as per the approach that CER has instigated.	ESB, DSO, TSO

Abbreviations:	CER	Commission for Energy Regulation
	DoEHLG	Department of Environment, Heritage and Local Government
	DSO	Distribution System Operator
	ESB	Electricity Supply Board
	EPA	Environment Protection Agency
	LA	Local authority (planning authority, fire authority)
	TSO	Transmission System Ope

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1 Introduction

1.1 Background

In May 2004, ERM Environmental Resources Management Ireland Limited (ERM Ireland), in association with Arthur Cox Solicitors, was commissioned by Sustainable Energy Ireland to undertake an *Evaluation of the Existing Legislation and Regulation affecting new CHP facility installation in Ireland.*

This report, which is current as at 30 June 2004, represents the principal output of the commission and will provide a key contribution to an overall report currently being prepared by the CHP (Combined Heat & Power) Policy Group of the DCNMR. The report of the CHP Policy Group will inform the future roll out of Government policy and action in relation to the development of CHP in Ireland.

1.2 Study Objectives

The objectives of this study were to:

- identify the existing legislative and regulatory framework in Ireland related to the installation of new CHP facilities;
- develop a comprehensive guide for potential applicants detailing:
 - each authorisation/licence/permit required and the government department or state agency responsible for issuing the authorisation;
 - list of forms which need to be completed and where they can be obtained;
 - outline of the process that each application for planning/ licence/ permit takes within the relevant government department or agency; and
 - an estimate of the overall time it takes to process each application, and an estimate of the time it takes to complete each stage of the application process.
- identify areas of potential difficulty associated with the licensing process;
- make recommendations on ways in which to:
 - reduce any regulatory and non regulatory barriers to an increase in cogeneration;
 - streamline the procedures at the appropriate administrative levels;
 - ensure rules are objective, transparent and non discriminatory;
 - potentially fast track planning procedures, if deemed necessary.

1.3 Methodology

The methodology employed by the Study Team involved an intensive review of legislation and relevant industry codes pertaining to all aspects of CHP installation and operation, (including electricity connection and distribution) and a review of the nationally determined procedures for planning and environmental approval of CHP facilities.

This review was supplemented by a wide range of consultations, including:

- telephone interviews and meetings with individuals and organisations that have experience in CHP installation and operation and in the development and implementation of public policy in this area;
- meetings with key representatives of Sustainable Energy Ireland;
- attendance and participation at the 2004 Irish CHP Forum; and
- attendance at, and presentation to, the CHP Policy Group on 1 June 2004.

The principle objective of these consultations and discussions was to bring a range of perspectives to bear on the current legislative and procedural requirements and to identify areas where improvement could be made. The organisations contacted included:

- Department of Environment, Heritage and Local Government
- Commission for Energy Regulation
- Electricity Supply Board
- Irish CHP Association
- IBEC
- Bord Gais Eireann
- F4 Energy
- Department of Communication, Marine and Natural Resources
- Environmental Protection Agency
- Fingleton White & Co
- NUI Maynooth
- Glanbia
- Aughinish Alumina
- Sustainable Energy Ireland

A list of the questions asked, and responses received, is provided in *Annex A*.

The information gathered through the desktop review and supporting consultations was used to inform a series of specific recommendations to foster improvement in the CHP policy, development and operational process. In addition a “data pack” was assembled to aid, and guide, potential CHP applicants through the various procedures and processes required to successfully secure the construction and operation of a new CHP facility in Ireland.

1.4 Structure of this Report

Section	Title	Pages
1	Introduction	1 - 2
2	Definition of CHP	3
3	Agencies and bodies responsible for licensing and granting permission to develop CHP facilities in Ireland.	4 - 7
4	Regulatory approvals in connection with: <ul style="list-style-type: none"> ➢ Construction of a CHP facility ➢ Operation of a CHP facility ➢ Connection to the Electricity Grid ➢ Electricity Supply and Trading Arrangements 	7 - 32
5	Recommendations	31 - 33
Annex		
A	Interview questions and responses	
B	Data-pack for potential CHP applicants (separate document)	
C	Acknowledgements	

2 Definition of CHP (Combined Heat & Power)

CHP is defined, in Section 2(1) of the 1999 Electricity Act, as meaning “the simultaneous production of utilisable heat and electricity from an integrated thermo-dynamic process where the overall process operating efficiency, based on the gross calorific value of the fuel used and defined as the ratio of energy output usefully employed to the energy input, is greater than 70 per cent....”¹.

Therefore, a facility that in all other respects constitutes CHP, but does not have an overall process operating efficiency of greater than 70%, does not constitute CHP for the purposes of the 1999 Act. This means that any advantageous treatment afforded to CHP, as defined, is not available to a CHP facility that does not satisfy this threshold.

Unless otherwise noted, references to CHP in this document are references to CHP as defined in the 1999 Act.

¹ Section 2(1) of the Electricity Regulation Act 1999, as amended (the “1999 Act”).

3 Permitting authorities, Agencies and Bodies

3.1 Overview

The key statutory bodies that have legal responsibility for determining whether to grant permission for the development of new CHP facilities are:

- the Local Planning Authority – when planning permission is required;
- An Bord Pleanála - in instances where an appeal of the local planning authority's decision is sought; and
- Environment Protection Agency – where an IPPC Licence or Emissions Trading Licence is required.
- Commission for Energy Regulation (CER) – who issue the authorisations and licences required to construct a generating station, generate electricity and supply electricity, and also issue gas supply/shipping licences;
- Distribution System Operator (DSO) – currently ESB Networks, who issues the Electricity Connection Agreement to provide access to the distribution system; and
- Transmission System Operator (TSO) – currently ESB National Grid (although the function is expected to be vested in EirGrid in the future) who issues the Electricity Connection Agreement to provide access to the transmission system.

Each of these agencies/bodies is discussed in detail within this section, along with a description of the relevant legislation that they are governed by.

3.2 Planning Authority

Each County and City in Ireland has its own planning authority that determines local planning policy. This determination is secured through:

- the adoption of Development Plans and Local Area Plans under Chapters I and II of the *Planning and Development Act (2000 – 2002)* ("the Act");
- regard for the Regional Planning Guidelines of Regional Authorities under Chapter III of the Act;
- regard for its City/County Strategy for Economic, Social and Cultural Development under Section 129 of the *Local Government Act (2001)*;
- regard for any Ministerial Guidelines issued to the planning authority by the Minister for the Environment, Heritage and Local Government under Chapter IV of the Act; and
- Adherence to the Act's enabling regulations, principally the *Planning and Development Regulations (2001)*.

Part III of the Act, entitled 'Control of Development', defines the requirement for persons to formally seek planning permission in respect of any development of land (with the exception of exempted development), for change of material use, or for the retention of previously unauthorised development.

As such, CHP promoters must follow a planning approval process, which may require the preparation of an Environmental Impact Statement (EIS), and must have regard for the policy of the planning authority. This means that the proposed CHP development must conform to the specific requirements set out in the local Development Plan and, where applicable, the: Local Area Plan; the Regional Planning Guidelines; the Strategy for Economic, Social and Cultural Development; and any relevant Ministerial Guidelines. Evidence of this will need to be demonstrated in the planning application.

In some, limited circumstances, planning permission may not be required. Discussions should be held with the planning authority to confirm whether or not planning permission is required on a case-by-case basis, and if so, whether or not an EIS will be required as part of the planning application. Where planning permission is not required, the applicant should obtain formal notification of this.

A failure to address local planning policy will generally result in a refusal to develop. The Act makes provision for the appeal of planning authority decisions to An Bord Pleanála. This is discussed in *Section 2.3*.

To be submitted to the planning authority:

- Planning Application (where required)
 - Planning application form and associated plans and details;
 - EIS if required (refer to *Section 3.2.1*);
 - Evidence of having given 2 weeks prior notice of the intention to make an application in a newspaper and by the erection or fixing of a site notice;
 - Appropriate planning fee; and
 - any additional information requested by the planning authority.

The planning process is detailed in *Section 4.2.2*.

3.3 An Bord Pleanála

An Bord Pleanála was established in 1977 under the *Local Government (Planning and Development) Act (1976)* and is responsible for the determination of appeals, references and certain other matters under the *Planning and Development Act (2000)*. The Board is also responsible for dealing with appeals under the *Building Control Act (1990)*, the *Local Government (Water Pollution) Acts, (1977 and 1990)* and the *Air Pollution Act (1987)*.

The mission of An Bord Pleanála is to be an independent body that ensures that physical development and major infrastructural projects in Ireland respect the principles of sustainable development and are planned in an efficient, fair and open manner.

In determining an appeal concerning an application where an EIS has been submitted, or relating to activities that require an Integrated Pollution Prevention and Control (IPC/IPPC) Licence, the Board takes into consideration that the control of emissions arising from the activity is a function of the Environmental Protection Agency (EPA).

It is the duty of the Board to ensure that appeals and referrals are disposed of as expeditiously as possible, and to take all feasible actions to ensure there are no avoidable delays at any stage in the determination of appeals or referrals.

To be submitted (where applicable):

- Any appeal of the local planning authority's Notification of Decision should be made directly to An Bord Pleanála, within 4 weeks.
- The responsibility lies with the planning authority to provide An Bord Pleanála with a copy of all items and correspondence pertaining to the planning application.
- Subsequently, An Bord Pleanála may request the developer for clarification or additional information, or attendance at an Oral Hearing.

3.4 Environment Protection Agency

The Environment Protection Agency (EPA) operates under the *Environment Protection Agency Act (1992)*, as subsequently amended and enhanced by the *Protection of the Environment Act (2003)*.

It is an independent body responsible for the administration of the regulation and control of activities in Ireland that impact upon, for example, air quality, water quality, noise, climate change and biodiversity. They are also responsible for environmental enforcement, emissions trading and IPPC licensing. There are four divisions of the EPA, namely Corporate Affairs, Environmental Management & Planning, Licensing & Control and Environmental Monitoring & Laboratory Services. Their overall mission is to protect and improve the natural environment for present and future generations, taking into account the environmental, social and economic principles of sustainable development.

Specific to CHP development and operation, the EPA is concerned with potential pollution and CO₂ emissions.

To be submitted (where applicable):

- IPPC License application form;
- Emissions (greenhouse) Trading Application;
- Waste Licence application form.

3.5 Commission for Energy Regulation

The Commission for Energy Regulation (CER) is an independent body with responsibility for overseeing the liberalisation of Ireland's energy sector.

The CER was established and vested with regulatory powers over the electricity sector under the *Electricity Regulation Act, 1999*. The enactment of the *Gas (Interim) (Regulation) Act, 2002* expanded the CER's jurisdiction to include regulation of the natural gas sector.

With regard to the development of new CHP facilities, consents are required to be obtained from the CER with respect to their construction and operation.

To be submitted (where applicable):

- Authorisation to construct or reconstruct a generating station;
- Licence to generate electricity; and
- Licence to supply electricity (if the developer proposes to supply electricity to final customers, but not if all electricity is used on site or if surplus electricity is only sold to a licensed electricity supplier).

3.6 Electricity Supply Board

The Electricity Supply Board (ESB) was founded in 1927 and is 95 per cent owned by the Government of Ireland, with the remaining shares held by an employee share option trust. ESB includes a number of divisions including ESB Power Generation, ESB Customer Supply and ESB Networks. Of relevance to CHP:

- **ESB Networks** is Ireland's Distribution System Operator (DSO); and as such is the owner of the high voltage transmission system and is the owner and operator of the medium and lower voltage distribution system (Distribution System Operator). It provides services to all 1.7 million electricity customers and all generators and suppliers of electricity in the Republic of Ireland.

- **ESB National Grid (ESBNG)** is Ireland's Transmission System Operator (TSO), and as such currently operates Ireland's electricity transmission system. EirGrid plc is expected to take over responsibility for managing the national grid from ESBNG, pursuant to SI No. 445 of 2000. The Transmission System is a meshed network of high voltage lines and cables for the transmission of bulk electricity supplies around Ireland. Responsibilities include planning and developing the system, scheduling and dispatching generation, operating a fair electricity market and ensuring system security.

To be submitted (where applicable):

- Application for connection to the Electricity Distribution System: Generators; or
- Application for connection to the Electricity Transmission System: Generators

4 Regulatory Approvals

4.1 Overview

There are a large number of licences and approvals that need to be obtained in order to construct and operate a CHP facility, each of which is required under a specific piece of legislation. A list of these requirements is provided in *Table 4.1* below.

Information on the legislative context, as well as specific details on the process to obtain each of these licences and approvals, is provided in the remainder of this Section – divided into four distinct sections:

1. Construction of a CHP facility;
2. Operation of a CHP facility;
3. Connection to the Electricity Grid; and
4. Electricity Supply and Trading Arrangements.

Copies of all application forms and details of how to apply for permissions are provided in the data-pack that is located the accompanying *Annex B*.

Table 4.1 Regulatory approvals that need to be obtained

Activity	Licensing body	Required when:
Construction of a CHP Facility		
<ul style="list-style-type: none"> • Planning Permission (including EIS where required) 	Local Planning Authority (LA) and An Bord Pleanála	Decision up to planning authority
<ul style="list-style-type: none"> • Authorisation to construct or reconstruct a generating station 	Commission for Energy Regulation (CER)	Mandatory
Operation of a CHP Facility		
<ul style="list-style-type: none"> • Licence to generate electricity 	Commission for Energy Regulation	Mandatory
<ul style="list-style-type: none"> • Fire Safety Certification 	Fire Authority (LA)	Mandatory
<ul style="list-style-type: none"> • IPPC Licence 	Environment Protection Agency (EPA)	Needed only if total rated thermal input of 50MW or more
<ul style="list-style-type: none"> • Emissions Trading Licence 	Environment Protection Agency	Need only if the site has a combined total rated thermal input greater than 20MW
<ul style="list-style-type: none"> • Waste Licence 	Environment Protection Agency	Needed where waste is to be burned
<ul style="list-style-type: none"> • Water Extraction Licence 	Local Authority	Needed only if using non-mains water source
<ul style="list-style-type: none"> • Gas shippers/suppliers Licence 	Commission for Energy Regulation	Needed only if operator shipping gas to plant
<ul style="list-style-type: none"> • Standard Transportation Agreement and Entry Point Agreement 	Bord Gais Eireann	Needed only if operator shipping gas to plant

Connection to the Electricity Grid		
• Electricity Connection Agreement with DSO	Distribution System Operator	Needed only if exporting or importing electricity to the distribution system
• Electricity Connection Agreement with TSO	Transmission System Operator	Needed only if exporting or importing electricity to the transmission system
Electricity Supply and Trading Arrangements		
• Electricity Supply Licence	Commission for Energy Regulation	Needed only if supplying electricity to final customers
• Accede to the Trading and Settlement Code	Electricity Supply Board (ESB)	Needed only if hold a Supply Licence or if wish to trade electricity

4.2 Regulatory Processes – Construction of a CHP Facility

4.2.1 Overview

Prior to commencing the construction of a CHP facility, the following permissions and authorisations are required:

- Planning permission (or confirmation of exemption); and
- CER Authorisation to construct or reconstruct a generating station.

Furthermore, in some instances the Utilities Directive will apply and impose certain public procurement obligations.

Details are provided below.

4.2.2 Obtaining Planning Permission

Overview

The *Planning and Development Act (2000)*, Section 32, sets out a general obligation for private developers to obtain planning permission for development. The application is made to the Planning Authority in whose jurisdiction the site is located.

In some instances, for example where a material change to the existing development will not occur, planning permission may not be required. A further example might be where a proposed CHP facility will replace an existing boiler and no construction works are required.

Advice should be sought from the local planning authority on a case-by-case basis. If permission to proceed without planning permission is granted, official *Confirmation of Exemption* must be obtained.

In all other circumstances, planning permission is required by law.

Preparation of Planning Application

Article 22 of the *Planning and Development Regulations (2001)*, outlines the general content of planning applications. Each County or City has slightly different requirements. Copies of planning application forms can be obtained from the relevant County or City Council. Some example application forms are included in *Annex B*.

Generally, a planning application requires statement of, details on, and submission of ⁽²⁾ :

- Contact details and the address of the land or structure concerned;
- Legal interest of the applicant;
- Where the application relates to a building or buildings, the gross floor space of any existing building(s) and of the proposed works;
- Indication of whether the development comprises or is for the purposes of an activity in relation to which an IPC/IPPC or waste licence is required;
- Indication of whether the development consists of or comprises the carrying out of works to a protected structure;
- Submission of a copy of the newspaper notice published, and the site notice erected on the land or structure, two weeks prior to the submission of the planning application;
- Six copies of a location map;
- a plan showing the position of a site notice or notices affixed to the land or structure; and
- documents, particulars, plans, drawings and maps, in metric scale, as required.

Site or layout plans must be of not less than 1:500 scale. Other plans, elevations and sections must be of not less than 1:200 scale.

Determination of whether an EIS is required

In some situations, an Environmental Impact Statement (EIS) may be required for submission with the planning application. The applicant should consult directly with the local planning authority to determine whether they require an EIS.

The planning authority will request an EIS where it considers that the development is likely to have 'significant effects on the environment'.

The criteria for determining this are detailed in Schedule 7 of the 2001 Planning and Development Regulations.

The requirement for a formal Environmental Impact Assessment (EIA) was introduced to European Union Member States through *Directive 85/337/EEC* (as amended by *Directive 97/11/EC*). This Directive was first transposed into regulations in Ireland in 1990 and has undergone several revisions as both the Directive and Irish law have developed. The currently Applicable Irish Legislation is the *Planning and Development Act (2000)* and the *Planning and Development Regulations 2001*.

As such, the planning authority may apply environmental criteria to its planning considerations under Section 43 (2) (a) of the Act and may specifically refuse permission under Sections 256-257 ⁽³⁾ of the Act, notwithstanding any decision of the EPA. It is therefore critical that, if an EIS is required that the design of the facility parallels the completion of the EIS and that the EIS underpins the planning application.

Following Lodgement of the Planning Application

Upon lodgement of the planning application, the Planning Authority will allow five weeks for the receipt of any Third Party submissions or observations in relation to the application ⁽⁴⁾. A planning application that is accompanied by an EIS will be automatically referred by the planning authority to the relevant 'prescribed bodies' for assessment and comment ⁽⁵⁾. Appeals in relation to

(2) This is an indicative list only. The applicant should refer to Part 4 of the *Planning and Development Regulations 2001*, and to the relevant planning application form which can be obtained from the local planning authority.

(3) Section 256 relates to the amendment of the Environmental Protection Agency Act, 1992 and Section 257 relates to the amendment of the Waste Management Act, 1996.

(4) Refer to Article 28(2)(b) of the *Planning and Development Regulations, 2001*.

(5) Refer to Part 3 of the *Planning and Development Guidelines, 2001*.

submissions/observations made outside this statutory five-week period, without the appropriate fee or a copy of the receipt of objection from the local planning authority, will be deemed invalid.

The Local Planning Authority may then require the applicant, by notice in writing within eight weeks of receipt of the planning application, to ⁽⁶⁾ :

- submit any further information (including any plans, maps or drawings, or any information as to any estate or interest in or right over land), which the authority considers necessary to enable it to deal with the application; or
- produce any evidence, which the authority may reasonably require to verify any particulars or information given in, or in relation to, the application.

If the additional information response is determined by the planning authority to contain significant additional data, including information in relation to effects on the environment, it shall notify prescribed bodies and objectors and require publication of a newspaper notice to that effect.

Under Article 33 (3), a planning authority may request clarification of responses in respect of the issues raised in a request for additional information.

With the assistance of the original planning application, and any further information requested, the planning authority will then make a decision on whether to grant or refuse permission for the proposed development. This decision (Notification of Decision) must be handed down within eight weeks of its request for further information being complied with.

Upon submission of the planning application to the local planning authority there are two possible scenarios:

1. the Notification of Decision to grant or refuse permission for the proposed CHP facility will be handed down and will be accepted; or alternatively; or
2. the Notification of Decision will be appealed, in which case it will be referred to An Bord Pleanála.

Upon Lodgement of Appeal with An Bord Pleanála

If the planning authority's decision is appealed, (which can be done by either the first party applicant or a third party person) the application will be forwarded to An Bord Pleanála.

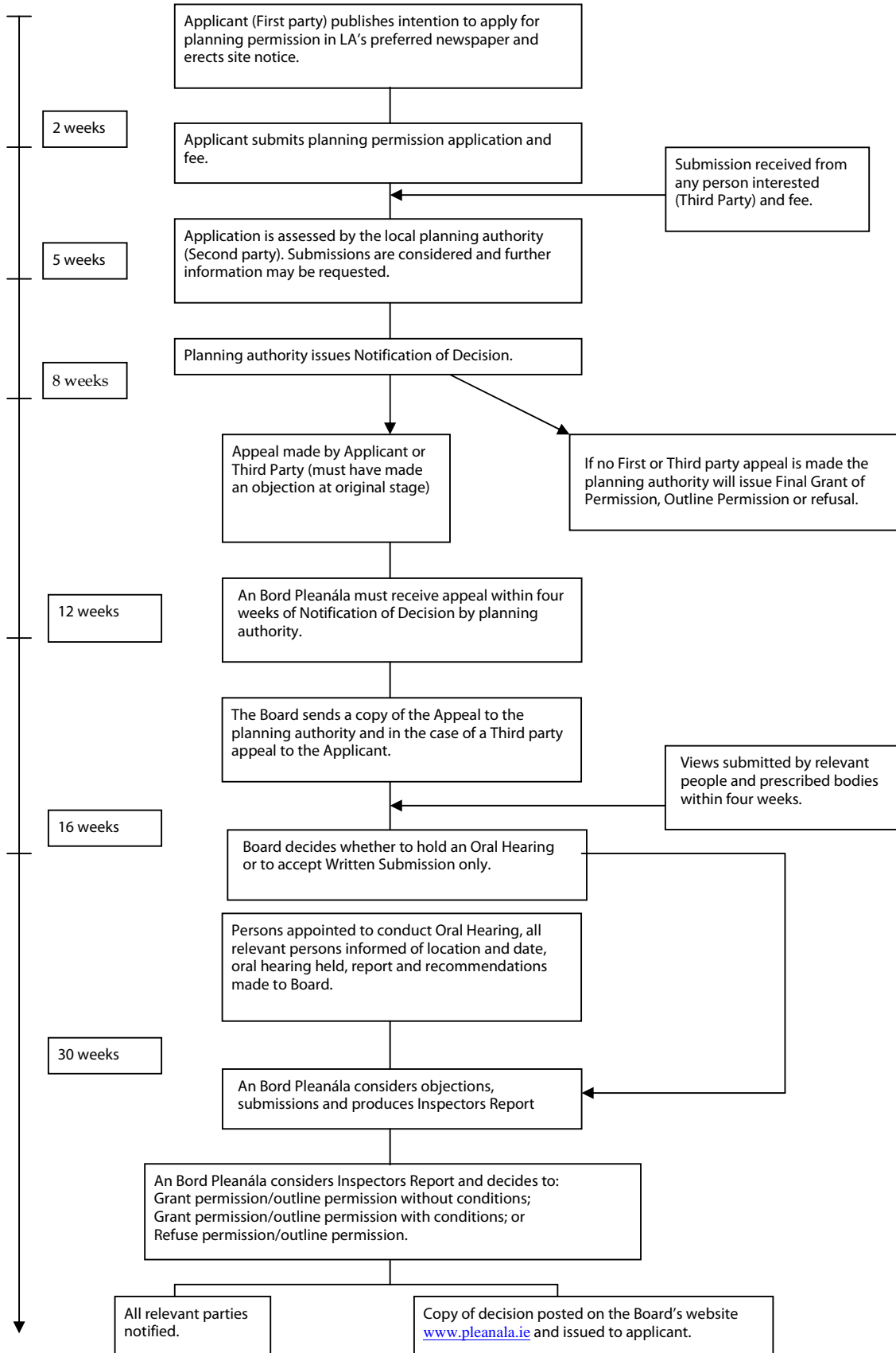
The submission of an appeal to An Bord Pleanála is in effect a completely new application for planning approval. The decision of the Board will over-ride any decisions issued by the local planning authority.

Typically, an Inspector will be assigned to the case, and will report back to the Board who will then issue their decision on whether to permit or deny the planning application. Oral hearings are sometimes held to assist the Board in its understanding of particularly complex cases or where significant national or local issues are involved. The hearing is designed to allow further necessary elaboration, discussion and examination of relevant planning issues over and above the written appeal submissions.

Figure 4.2 overleaf depicts the overall planning application process.

(6) Refer to Article 33 of the *Planning and Development Regulations, 2001*.

Figure 4.2 Planning application process



4.2.3 CER Authorisations

Before constructing a CHP Facility, authorisation to proceed is required from the Commission for Energy Regulation (CER). This Authorisation is the key administrative permission required to construct a generation facility ⁽⁷⁾.

An Authorisation is obtained by application to the CER ⁽⁸⁾. Commencement of construction of a generating station without an Authorisation may result in a fine up to €126,973.00 ⁽⁹⁾. If the application is refused, the applicant will be notified in writing of the reasons for the refusal. A decision to refuse to grant an Authorisation may be appealed ⁽¹⁰⁾.

When Generating Capacity is Less than or Equal to 5 megawatts:

The application and assessment procedure for an Authorisation depends on the size of the proposed generating facility. In order to minimise regulatory burdens on smaller market participants, a streamlined process has been implemented for applications from small-scale generators (less than or equal to 5 megawatts) ⁽¹¹⁾. This streamlined process is as follows:

- *Financial Assessment:* Applicants must submit details of directors and principal shareholders, a short business plan and, if applicable, confirmation of the existence of a power purchase agreement (whether or not under AER);
- *Technical Assessment:* Applicants must submit technical specifications of each unit, a connection offer, planning permission, an environmental impact statement (if applicable) and a construction and commissioning programme.
- *Fees:* The fee for an application for a plant that has a generating capacity of less than 5 megawatts is €35. If the generating capacity is 5 megawatts, the application fee is €270.

When Generating Capacity is Greater than 5 megawatts:

For plants greater than 5 megawatts, applicants must pay an application fee and submit two copies of the following documents with their applications:

- *Financial Information:* accounts for the last two years, including a certificate that no material change has occurred if more than three months have elapsed since the end of the financial year (and accounts of the parent company in the case of an SPV) ⁽¹²⁾. Applicants must also submit a five year business plan including annual forecasts of costs, sales and revenues and financing.
- *Environmental impact statement:* if applicable.
- *Construction and commissioning programme:* This must identify the major milestones in the project development, from authorisation to completion.
- *Map(s):* sufficient to identify the location of the generating station.
- *Application Fee:* fees vary according to the installed capacity of the generating unit. The scale of fees is set out in the *Application Guidance Note* in *Annex B*.

(7) Issued by the CER pursuant to section 16(1) of the 1999 Act. A copy of the form of Authorisation is attached at Annex B and can be downloaded from <http://www.cer.ie/CERDocs/Authorisation.pdf>.

(8) The application form for an Authorisation to Construct or Reconstruct a Generating Station is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Authorisation_Application_v3.1.doc. Guidance Notes issued by the CER to assist applicants in their application(s) are attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Authorisation_Guidelines_v6.doc

(9) Section 16(4) of the 1999 Act.

(10) The appeal procedure is set out in Part IV, sections 29 to 32 of the 1999 Act. An explanation of the appeal procedure may also be found in paragraphs 46 to 47 of the Guidance Notes.

(11) CER Decision CER/03/061: "Modification of the Commission's Procedures for Assessing Small-Scale Licence Applications" dated 19 March 2003, a copy of which can be downloaded from <http://www.cer.ie/CERDocs/cer03061.pdf>.

(12) While it will not routinely request or assess financial information for applications of this size the CER reserves the right to request its submission.

In addition, to assist the CER in assessing applications in a timely manner, applicants are encouraged (but not required) to provide the CER with two copies of the following documentation (where applicable):

- planning permission or confirmation of exemption;
- IPC/IPPC Licence or confirmation that an application has been submitted;
- water extraction licence;
- connection offer; and
- Power Purchase Agreement.

4.2.4 Public Procurement Obligations

A developer of a CHP plant may need to comply with the formalities prescribed in EC Public Procurement Directives in certain circumstances. In general, the Utilities Directive¹³ applies to entities that hold authorisations and/or licences, such as those necessary for a CHP plant, and which are engaged in “relevant activities” for the purposes of that Directive. Materially, such activities are “the provision or operation of fixed networks intended to provide a service to the public in connection with the production, transport or distribution of electricity” or “the supply of ... electricity ... to such networks”.

In practice this means that a CHP plant that intends to export into the grid falls under the Directive. Furthermore, a CHP plant that intends to export to other business enterprises, and where the means of export itself forms part of a fixed network (for example, in an industrial estate), might also fall under the formalities of the Directive. In such instances, the formalities include the requirement to advertise, by call for competition, (tender notice) in the Official Journal of the European Union (“OJEU”) and abiding by certain prescribed procedures and time limits. In practice, time limits of up to 77 days¹⁴ (or certain other abbreviated time limits) must be allowed to tenderers. Further periods may be required to allow for the evaluation process. Failure to abide by these formalities may result in awards of monetary damages, injunction, declaration of voidness or other remedies.

However, if the CHP plant is not intending to supply electricity to the grid, or if it does not supply electricity to other business enterprises as above, the Utilities Directive will not be applicable. Furthermore, the Utilities Directive does not apply if the financial value of the procurement is below the financial thresholds therein which, in general, are €5,923,624 for construction contracts and €473,890 for goods and many services.¹⁵

In general, public sector bodies will be bound by the formalities of the Directives (but with lower financial thresholds) in respect of procurement of goods or certain services, as well as for construction contracts if the Utilities Directive would not be applicable to them in the relevant circumstances.

(13) Directive 93/38/EEC, as amended by Directive 98/4/EC and as transposed in Ireland (and sometimes known as the Water, Electricity, Transport and Telecommunications Directive).

(14) This period may vary according to the circumstances and according to which Directive and which procedure is applicable.

(15) In general, where Annex 1A of the Services Directive or Annex XVI A of the Utilities Directive apply the only formality required is publication of an award notice and other categories of services required to be advertised if the financial threshold is exceeded.

4.3 Regulatory Processes – Operation Of the CHP Facility

4.3.1 Overview

Before legally commencing operation of the CHP facility, the following permissions and licenses are required:

- Licence to Generate Electricity;
- Fire Safety Certificate;
- Emissions Trading Licence (if combined site rated thermal input is > 20 megawatts);
- IPPC Licence (if rated thermal input is > 50 megawatts);
- Waste Licence (if waste is to be burned) and
- Water Extraction Licence (if water to be obtained from non-mains source).

If the CHP facility is to be gas fired and the generator wishes to ship gas itself, rather than purchasing gas from a licensed supplier at its plant gate, the following additional licenses and agreements are required:

- Gas shippers/suppliers license; and
- Bord Gais Eireann Standard Transportation Agreement.

Furthermore, the shipper must accede to the relevant entry point agreements to the system, as discussed in *Section 4.3.7*. It should be noted that the CER is currently implementing a new entry-exit regime to replace the existing point-to-point regime. It is proposed that this will be implemented in April 2005. This is discussed in *Section 4.3.7*.

4.3.2 CER Licence to Generate Electricity

Commencement of generation without a Generation Licence may result in a fine of up to €1,904, or to imprisonment for a term not exceeding 12 months¹⁶.

A Generation Licence is obtained by application to the Commission for Energy Regulation (CER)¹⁷ and can be made jointly with an application for an Authorisation (refer to *Section 4.2.2*), or at any time after the grant of an Authorisation.

Only one Generation Licence will be granted to each applicant, although this may cover more than one generating station under the applicant's ownership. A decision by the CER to refuse to grant a Generation Licence may be appealed.¹⁸

When the Generator is less than or equal to 5 megawatts:

The application and assessment procedure for a Generation Licence depends on the size of the proposed generating station.

An applicant for a generating station with a generating capacity of less than or equal to 5 megawatts must submit the same financial and technical information as is required for an Authorisation¹⁹. The relevant application fee for a generating station with a capacity of less than 5 megawatts is €35, and the fee for a generating station with a capacity of 5 megawatts, is €55.

(1) Section 4 of the European Communities (Internal Market in Electricity) Regulations 2000 (S.I. 445 of 2000).

(2) The application form for a Licence to Generate Electricity is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Generation_Application_v3.1.doc. Guidance Notes issued by the CER to assist applicants in their application(s) are attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Generation_Guidelines_v6.doc.

(3) The appeal procedure is set out in Part IV, sections 29 to 32 of the 1999 Act. An explanation of the appeal procedure may also be found in paragraphs 46 to 47 of the Guidance Notes.

(4) CER Decision CER/03/061: "Modification of the Commission's Procedures for Assessing Small-Scale Licence Applications" dated 19 March 2003, a copy of which can be downloaded from <http://www.cer.ie/CERDocs/cer03061.pdf>.

When the Generator is greater than 5 megawatts:

For plants greater than 5 megawatts, applicants must pay an application fee and submit two copies of the following documents with their applications:

- *Financial Information*: the same information required in connection with an application for an Authorisation.
- *Map(s)*: sufficient to identify the location of the generating station.
- *Application Fee*: fees vary according to the installed capacity of the generating unit. The scale of fees is set out in the *Application Guidance Note* in *Annex B*.

In addition, to assist the CER in assessing applications in a timely manner, applicants are encouraged (but not required) to provide the CER with two copies of the following documentation (where applicable):

- planning permission (where required) or Confirmation of Exemption (refer to Section 4.2.1);
- EIS (where required – refer to Section 4.2.1);
- IPC/IPPC Licence or confirmation that an application has been submitted (when the plant total rated thermal input is greater than 50MW);
- Water Extraction Licence and Foreshore Licence (where required – refer to Section 4.3.5);
- Connection Offer; and
- Power Purchase Agreement.

4.3.3 Fire Safety Certification

Article 13 of the *Building Control Regulations (1997)* provides for applications for fire safety certification. Applications are processed by the Local Fire Authority, as defined under Section 2 of the *Fire Services Act (1981)* and application forms are available from the local County⁽²⁰⁾ or City Council⁽²¹⁾ or Town Council.

Applications should include appropriate plans and calculations, particulars of the nature and extent of the proposed use, and the appropriate fee. The fee is €125 or €2.90 for each square metre of relevant floor area, whichever is greater, up to a maximum of €12,500⁽²²⁾. Applications are processed within two months of the submittal of a proper application or within a time frame agreed between the applicant and building control authority, i.e. the Fire Authority.

An appeal to An Bord Pleanála can be made where a certificate is refused or conditions attached are considered inappropriate.

4.3.4 Emissions Trading Licence

As a member of the EU, Ireland is committed to an average increase of greenhouse gas emissions by 13% above 1990 levels (Ireland was given an increase of 13% rather than the EU wide goal of a reduction of 8% over 1990 levels). The EU *Emissions Trading Directive* (Directive 2003/87/EC), implemented in Ireland by the European Communities (Greenhouse Gas Emissions Trading) Regulations (SI No. 437 of 2004), which establishes an allowance-trading scheme for emissions to

(20) An example of an application form is provided in Annex B and can be downloaded from Waterford County Council

(21) An example of an application form is provided in Annex B and can be downloaded from Dublin City Council

(22) The fee quoted here is an example fee and relates to Dublin City Council charges.

promote reductions of greenhouse gases, in particular carbon dioxide, is being implemented by the Environmental Protection Agency (EPA) to achieve this target. ⁽²³⁾

Annex 1 of the Directive sets out which activities will be covered by the scheme. Thresholds set in the Directive are based on capacity rather than actual output and on the accumulative capacity of all directly associated and technically connected facilities on sites. CHP plants are "Energy Activities" and will come under the scheme where they have a rated thermal input exceeding 20 MW (except in the case of hazardous or municipal waste installations).

Installations that fall within this "permit required" threshold will not be able to operate legally after the 1st of January 2005 until a permit has been issued.

The EPA will not grant a permit until after the installation has obtained all necessary consents to commence construction, which for CHP would include Planning Permission (where required) and a CER Authorisation to Construct. There is no fee involved in the application for a permit. The estimated timescale for the processing of permit applications is one month.

The allowance-trading scheme operates by providing each installation with some free allowances, but these allowances may not be sufficient to cover the actual emission levels. In such instances, the operator will be required to either reduce their electrical/heat demand (and therefore their CO² emissions) or source extra allowances from the market place.

The first phase of the trading scheme will run from January 2005 to December 2007, with second and subsequent phases running from 2008 in five-year periods. During the first phase, allowances for installations that had obtained a greenhouse gas emissions permit before 31st March 2004 are described in the National Allocation Plan for the period 2005 to 2007 and are based on historic emissions.

Other CHP installations that come into operation during this period, but which obtain a permit after 31st March 2004, may apply for an allocation from a reserve of allowances set-aside for CHP. This application must be made to the EPA. Together with the construction consents described above, the operator must have obtained a Electricity Connection Agreement with ESB National Grid before an application can be made. Allocations are made on a first come-first served basis. 450,000 allowances (tonnes CO² equivalent) have been set-aside for the first phase, split into annual proportions of 1:2:3 for the first three years. In years one and two, the most allowance that one can obtain is 37,500. A higher amount may be allocated in year three.

Allowances set-aside for CHP in recognition of its environmental benefits, are made on the following basis:

- New CHP plants will receive allowances for both the electricity generation and the heat elements of the process.
- Displacement CHP plants (which involves the replacing of existing boilers) will receive an allowance for the electricity generation part and will be permitted to retain the heat allowance that existed for the boiler.

Allowances are allocated after the permit has been granted, and by the end of February in each trading year or, where first allocation within a month or two of first obtaining a permit. Allowances for subsequent trading phases after 2008 will be made in accordance with allocation plans developed at least 18 months before each subsequent trading phase begins.

Emission of certain pollutants from large combustion plants Directive 2001/80/EC

Directive 2001/80/EC of the European Parliament and of the Council of 23 October 2001 on the limitation of emission of certain pollutants into the air from large combustion plants has been

(23) The application form and guidance note for a Green House Gas Emission Permit are included in Annex B and can be downloaded from Environmental Protection Agency

transcribed into Irish legislation by the Statutory Instrument 644 of 2003 Large Combustion Plants Regulations 2003 (S.I. No 644 of 2003).

The conditions set down in these regulations apply to combustion plants with a rated thermal input of 50 MW or greater, irrespective of the type of fuel used. Therefore any CHP plants in existence or built in the future with a rated thermal input of 50 MW or greater, will have to meet the emission limit values set out in the first and second schedule of the regulations. The Regulations set differing emission limit values for sulphur dioxide, oxides of nitrogen and dust to be applied, depending on plant type and the fuel used i.e. solid, liquid and gaseous fuels.

4.3.5 The Integrated Pollution Control Licence (IPC/IPPC)

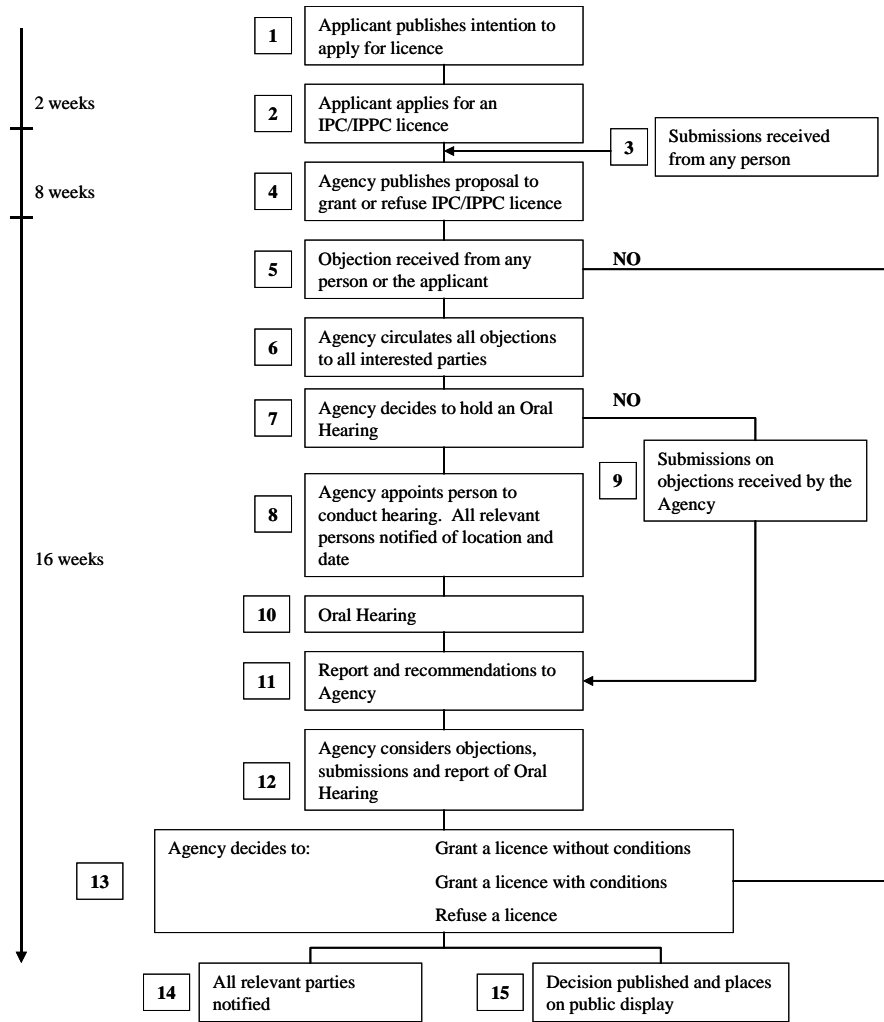
Under Section 82 of the EPA Act 1992 (as amended by Section 15 of the Protection of the Environment Act 2003), an *IPPC licence* is required where the proposed CHP development has a heat/power total rated thermal input of 50 MW or more.

Before granting this license, the EPA must be satisfied that the activity to be permitted and licensed will not cause significant environmental pollution. As such, the applicant must provide sufficient information in the IPC /IPPC application to allow the EPA to make this assessment ⁽²⁴⁾. In addition, with the requirements of IPPC being integrated into new EPA licences, a greater emphasis will be placed on the existing site conditions, in terms of site contamination, on the condition that the site should be restored to on closure and on energy efficiency. Indications from the EPA at the moment are that they will require restoration after closure to a similar quality of environment as existed prior to a development. The EPA's licensing regime changed substantially in 2003, with the creation of the IPC Licensing Inspectorate.

Prior to lodging an IPPC license application, a scoping meeting should be held with the EPA to discuss each section of the proposed application, and to allow the EPA an opportunity to comment on the proposed approach and to outline their comments and requirements. This process enables a robust IPPC application to be lodged, which has a greater chance of being acceptable to the EPA. It has become EPA policy in recent times that, on completion of the scoping process, they make no further comment, nor enter into any further discussion, until the licence application has been submitted. It is therefore crucial that the scoping process is carried out in a thorough manner and that the EPA's views are sought, and agreement obtained on the key issues, prior to submission. *Figure 4.3* summarises the IPPC licensing process and timeline from the point at which the Applicant publishes their intention to apply for/ or revise such a licence.

(24) The application form and guidance note for an IPC/IPPC licence is attached in Annex B and can be downloaded from Environmental Protection Agency

Figure 4.3 IPPC Licensing Process



4.3.6 Water Extraction Licence and Foreshore Licence

If water is to be sourced from a river, lake, ocean or bore hole, rather than the water mains, and is to be used as a coolant and not reused for heating (i.e. is discharged back into the water body), a Water Extraction Licence, and possibly a Foreshore Licence, will be required. Applications for a Water Extraction Licence are made to the local authority, and a copy of the granted application will need to be supplied to the CER. Applications for a Foreshore Licence, if required, are made to the Coastal Zone Management Division of the Department of Communications, Marine and Natural Resources.

A local authority may issue a notice under Section 23 of the Water Pollution Act 1977, requesting specific information to be provided in relation to water abstractions being carried in its area. Local authorities must keep a register of water abstractions greater than 25 cubic meters per day.

4.3.7 Supply of gas to the site

The operator of a gas-fired CHP facility may purchase gas from a licensed supplier at the plant gate without having any capacity rights in the gas transmission or distribution systems, and thus will not require the licences discussed below. We understand that the majority of CHP operators in Ireland would obtain the gas for their plants in this way.

However, it is also open to an operator/electricity generator to ship gas to the plant itself²⁵. The third party access regime is one of regulated access, based on published tariffs, with the CER having the right to approve such tariffs, or the methodologies used for their calculation, in advance.

Under the current Irish Point-to-Point regime, a generator who wishes to ship gas must hold a CER gas *Supply/Shipping Licence*, as well as signing a *Standard Transportation Agreement* with Bord Gais Eireann and acceding to the Entry Point Agreements applicable to the Entry Point from which the generator proposes to ship gas. It is then open to the generator to negotiate gas supply arrangements with suppliers at the relevant Entry Point to the Irish system.

Gas Shippers/Suppliers Licence

A person who supplies natural gas without holding a Supply/Shipping Licence may be liable for a fine of up to €3,000 or imprisonment for a term not exceeding 3 months or both²⁶. "Supply" is defined in section 2(1) of the 2002 Act to include "delivery" and therefore a shipper of natural gas must hold a Supply/Shipping Licence²⁷.

The licence may be obtained by applying to the CER²⁸. At the time of writing the final form of Licence had been approved by the CER but has not yet been published. The application form relates only to applications for the granting, by the CER, of temporary gas Supply/Shipping Licence, prior to the development of permanent generic licences.²⁹

An applicant for a Supply/Shipping Licence must submit the following documents with its application and pay the following fees:

- *Financial History*: audited accounts for the last two years and, where applicable, audited accounts for the last two years of any party holding 20% or more of the shares of the applicant.
- *Business Plan*: A business plan for the next five years, including annual forecasts of costs, sales, revenues and profits. This should include the assumptions underlying the figures provided. In addition, information on the intended source of finance for the business of the applicant to which the application relates.
- *Billing*: Details of the proposals for billing and customer care management, including the IT system to be employed for this purpose.
- *Employees*: Estimate of the number of people to be employed in relation to this operation and their address of employment.
- *Technical Requirements*: The applicant must also provide evidence as to how it proposes to comply with any technical requirements associated with the licensed activity.
- *Application Fee*: This has not yet been determined by the CER.

(1) Section 10A(1)(d) of the Gas Act 1976, as amended.

(2) Section 16(2) of the Gas (Interim) (Regulation) Act 2002, as amended (the "2002 Act").

(3) Issued by the CER pursuant to section 16(1)(a) of the 2002 Act. A copy of the interim form of Gas shipping/supply licence is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Gas_Interim_Supply-Shipping_Licence.pdf.

(4) The application form is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Gas_Supply-Shipping_Application.pdf.

(5) A Consultation Paper published by the CER relating to natural gas licences can be downloaded from the following link: <http://www.cer.ie/CERDocs/cer03093.pdf>

Standard Transportation Agreement

The key document, which must be signed to obtain third party access to the gas transportation system, is a *Standard Transportation Agreement (STA)*⁽³⁰⁾. An application for a STA should be made to Bord Gais Eireann. The STA contains customer specific information such as location, reserved capacity, pressure, ramp rates, and applicable maintenance days at the Exit Point⁽³¹⁾. The STA also incorporates the Code of Operations which includes detailed rules regarding capacity, balancing, shrinkage, entry/exit points, nominations, allocations, measurement and testing, specifications, quality and pressure, system planning, maintenance, emergencies and throughput restrictions⁽³²⁾.

Entry Point Agreements

In addition, the shipper must accede to the relevant entry point agreements to the system. There are currently only two entry points to the Irish system, Moffat and Inch. The entry point agreements in respect of Moffat are the OPN Agency Agreement⁽³³⁾ which details the framework of rules for requests to BG Transco for hourly flow rates to be provided at Moffat on a daily basis to ensure that the appropriate quantity of gas is delivered into the Irish transportation system, and the Moffat Administration Agreement⁽³⁴⁾ which deals with nominations and allocations amongst Shippers at the Moffat entry point. The entry point agreement for Inch is currently being negotiated.

New Entry-Exit Regime

The CER has recently determined that the Irish gas capacity regime will change from a Point-to-Point to an Entry/Exit regime with a target implementation date of April 2005⁽³⁵⁾.

Under an Entry/Exit regime, flexibility for Shippers is created by treating gas delivered at any Entry Point as being capable of off-take at any Exit Point where a Shipper holds capacity. Therefore, the linkage between Entry and Exit Points that exists under a Point-to-Point regime is broken, allowing Shippers to purchase capacity without the need to be tied into transportation contracts that specify dedicated entry and off-take point combinations. Key elements of the new Entry/Exit regime include:

- a ticket-to-ride principle will be maintained whereby Shippers will be expected to book capacity prior to gas flow. Capacity overruns will be applied separately at both Entry and Exit to provide a commercial incentive to enforce this principle;
- a notional point at which entry-paid gas can be transacted will be facilitated;
- a Unified Code of Operations will be implemented and Shippers will accede to the Code by signing a Framework Agreement;
- in the absence of STAs, Exit Agreements will be required specifying site specific details for specific Exit Points for large daily metered customers;
- Entry and Exit Capacity will be separate products that are defined and sold independently of one another. Shippers will book Entry and Exit Capacity separately but must maintain an aggregate balance position; and
- The Transporter will maintain a register of Entry and Exit capacity bookings.

(1) A copy of the BGE Gas Transportation Enquiry Form is attached as Annex B and can be downloaded from http://www.bordgais.ie/htm/transportation/docs/gas_transportation_enquiry_form.doc

(2) The STA can be downloaded from <http://www.bordgais.ie/htm/transportation/docs/STA-Feb%202004.pdf>

(3) The Code of Operations can be downloaded from <http://www.bordgais.ie/htm/transportation/index.htm>

(4) A copy can be downloaded from <http://www.bordgais.ie/htm/transportation/transmission/opn.pdf>

(5) A copy can be downloaded from http://www.bordgais.ie/htm/transportation/docs/MAA_221003.pdf.

(6) A copy of the direction to BGE can be downloaded from <http://www.cer.ie/cerdocs/cer03184.pdf>.

4.4 Regulatory Processes – Connection to The Electricity Grid

4.4.1 Overview

In order for the CHP facility to export or import electricity from the distribution or transmission system, the applicant must:

- enter into a Connection Agreement with either the distribution system operator (“DSO”) or the transmission system operator (“TSO”)³⁶; and
- pay the associated connection and use of system charges.

In order to obtain a connection offer, the developer of a CHP plant must apply to the DSO or the TSO, as applicable.

The process for obtaining a connection offer currently differs for transmission and distribution connected customers, as discussed below. However, the CER has recently proposed aligning the transmission and distribution connection offer processes, as discussed in *Section 4.4.3*.

4.4.2 Electricity Connection Agreement

A) Distribution Connected CHP Facilities

An application for connection to the distribution system is made by submitting an application to the DSO which includes: load or generator details; final address details; an application fee of €100 (where a site visit is required); site and location maps; electrical line and functional block diagrams; and generator details³⁷.

On receipt of the completed application, a Quotation Letter and Connection Agreement³⁸ will be sent to the customer. The connection offer will provide a costing for the works to be undertaken by the DSO up to the connection point. Connection works will be carried out in accordance with the quotation letter on receipt of:

- payment in full, or payment of the first instalment;
- signed Connection Agreement or Acceptance of Offer Form; and
- completion of relevant documents if transfer of the substation site to the ESB is required.

If an ESB planning study is sought to assess the implications of a connection at a particular point on the Distribution System, a standard charge of €635 will be payable in advance of a planning study or statement being prepared. Some users may also request a capacity statement giving information regarding circuit capacities, present or projected power flows or loadings on a part of the system. The standard fee for this statement is €254.

Timescales for applications (subject to wayleaves, planning permission and customer’s acceptance of offer) are outlined in *Table 4.1*.

(1) The TSO is currently ESB National Grid, although it is intended that these functions will be vested in a new body, Eirgrid. ESB Networks continues to act as DSO, although it is proposed that this function will also ultimately be transferred to Eirgrid.

(2) A Guide to Connection to the Distribution System is attached at Annex B and can be downloaded from http://www.esb.ie/esbnetworks/downloads/connections_metering/connection_process_doc_250602_ade.pdf. The application form is also attached at Annex B and can be downloaded from http://www.esb.ie/esbnetworks/downloads/application_generator_v2.pdf.

(3) A copy of the General Conditions for Connection of Industrial and Commercial Customers and Generators to the Distribution System is attached at Annex B and can be downloaded from http://www.esb.ie/esbnetworks/downloads/general_conditions_connection_greater_100v2.pdf

Table 4.1 Timescale for applications

Time Scale Description	From	To
Quotation sent to customer	Receipt of completed application	18 weeks
Acceptance of Offer	Period for which quote is valid	3 months
Connection Works	Acceptance of Offer	9 months
Final energisation	Date of customer's notification/advice of completion of Customer Connection Works	1 month
Typical Project Duration	Receipt of completed Application	12 months

Customer connection works must comply with the Distribution Code³⁹ and must be completed to specification prior to commencement of ESB Connection Works on the Customer's site.

Declaration of Fitness for Service / G10 Form

The applicant will be responsible for carrying out pre-commissioning and compliance tests to ensure that the CHP facility meets appropriate standards, and that competent personnel are operating the equipment. This is mandatory.

A 'test results sheet' that provides details on the generators relay calibration, operating conditions, and functional operation must be submitted to the Electricity Supply Board (ESB). The ESB will review this information, and if satisfied will issue the applicant with a Declaration of Fitness for Service.

The test results sheet and associated details on the conditions governing connection to the distribution system can be obtained from ESB. The documentation can be obtained via the internet.⁽⁴⁰⁾

B) Transmission Connected CHP Facilities

An application for connection to the transmission system is made by submitting an application to the TSO⁴¹, together with two signed confidentiality agreements⁴² and the first instalment of €7,000 of the application fee. The second instalment will depend on the capacity of the development and whether shallow connection works will be involved⁴³.

The TSO will make a connection offer within 70 business days from receipt and acceptance of a completed application, except in the case of complex connections. The connection offer will comprise an offer letter which sets out relevant charges and a standard form Connection Agreement⁴⁴. The connection offer is valid for a period of 70 business days from the date of issue of the offer letter.

In order to accept a connection offer, the generator will have to provide a signed copy of the Connection Agreement, pay the first instalment of the Connection Charges (equal to 10%) and provide a Connection Charges Bond for the remainder of the Connection Charges, an MEC Capacity

(1) The relevant specifications are in Annex 1 of the Code. The Distribution Code can be downloaded from http://www.esb.ie/esbnetworks/downloads/standards_codes/distributioncode_v12.pdf.

(40) www.esb.ie/esbnetworks/connections_metering/networks_get_connected.jsp

(1) The Application form for a Connection Offer is attached at Annex B and can be downloaded from <http://www.eirgrid.com/EirGridPortal/uploads/Regulation%20and%20Pricing/Generator%20Connection%20Application%20.pdf>

(2) A copy of the Confidentiality Agreement is attached at Annex B and can be downloaded from <http://www.eirgrid.com/EirGridPortal/uploads/General%20Documents/Confidentiality%20Agreement%20-%20template.pdf>.

(3) Details of application fees are set out in the Process for Connection to the Transmission System in Ireland issued by ESBNG on the 16 June 2003 which is attached at Annex B and can be downloaded from <http://www.eirgrid.com/EirGridPortal/uploads/General%20Documents/Process%20for%20Connection.pdf>.

(4) A copy of the standard Connection Agreement is attached at Annex B and can be downloaded from <http://www.eirgrid.com/eirgridportal/uploads/Regulation%20and%20Pricing/Connection%20Agreement.pdf>. The general conditions of Connection and Transmission Use of System can be downloaded from <http://www.eirgrid.com/EirGridPortal/uploads/Regulation%20and%20Pricing/Connection%20Ag%20-%20Gen%20Conditions%20&%20Schedule%2010.pdf>.

Bond equal to €10,000 per MW of contracted capacity and possibly also an MIC Capacity Bond. The MEC Capacity Bond can be drawn down if the applicant's generation plant has not passed all capacity tests or the applicant fails to submit a Capacity Certificate.

Payment of Connection and Use of System Charges

Transmission connection charges in Ireland are based on a shallow rather than a deep connection charging policy⁴⁵. As an incentive for the ESB National Grid to complete the necessary deep reinforcement works, generators are granted deemed firm⁴⁶ access to the system after prescribed time periods, after which the generators will be paid constraint payments if they are constrained off.⁴⁷

CHP producers largely pay connection and use of system charges on the basis of the predominant use being made of networks⁴⁸. If a CHP producer's maximum import capacity (MIC) exceeds its maximum export capacity (MEC), then connection and capacity charges are levied on its MIC, on the same basis as a final customer⁴⁹. If a CHP producer's MEC exceeds its MIC, then connection and capacity charges are levied on its MEC, on the same basis as a generator⁵⁰.

However, certain other transmission usage and system charges are payable in respect of any net electricity imports and all electrical exports, save that where a CHP Producer connected to the distribution system has an MEC of less than 10 megawatts, that person shall not be charged generator related Transmission Use of System Charges.

4.4.3 Draft CER Directions

The Commission for Energy Regulation (CER) has recently proposed aligning the transmission and distribution connection offer processes⁵¹. Key elements of the revised proposal include:

- subject to certain limited exceptions, all connection offers shall be made within 70 business days of receipt of a complete application and all connection offers shall be valid for a period of 70 business days;
- there shall be a single combined queuing system for all generator connection applications in the application process;
- all transmission offers issued from 14th May 2004 shall not be required to place a connection charges bond and will be subject to a schedule of payment of 25% of shallow connection costs on Offer Acceptance, 50% on Consents Issue Date, and 25% on Connection Works completion;
- all connection applicants shall pay application fees and modification fees;
- all connection applicants shall be required to post a Capacity Bond of €10,000 per megawatt as a condition precedent to offer acceptance;
- a validity period of 36 months shall apply from execution of the transmission connection agreement to the Transmission Shallow Operational Date or execution of the distribution connection agreement to the Final Energisation date; and

(5) CER Direction CER/23/12: "Direction Issued to the ESB on the Policy to be Followed by the Board for Connections to the Transmission System" dated 23 December 1999, a copy of which can be downloaded from <http://history.cer.ie/1299Archive.htm>

(46) 'Deemed firm access' means that the site is given permission and access to export its entire generating capacity to the network. If the network cannot take the full amount, company will be paid a 'constraints payment'.

(7) CER Direction CER/01/72: "Firm and Non-Firm Access to the Transmission System" dated 19 June 2001, a copy of which can be downloaded from <http://www.cer.ie/cerdocs/cer03036.pdf> and CER Decision CER/03/036: "Future of Direction on Firm and Non-Firm Access to the Transmission System" dated 6 March 2003, a copy of which can be downloaded from <http://www.cer.ie/cerdocs/cer03036.pdf>.

(8) CER Direction CER/03/237: "Network Charges for Autoproducers and CHP Producers" dated September 2003, a copy of which can be downloaded from <http://www.cer.ie/cerdocs/cer03237.pdf>.

(9) Excluding costs required in relation to the provision of export meters which must be paid for in full.

(10) Generators connected to the distribution system do not pay distribution use of system charges for exported energy, however these generators do pay annual maintenance and operation charges associated with the connecting asset.

(1) Draft Direction CER/04/200 made under section 34(2) of the 1999 Act: "Generator Connection Offer Processes: Process for Connection of Generation to the Transmission and Distribution Systems in Ireland" dated 14 May 2004, a copy of which can be downloaded from <http://www.cer.ie/cerdocs/cer04200.pdf>.

- transmission connected generators less than or equal to 10 megawatts and distribution connected generators shall post a Decommissioning and Reinstatement Bond (D&R Bond) on Year 15 following commissioning of the generation unit (or units) or two years prior to decommissioning, whichever is the earlier. Transmission connected generators above 10 megawatts shall post a D&R Bond on notification of the decommissioning of the generation unit or units as required by the Grid Code.

4.5 Regulatory Processes –Supply & Trading Arrangements

4.5.1 Overview

If the CHP facility produces surplus electricity that it wishes to supply/sell to customers, it has the following options:

- electricity can be sold to licenced electricity suppliers pursuant to AER Contracts or other power purchase agreements; or
- electricity can be traded via the current bilateral contracts market. In such cases, a CER Electricity Supply Licence is required, and the Trading and Settlement Code must be acceded to.

Any generator in Ireland is able to trade electricity in the market. However, it would not be practical or economic for the majority of small scale generators, including the majority of CHP generators, to actively participate in electricity trading. Therefore, many small-scale CHP producers in Ireland prefer to sell surplus electricity to licensed electricity suppliers pursuant to AER Contracts or other power purchase agreements. This means that they are not required to obtain an electricity supply licence or accede to and comply with the relevant electricity market rules.

In addition, new market arrangements for electricity are currently being developed by the CER. This is discussed in *Section 4.5.4*.

4.5.2 Electricity Supply Licence

The developer of a CHP plant is only required to hold an Electricity Supply Licence if it is proposed that electricity be supplied to final customers other than itself or its subsidiaries. If all electricity is used on site by the Licensee or one of its subsidiaries, or if excess electricity is sold to a licensed electricity supplier (including under an AER Contract), there is no need to hold such a licence. However, if excess electricity is being sold to final customers, one of two licences will be required:

- if the plant satisfies the definition of CHP in the 1999 Electricity Act⁵², a licence to supply all final customers with electricity produced using CHP may be obtained⁵³. This will permit the supplier to supply electricity to final customers which in aggregate does not exceed the amount of electricity which is produced using CHP or electricity purchased, in place of such electricity, in accordance with the trading arrangements provided by the CER; or
- if the plant does not satisfy the definition of CHP in the 1999 Electricity Act, a licence to supply “eligible” customers may be obtained (“eligible” customers are those who consume more than 1GWh per annum at a single premises)⁵⁴.

The critical difference between these licences is that if the plant satisfies the definition of CHP in the 1999 Act, the supplier may sell to all customers. If the plant does not satisfy the definition of CHP, the supplier may only sell to “eligible” customers.

(1) CHP, as defined in section 2(1) of the 1999 Act, must have an overall process operating efficiency of greater than 70% (See section 2 of this paper, above).

(2) Issued by the CER pursuant to section 14(1)(d) of the 1999 Act. A copy of the form of Licence is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Supply_Licence_V2.pdf.

(3) Issued by the CER pursuant to section 14(1)(b) of the 1999 Act.

A Supply Licence is obtained by application to the CER⁵⁵. Any person who supplies electricity without a Licence may be liable for fines up to €1,904 or a term of imprisonment not exceeding 12 months⁵⁶. A decision to refuse to grant a Licence may be appealed.⁵⁷

Applicants for a Supply Licence must submit two copies of the following documents with their application and pay the fee set out below:

- *Financial History and Business Plan Proposal*: the same information required in connection with an application for an Authorisation.
- *IT System*: Details of systems employed for billing and customer care management.
- *Employees*: Estimate of the number of people to be employed in relation to this operation and their address of employment.
- *Application Fee*: The fee for a Supply Licence application is €254.

4.5.3 Current Bilateral Contracts Market

Ireland currently operates a day ahead bilateral contract market pursuant to which generators nominate to the transmission system operator (TSO), on a day ahead basis, the schedule of energy they want to produce and the prices they require. The market rules are set out in the Trading and Settlement Code (Code)⁵⁸. A CHP plant is subject to central dispatch under the Grid Code on the same basis as conventional units⁵⁹.

The TSO determines a merit order for dispatch purposes on the basis of the schedules submitted by generators. Initial commercial positions are based on forecasts and therefore imbalances between projected supply and demand often occur. The Settlement System Administrator (SSA) calculates imbalances and market participants are able to initially trade out imbalances amongst themselves. Aggregate imbalances are then settled by the purchase of "Top up" from and sale of "Spill" to ESB.

The holder of a Supply Licence or any centrally dispatched plant must accede to and comply with the Code. However, a non-centrally dispatched plant does not have to accede to the Code unless it wishes to trade electricity⁶⁰. Therefore, a CHP unit, which produces only for its own use and does not "Spill" onto the system, does not have to accede to the Code. The process for acceding to the Code is by application to the TSO and the CER pursuant to Agreed Procedure No. 9⁶¹.

Since July 2003, CHP suppliers are required to balance only 95% of their demand in their first year of trading, allowing a 5% margin of error in recognition of the difficulty of balancing a supplier's demand on a certain date at a certain time. CHP generators are required to balance 92% of their rated capacity of sales to CHP suppliers with its CHP tradable quantity, again recognising a CHP generator's outage probability.⁶²

(4) The application form for a Supply Licence is attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Supply_Application_v2.1.doc. Guidance Notes issued by the CER to assist applicants in their application(s) are attached at Annex B and can be downloaded from http://www.cer.ie/CERDocs/Supply_Guidelines_v5.doc.

(5) Section 4 of the European Communities (Internal Market in Electricity) Regulations 2000 (S.I. 445 of 2000).

(6) The appeal procedure is set out in Part IV, sections 29 to 32 of the 1999 Act. An explanation of the appeal procedure may also be found in paragraphs 46 to 47 of the Guidance Notes.

(1) The Code is established by ESB pursuant to the Electricity Regulation Act, 1999 (Trading Arrangements in Electricity) Regulations, 2000 (SI 49 of 2000).

(2) Under Section 1.4 of the Code a unit greater than 10MW is subject to central dispatch, a unit less than 10 MW, is not subject to central dispatch and a unit between 5MW and 10MW may elect to be centrally dispatched.

(3) CER Decision CER/01/155 dated 9 November 2001 states that "This Decision does not prevent small-scale non-dispatchable CHP plant from physically exporting if it had not acceded to the Code. However, if the plant has not acceded to the Code its exports will not be considered as trades under terms of the Code."

(4) Agreed Procedure No. 9 can be downloaded from <http://history.cer.ie/cer0152.pdf> and is attached as Annex B.

(5) <http://www.eirgrid.com/EirGridPortal/uploads/Market%20Operations/CHP%20CER%20Decision.pdf>.

4.5.4 New Market Arrangements in Electricity

New Market Arrangements for Electricity (“MAE”) are currently being developed by the CER and are required to be implemented in Ireland on or before 19th February 2006⁶³.

However, on 16th June 2004 the CER announced that it would delay the implementation of the MAE for a period of approximately 3-4 months to allow for the consideration of changes to the MAE market design and for the introduction of a new market implementation and procurement process. This may therefore require an extension of the implementation deadline. The high level principles of the MAE include:

- A mandatory centralised pool market requiring all electricity to be bought from and sold to the system and market operator (SMO). This will mean that it will no longer be possible for market participants to contract to buy and sell physical electricity from each other. They may only buy and sell electricity from the pool.
- Market participants may manage their exposure to volatility in the pool price for electricity by entering into various forms of hedging arrangements. At their simplest level, these may be contracts for differences between the pool price and an agreed strike price entered into by generators and suppliers.
- The pool will be an energy-only spot market with no payments for capacity. Generators who are not dispatched due to constraints, or because their bids are above the spot price, will not receive any payments in the spot market. The spot market will be cleared and corresponding dispatch schedules determined for half hour trading intervals.
- The market clearing price for each generation node will be the locational marginal price (LMP) at that node. The nodes have not yet been specified but will be designated by the CER. A load weighted average demand price or Uniform Wholesale Spot Market Price (UWSMP) will be calculated for all demand nodes.
- A regime of financial transmission rights will be implemented which will enable generators to hedge differences between the price at their generation node (i.e. their LMP) and the load weighted average demand price (i.e. the UWSMP).

The CER has recently published a decision in relation to the treatment of CHP in the new market arrangements for electricity (MAE)⁶⁴. Key elements of this decision are as follows:

- small-scale generators with an MEC of less than 100kVA shall be exempt from the MAE Rules; generators with an MEC of less than or equal to 5MVA will self-dispatch; generators with an MEC greater than 5MVA must register with the SMO as centrally controllable and may be dispatchable if they satisfy the requirements of the Distribution/Grid Code; and generators with an MEC of 30MVA or more must be dispatchable;
- self-dispatched and centrally controllable generators will be required to produce for the SMO a “best-efforts” schedule comprising, at minimum, estimated plant output per trading period from day-ahead up to gate closure;
- grid connected generators and generator sites with an aggregate MEC greater than 5MVA will receive the LMP at its node; distribution-connected generators with a MEC less than or equal to 5MVA will receive the UWSMP; and
- the MAE rules will not insulate generators from negative pricing; therefore, if the spot price becomes negative, generators exporting electricity directly to the pool may be required to pay the negative spot price multiplied by the volume of electricity that they are exporting⁶⁵.

(6) The high level principles for the MAE are set out in the Electricity Regulation Act 1999 (Market Arrangements for Electricity) Regulations 2003 (S.I. 304 of 2003) published on 16 July 2003. Further details of the proposed MAE are available at www.cer.ie.

(1) CER Decision CER/04/214 made under S.I. 304 of 2003: “Implementation of the Market Arrangements for Electricity (MAE) in relation to CHP, Renewable and Small-scale Generation” dated 9 June 2004, a copy of which can be downloaded from <http://www.cer.ie/CERDocs/cer04214.pdf>.

(2) The floor price for the pool is set at -€5,000/MWh. However, generators that sell excess electricity under an AER Contract will be insulated from this, as they will continue to receive their contract price. Generators may also protect

5 Conclusions and Recommendations

5.1 Overview

In carrying out this study, the existing regulatory and legislative framework that governs CHP licensing and operation has been reviewed, and considerable consultation has been undertaken with policy makers, CHP suppliers, and CHP operators.

In forming recommendations on ways in which to facilitate potential improvement to the CHP licensing process, an analysis of stakeholders views has been undertaken, having regard for the statutory processes within which the development of the CHP industry currently operates.

One research revealed that considerable work has been done in recent years, in particular by the CER, to facilitate the development of CHP. As a consequence, the regulatory framework for CHP development has been significantly improved over this timeframe. However, one of the most significant findings of our research was the extent to which market participants were unaware of these developments. As a consequence, many respondents to our consultation expressed pessimism in relation to the potential for CHP for reasons which had already been addressed, in some cases many years previously. Clearly, therefore, improved communication in relation to the existing regulatory regime and new developments forms a critical aspect of our recommendations.

Key fields in which potential recommendations have been put forward include ways in which to:

- A. Provide clear policy guidance;
- B. Provide up-to-date and clear advice to CHP applicants
- C. Address regulatory and licensing issues:
 - clarify and redefine terms;
 - reduce any regulatory and non regulatory barriers to an increase in cogeneration;
 - streamline the procedures at the appropriate administrative levels;
 - ensure rules are objective, transparent and non discriminatory; and
 - potentially fast track planning procedures if necessary.

5.2 Key Recommendations

Table 5.2 Recommendations

	Recommendation	Responsibility of:
A	<i>Provision of policy guidelines</i>	
A1.1	Policy guidelines should be issued to all local authorities by DEHLG in regard to setting out clearly permissible planning exemptions on the scale of development associated with CHP. These guidelines should be developed following consultation with the CER to ensure that they are consistent with the current and future policy direction of the CER. The guidelines should explicitly state what types of CHP facilities are exempt from the requirement to seek planning permission, including EIS application.	DEHLG
B	<i>Provision of up-to-date advice to CHP applicants</i>	

against this risk by hedging against changes in the spot price. In Decision CER/04/214, the CER states that supports for CHP generators, if deemed appropriate, can be facilitated outside the MAE and that the CER will actively engage with the DCMNR to address this issue.

Recommendation	Responsibility of:
B1.1 In order to facilitate future development of CHP and to assist potential developers in making investment decisions, funding should be made available to ensure that user friendly reference materials, such as those prepared as part of this study, are regularly updated and made available to potential developers.	SEI
B1.2 A user friendly, web-based information resource that can assist CHP applicants in understanding and negotiating the regulatory approvals process should be provided to the public, and regularly reviewed and kept up to date. Given the current rate of change in the industry, updates should be made on an ongoing basis while overall reviews should be undertaken at least quarterly until such time as a less regular review is deemed acceptable. Web links to this site should be provided from CER, SEI, ESB, EPA and local authority web sites.	SEI
C Recommendations on Regulatory and Licensing issues	
Clarification and redefinition of terms	
C1.1 Consideration should be given to revisiting the definition of CHP, as provided in the Electricity Regulation Act 1999, to set the overall process operating efficiency threshold at a more appropriate level in order to include those facilities that for all intents and purposes are CHP but which are not captured by the current definition. Following consultation with the ICHPA, we recommend that the definition of combined heat and power in the Electricity Regulation Act 1999 be replaced with the definition of high efficiency cogeneration in the Cogeneration Directive (8/2004/EC).	Government
Reduction of regulatory and non regulatory barriers / consideration of measures to encourage an increase in cogeneration	
C2.1 CHP should be granted greater recognition of the fact that it is more environmentally friendly and more efficient than conventional power generation, in order that it can take greater advantage of the full range of financial incentives and benefits awarded to renewable energy. Specific recommendations in relation to the manner in which this can be addressed are set out in recommendations C2.2 to C2.7, below. In addition, potential financial incentives might include the operation of a green credit system and/or financial recognition of the benefits of embedded generation.	Government /CER
C2.2 CHP fuel inputs should be exempt from any carbon tax.	Government
C2.3 Means should be investigated to enhance investment in, and accelerate reinforcement of, transmission and distribution systems in order to increase the capacity of the system. Key means of addressing this include finalising and passing the Critical Infrastructure Bill to facilitate development of required infrastructure and/or through prioritisation of investment in infrastructure in areas that will assist in meeting the targets of electricity to be generated by green sources, including CHP.	Government, CER and ESB
C2.4 CHP should be exempt from the Public Service Obligation Levy (PSO).	Government
C2.5 The costs of the ESB planning study and capacity statement should be reviewed, and consideration given to lowering or eradicating these costs. Costs incurred could instead be charged at the time of connection to the transmission or distribution system. This would allow applicants to investigate the option of CHP and thereby facilitate the consideration of CHP as an option without incurring the 'investigative' costs that consultation has indicated can be a barrier to consideration of CHP.	CER

Recommendation	Responsibility of:
C2.6 The content of the planning study reports that are prepared for applicants by ESB should be standardised, and should contain detailed information on the various development options available to them, prices for carrying out the works associated with each option, and likely timescales for the completion of the work. Consultation indicated that this would provide applicants with greater information from which to formulate their preferred generation option.	ESB
C2.7 Local Authorities should require that CHP be assessed as a possible source of heat and electricity for all new industrial estates and high density developments i.e. shopping centres, housing estates, prisons etc. including all Local Government developments e.g. offices, treatment plants and housing. Guidelines to this effect should be issued by DEHLG. To this end, the requirements of the Energy Performance and Buildings Directive (2002/91/EC) should be transposed in Ireland as a matter of priority and consideration should be given to circumstances in which it may be appropriate to extend the minimum requirements of the Directive.	DEHLG
<i>Streamlining of procedures at the appropriate administrative levels</i>	
C3.1 In the interests of limiting the number of consents and approvals that developers of CHP require, we recommend that the proposed new powers of the CER under section 16(3A) of the Electricity Regulation Act 1999 (proposed to be inserted by section 13(b) of the European Communities (Internal Market in Electricity) Regulations 2004) be implemented into Irish law and used to streamline, or if possible eliminate, the requirement for small scale CHP developers to obtain an Authorisation to Construct or Reconstruct a Generating Station.	Government / CER
<i>Ensuring rules are objective, transparent and non discriminatory</i>	
C4.1 Use of system charges should be based on average import/export volumes and not on maximum capacity as applying a standard charging methodology to all facilities discriminates against the particular operating characteristics of CHP.	CER
<i>Fast tracking planning and licensing procedures</i>	
C5.1 All applicants should avail of pre-consultation and scoping meetings available to them with the planning authority and EPA, and make use of the telephone information numbers at CER and the ESB, in order to ensure that applications, when submitted, contain all required information. This will enable applications to be processed within a shorter time span.	Applicant
C5.2 All organisations involved in assessing CHP applications should instigate a streamlined/condensed application process, and clearly publicise this, for plants of 5MW or less in size, as per the approach that CER has instigated.	ESB, DSO, TSO

Abbreviations: CER	Commission for Energy Regulation
DoEHLG	Department of Environment, Heritage and Local Government
DSO	Distribution System Operator
ESB	Electricity Supply Board
EPA	Environment Protection Agency
LA	Local authority (planning authority, fire authority)
TSO	Transmission System Operator

6 Consultation With Identified Stakeholders

6.1 Introduction

Interviews were undertaken with a number of stakeholders that were identified in conjunction with Sustainable Energy Ireland (SEI). These stakeholders were chosen because they have an involvement in the CHP policy process, or because they have previously been through the process of obtaining permission to construct and operate a CHP facility. The stakeholders included:

Industry representatives / CHP developers:

- Aughinish Alumina;
- Glanbia;
- F4 Energy;
- Bord Gais Eireann; and
- Fingleton White and Co.

CHP Policy awareness:

- Bord Gais Eireann Distribution;
- Commission for Energy Regulation;
- Department of Communications, Marine and Natural Resources;
- Department of Environment and Local Government;
- Environment Protection Agency (EPA);
- Electricity Supply Board (ESB);
- Fingleton White and Co.;
- IBEC;
- Irish Combined Heat Power Association (ICHPA);
- NUI Maynooth; and
- Sustainable Energy Ireland.

A number of set questions were asked of each interviewee. These are listed in *Section A1.2* below. These were expanded upon, as appropriate, in each interview, in order to gain detailed responses to the questions asked. The aim of the interviews was to gain detailed information to assist in identifying the strengths and weaknesses of the application process, in order to contribute to the formulation of useful recommendations to improve or refine the process.

6.2 Interview Questions

Slightly different questions were asked of the policy representatives and the industry representatives, as detailed below.

6.2.1 Questions asked of Industry Representatives/ CHP Developers

- Background information, including their involvement in what types of installations and licenses was obtained.

- Details were obtained on whether the CHP facility is operational, or whether the application process is still underway.
- What is your overall impression of the CHP development application process in Ireland?
- If operational, what was the overall timescale for the development of your CHP facility? How did this compare with your initial expectations?
- What is your impression of the co-ordination of the various agencies/bodies you dealt with during the application process? Which agencies did you deal with?
- Did you experience any particular hold-ups/delays in the application process? In your experience, what were the key reasons for the hold-ups?
- Can you suggest any improvements to the current system?
- If an information pack is developed for potential CHP applicants, what information do you believe should be included in it?

6.2.2 Questions asked of policy representatives

- Background information, including their involvement in the industry, was sought.
- What is your overall impression of the CHP development application process in Ireland?
- What do you believe are the significant issues for policy makers in relation to CHP in Ireland?
- What is your impression of the co-ordination of the various agencies/bodies you dealt with during the application process?
- Do you believe CHP should be referred to specifically in local authority Development Plans?
- Do you believe CHP should be considered in the Critical Infrastructure Bill?
- Can you suggest any improvements to the current system that you believe would improve the application process and help make CHP development more desirable?

Annex A

Interview Results

1 Interview results

Responses to the questions asked are provided in this section. They are provided verbatim in some instances. At the request of many of the interviewees, specific responses have not been attributed to specific organisations.

1.1 Interviews with Industry Representatives / CHP Developers

1.1.1 What is your overall impression of the CHP development process in Ireland?

- Same rules apply for large or small CHP plants, which is inappropriate.
- Licensing/paperwork does not affect timescale.
- Timescale is driven by economic/contractual factors and not affected by administrative requirements.
- If you submit everything on time, there are no hold-ups.
- Timescale may be confusing for a new developer of CHP.
- CHP on brown-field sites or as part of a new plant application is not a problem to carry out, administratively speaking.
- Good potential for the development of CHP in the market but not in current economic climate.
- You have a year to sort out your paperwork, as this is how long it takes to get over the commercial and practical issues.
- CER does not appear to fully support CHP.
- CHP will not be developed further, or reach its potential, without some form of in market or outside support.
- CHP is often only a secondary option to a manufacturing operation and therefore, because the rewards can be low and spread over a long period, they are not willing to invest time and effort into CHP.
- People do not put CHP plants in place out of the goodness of their hearts or for environmental reasons, they will only put CHP in place when it makes economic sense.

1.1.2 What was the overall timescale for the development of your CHP facility and how did it compare with your initial expectations?

- Paper work took approximately three months to compile and complete.
- Technical development could take 9-12mths.
- Negotiations and studies could take anywhere from 3-5yrs.
- From time of decision to actual generation took approximately 12mths.
- Generally timescales were as expected.
- New applicants might find timescales hard to grasp.
- Most applications can run in parallel and therefore do not cause delays.
- Our application took approximately 9mths to file and process, with delays being associated with uncertainty of what was needed by CER when dealing with some of the initial applications.

1.1.3 What is your impression of the co-ordination of the various agencies/bodies you dealt with during the application process?

- Insufficient communication exists between them.
- No problems highlighted.
- All might vocally support or see the positives of CHP, but not all agencies/bodies encourage it.
- Lack of communication between the different groups does not affect administrative timescales, but they do seem to have different outlooks as to what CHP is and how it should be handled.

1.1.4 Did you experience any particular hold-ups in the application process? If yes, what were the key reasons for the hold-ups?

- Administrative process does not cause hold-ups, as there is a long run in time.
- Financial considerations are the only source of hold-ups.
- CER paperwork duplication can cause hold-ups due to the need for duplication of information, but this is not a major issue.
- EPA licensing usually facilitates or encourages CHP.
- ESB connection not a problem. You need to fill out G10 form, get it assessed and it is as easy as that.
- The G10 can cause problems in some cases. More so for the exporters of electricity.
- ESB rules have been in existence for a long time and they have a good system in place.
- Site assessment by the ESB for export of electricity is slow, expensive and monopolised. Fee is paid up-front for assessment, no written report is provided and there is no set turn around time. If a new transformer is to be installed, the quote is provided by ESB and is non-negotiable, and if accepted there is no deadline for its installation. This is unacceptable. The only comeback one has is that after nine months you can complain to the complaints board.

1.1.5 Can you suggest any improvements to the current system?

- CER applications should be combined into one form.
- Small plants (less than 5MW and micro turbines) should receive exemption from requiring planning permission, CER application process and ESB pre-feasibility charges.
- Proposed CHP plants that will cause only minor changes to current buildings should not require planning permission. This would remove another layer of bureaucracy from the process.
- CHP plants that are under 10MW in size should be exempt from planning application and EPA licensing requirements, in order to encourage their development.
- CHP should be recognised as a green source of energy and have a separate application process, within CER, to that of non-green/low energy efficient producers.
- All sites that do not export electricity should be exempted from CER/ ESB requirements.
- If exporting under 1MW of electricity, or on an AER agreement, should not require CER licensing.
- CHP should be classified as an exempted development under the planning legislation as it really is not a change of use, particularly if converting from an existing boiler.
- Smaller scale projects are most at risk of being influenced by the planning/ administrative issues than larger projects. Smaller budgets and tighter timeframes mean that while economics tends to be the driving force in deciding whether or not to choose to install a CHP plant, developers look twice at the red tape associated with small CHP plants, especially micro turbines.
- Two sectors were highlighted as potential areas for CHP to be developed, 1) greenhouse growers (potential of 4-5MW) and 2) multi-tenants sites.
- ESB pre-feasibility assessments should be carried out free of charge and the likelihood is that the current facilities would require little or no change.

- Any upgrade that has to be carried out by the ESB should be subsidised in some manner.
- Where local CHP plants are to be set up for shopping centres and industrial estates, operators of the plant should be charged for one end user only rather than each site/shop or alternatively should not incur the Air Grid charges at all.
- To enable this, multiple meter readings should be taken and totalled for an overall reading. In instances where individual shops/sites don't wish to sign up to the local CHP system, their meter reading could be charged as if customers of the ESB.
- Operators of a local/regional CHP system should be charged for the security of the national grid i.e. in case the CHP plant fails or trips, but this charge should be based on a system that will encourage maximising the availability of the electricity rather than being charged TUOS and DUOS for each client.
- Current tariff rates are made up of three parts: a Max Input Capacity, a Max Demand (MD) and Variable Cost (VC) rate. The VC is dependant on the MD of a user, which is recorded at 15minute intervals, but only the maximum level is used to set the charge rate. A rebate system should be established where the user can show that the average rate was so much and the MD was only used for a certain period of time. This would result in cost savings and would encourage the user/operator of the CHP plant to have it operational for the maximum amount of time.

1.1.6 If an information pack is developed for potential CHP applicants, what information do you believe should be included within it?

- Technical information explaining the different types of CHP.
- List of developers/consultants that could provide support for individuals/industry wishing to develop CHP.
- Case studies.
- Contacts for SEI/CHPA/CER/EPA.
- Suitability guidelines: how to ascertain if a CHP plant is economically suitable for the site.
- Outline of the technical costs involved in developing a CHP plant.
- List of forms needed and where to get them.

1.2 Interviews With Policy Representatives

1.2.1 Is there a need for the specific discussion of CHP in Local Authority Development plans?

- Most answered no or no comment.
- Local Authorities should have a policy to implement CHP at any public development i.e. hospitals, offices etc.
- Shopping centres should be required to use a CHP plant to heat the shops and supply electricity to them.
- Installation of CHP plants should be considered for industrial estates.
- Central CHP plants for industrial estates should be considered – this would be a long-term objective.

1.2.2 Should CHP facilities be considered in relation to critical infrastructure bill?

- Most responses to this question were no.
- Yes, as a possible base supply to the electricity supply network if the industry/operation is suitable/reliable.

1.2.3 What is your overall impression of the CHP development process in Ireland?

- Hit and miss.
- Good progress made in the 90's but has lost its way then.
- Currently no political champion for CHP.
- Room for expansion.
- Need to set out a definite policy on CHP especially in light of the Directive on promotion of cogeneration based on a useful heat demand in the internal energy market (2004/8/EC)
- Low uptake of CHP in comparison to our European counterparts.
- Emission trading may increase the cost of electricity, which may then increase the attractiveness of CHP as a viable alternative.

1.2.4 What do you see as the significant issues for policy makers in relation to CHP in Ireland?

- Have to address the poor development of CHP.
- Have to provide financial support for CHP.
- Have to set realistic targets for MW of energy to be produced by CHP, identify why these targets have been set and what are the most cost effective mechanisms for reaching these targets.
- Suggested approaches include tax relief, capital allowances, designation of CHP as green or sustainable energy, and giving it marketability like wind power.

1.2.5 What is your impression of the co-ordination of the various agencies/bodies you dealt with during the application process?

- No comments generally.
- CHP policy group has to be helping somewhat.

1.2.6 Can you suggest any improvements in the current system?

- The manner in which CER regulation is handled needs to be examined, as the current process seems to be somewhat bureaucratic and cumbersome.
- CER seem to be taking an ideological approach to the licensing for construction, generation and supply, and are not supporting CHP.
- CHP has to be recognised as green or sustainable and not treated like any other producer of electricity.
- Streamlined connection requirements to the ESB for smaller operators would lead to improvements in the system.
- Small CHP plants should be exempt from some of the current licencing / authorisation requirements.
- Bilateral Daily Contracts are cumbersome and may be difficult for some operators to complete.

1.3 Economic concerns

Investigation of economic issues relating to CHP development was not included within the scope of work of this study. However, during the course of the interviews undertaken, it became clear that economic issues are generally of greater concern to both the developers and policy makers than any planning/administrative issues. All interviewees stated that CHP will only be undertaken where it makes economic sense, which is not the case for most operators in the present market climate. Issues relating to planning and the associated administration tended to be considered as secondary to these economic issues.

Significant comments were raised with regard to: the charges applied by CER and ESB re TSO/DSO; the charge applied for pre-feasibility studies to be carried out by the ESB; and the fact the CHP plants have to pay PSO charges which support peat fired stations (which some believed the CER considered renewable power plants rather than the security of supply issue) yet the CER does not recognise CHP as a high efficiency or green source of energy.

Numerous suggestions on how to address economic issues that arise with regard CHP development were provided, and are briefly summarised below:

- Tax relief on gas.
- Tax relief on capital investment or allowances on replacement schemes.
- Exemptions from TSO/DSO charges.
- Exemption from carbon taxes.
- Develop a Green Certificate system, which would allow CHP operators to sell their power on the open market as an environmentally friendly product.

Annex B

Overview of regulatory approvals associated with installing CHP facilities in Ireland

1 Overview: Overview of regulatory approvals associated with installing CHP facilities in Ireland

The following table provides a summary of all the regulatory approvals associated with installing a CHP facility in Ireland. The application of these approvals will depend on the site specific circumstances as every approval is not necessarily a requirement in all cases. The Irish CHP Association website provides a “Legal & Regulatory” map where details of these regulatory approvals can be obtained and the necessary forms downloaded.

Table 1.1 Regulatory approvals required

Activity	Licensing body	Required when:
Construction of a CHP Facility		
<ul style="list-style-type: none"> Planning Permission (including EIS where required) 	Local planning authority (LA) and An Bord Pleanála	Decision up to planning authority
<ul style="list-style-type: none"> Authorisation to construct or reconstruct a generating station 	Commission for Energy Regulation (CER)	Mandatory (at present)
Operation of a CHP Facility		
<ul style="list-style-type: none"> Licence to generate electricity 	Commission for Energy Regulation	Mandatory (at present)
<ul style="list-style-type: none"> Fire Safety Certification 	Fire Authority (LA)	Mandatory
<ul style="list-style-type: none"> IPPC Licence 	Environment Protection Agency (EPA)	Needed only if total rated thermal input of 50MW or more
<ul style="list-style-type: none"> Emissions Trading Licence 	Environment Protection Agency	Need only if the site has a combined total rated thermal input greater than 20MW
<ul style="list-style-type: none"> Waste Licence 	Environment Protection Agency	Needed where waste is to be burned
<ul style="list-style-type: none"> Water Extraction Licence 	Local Authority	Needed only if using non-mains water source
<ul style="list-style-type: none"> Gas shippers/suppliers Licence 	Commission for Energy Regulation	Needed only if operator shipping gas to plant
<ul style="list-style-type: none"> Standard Transportation Agreement and Entry Point Agreement 	Bord Gais Eireann	Needed only if operator shipping gas to plant
Connection to the Electricity Grid		
<ul style="list-style-type: none"> Electricity Connection Agreement with DSO 	Distribution System Operator	Needed only if exporting or importing electricity to the distribution system
<ul style="list-style-type: none"> Electricity Connection Agreement with TSO 	Transmission System Operator	Needed only if exporting or importing electricity to the transmission system
Electricity Supply and Trading Arrangements		
<ul style="list-style-type: none"> Electricity Supply Licence 	Commission for Energy Regulation	Needed only if supplying electricity to final customers
<ul style="list-style-type: none"> Accede to the Trading and Settlement Code 	Electricity Supply Board (ESB)	Needed only if hold a Supply Licence or if wish to trade electricity

Annex C

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