01 April 2004

NORTHERN IRELAND AUTHORITY FOR ENERGY REGULATION

Forward Work Programme 2004/2005

CHAPTER ONE INTRODUCTION

1. Background

The Energy (Northern Ireland) Order 2003 ('The Energy Order') established the Northern Ireland Authority for Energy Regulation ('the Authority') from 1 April 2003 and at the same time abolished the offices of Director General of Electricity Supply and Director General of Gas for Northern Ireland. The Energy Order amended the Electricity (Northern Ireland) Order 1992 and the Gas (Northern Ireland) Order 1996 and transferred most of the functions described in those Orders to the Authority, and in addition transferred the assets and liabilities of the Directors General to the Authority.

The Authority's Chairman and members (Annex 1) were appointed by the Department of Enterprise Trade and Investment. The Chairman has been authorised to undertake the day to day running of the Authority's administration, which continues to be known as Ofreg. He is known informally as Chief Executive. Ofreg is staffed by the team of Civil Servants who previously supported the Directors General.

The Energy Order requires the Authority to publish a Forward Work Programme for each financial year, but before doing so it must consult on a draft of the Programme in time to allow it to consider any representations or objections made.

The Consultation Paper that was issued fulfilled the obligation in legislation. It described the Authority's objectives as defined in The Energy Order, it identified the main priorities which the Authority considered important in working towards those objectives and it itemised and described the specific projects and their objectives which the Authority plans to undertake in the year commencing 1 April 2004. It also includes in Chapter Three an estimate of the overall expenditure which the Authority expects to incur during the year.

2. Consultation Process

Copies of the NIAER's "Draft Forward Work Programme 2004-2005 – Consultation Paper" was issued to all consultees on 27 November 2003 and was also made available on Ofreg's Internet website at http://ofreg.nics.gov.uk. The deadline for responses to this consultation process was set at Friday 30 January 2004.

A Consultation List is attached at Annex 3.

3. Responses

Representations or objections were invited on all aspects of the "Draft Forward Work Programme 2004-2005 – Consultation Paper" and in particular the priorities and constraints identified for 2004/2005. The NIAER would like to thank all those parties who submitted their contributions to our Consultation Paper and helped enable us to produce this document, our 2003-2004 Forward Work Programme.

CHAPTER TWO

THE AUTHORITY'S OBJECTIVES

- 1. The Authority's objectives and the matters it must consider when seeking to achieve them are defined in The Energy Order 2003. In summary the Authority has two main objectives:
 - To protect the interests of electricity consumers where appropriate by promoting competition; and
 - To promote the development and maintenance of the natural gas industry.
- 2. In its work to achieve these objectives the Authority must have regard to a number of considerations which can be summarised as follows:
 - The protection of gas consumers;
 - The financial soundness of licence holders;
 - Ensuring electricity prices charged to tariff customers and gas prices charged in connection with the conveyance of gas do not differ in different parts of Northern Ireland;
 - The interests of the sick, the disabled, pensioners, persons on low incomes, and in the case of electricity, persons living in rural areas;
 - The protection of the environment.
- 3. The Authority must also carry out its functions in the manner best calculated to:
 - Secure a diverse and viable long term energy supply;

- Promote energy efficiency;
- Encourage research and development and new techniques by electricity licensees.
- 4. The Authority may in carrying out any electricity functions, have regard to the interests of gas customers and vice versa.
- The summary above is based on Articles 12 and 14 of The Energy Order which set out the Authority's principle objectives and general duties. Articles 12 and 14 are reproduced in Annex 2.

CHAPTER THREE

THE AUTHORITY'S PROGRAMME

- 1. In drawing up its Forward Work Programme the Authority considered it essential, as a first step, to take an overview of the work previously undertaken by the Directors General with the support of Ofreg. In the Authority's opinion the direction taken by this work, the issues involved and the strategies produced would contain essential pointers to the priorities which it needed to establish for 2004/2005 and beyond.
- 2. The Authority also attached high importance to matters raised by the Minister at the Department of Enterprise, Trade and Investment (DETI) in public policy statements and by the Department in public consultation papers. In its response to DETI's Energy Strategy Consultation Paper, published in April 2003, the Authority identified a range of key issues which it considered to be of such fundamental importance to the achievement of its objectives that they should become main themes in its Forward Work Plan for 2004/2005.

3. The themes are:

• Reducing generation costs (Chapter 4)

• Establishing mechanisms to deliver energy efficiency (Chapter 5)

• Extending natural gas coverage (Chapter 6)

• Securing a balanced portfolio of renewable generation (Chapter 7)

• Securing a significant increase in the use of combined heat and power (CHP)

(Chapter 8)

• Creating competition and customer empowerment (Chapter 9)

 Reducing the Northern Ireland Electricity Sector's CO2 emissions by the level set by Government in the most cost effective manner possible

(Chapter 10)

- 4. The Chapters which follow address each of these headings and describe in particular:
 - Work undertaken and underway on each of the themes and the Authority's plans to progress this work in 2004/2005;
 - The potential for policy decisions and other external factors at local, national and European levels to constrain or facilitate progress and the Authority's plans to positively influence these.
- 5. In addition to the themes contained in Chapters 4 to 10, the Authority throughout 2004/2005 will continue to be involved in a wide range of other regulatory and associated areas of work. These have been summarised in Chapter 11.
- 6. The Authority's projected overall expenditure for 2004/2005 is £2.042m this is based on data developed for the NI Main Estimates 2003/04. The breakdown of the expenditure is as follows: -

Category	Estimated Expenditure (£'000)
Staff Costs	1,043
Other Administration Costs	<u>492</u>
Total Administration Costs	<u>1,535</u>
Programme Costs (Legal, Consultancy etc costs)	507
Total Operating Costs	<u>2,042</u>

The actual costs of electricity and gas regulation are paid for by the respective licence holders, the balance of non-regulatory costs are met by Central Government.

The Authority has a staff complement of 23 excluding its 5 part-time members.

CHAPTER FOUR REDUCING GENERATION COSTS

1. Priorities

The privatisation arrangements put in place in 1992 resulted in higher generation costs in Northern Ireland than the rest of the UK. The structure of the privatisation contracts imposed on the industry has meant that Northern Ireland Electricity plc (NIE) has been required to raise from customers an amount of money each year to meet the total costs of generation by the power stations under long term contract to its Power Procurement Business (PPB).

The privatisation contracts, usually referred to as Power Purchase Agreements (PPAs), were structured so that they contain a fixed availability element (indexed to RPI). This is dependent on the power stations' percentage availability throughout the year and its cost is passed through to the PPB and on to customers. The cost of fuelling the power stations is also passed through to customers. The privatisation contracts contained no mechanism to capture efficiency benefits and as a result all cost savings achieved since 1992, for example from reducing operating costs, have been retained by the generators who carry only operational risk.

Not only have the arrangements put in place resulted in higher electricity bills than in Great Britain since privatisation but liberalisation of the electricity market has also been substantially nullified by the contractual obligation on customers to meet the full cost of these overpriced contracts. Energy markets rely on a cost excess to be competed away for benefit to trickle down to customers and as this has been prevented, downward pressure on generation costs has been non-existent except for customers with access to uncontracted generation.

The Chairman has been working since his appointment to reduce generation costs within the constraints outlined. Contracts at Coolkeeragh and Belfast West Power Stations were successfully renegotiated in the late 1990s by harmonising contract termination dates more favourably with system loads and there was a Net Present

Value gain to customers from so doing. Belfast West has now closed, its contract having expired in 2001. Coolkeeragh's contract will finally terminate in 2005.

A substantial contribution to reducing the high cost of generation in Northern Ireland resulted from the buydown and re-powering of Ballylumford Power Station in 2000. This involved retiring existing plant, and replacing it with more efficient combined cycle gas turbine (CCGT) technology which delivers fuel efficiency savings. The profit stream of the old plant was discounted and bought out, with a financial vehicle established to recover the revenues necessary to do so. This Customer Buyout (CBO) is recovered across the franchise customer base. As a result of the refinancing the electricity customer is better off. The Director General undertook to report annually on the benefit or penalty in the preceding year. Although the CCGT was only commissioned in the summer of 2003 customers gained financially from the arrangements in the years immediately preceding the commissioning of the CCGT through reduced PPA payments.

The Authority, DETI and NIE's Power Procurement Business are actively engaged in seeking to minimise generation costs under long term contract to NIE, and will further pursue this along with related issues in the course of 2004/2005. The aim will be to derive a wholesale cost base (from the long-term contracts) which more accurately reflects the long-term marginal cost of generation in Northern Ireland.

The Authority's priorities in 2004/2005 will be to:

- re-negotiate the generation contract with Kilroot Power Station;
- reduce the high cost of the LT13 contract a type of take-or-pay gas contract
 which has proven to be of high cost, around £30m p.a. over spot-market gas
 prices;
- reduce the high cost of the Scotland Northern Ireland Pipeline (SNIP) charges Chapter 6 outlines the Authority's Pipeline objective.

2. Constraints

The Kilroot issue is affected by two constraints – the need to fit FGD (Flue gas de-sulphurisation) to reduce emissions and the effect of new EU regulations regarding CO2 emissions permits. The Authority will assess the impact of these and seek to give effect to such changes to the Kilroot contract as give maximum benefit to customers.

CHAPTER FIVE

ESTABLISHING MECHANISMS TO DELIVER ENERGY EFFICIENCY

1. Priorities

(a) Energy Efficiency Levy

An Energy Efficiency Levy of £1 per electricity customer was first introduced in Northern Ireland from April 1997. The amount collected was increased following consultation to £1.50 in 1999, to £2.00 in 2000 and with Assembly approval to £5.00 per customer from April 2002. In its response to the Department's consultation paper on its Energy Strategy the Authority suggested increasing the emphasis on energy efficiency by increasing the levy by £1 each year until 2010.

As originally conceived the Energy Efficiency Levy Scheme was primarily intended to save carbon emissions and costs through energy efficiency initiatives. Increasingly however as the reduction of fuel poverty emerged as an important component of the Government's policy agenda, the Scheme's focus and resources became skewed towards programmes aimed at improving the position of the fuel poor. Fuel poverty is the situation in which a household cannot be heated adequately because of cost. The Authority currently awaits the publication by the Department for Social Development in Northern Ireland of the Fuel Poverty Strategy to which it committed in the Secretary of States document 'Building on Progress: Priorities and Plans 2003-06'.

Projects seeking support from the Energy Efficiency Levy Scheme can be submitted by holders of electricity supply licences in Northern Ireland. To the present however the only proposals received have been from NIE's Supply business.

Since the levy was first introduced in 1997 cumulative benefits to 31 March 2003 have been as follows:

Customer benefits £79.9m

Energy saving 1698Gwh

Carbon saving 299,244 tonnes

Amount of levy money spent £8.48m

Cost effectiveness 0.95(pence per kilowatt hour avoided)

NIE's target savings for the levy in 2003/2004 was 332GWh. However NIE is incentivised to outperform the target and cumulatively has done so since scheme inception by 326GWh.

Levy supported projects have continued to contribute to energy efficiency savings and the alleviation of fuel poverty in the year ended 31 March 2004. Details of levy expenditure are published annually and are available from NIE's Supply Business.

The twin objectives of reducing carbon emissions and eradicating fuel poverty through the implementation of energy efficiency projects will continue to be the main drivers of levy expenditure in 2004/2005. During the year the Authority's priorities will be to:

- consider approval of projects seeking support from the Energy Efficiency Levy scheme and monitor those approved;
- maintain a watching brief in the energy efficiency field to ensure best practice is maintained;
- review the overall progress of the Energy Efficiency Levy scheme including analysis of the costs and benefits of further increases to the levy.

(b) Energy Efficiency and the Supply Price Control

In NIE's Supply Price Control for the period from April 2000 to March 2005, which would otherwise have included a reduction in the Supply Business's revenue stream, NIE was charged with finding energy efficiency savings for customers valued at £2m per annum – a total of £10m over the price control period – if its revenue stream was to be maintained. Essentially NIE Supply was given the task of developing schemes to achieve energy savings and in addition the company was expected to increase the number of keypad meters installed, offer support for renewable energy development and encourage the uptake of electric vehicles.

In response to an invitation from the Director General, NIE agreed to propose an extension of the Supply Price Control until 2007. In addition to annual revenue reductions, benefits would include an additional 25,000 keypad meters annually, including a new version for Economy 7 users, a specially adapted meter for customers with special needs and the introduction of further energy efficiency measures aimed at delivering £4m of lifetime savings from initiatives such as encouraging cavity wall insulation and condensing boilers and the use of low energy light bulbs by housing associations.

At 31 March 2003 NIE had achieved £7.1m of lifetime energy savings and were well ahead of target; 98,029 keypad meters had been installed, 77.53Gwh of Eco Energy (renewable) had been sold and 2 electric vehicles registered. It is anticipated figures for the period ending 31 March 2004 will show a similar level of progress.

In 2004/2005 the Authority's priority will be to pursue the objectives in the Supply Price Control by:

- monitoring the initiative to ascertain energy efficiency gains;
- reviewing the initiative in the light of gains identified.

2. Constraints

The involvement of NIE Supply is essential to the continued operation of each of the energy efficiency initiatives. It has supported them enthusiastically and if this position remains unchanged, no major constraints are envisaged to their continued operation. Despite being periodically reminded of the opportunity to bid for energy levy money, no supplier other than NIE has shown any interest in promoting energy efficiency to the domestic or small business sectors.

CHAPTER SIX EXTENDING NATURAL GAS COVERAGE

1. Priorities

Piped natural gas from Scotland was introduced to Northern Ireland in 1996 and by the end of 2003 some sixty five thousand domestic and industrial customers were enjoying the benefits of natural gas. The Director General, in concert with the DETI, worked to promote the development of the natural gas industry in a number of ways. His main priorities, now the responsibility of the Authority, continue to be: -

- (a) Facilitating the establishment and regulation of the new North West and South North gas transmission pipelines being built by BGE (NI);
- (b) Extending Town Distribution and supply opportunities beyond the current Phoenix licence area of Greater Belfast;
- (c) "Postalisation" of gas transmission charges in Northern Ireland;
- (d) Refinancing of gas-related assets;
- (e) Regulation of Phoenix's costs/prices and re-negotiation of Phoenix's revenue recovery formula for gas conveyance assets.

The remainder of this chapter outlines each of these priorities.

(a) The new North West and South North gas transmission pipelines

The current building of a combined cycle gas turbine (CCGT) power station at Coolkeeragh in the North West of Northern Ireland has provided the anchor load for a gas transmission pipeline to the North West. In February 2002 Bord Gais

Eireann (BGE)¹ was granted a natural gas conveyance licence. The licence permits BGE to convey gas through two new transmission pipelines to be constructed by the company. The first of these, known as the North West (NW) pipeline will transmit gas to the new Coolkeeragh CCGT and to the towns along the pipeline route. It will be completed in time for the commissioning of the CCGT at Coolkeeragh, scheduled for October 2004. The second known as the South North (SN) pipe, will connect the North West pipeline with the natural gas transmission network in the Republic of Ireland. It is planned to be built in 2006, and will provide a second source for gas to Northern Ireland, thus improving the security of supply of gas to Northern Ireland.

The Authority will take all necessary steps to ensure its objective that the appropriate arrangements are in place to allow the successful building of these gas transmission pipelines and the subsequent successful commissioning of the new Power Station.

The Authority's priorities in 2004/2005 will be to:

- Agree a revenue determination formula to be inserted into BGE's licence.
 This will enshrine in mathematical format the financial principles already agreed in the licence;
- Continue to verify BGE's efficient expenditure requirements in respect of the NW Pipeline.
- Agree BGE's efficient capital expenditure forecast in respect of connecting pipes to town gates.
- Liaise with BGE regarding other necessary consents, e.g. planning, wayleaves and Article 35 consents for both NW and SN pipelines;

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¹ Subsequently assigned to BGE(UK)

Work with BGE regarding the implementation of a Network Code for the NW pipe in the first instance and any necessary amendments for the SN leg. This Network Code will be the set of rules which governs the day to day running of the pipeline and the relationship between BGE and any natural gas shippers who use the pipeline.

(b) Extending Town Distribution and supply opportunities beyond Greater Belfast.

The North West and South North Pipelines open up the possibility of gas supply to customers in those towns close to the route of the pipeline corridors.

The North West Pipeline could facilitate all	The South North Pipeline could facilitate
the towns along the route of the pipe	all the towns along the route of the pipe
including	including
Ballymena	Antrim
Ballymoney	Armagh
Derry	Banbridge
Limavady &	Craigavon &
Coleraine	Newry

On 13th December 2002 the Director General issued a call for licence proposals from companies interested in the distribution and supply of natural gas to towns along the route of the pipelines. Two proposals were received, one from Phoenix Natural Gas and one from BGE. After due assessment, on 13 June 2003, BGE were selected as preferred applicant for a new gas distribution and supply licence for the towns.

The Authority will take all necessary steps to ensure its objective that the appropriate arrangements are in place to allow the successful development of the gas industry in the towns.

The Authority's priorities in 2004/2005 will be to:

- Negotiate and issue a conveyance and supply licence in respect of the towns.
 This will include agreeing development commitments, the financial aspects of the licence and any exclusivity arrangements. It is anticipated this work will be completed during the first half of the Programme year;
- Work with the new licensee and the DETI to facilitate the introduction of natural gas supply opportunities in the new areas as smoothly and speedily as possible.

(c) "Postalisation" of gas transmission charges in Northern Ireland.

Once the North West transmission pipeline is completed, as it currently stands three separate private companies will own Northern Ireland's natural gas transmission infrastructure.

- i) Premier Transmission Limited (PTL) owns the Scotland to Northern Ireland Pipeline (SNIP), which transports gas from Scotland to Ballylumford Power Station;
- ii) Phoenix Natural Gas (Phoenix) own the Ballylumford to Torytown Pipeline
 (BTP) and the Belfast Lough Crossing. The BTP transports gas from
 Ballylumford Power Station to Torytown and the Lough Crossing transports gas
 from Torytown to Knocknagoney. These transmission pipelines serve Phoenix's
 distribution network in Greater Belfast;
- iii) BGE will own the North West Pipeline and the South North Pipeline.

Unless altered, under the current gas transmission charging system for these pipes, each transmission pipeline owner will charge a separate tariff for the transmission of gas through each of the three systems. This would potentially result in a

situation whereby gas suppliers in the North West who must transport gas through all three systems would be charged all three tariffs. They would also need to sign agreements with the three separate system operators governing the operational regime of each of the systems. This so called "pancaking" effect of multiple charging and multiple operational agreements would penalise customers located on the outskirts of the network.

Currently the Authority and DETI, exercising the powers conferred on them by The Energy Order, are pursuing the principle of a "postalised" transmission tariff system. A postalised transmission tariff system would mean that a single "average" transmission tariff would be payable for the transmission of gas to any point on the Northern Ireland natural gas transmission network.

The principle of equalized tariffs applies to other services such as electricity. However in Northern Ireland gas transmission terms, the number of pipeline owners and the fact that each pipeline owner has existing financial and contractual arrangements with customers significantly complicates the postalisation exercise. In late 2002 the Director General in conjunction with DETI published a consultation paper on first proposals for the implementation and operation of a postalised tariff system. This was followed in June 2003 by a second consultation on actual postalisation implementation proposals and later that year by a consultation on initial postalisation decisions.

The Authority intends to continue to actively work with the asset owners and shippers/customers to push forward the postalisation objective.

The Authority's priorities for 2004/2005 will be to:

• Have the postalisation system operational in time for the scheduled commencement of gas transmission through the North West pipe;

 Have in place simultaneously the commercial/financial, operational and legal arrangements necessary for the system to become operational on 1st October 2004.

(d) Refinancing of gas-related assets.

Following the re-financing of the Moyle Interconnector (see chapter 9) it became clear that Northern Ireland's energy consumers could benefit from lower prices achieved by refinancing. The Authority wishes to explore the extent to which similar arrangements could benefit natural gas and electricity customers through delivering lower cost gas supplies to Northern Ireland for power generation and for domestic and Industrial and Commercial customers.

The Authority's priorities in 2004/2005 will be to pursue discussions with the following companies with the objective of ascertaining whether suitable refinancing deals are appropriate:

- PTL regarding the refinancing of the SNIP pipeline.
- Phoenix regarding the refinancing of their transmission assets.

(e) Regulation of Phoenix's costs/prices and re-negotiation of Phoenix's revenue recovery formula for gas conveyance assets.

The revenue recovery formula currently contained in Phoenix's licence is designed to allow the company to re-coup its investment along with a return of up to $8\frac{1}{2}$ % by 2016.

In light of information regarding the development of the Greater Belfast Natural Gas market the Authority has recognised that it will be difficult for Phoenix to achieve the timescale originally envisaged without price increases.

Therefore the Authority and Phoenix are looking at ways to extend the period over which Phoenix can re-coup its investment including moving to a Regulated Asset Base-style revenue recovery formula which allows a rolling asset base going forward.

When deciding on the most appropriate way forward it will be important to achieve a balance between benefits to shareholders and benefits to customers. In particular the Authority will want to ensure that any new formula will be capable of helping to deliver long term, stable and as low as possible gas distribution charges for the Greater Belfast market.

Given recent increases in the final supply price of gas to Phoenix customers and the issue of the contract under which Phoenix buy gas for the Greater Belfast market from Centrica, the Authority intends to investigate further the circumstances behind the recent price rises using all powers available to it.

- The Authority's priority is to try to re-negotiate by early 2004 a revenue recovery formula which will achieve stable and competitive natural gas conveyance charges for Greater Belfast.
- The Authority intends to investigate further the circumstances behind the recent price rises using all powers available to it.

2.Constraints

(a) The North West and South North gas transmission pipelines.

The construction of these pipelines is subject to planning and wayleave constraints. The SN pipe will need the relevant approvals from the Authorities in the Republic of Ireland for that portion of the pipe south of the Northern Ireland Border – this obviously lies outside the Authority's control.

(b) Extending town distribution and supply opportunities beyond Greater Belfast.

The project financials for the new towns are quite challenging and may inhibit the extent to which commercially viable extensions are possible. Planning, wayleave, "streetworks", etc constraints will also need to be overcome.

(c) Postalisation of gas transmission charges in Northern Ireland.

The postalisation process is complicated by the existence of legacy contracts between the owners of existing infrastructure and their customers. There are also significant financial, operational and legal underpinnings for the system still to be put in place.

(d) Re-financing of gas-related assets.

The main constraint will be the extent to which a mutually agreeable deal can be struck between the asset owners, the Authority and the purchasing bodies and the extent to which factors outside the Authority's control (e.g. interest rates) hinder the project.

(e) Regulation of Phoenix's costs/prices and re-negotiation of Phoenix's revenue recovery formula for gas conveyance assets.

There may prove to be legislative or enforcement power constraints on the Authority's investigation. The main constraint on the delivery of the renegotiation of the conveyance formula is the degree to which a mutually agreeable deal can be struck.

CHAPTER SEVEN

SECURING A BALANCED PORTFOLIO OF RENEWABLE GENERATION

1. Priorities

The new millennium has seen a dramatic increase in the amount of renewable generation in Northern Ireland, especially wind generation. Already there is in excess of 87MWe of indigenous wind generation with a further 23MWe imported into Northern Ireland from the Republic of Ireland. This is supported by a further 6 MWe of biomass and hydro generation. The main reasons for this rapid growth in renewable generation can be summarised as follows:

- (i) market opening in the industrial and commercial sectors has provided the opportunity for wind generators to compete for customers;
- (ii) the introduction of the renewable output factor (ROF) by the Chairman General which has removed the complication and uncertainty of 'top-up' costs from customers by introducing a mechanism through which wind generators compensate for uncertainty by delivering 120% of estimated needs to the system over a 12 month period;
- (iii) the introduction of the Climate Change Levy Exemption scheme which exempts renewable electricity from the climate change levy. This is worth about 0.43p per kilowatt hour to an accredited renewable generator. Accreditation, subject to a technical survey of the generator plant, is granted by the Authority. The past year has seen Ofreg process applications for renewable accreditation and issue levy exemption certificates to fifty or so renewable generators. The value of the levy exemption certificates issued to 31 March 2004 is estimated at £1.1m;
- (iv) the efforts by the Authority in areas such as connection charges to remove barriers to market entry for renewable projects;

(v) the incentive initiative in NIE's Transmission and Distribution Price Control agreed with the Director General which provides financial support to renewable generation at local level where the project contributes to system strengthening in the area.

In 2004/2005 the Authority's priorities will be to pursue:

- the efficient and effective administration of the CCL Exemption Scheme;
- prompt reaction to developments in the renewable sectors in Great Britain,
 Northern Ireland and the Republic of Ireland to reduce the potential for these to impose regulatory or other burdens on generators in Northern Ireland;
- exploration with NIE's Supply Business of opportunities for the development of embedded renewable generation under the incentive scheme in the Transmission and Distribution price control.

2. Constraints

Planning permission and public objection can be a major constraint on renewable development, most significantly on the erection of wind farms. The lead-in time for planning permission can be lengthy and can be exacerbated where public objections occur. The Authority has already drawn attention to this problem including at an Action Renewables conference in 2003/04 and will continue to lobby on behalf of the Authority in 2004/2005 for a faster track process for renewable energy projects.

CHAPTER EIGHT

SECURING A SIGNIFICANT INCREASE IN THE USE OF COMBINED HEAT AND POWER (CHP)

1. Priorities

Combined heat and power is the simultaneous generation of thermal heat and electrical energy. It is a technology that saves energy, cuts costs, reduces waste and represents a clear solution to the challenge of improving the environment. It accounts for 7% of total global power production, and more than 40% in some European countries.

The technology has been slow to gain a foothold in Northern Ireland albeit this is changing in recent years with the introduction of natural gas, a number of successful demonstration projects and an increasing knowledge and understanding of the technology. Indeed Northern Ireland has 42 CHP units delivering 27.3 megawatts electrical. The main role of the Director General in CHP development has been to facilitate the implementation of projects by removing regulatory barriers where these exist and to ensure the rapid development of the natural gas market as the preferred fuel for CHP.

Until recently CHP has been targeted at the business market but rapid development in the technology is now able to deliver CHP to both the smaller residential (micro CHP) and domestic(dCHP) markets. The Authority is at the forefront of ensuring that Northern Ireland embraces these significant developments in the domestic/residential energy environment.

The Chairman has encouraged the development of CHP in both the SME and domestic CHP (dCHP/micro CHP) markets through:

the incentive mechanism to support embedded generation within the latest NIE
 Transmission and Distribution Price Control;

- support for the Irish CHP Association (CHPA) through conference involvement and presentation;
- the publication of a Biomass Manifesto examining how biomass development can be encouraged and supported;
- liaison with the EU on policy and other CHP developments;
- introduction and management of the climate change levy exemption scheme for accredited good quality CHP;
- field-trip to the UK involving key individuals to view and speak to developers in the dCHP and micro CHP markets;
- encouraging and supporting the introduction of demonstration dCHP and micro CHP units in Northern Ireland through the energy efficiency levy; and
- introduction of key dCHP and micro CHP developers to the Northern Ireland market.

In 2004/2005 the Authority's priorities will be to encourage the development of CHP through:

- promoting the expansion of the natural gas market;
- striving to ensure a competitive level playing field;
- removing regulatory barriers to CHP development;
- supporting the all island CHP Association;
- ensuring support through the energy efficiency levy for the commissioning inyear of at least 2 dCHP units and 2 micro CHP.

CHP uptake in the SME market is essentially a commercial decision for each individual company which feels that CHP may be the solution to its energy needs.

2. Constraints

CHP tends to be an attractive technology where the price of electricity is high. Therefore falling electricity prices are a disincentive to CHP implementation and as a consequence could be a significant constraint to its development. As electricity prices are relatively high in Northern Ireland reducing electricity prices may not constitute the same level of threat to CHP as in the rest of the United Kingdom. High gas prices are also a constraint, so reducing gas prices by refinancing SNIP and renegotiating the LT13 contract could be beneficial.

Because each CHP unit still requires connection to the grid and at times to be able to export or sell its excess electricity it is important that connection charges are cost reflective for CHP developers and that there are no unnecessary impediments to the export and sale of electricity from a CHP plant. The Authority as part of its strategy for CHP in the forthcoming year will strive to ensure that connection costs are reasonable and that the market permits the cost reflective export of electricity.

dCHP and micro CHP are new emerging technologies. Customers must have confidence that the technology will work if implemented and that issues such as metering, continuing grid connection and maintenance are sorted out before they purchase. Should the demonstration projects which the Authority intends to facilitate fail in any of these areas, then technology commissioning on a larger scale is likely to suffer.

CHAPTER NINE

CREATING COMPETITION AND CUSTOMER EMPOWERMENT

1. Priorities

(a) Market Opening

The electricity trading system introduced in Northern Ireland at privatisation established NIE's Power Procurement Business (PPB) as the single buyer of electricity from the privatised generators under long-term Power Purchase Agreements (PPAs). Each year the PPB set a Bulk Supply Tariff (BST) which all supply companies, including NIE Supply and Second Tier Suppliers, were required to pay. As a result of these arrangements opportunities for customers to benefit from electricity trading were severely limited.

The situation was changed by the introduction of the EU Directive on the Internal Market for Electricity (IME) which became law in Northern Ireland in July 1999. At this point the wholesale electricity market was liberalised to the extent that the first 26.4% (by demand) of large customers obtained the right to source their wholesale energy (via a licensed Supplier) from a source other than the PPB. The Directive required further market opening to 35% by 2003 but in the event, ahead of schedule, the Director General gave some 750 large customers the opportunity to choose both retail supplier and wholesale generation provider from April 2001. The timing was opportune and allowed customers to take advantage of the limited capacity at Belfast West and Ballylumford which had been taken out of contract the previous year. As a result the large customer market achieved savings estimated at around 20 to 25 per cent although the escalation of gas prices in the period caused these gains to be eroded in following years. By March 2002 there were no indigenous power stations remaining in the market – due to their increasingly uneconomic position when compared to imports from Scotland.

Electricity supply through the Moyle interconnector came on stream from 1 January 2002 and 400 MW of capacity is currently available to the Northern Ireland market (max demand is around 1700 MW). This now provides the bulk of

electricity for the competitive market in Northern Ireland. Regulatory arrangements are in place through which Ofreg and SONI (System Operator Northern Ireland, a regulated business under the NIE licence) and latterly Moyle Ltd following its acquisition of the interconnector as a result of recent re-financing and new licensing arrangements oversee allocation and access arrangements to the link. Access is on the basis of regulated third party access arrangements (RTPA), and annual allocation of capacity by auction is carried out by SONI, as approved by Ofreg.

Northern Ireland and the Republic of Ireland are also interconnected, with the link reactivated in 1995. When the market in the Republic of Ireland opened to competition in Feb 2000 (a year later than Northern Ireland as a result of EU derogation) the Director General and CER (Commission for Energy Regulation - the Republic of Ireland Regulator) agreed suitable access arrangements and transmission tariff harmonisation to allow effective cross-border trades. This cooperation continues to date, with the recent introduction of a superposition facility (a contractual mechanism to allow trades in excess of the link's constrained transfer capacity). The link in tandem with Moyle has added a new competitive dynamic to the electricity markets on the island.

The latest EU energy Directive stipulates that the market for electricity must open to include all non-domestic customers (roughly 60% by demand or an increase of around 60,000 customers) by July 2004.

To achieve this the Authority's priorities in 2004/2005 will be to:

- develop an implementation plan to bring forward market opening in the least cost manner consistent with the EU Directive. This plan envisages a rolling market opening throughout 2004;
- in co-operation with DETI and the electricity industry develop new trading arrangements and oversee the expenditure by NIE necessary to allow it to carry out its new duties under the EU requirements.

- through the steering group established in 2003 in co-operation with DETI and electricity industry participants continue to oversee market opening including the development of detailed plans for trading arrangements, new system expenditures (including new customer registration and billing systems) and any other details which are necessary prior to market opening. Market opening will occur in stages throughout 2004. The key dates are:
 - using manual systems increase to 1000 customers (1 April 2004)
 - using new IT systems ensure that an estimated 60,000 non-domestic customers will have the option of sourcing their wholesale energy requirements from a source other than the NIE Bulk Supply Tariff (early 2005)
- exercise regulatory oversight of all systems expenditure carried out by NIE
 regulated businesses in order to meet EU Directive Requirements. The
 priority in Northern Ireland will be to meet the EU requirements at least cost
 (given already high costs of energy) and extend real choice to customers for
 whom it is economic to switch supplier.

(b) The All Island Market Dimension

The Authority will continue to work with DETI, the Commission for Electricity Regulation (CER) and the Department of Communications, Marine and Natural Resources on the development of a coherent approach to energy trading between the two parts of the island.

The Authority is represented on the Joint steering Group (JSG) which brings together the two Regulatory bodies and the Departments. It also works closely with the system operators and network planners in both electricity and gas transmission.

The Authority's priorities in 2004/2005 will be to:

- ensure that work on the South North gas pipeline proceeds according to plan and timetable
- work with the partners in the JSG to produce a framework for the efficient and economical operation of the gas transmission network across the island and from supply points in Great Britain following the completion of the South North pipeline
- reach a decision on the form of relationship between the electricity market in the island of Ireland and Great Britain which both in the immediate future and longer term confers the maximum net benefit on electricity customers in Northern Ireland
- working with partners in JSG produce a regime which stimulates the cost effective development of the islands renewable resources
- explore the optimisation of the potential for reducing CO2 emissions by joint action in the two parts of Ireland
- encourage the commissioning of research on the energy trading relationship with Great Britain which would work best for Customers in Northern Ireland.

2. Constraints

The changes are complex, and will require considerable investment in design and procurement of systems by NIE's Transmission and Distribution (T&D) business (under the Authority's regulatory oversight) in order to meet target dates. Any delays which may occur in such procurement exercises will delay final market opening.

The developments in neighbouring markets (BETTA in Great Britain and the new arrangements in the Republic of Ireland) will also be a factor to be considered, as they will impact on the trading of energy across interconnectors.

CHAPTER TEN

REDUCING THE NORTHERN IRELAND ELECTRICITY SECTOR'S CO2 EMISSIONS BY THE LEVEL SET BY GOVERNMENT IN THE MOST COST-EFFECTIVE MANNER POSSIBLE

1. Priorities

The majority of energy used in Northern Ireland is produced from fossil fuels which release carbon dioxide into the atmosphere when burned. Carbon Dioxide emissions are regarded as one of the major contributors to climate change.

In delivering its objectives the Authority, and previously the Director General, is required by legislation to have regard to the protection of the environment and to carry out its functions in the manner best calculated to promote energy efficiency. Far and away the most significant contribution to carbon dioxide reduction arises from the closure of Power Station West and Coolkeeragh which were coal and oil plants with poor efficiencies and their replacement by gas fired CCGT at Ballylumford and Coolkeeragh.

The Director General also sought to fulfil CO2 obligations through, for example, the Customer Energy Efficiency Levy scheme which has lead to carbon savings of 299,244 tonnes between its inception in 1997 and March 2003. The scheme has also made a major impact on fuel poverty.

Northern Ireland has seen quite a remarkable increase in electricity generation from renewable sources, especially wind generation, over the last two years. Factors contributing to this increase which lay within the Chairman's control are outlined in Chapter 7 and this rapid growth has also made a significant contribution to the reduction of Northern Ireland's CO2 emissions.

Natural gas is the least-polluting of the fossil fuels. As the regulatory authority with legislative responsibility for promoting the development of the Northern Ireland gas market, the Director General fulfilled an important role in the establishment of the industry. The North West pipeline planned for 2004 and the

link with the Republic of Ireland planned for 2006 will bring choice of fuel and consequent reductions in carbon emissions to a much wider customer base.

In 2004/2005 the Authority's priorities for the delivery of carbon savings will be to:

- Increase the funding available and monitor energy-efficiency projects supported by the Customer Energy Efficiency Levy scheme to ensure delivery of maximum carbon savings,
- ensure that the ROF mechanism continues to provide an incentive to deliver the expansion of wind generation and increased carbon savings by displacing conventional generation from fossil fuels;
- facilitate the expansion of the natural gas market as rapidly as possible to provide consumers with choice of a less-polluting energy source;
- exploit opportunities that may arise in 2004/2005 from carbon trading resulting from the United Kingdom's implementation of the EU's Emissions Trading Directive and ensure that any benefits are captured for consumers.

2. Constraints

Whilst existing initiatives are helping to deliver savings in CO2 emissions, for example, through the Customer Energy Efficiency Levy scheme and through ROF for wind generation, Government's introduction of a renewable obligation for Northern Ireland is likely to result in the withdrawal of the ROF mechanism. The Authority is opposed to the introduction of a renewables obligation in Northern Ireland and takes the view that it will impose an unnecessary cost on customers.

CHAPTER ELEVEN

OTHER REGULATORY AND ASSOCIATED TASKS

The preceding Chapters of this consultation document outline the Authority's themes derived from key issues identified in its response to DETI's Energy Strategy Consultation Paper. This Chapter describes briefly other regulatory and associated tasks in which the Authority will be engaged during 2004/2005. A number of these are ongoing with the work involved proceeding year in and year out. Others however are emerging and are likely to gather importance and momentum as the year progresses.

NIE's Price Controls

The Authority plans to review, with NIE, the approach taken to the setting of price controls. This will involve the following work in 2004/2005:

- completion of the discussions with NIE on the proposal to extend the Supply Price Control from 2005-2007;
- consideration of whether supply price controls post 2007 will still be necessary to protect domestic customers in a nominally liberated market;
- consideration of the role and appropriateness of incentives in price controls and the monitoring of these incentives;
- reviewing the charging methodology for the use of NIE's Transmission and Distribution (T&D) system;
- establishing with NIE (T&D) a stakeholder group to examine capital expenditure plans and in particular the issue of quality of supply versus price;
- reviewing existing price controls on NIE's Power Procurement and Transmission System Operation businesses to inform the design and duration of price controls from April 2005.

Other Electricity and Gas Matters

The Authority will undertake a number of other tasks arising from requirements in legislation and in gas and electricity licences:

- monitoring financial statements and reports from gas and electricity licensees;
- managing the approval process for NIE's Bulk Supply Tariff (BST), Public Service Obligation (PSO) Charge, System Support Services (SSS) Charge, Transmission and Distribution Use Of System Charges;
- overseeing the annual auction by SONI of capacity on the interconnectors with Scotland and the Republic of Ireland;
- monitoring the performance of bi-lateral trading arrangements and, if required, agreeing modifications to trading rules;
- chairing the representative group of electricity industry participants comprising licensees, DETI and large users which advises on the liberalisation of the electricity market;
- reviewing the Development Plan Report submitted annually by Phoenix Natural Gas to ensure the company continues to meet its development objectives;
- reviewing the natural gas and other fuels market to determine whether competition is sufficient and if not, considering the need for a supply price control on Phoenix Natural Gas in respect of customers using less than 75,000 therms per annum.

Renewables Obligation for Northern Ireland

DETI have proposed a Renewables Obligation (RO) from April 2005. This will require all licensed electricity suppliers to supply a specific and growing proportion of their sales from renewable sources. The obligation will be underpinned by a substantial package of financial and non-financial support mechanisms. The

Renewables Obligation Scheme will be managed by the Authority which will need to undertake preparations during 2004/2005 including:

- organising appropriate staff training;
- developing a procedures manual;
- developing IT support systems.

Implementing Article 5 of the EU Renewables Directive (Guarantees of Origin for Renewable Energy)

Legislation introduced in Northern Ireland effective from 27 October 2003, implements Article 5 of the EU Renewables Directive. The Northern Ireland legislation in support of Article 5 requires the provision of Renewable Energy Guarantees of Origin (REGO's) to be issued on request to generators to act as evidence that they have generated a given amount of electricity from a renewable source. The Authority will continue the work it commenced as a result of the legislation by:

- providing accreditation of renewable generators for REGO purposes;
- issuing REGO certificates on request;
- maintaining appropriate records as required by legislation.

Updating progress on Social Action Plan proposals

Ofreg undertook a review of its 2002 Social Action Plan proposals in August 2003. The review paper, which was widely circulated and is available on the Authority's web-site, failed to attract comment on suggestions for further social action. The Authority will however continue to:

- review the implementation of the ongoing proposals;
- liaise with and obtain views from groups or organisations representing the interests of the disadvantaged;
- work closely with electricity and gas suppliers to ensure the needs of the disadvantaged and fuel poor are not overlooked;
- track statistics such as debt levels, keypad meters installed, disconnections etc and take action as appropriate to protect customers should contrary indicators emerge.

Consumer Affairs

While responsibility for handling customer complaints against NIE transferred to the General Consumer Council for Northern Ireland as a result of The Energy Order resulting in a 'one-stop shop' for electricity and gas complaints, the Authority continues to have responsibility for a range of consumer issues which it plans to pursue in 2004/2005. These include:

- liaison with the General Consumer Council for Northern Ireland including quarterly meetings in keeping with the joint Memorandum of Understanding with the Council;
- preparation of the 2003/2004 Customer Services Report;
- investigations under the Competition Act 1998 (as required);
- processing 'Super Complaints' from consumer representative bodies which have formed a view that the market is working against consumer interests (as required);

- preparing Gas Metering Regulations setting metering standards for the natural gas market;
- monitoring and reviewing NIE's Guaranteed and Overall Standards;
- monitoring Annual Reports on Standards of Performance achieved by Phoenix
 Natural Gas (and potentially from new town suppliers).

Equality Scheme

The Authority is committed through the Ofreg Equality Scheme to the fulfilment of the obligations in Section 75 of the Northern Ireland Act 1998 concerning the promotion of equality of opportunity between the categories listed and promoting good relations between persons of different religious belief, political opinion or racial group.

Freedom of Information Publication Scheme

The Authority is committed through its Publication Scheme to the principles of openness and fairness enshrined in the Freedom of Information Act 1998.

ANNEX 1

NORTHERN IRELAND AUTHORITY FOR ENERGY REGULATION

The Northern Ireland Authority for Energy Regulation, a body corporate, was established with effect from 1 April 2003, under The Energy (Northern Ireland) Order 2003, to regulate the Electricity and Natural Gas industries in Northern Ireland on behalf of the Crown.

Douglas McIldoon was appointed as full-time Executive Chairman of the Authority. His term of office will expire on 12 September 2005. He held the offices of both Director General of Electricity Supply and Director General of Gas for Northern Ireland prior to their abolition.

Five part-time Non-Executive Directors were also appointed to the new Authority, as follows:

Mr Charles Coulthard: recently retired Managing Director, Ofgem, Scotland.

Professor John Fitzgerald, Director of the Energy Policy Research Centre in the Economic and Social Research Institute, Dublin.

Mr John Gilliland OBE, Former President of the Ulster Farmers' Union and Farmer.

Mr Peter Lehmann CBE, Chairman of the Energy Saving Trust for the UK.

Mrs Joan Whiteside OBE, recently retired Chair of the General Consumer Council for Northern Ireland and a former Chair of the Northern Ireland Consumer Committee for Electricity.

ANNEX 2

Extracted from the Energy (Northern Ireland) Order 2003

The principal objectives and general duties of the Department and the Authority in relation to electricity

Article 12

- (1) The principal objective of the Department and the Authority in carrying out their respective electricity functions is to protect the interests of consumers of electricity supplied by authorised suppliers, wherever appropriate by promoting effective competition between persons engaged in, or in commercial activities connected with, the generation, transmission or supply of electricity.
- (2) The Department and the Authority shall carry out those functions in the manner which it considers is best calculated to further the principal objective, having regard to
 - (a) the need to secure that all reasonable demands for electricity are met; and
 - (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Electricity Order or this Order; and

(c) the need to secure

that the prices charged to tariff customers by public electricity suppliers for electricity supplied under Article 19(1) of the Electricity Order to premises in any area specified in an Order made by the Department are in accordance with tariffs which do not distinguish (whether directly or indirectly) between different parts of that area; and

- (ii) that public electricity suppliers are not thereby disadvantaged in competing with other persons authorised by a licence or exemption to supply electricity to such premises.
- (3) In performing that duty, the Department or the Authority shall have regard to the interests of
 - (a) individuals who are disabled or chronically sick;
 - (b) individuals of pensionable age;
 - (c) individuals with low incomes; and
 - (d) individuals residing in rural areas;

but that is not to be taken as implying that regard may not be had to the interests of other descriptions of consumer.

- (4) The Department and the Authority may, in carrying out any electricity functions, have regard to the interests of consumers in relation to gas.
- (5) Subject to paragraph (2), the Department and the Authority shall carry out their respective electricity functions in the manner which it considers is best calculated
 - (a) to promote the efficient use of electricity and efficiency and economy on the part of persons authorised by licences or exemptions to supply or participate in the transmission of electricity;
 - (b) to protect the public from dangers arising from the generation, transmission or supply of electricity;
 - (c) to secure a diverse and viable long-term energy supply;

- (d) to promote research into, and the development and use of, new techniques by or on behalf of persons authorised by a licence to generate, supply or participate in the transmission of electricity; and
- (e) to secure the establishment and maintenance of machinery for promoting the health and safety of persons employed in the generation, transmission or supply of electricity;

and shall have regard, in carrying out those functions, to the effect on the environment of activities connected with the generation, transmission or supply of electricity;

- (6) In this Article "electricity functions" means
 - (a) functions under Part II of the Electricity Order; and
 - (b) functions under this Order relating to electricity.

The principal objectives and general duties of the Department and the Authority in relation to gas

Article 14

- (1) The principal objective of the Department and the Authority in carrying out their respective gas functions is to promote the development and maintenance of an efficient, economic and co-ordinated gas industry in Northern Ireland.
- (2) The Department and the Authority shall carry out those functions in the manner which it considers is best calculated to further the principal objective, having regard to
 - (a) the need to protect the interests of consumers of gas;

- (b) the need to secure that licence holders are able to finance the activities which are the subject of obligations imposed by or under Part II of the Gas Order or this Order;
- (c) the need to secure that the prices charged in connection with the conveyance of gas through designated pipelines (within the meaning of Article 59) are in accordance with a common tariff which does not distinguish (whether directly or indirectly) between different parts of Northern Ireland or the extent of use of any pipeline; and
- (d) the need to protect the interests of gas licence holders in respect of the prices at which, and the other terms on which, any services are provided by one gas licence holder to another.
- (3) In performing that duty, the Department or the Authority shall have regard to the interests of
 - (a) individuals who are disabled or chronically sick;
 - (b) individuals of pensionable age; and
 - (c) individuals with low incomes;

but that is not to be taken as implying that regard may not be had to the interests of other descriptions of consumer.

- (4) The Department and the Authority may, in carrying out any gas functions, have regard to the interests of consumers in relation to electricity.
- (5) Subject to paragraph (2), the Department and the Authority shall carry out their respective gas functions in the manner which it considers is best calculated
 - (a) to promote the efficient use of gas;

- (b) to protect the public from dangers arising from the conveyance, storage, supply or use of gas;
- (c) to secure a diverse and viable long-term energy supply; and
- (d) to facilitate competition between persons whose activities consist of or include storing, supplying or participating in the conveyance of gas;

and shall have regard, in carrying out those functions, to the effect on the environment of activities connected with the conveyance, storage or supply of gas.

- (6) In this Article "gas functions" means
 - (a) functions under Part II of the Gas Order; and
 - (b) functions under this Order relating to gas.

ANNEX 3

CONSULTATION LIST

Age Concern

Bryson House

Business in the Community

CBI

Chief Executives' Forum

Child Poverty Action Group

Coalition on Sexual Orientation (CoSo)

Commission for Electricity Regulation (CER)

Community Relations Council

Disability Action

District Councils

East Belfast Community Development Agency

Electricity and Gas Licensees

Energy Companies

Energy Saving Trust

Federation of Small Businesses

GCC NI

Help the Aged

Institute of Directors

Law Centre Northern Ireland

MENCAP

NEA

NIACAB

NIAER Members

NIC/ICTU

NICVA

NIERC

Northern Ireland Anti-poverty Network

Northern Ireland Association of Chief Officers of Voluntary Organisations

Northern Ireland Association for Mental Health

Northern Ireland Chamber of Commerce & Industry

Northern Ireland Council for Ethnic Minorities

Northern Ireland Economic Council

Northern Ireland Gay Rights Association (NIGRA)

Northern Ireland Government Departments

Northern Ireland Housing Executive

Northern Ireland MPs

Northern Ireland Ministers

Northern Ireland Political Parties

Northern Ireland Secretary of State

Northern Ireland Women's European Platform

Office of Gas and Electricity Markets (Ofgem)

Royal National Institute for the Blind

Royal National Institute for the Deaf

Rural Community Network

CONSULTATION LIST (Cont'd)

Rural Development Council Ulster Farmers' Union (UFU) West Belfast Economic Forum Women's Forum Youth Council for Northern Ireland