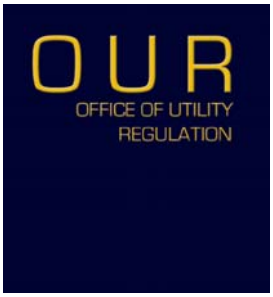

Office of Utility Regulation

Review of Guernsey Electricity Limited's Price Control

Consultation Paper

Document No: OUR 06/17 **September 2006**

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1. Introduction

In December 2005, the OUR set a price control for the tariffs charged by Guernsey Electricity Limited ("GEL") to cover the period up to the end of March 2007. A short term price control was introduced at that time in order for the Director General ("DG") to consider a number of outstanding issues, but allow GEL to increase its prices for 2006/07. As a consequence there is a need to establish a further price control from April 2007 forward. The purpose of this paper is to consult on the key principles used to inform any future price control.

The OUR, in cooperation with GEL, Treasury & Resources Department (T&R) and the Commerce & Employment Department (C&E) have, since the finalisation of the December 2005 price control, been working on addressing a number of the areas which remained outstanding from that price control. The DG believes that this work has helped to clarify and inform a number of the outstanding issues critical to the formulation of a robust and fair price control for a longer period.

It is important that any price control that is put in place from 2007 reflects the need for a strong, sustainable electricity provider, whilst also taking account of consumers needs for affordable tariffs that reflect a service that is efficiently provided. There is also a need to provide GEL with certainty about the nature and form of regulation it will face over the price control period. Ensuring consumers are only asked to pay, through their electricity tariffs, for a service provided in an efficient manner and which covers those costs directly related to the service being provided, is a key element of any price control.

The price control will set a ceiling on the tariffs that GEL may charge during the course of the control period. The control will be based on information provided from GEL and other sources that assist the DG in determining whether the tariffs sought by GEL are reasonable. This document will discuss further the sources of information available to the DG and the input that the various streams of work will have in helping inform the DG's final decision. The consultation is not setting out details of the tariffs that may apply from April 2007. Given the number of material issues that need to be finalised it is not practical at this point for GEL to make an application for the tariffs it wishes to apply. These will be considered prior to the publication of any decision.

The DG would like to thank all parties, and GEL in particular, for its co-operation during the past period on a number of important issues consulted upon further in this document. The DG is conscious that a wide range of issues are being consulted upon in this report and he and his staff would be happy to discuss any aspect of the document with interested parties if this will help further in informing any responses.

This consultative document does not constitute legal, commercial or technical advice. The Director General is not bound by it. The consultation is without prejudice to the legal position of the Director General or his rights and duties to regulate the market generally.

2. Structure of the Paper

2.1. Structure

The rest of this paper is structured as follows:

Section 3:	sets out developments since the last price control;
Section 4:	summarises the legal framework of this price control;
Section 5:	discusses the principles underpinning GEL's price control;
Section 6:	sets out the framework for the price control as well as the period of the control, opening regulatory asset value and the depreciation schedule;
Section 7:	assesses GEL's operating costs;
Section 8:	deals with the role of cash reserves in the price control;
Section 9:	raises other issues on which views are sought;
Section 10:	summarises the next steps in the process.

2.2. Comments

Interested parties are invited to submit comments in writing on the matters set out in this consultation paper to the following address:

Office of Utility Regulation
Suites B1& B2
Hirzel Court
St Peter Port
Guernsey
GY1 2NH

Email: info@regutil.gg

All comments should be clearly marked "*Comments on the Review of Guernsey Electricity Limited's Price Control*" and should arrive before 5pm on **27th October 2006**.

In line with the policy set out in Document OUR 05/28 – "*Regulation in Guernsey; Revised Consultation Procedures*", the DG intends to make any comments received available on the OUR website. Any material that is confidential should be put in a separate annex and clearly marked so that it can be kept confidential. However the DG regrets that he is not in a position to respond individually to the responses to this consultation. Any comments received will be taken into account by the DG in informing a draft decision for publication in December 2006, with the aim of announcing a final decision in January 2007.

3. Developments since Last Price Control

When the DG published his decision in December 2005, he highlighted that a number of matters merited further detailed consideration given the issues raised during the previous price control work. This was particularly so in light of GEL's unique financing arrangement and the implications that this has for the financial representation of the company in its statutory accounts. Implications for the determination of the Regulatory Asset Value ("RAV") were also considered further given the funding arrangements in place. This section of the report outlines the various workstreams that have taken place over the past eight months. The detail of each, as well as their importance, to the price control is considered separately further in this consultation. Particular issues on which the DG is interested in receiving comments are set out in this document, but respondents are invited to comment on other issues they consider relevant.

3.1. Independent Expert Panel

The DG indicated in OUR 05/31 that he would be convening an independent expert panel (the "Panel") to assist in reviewing the implications of the funding arrangements of GEL and how this funding impacted on the way in which a return to the company (and its shareholder) might be determined. In May 2006 the DG formed a Panel comprised of:

- Mr. Chris Bolt (Chairman of the Office of Rail Regulation);
- Sir Ian Byatt (Chairman of the Water Industry Commission for Scotland); and
- Professor David Newbery (Vice Chairman, Cambridge Economic Policy Associates and Professor of Applied Economics at Cambridge University)

The DG is grateful to the Panel members for their time, which has contributed greatly to addressing certain key issues of this price control. The Panel met with GEL, Guernsey Gas, T&R, C&E and the OUR on 10th July having considered various written submissions from interested parties. Further interviews took place on 11th August. The Panel took account of a number of matters including the financial framework within which GEL may operate. The detail of the Panel's work is elaborated on later in this report and Annex A provides the full report.

3.2. Efficiency Review

One of the key aims of economic regulation is to mimic competition either where it does not exist, or is not developed sufficiently. In Guernsey the likelihood of competition to GEL is remote. The regulator therefore places certain incentives on GEL to improve its performance. A key feature of any price control is a consideration of the degree to which the operator in question is performing at efficient levels. Consumers should only pay for services provided in an efficient manner. In order to assess whether this is the case, the OUR commissioned Power Planning Associates ("PPA") to undertake a detailed efficiency study of GEL's generation operations.

In April 2006, PPA met with GEL and received a detailed and thorough briefing on the operation of the St Sampson power station and the associated aspects of the business. GEL also provided information in response to additional queries raised by PPA. In June 2006 PPA provided GEL with its draft report for further comment.

Following a meeting on 5th July 2006 and further feedback from GEL, PPA submitted its final report to the DG in September 2006. The result of this work and its implications for the future price control is considered further in section 7. A copy of PPA's full report is provided as Annex B. This Annex however contains commercially confidential information and is therefore made available only to GEL and its shareholder on behalf of the States.

3.3. Financial Framework for GEL

One of the issues highlighted during the last price control was the implication that GEL's funding arrangements have for normal regulatory practice. GEL's funding entails generating large cash reserves collected in advance from customers to fund future capital expenditure.

During the 2005 price control work (when a longer price control was envisaged) concerns were expressed by GEL about reporting accounting losses in its statutory accounts, given the DG's proposed decision. From the regulator's perspective there is a conflict in that, despite GEL's large cash reserve to fund capital projects which have been planned, consumers could face the prospect of higher tariffs to address the perception of the financial health of the company based only on its profit and loss account. A balance between GEL's concerns and consumers' needs is clearly necessary.

In March 2006, the departments of T&R and C&E considered further the financial framework of GEL. This addressed how T&R as shareholder would receive a return while considering further the implications of GEL showing trading losses in any particular year. The Financial Framework (Annex C) sets out more fully the detail of this framework and was considered as part of the Panel's work.

3.4. Price Control Model

The issues described above and through this paper are important inputs to any future price control. However to reflect these assumptions and inputs in actual tariffs requires modelling. The OUR price control model has evolved over time to reflect, among other things the planning period that would reasonable be expected of a business such as GEL. In particular, because of the significance of the importation contract for electricity from France, accurately reflecting that agreement in tariffs is important. The advent of a new import contract in particular, has allowed for the simplification of the price control model, which should significantly reduce the effort required to prepare the next price control.

3.5. Energy Policy Working Group

The States in November 2005 established an Energy Policy Working Group ("EPWG") to consider the wider issue of an energy policy for Guernsey. The EPWG is currently scoping the terms of its work and it is likely that its outputs may have implications for how electricity needs on the Island are met. In light of this, the DG believes it may be necessary to provide for some mechanism that will allow for any price control to be revisited to take account of any policy changes that may impact on the assumptions upon which this control is set. The DG would only anticipate a review of this kind occurring should some external event markedly alter the underlying basis for any price control decision that may be determined.

4. Licensing Regime and Legislative Framework

4.1. Overview

The legislative framework underpinning the regulatory regime for the electricity sector is governed by:

- The Regulation of Utilities (Bailiwick of Guernsey) Law, 2001 (the "Regulation Law");
- The Electricity (Guernsey) Law, 2001 (the "Electricity Law");
- The Electricity (Guernsey) Law 2001 (Commencement and Amendment) Ordinance 2001; and
- States Directions to the DG adopted by the States of Guernsey[1].

The Electricity Law defines the three activities that constitute the electricity supply chain under the current legislative framework. These are:

- the generation of electricity;
- the conveyance of electricity across the electricity network; and
- the supply of electricity directly to homes and businesses.

These terms are defined in the Electricity Law and govern the current licensing framework which is outlined below.

4.2. Current Licensing Regime

The States of Guernsey has issued a number of States Directions to the DG in relation to the licensing of electricity activities in Guernsey. In accordance with those Directions the DG issued the first licences for electricity generation, conveyance and supply to the incumbent electricity company – GEL - on 1st February 2002.

The market for generating electricity is, in principle, open to competition. In terms of conveyance, under the current regime no other operator can lay electricity cables until 2012 and anyone generating electricity must therefore use the existing electricity network of GEL to convey that electricity from their generation plant to customers. Until 2012 only GEL may sell electricity to end customers.

4.3. Legislative Background to Price Regulation

Section 5(1) of the Electricity (Guernsey) Law, 2001, provides that the DG may include in licences such conditions as he considers necessary to carry out his functions. The Law specifically provides that such conditions can include (but are not limited to) conditions regulating the price premiums and discounts that may be charged or (as the case may be) allowed by a licensee which has a dominant position[2] in a relevant market[3].

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[1] Billet d'Etat No.XVIII 2001, pages 1263-1264 and Billet d'Etat I of 2003, p.55

[2] Condition 5(1)(f) of the Electricity (Guernsey) Law, 2001.

[3] Section 22 of "The Regulation of Utilities (Bailiwick of Guernsey) Law, 2001 states that:
"A dominant position in relation to a relevant market shall be construed as it would be in the United Kingdom under the Competition Act 1998, but with the substitution, where appropriate, of references to the Bailiwick for references to the United Kingdom."

In accordance with these provisions, the "Electricity Licence Conditions" include the following condition 20.2:

"The DG may determine the maximum level of charges the Licensee may apply within a relevant market in which the Licensee has been found to be dominant. A determination may;

(a) provide for the overall limit to apply to such charges;
(b) restrict increases in any such charges or to require reductions in them whether by reference to any formula or otherwise; and
(c) provide for different limits to apply in relation to different periods of time falling within the periods to which any determination applies."

This condition allows the DG to regulate the prices that a licensee charges for its electricity services in a way and for a period that he deems appropriate, provided the licensee has a dominant position in the relevant market.

As set out in a previous OUR document (OUR03/07), Guernsey's retail electricity market currently possesses a monopolist/dominant operator that also has a dominant position throughout the electricity supply chain. This position of economic strength is unlikely to change in the near to medium term. In this context it is essential that the social objective of maintaining the affordability of electricity provision, thus underpinning economic growth, is safeguarded. In the absence of competition, price control is widely accepted as the most appropriate tool to achieve this.

The OUR also wishes to highlight the States guidance to T&R at the time of commercialisation of GEL. This guidance stated, inter alia, that:

4. Financial performance targets for Guernsey Electricity Limited shall be set so as to:
1. deliver improved efficiency in fulfilling the requirements of the Public Supply Obligation imposed under the regulatory regime whilst drawing a balance between seeking a commercial return on the resources employed and the effect on the community of any increase in charges which may result; and
2. achieve as soon as is practicable an appropriate commercial return on the resources employed in the provision of other services.

The Competition Act 1998 utilises the definition of dominance that has developed under European Community Competition Law.

5. Principles of GEL's Price Control

In OUR 05/31 the DG set out his approach to determining GEL's price control and in particular addressed the following important issues.

5.1. Form

In document OUR 05/31 the DG decided to impose an incentive regulation form of price control (i.e. RPI-X or RPI+Y) on GEL. This is a standard form of price regulation and can provide the mechanism for proper incentives for GEL to run its business efficiently while offering consumers an appropriate level of protection where there is a monopoly provider of their service.

Q1) The DG wishes to consult on whether an RPI-X form of price control remains an appropriate approach to the regulation of GEL's prices or whether an alternative is more appropriate?

5.2. Scope

While the DG accepts that it is not possible for GEL to propose tariffs at this point, he believes it is worth indicating that it is, at this stage, intended that the tariffs proposed to be price controlled are:

- Standard Tariff:
  - Standing charge; and
  - Unit charge;

- Super Economy 12:
  - Standing charge;
  - Low rate unit charge;
  - High rate unit charge

- Industrial Economy Tariff – High Voltage Supplies:
  - kW charge (April-October);
  - kW charge (November-March);
  - Low rate units; and
  - High rate units

- Industrial Economy Tariff – Low Voltage Supplies:
  - kW charge (April-October);
  - kW charge (November-March);
  - Low rate units; and
  - High rate units

- Maximum Demand Tariff – High Voltage Supplies:
  - kW charge (April–October);
  - kW charge (November-March); and
  - All units

- Maximum Demand Tariff – Low Voltage Supplies:
  - kW charge (April-October);
  - kW charge (November-March); and
  - All units

- Heat Pump Tariff:
  - All units;

- Non-Peak Tariff:
  - Standing charge; and
  - All units;

- Superheat Tariff:
  - Standing charge; and
  - All units;

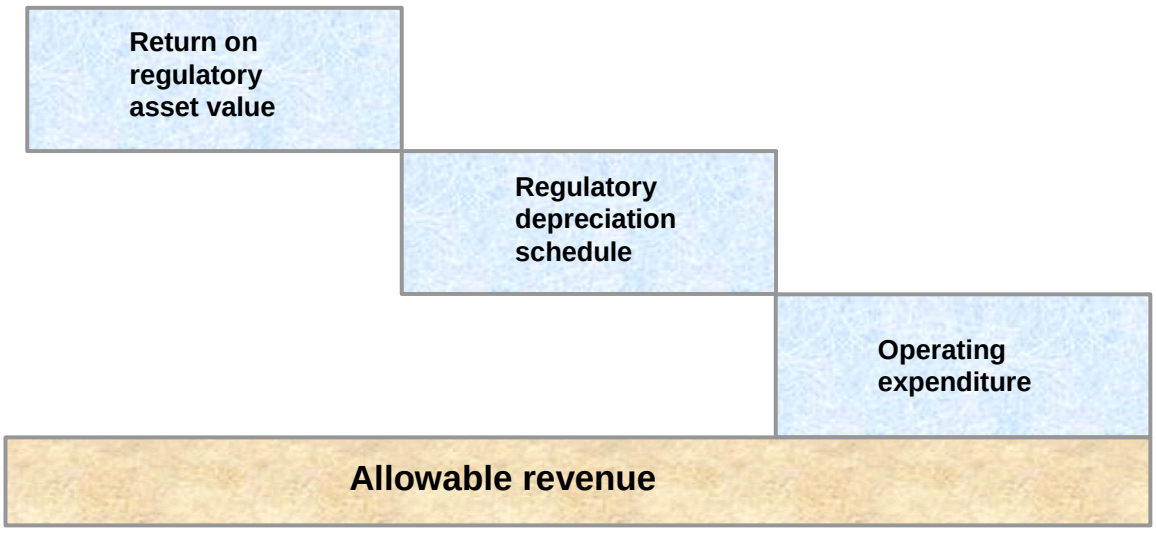
- Public lighting Tariff:
  - Standing charge; and
  - All units;

Q2) The DG wishes to confirm that the above are the relevant tariffs on which the proposed price control of GEL's core business is based over the next control period?

5.3. Price control Structure and Financeability

5.3.1. The structure of a price control

A price control can take the following general structure, where allowable revenue is the sum of the amounts under each of the categories, and this allowable revenue effectively limits the amount of revenue GEL recovers from customers through their electricity bills:



5.3.2. Financeability

It is normal regulatory practice to assess whether the regulated business is adequately funded to efficiently carry out the necessary functions of the business. This involves an assessment of funding availability, which for businesses that rely on some combination of equity and debt, takes account of factors relevant to the regulated business' ability to attract adequate capital funding. Ratio analysis and credit rating criteria are typical of such assessments.

GEL's funding needs are met through a policy of 'Save to Spend' which, for purposes of the next regulatory price control, is proposed as a cash reserve that is available to fund all efficient capital expenditure and working capital needs of the core business. As the Save to Spend reserve is the key determinant of whether GEL is adequately funded going forward, the focus of an assessment of financial viability is the ability of GEL to meet its cash obligations. The most relevant financial indicators may therefore involve cash measures rather than accrual identities. This implies placing more weight on the relationship between cash inflows and cash obligations at each point in time, and less weight on accounting accruals and provisions such as depreciation when assessing financial viability. While a number of ratios may be relevant it appears to the DG that the key variable on which to assess GEL's financial viability is the level of cash in the Save to Spend reserve.

The need for criteria as to the appropriate level of the Save to Spend reserve is a particular issue in this regard. The factors that may contribute to a shortfall or surplus in cash reserves at some point in the future also require consideration given their consequences. A level of Save to Spend higher than necessary is a situation where GEL has access to a greater level of funds than it in fact needs. In these circumstances hard budget constraints are effectively undermined since the regulated business can offset efficiency pressures without the financial disciplines provided by a price control. A level of Save to Spend that falls below what is regarded as an appropriate level represents a risk to the capital investment needed by the business. The issue of how to make up such a shortfall then arises, with implications for the shareholder and/or customers.

5.4. Monitoring and Compliance

The aim of the compliance procedures will be to allow GEL to demonstrate that it has met its obligations under the price control, with the following objectives:

- to minimise the resources required for compliance and monitoring, both from GEL and the OUR; and
- to ensure maximum transparency and certainty for GEL to make its pricing decisions.

The DG intends to ensure that the requirements to demonstrate compliance with the price control will be as simple as possible and intends to publish guidelines to assist GEL in this regard. These guidelines will be available prior to the commencement of the price control period on 1st April 2007.

6. Price Control Framework

In considering a further price control for GEL, a number of key issues need to be considered and addressed. These include:

- Price control period;
- Opening Regulatory asset value and Return to shareholder;
- Depreciation schedule;
- Operating costs;
- Cash reserves;
- Time horizon; and
- Other issues

Each of these is discussed further below.

6.1. Price Control Period

In December 2005 the DG set a price control for GEL for the period 1st January 2006 through to 31st March 2007. This short-term price control was set in recognition that several key issues required clarification before a longer-term price control was put in place. Relevant issues included the use of cash reserves in a price control, the expectations of the States as shareholder and the return the shareholder was entitled to given the history of the business.

For the next price control, the DG understands GEL favours a long-term control of six years. When considering an option of setting a price control over such a period the DG must consider the potential risks as well as the benefits of doing so. An appropriate balance must be drawn between the interests of all relevant parties since the risks and benefits may differ between stakeholders. Longer-term price controls can, for example, improve the scope for the business to implement efficiency savings as there is potentially a longer period of certainty. From the customers' perspective, a longer-term control can provide greater price stability, but there is also a greater degree of risk that prices could be higher than necessary if costs turn out lower than expected.

Particular factors are worth highlighting in this regard and these are set out below:

Fuel oil price volatility and trends - The current energy market is not stable and, in particular, energy prices have risen significantly over the past few years. In this context the reliability of forecasts of fuel prices is affected. An added difficulty is that forecasts based on more recent price trends suggest significant upward growth that may be unrealistic over a longer-term price control. In such market conditions, either a shorter price control period or greater reliance on adequate pass-through mechanisms appear necessary.

Certainty of price structure for imported electricity – [This section is confidential]

Certainty of imported electricity prices – [This section is confidential]

Energy price movements in the international energy market over recent years, the price structure of GEL's import agreement and the implications for reliability of forecasting imported electricity prices present different challenges and risks.

Q3) Views are sought on the appropriate length of the next price control?

6.2. Opening Regulatory Asset Value

The opening Regulatory Asset Value ("RAV") or Regulatory Asset Base ("RAB") represents the sum of funds on which the shareholder return is based. Historic evidence showed the sum of funds provided by the States as shareholder were zero and it was therefore less obvious what an appropriate basis might be for a shareholder return. The DG's 2005 price control decision on return to shareholder was therefore based on a return on turnover rather than an opening regulatory asset value, as it was considered prudent to avoid setting a final regulatory asset value in 2005. GEL's tariffs were set until March 2007, and the OUR in co-operation with GEL, T&R and C&E has considered how best to address the issues relating to the level of return the States is entitled to before any future price control is determined.

The OUR was of the view that further work on these areas should await the end of GEL's 2005/06 financial year when the most up-to-date financial information was available. Independent expert opinion on the key areas was sought so that a position could be determined that would further inform future price control work.

The independent Panel was therefore established to advise the OUR on the feasible alternatives for arriving at the opening regulatory asset base the OUR should apply for the purposes of its future price control of GEL and the implications of the alternatives identified for any future price control by the OUR. The final report by the Panel is provided in Annex A.

The Panel noted guidance from T&R on the use of the existing (historical cost) valuation of GEL's assets for accounting purposes, and concluded that this provided an appropriate starting RAB. The Panel also recognised that the commercialisation of GEL was not intended to change the level of electricity charges and therefore concluded that a lower return should be earned on this element of the RAB than on subsequent new investment. Given these recommendations, the DG proposes to implement the Panel's recommendations by establishing two separate RABs, namely 'RAB (historic)' and 'RAB (new)'.

The starting RAB (historic) is proposed as either:

- The estimated value of GEL's core asset base (net of accounting depreciation) as at the end of the financial year 2006/07 comprising capital investment undertaken prior to February 2002; or
- The estimated value of GEL's core asset base (net of accounting depreciation) as at the end of the financial year 2006/07 comprising capital investment undertaken up to the end of 2006/07.

The starting RAB (new) is proposed as either:

- The estimated value of GEL's core assets (net of accounting depreciation) as at the end of the financial year 2006/07 acquired from April 2002; or

- Zero at the outset of the next price control.

The above alternatives for RAB (historic) and RAB (new) relate to the period from 1 February 2002 to 31 March 2007. This period falls between two clear periods in terms of pre-commercialisation investment and investment going forward. Given the rationale set out by the Panel there is some question as to the appropriate rate of return that should apply to investment post-commercialisation but already incurred.

Q4) The DG requests views on the appropriate allocation of capital investment costs incurred by GEL over the period from 1 February 2002 to 31 March 2007. In particular, whether they should be allocated to RAB (historic), RAB (new) or some alternative?

The intention is to roll-forward these two regulatory asset bases from April 2007. RAB (historic) would by definition decline over time as new investment would not be attributed to this RAB, while accounting depreciation will reduce the value of these assets. RAB (new) would roll forward with the net of GEL's regulatory depreciation schedule and actual capital expenditure determining the future path of this regulatory asset base.

Q5) Comments are invited on the DG's proposed approach to the implementation of the Panel's recommendations in establishing GEL's regulatory asset bases, RAB (historic) and RAB (new).

6.2.1. Return to shareholder on RAB (historic)

The Panel's recommendations were based on a conclusion that the way in which GEL was commercialized effectively recognized as a public policy objective that commercialization in itself should not lead to a change in average bills. This is taken to imply that the regulatory framework should accept the average level of bills in 2002 as an appropriate starting point. The Panel concluded from this that the objective of leaving the initial level of bills unchanged required either a write-down of assets or earning of a lower return on assets in existence at the time of commercialization. T&R set out a principle that, for accounting purposes, the value of GEL's assets should continue to be based on historic costs, and does not contemplate any asset write-down.

The Panel's preference was therefore to retain the 2002 valuation of GEL's assets, and establish a return on those assets below the weighted average cost of capital. The Panel believed this approach most appropriately recognizes the past approach to the financing of GEL's assets, and preserves the financial interests of both customers and shareholder at the time of commercialization. To ensure all parties have a clear understanding of the potential implementation approach for this aspect of the Panel's recommendation, the reasoning and approach the DG is currently minded to implement is discussed below.

The Panel's recommendation would appear to require a return on historic assets based on a proxy to the return earned by the owner just prior to commercialization. It could be argued, that since the States did not run the utility to generate a return, any surplus generated was attributable entirely to the Save to Spend policy. In this interpretation, it may be reasonable to assume a zero return on assets acquired prior to commercialization. The DG however proposes to rely on the States Electricity Board

("SEB") accounts submitted to the States on Wednesday 10 July 2002[4]. These audited accounts were presented to the States and represent the nearest approximation in terms of timing, to the key variables of tangible assets and surplus generated by the business prior to commercialization in February 2002. As they underpinned pricing decisions at the time of commercialization they meet the criteria set by the Panel. These accounts may also provide a more appropriate reference point than previous accounting periods given the greater similarities to the current operating environment as they appear to provide the first set of accounts over a substantive period following the installation and operation of the cable link.

The accounts presented to the States on 10 July 2002 show SEB's balance sheet for the period 1 April 2001 to 31 January 2002, and Note 7 to the accounts show a book value for tangible assets of £93.525m[5]. The surplus generated by the business for this 10 month period is reported in the revenue account as £0.224m. It should be noted that the above represents the aggregate of assets currently categorized as core and non-core. The DG does not however believe there is value in drawing a distinction between core and non-core tangible assets and surpluses generated for the purposes of this analysis.

He therefore proposes to derive a rate of return based on the aggregate tangible asset value and surplus (after depreciation) of the business presented in these accounts, or an adjustment for a full financial year if appropriate. This surplus transferred to general reserve provides an estimate of the shareholder rate of return at 31 January 2002 and is calculated as 0.245% (£0.224m/£91.4m) based on this historic asset base.

Q6) The DG requests views on whether the accounts submitted to the States on Wednesday 10 July 2002 for the period 1 April 2001 to 31 January 2002 are appropriate as a basis for implementing the Panel's recommendation regarding the rate of return on which RAB (historic) might be based? Comments are also sought on the use of the surplus (after depreciation) as at end of period 31 January 2002 as the basis for assessing the return to shareholder and therefore the cost of capital for RAB (historic)?

6.2.2. Return to shareholder on RAB (new)

As noted above the Panel's recommendation is that in appraising GEL's future investment, options should be appraised at a risk-based test discount rate, established by the OUR as part of the price setting process, to deliver a security standard agreed between GEL and the States. The Panel consider that the same rate should be the allowed return on net additions to the RAB, so that consumer prices reflect at the margin the economic cost of maintaining the agreed security levels. For the same reasons the Panel also consider it is important that variable electricity charges should be set on proper economic principles to give appropriate price signals and ensure fair competition with other fuels.

In summary, it appears to the DG there are three key areas that are relevant to these recommendations, namely:

[4] BILLET D'ETAT, Wednesday, 10th July, 2002 – Accounts of the States for 2001.
[5] Which represented the net book value of a gross tangible asset value of £150.014m less a depreciation charge of £56.489m.

- all core investment decisions submitted and evaluated by the shareholder should do so based on cost of capital assumptions more in line with those of comparable commercial businesses;
- future capital expenditure allowed as part of GEL's price control revenues should receive this same cost of capital return as part of its allowed revenue; and
- the per kilowatt hour charge should reflect these costs rather than any fixed charges in GEL's revenues.

The weighted average cost of capital (WACC) is the most commonly used approach for estimating a company's opportunity cost of capital and the Capital Asset Pricing Model (CAPM) is the most widely accepted approach in estimating a company's cost of equity. These two methodologies, whilst conceptually relatively simple require a number of company specific and market specific factors input to the WACC and CAPM formulae.

OUR 04/11 sets out a discussion of this area. Full descriptions of the WACC and CAPM used for estimating a company's cost of capital are provided in publicly available documents on other regulators' websites and respondents may also wish to refer to these for background information[6]. The DG considers that this approach to calculating the cost of capital of a company is well established and there is ample precedent for it.

In the case of GEL however, a key rationale for derivation of a risk-based discount rate appropriate for new investment decisions is to ensure consumer prices reflect at the margin the economic cost of maintaining the agreed security levels. Since GEL's capital investment programme is funded through 'Save to Spend' it does not directly acquire its funds from lending institutions or its shareholder. Derivation of a risk-based discount rate must therefore rely as its starting point on benchmark rates as set by other regulators.

Table 6.1 below sets out the key variables identified in previous regulatory decisions taken across a number of sectors over recent years. As the equity betas in each case are derived from differing levels of gearing, under the assumption of a zero debt beta the asset betas have been estimated.

[6] The following two documents by Oftel and the Civil Aviation Authority in particular provide good introductions to the topic;
Hwww.ofcom.org.uk/static/archive/oftel/publications/1995_98/pricing/pri1997/contents.htmH and Hwww.caa.co.uk/erg/ergdocs/annexcc.pdfH. A more detailed discussion of the cost of capital prepared by Smithers & Co on behalf of the UK economic regulators and the Office of Fair Trading is available at Hwww.ofgem.gov.uk/temp/ofgem/cache/cmsattach/2012_jointregscoc.pdfH

Table 6.1: Derivation of equity betas – regulatory precedent

National Regulatory Authority or Competition Commission	Sector	Date	Equity Beta	Gearing	Asset beta
Ofgem	Electricity Distribution	2004	1.0	57.5%	0.43
Ofwat	Water & Sewerage	2004	1.0	55.0%	0.45
Competition Commission	Airports	2002	1.0	25.0%	0.75
Ofcom	BT copper access	2005	0.9	35.0%	0.59
ORR	Rail	2000	1.3	50.0%	0.65
CAA	Air traffic control	2005	1.54	61.0%	0.60
Postcomm	Post	2006			0.65
	Post	2006			0.75

The gearing levels on which the risk-based discount for GEL is derived is proposed as zero given the absence of debt by GEL and the existence of the 'Save to Spend' policy. In effect this exercise is therefore concerned with the equity premium only.

Table 6.2 then presents the key variables specific to GEL's risk-based discount rate given previous regulatory decisions elsewhere and under these assumptions. The cost of capital derivations based on the variables presented in Table 6.1 are set out in the final row of Table 6.2 below. The extent to which GEL's circumstances and the risks to the shareholder inform whether the low, middle or high case is more appropriate is an additional issue on which views are sought.

Table 6.2: Cost of capital – Regulatory precedent applied to GEL

	Low Case	Middle Case	High Case
Risk Free Rate	2.5%	2.5%	2.5%
Debt Premium	0.5%	0.5%	0.5%
Cost of Debt	3.0%	3.0%	3.0%
Gearing	0.0%	0.0%	0.0%
Equity Risk Premium	2.5%	4.3%	5.0%
Asset Beta	0.425	0.70	0.75
Equity Beta	0.4	0.7	0.8
Corporation Tax	0.2	0.2	0.2
Cost of Equity	4.45%	6.84%	7.81%
WACC (real pre-tax)	**5.97%**	**6.84%**	**7.81%**

The Panel also recommended that the WACC should take account of the risk that would be incurred by the shareholder as a result of any unexpected events or any failure by GEL to meet its obligations within the efficiency expectations specified by

OUR when setting price limits. These considerations relate to the extent of capacity on the Island, the ability of a utility to acquire capital (in addition to cash reserves) given some unexpected event and the likelihood of failure to meet efficiency targets for example. Comments are invited on these elements that may be relevant to the DG's conclusions on the appropriate WACC on new investment.

Q7) Comments are sought on the validity of the approach to assessing GEL's risk-based discount rate as set out in section 6.2.2?

6.3. Depreciation schedule

The depreciation schedule is the allowance within regulated revenues that provides for the capital expenditure needs of the business.

In the 2005 price control the DG's view was that a regulatory depreciation schedule based on the value of GEL's historic assets as stated in its financial accounts was not appropriate in the circumstances. The issue of an appropriate RAB was a key consideration in coming to this view given the need to relate actual capital expenditure to a depreciation schedule in order to roll-forward the RAB in a systematic way. In the circumstances, the DG provided for GEL's capital investment costs through a combination of allowable revenue (which was collected from GEL's future tariffs) and a draw down of cash reserves (which was collected from GEL's historic tariffs). For this reason, as well as the difference between GEL's historic and future levels of capital expenditure, the depreciation allowance provided for within allowable revenues was lower than the accounting depreciation charge based on GEL's accounting depreciation policy.

The depreciation allowance is also a variable in the price control that has an impact on the regulatory asset base rolled forward. Actual capital expenditure that exceeds the depreciation schedule in a given period results in an increasing regulatory asset base, and vice versa, with implications for the return to shareholder. Given a suitable RAB and the roll-forward approach there is in fact a range of feasible depreciation schedules.

A depreciation schedule for RAB (new) is likely to be more straightforward given the roll-forward of the RAB would be netted off against actual capital expenditure. The depreciation schedule for RAB (new) may therefore lend itself to a number of approaches, one of which is an annual average of capital expenditure over the time horizon of the price control. Given this is related more closely to the actual capital expenditure needs of GEL than historic expenditure, in the DG's view this provides a feasible candidate for a depreciation schedule. A consideration is the extent to which such a schedule deviates, if at all, from GEL's actual accounting depreciation.

There is effectively no depreciation schedule for RAB (historic) implied since no new capital expenditure is allocated to the roll-forward of this RAB.

Q8) Views are invited on the feasible depreciation allowance for RAB (new) and the implication of no depreciation allowance for RAB (historic)?

7. Operating costs

The 2005 price control was set for a period of 15 months supported by an efficiency study by ESBI which identified potential efficiency savings in the areas of overhead and generation costs. Different approaches to efficiency assessments might reasonably be taken for these quite different areas of GEL's business. The overall efficiency savings achieved by other regulated businesses can also provide a useful reference. In terms of the present price control, a combination of top-down and bottom-up assessments were made to inform the level of efficiency targeted. Analysis in OUR 05/31 of overhead costs in particular is repeated as part of this consultation.

The current price control sets efficiency targets on GEL's overhead costs (including marketing, IT and other administration costs) by restricting these to a fixed proportion of total overhead costs, with the proportion of these operating costs in 2001/02 taken as the reference point. A detailed account of this approach is set out in 7.2 below and the DG proposes to draw upon this for purposes of this price control.

Following an efficiency review by ESBI of GEL's business, recommendations relevant to the area of generation operations were made. Given the significant impact implied by some of these recommendations, the DG engaged PPA, an international specialist power consulting firm, to focus on the key area of generation identified in the first review. PPA's assessment and recommendations therefore specifically relate to the generation business. GEL has commented on the draft version of PPA's report and taken the opportunity to discuss the proposals with PPA. The PPA final report takes account of the comments provided by GEL. Appendix B provides the full PPA report based on their assessment of GEL's generation business. The core elements of PPA's recommendations and rationale for these are set out in section 7.3 below.

7.1. Introduction

GEL's key operating costs may be categorised according to a variety of factors and drivers. The key distinction this paper wishes to make is between those costs where GEL might be described as a 'price-taker' (those costs over which it has little influence by virtue of its size or influence on the market), and those where GEL's management has flexibility to manage and materially control costs. In the former category, it should however be noted that while the unit costs may not be easily controlled by GEL, the volumes consumed and efficient management of resource remains within GEL's control. There are therefore essentially three categories that may be identified. Table 7.1 below sets out some of the cost elements typical of such a categorization.

Table 7.1: Cost categories

Category	**Examples**
International market costs	Distillant gas, heavy fuel oil, Imported electricity
Non-fuel Generation costs	Volume of fuel used, staffing levels, maintenance
Overhead/Back office/Support costs	IT, Administration, Marketing, Consultancy

It is apparent from the above list that the cost drivers can be quite different between categories, as is the degree of control GEL has over certain elements of its costs. In assessing the reasonableness of these different costs it is also apparent that some categories lend themselves more easily to benchmarking while others may require a more specific analysis given a particular set of Guernsey specific issues. The DG is required to regulate in a manner that is proportionate to the circumstances in Guernsey. He is therefore mindful that in some circumstances the use of top-down analysis (benchmarking for example) may provide a less resource intensive approach to assessing the reasonableness of GEL's costs. Benchmarking offers a means of drawing comparisons without a more intrusive review of a regulated business, that can support general conclusions about the expected savings in light of what similar businesses have achieved. Detailed analysis on the other hand can be costly as well as an intrusive form of regulatory oversight, but the recommendations from such reviews can provide an evidence base for proposals that take account of issues specific to Guernsey which benchmarking may not always achieve.

It is apparent that a certain degree of compromise is appropriate where, instead of a detailed analysis to support conclusions, reliance is on a more general and wider body of evidence on which efficiency savings could be based. Table 7.2 below provides an indication of the approach the DG is minded to take when assessing the reasonableness of each category of operating costs. The rationale for doing so is also set out.

Table 7.2: Treatment of cost categories

Category	Examples	Approach to assessment	Rationale
International market costs	Distillant gas, heavy fuel oil, Imported electricity	Largely pass-through with some incentives in place where feasible	A price control that sets maximum tariffs can expose the regulated business to higher risk where it is a price taker and prices rise higher than forecast. Conversely, customers may be exposed to higher prices than necessary where prices fall lower than expected. Where some degree of discretion is available to GEL as to when it chooses to fix its prices, incentives that involve some sharing of risk between the business and the customer may be appropriate.
Non-fuel Generation costs	Volume of fuel used, staffing levels, maintenance	Bottom-up analysis	Given a unique set of States obligations as well as the demands of electricity provision in an Island context, a more specific analysis of these factors seem appropriate to support robust conclusions on an appropriate level of costs.
Overhead/Back office/Support costs	IT, Administration, Marketing, Consultancy	Top-down/Benchmarking	Computing systems and other support processes, including customer processes are common to most utilities. Given this, this area of operations may be less affected by Guernsey specific factors and their assessment could reasonably be made by reference to benchmarks available.

Q9) The DG wishes to consult on the appropriateness of drawing upon a mix of approaches to assessing GEL's potential for efficiency savings given his duty to regulate in a manner proportionate to Guernsey, and the different nature of costs?

In seeking suitable benchmarks against which the efficiency of businesses providing services such as GEL's are compared, regulators have tended to compare the achievement of other privatised businesses with similar features and over a comparable phase of their post-privatisation histories. A number of features of GEL's business are similar to those of other privatised infrastructure network businesses that operate in market environments with relatively few competing providers. Comparison with such businesses can therefore provide a reasonable basis to assess the potential for efficiencies. Rail, water, sewerage, electricity transmission and distribution, and gas transportation are all industries generally regarded as comparable to an electricity provider such as GEL.

To indicate the scope of savings proposed by regulators a summary of operating expenditure efficiency assumptions adopted by UK regulators is set out below. Table 7.3 below suggests a range between 1.5% and 5%.

Table 7.3: Summary of Efficiency Assumptions adopted by UK Regulators

Company	Duration	Real reduction
British Gas (1991)	1992-1997	2.5% pa
BG Transco (1996)	1997-2002	3.1% pa
British Gas Trading (1996)	1997-2000	4% pa
BT (1996)	1997-2001	3%-4% pa
NGC (1992)	1993-1997	5% pa
NGC (1996)	1997-2001	2.5% pa
REC Distribution (1995)	1995-2000	2% pa
REC Distribution (1999)	2000-2005	2.3% pa
REC Supply (1993)	1994-1998	2% pa
REC Supply (1997)	1998-2000	2% pa
Scottish Hydro (1994)	1995-2000	2% pa
Scottish Transmission (1993)	1994-2000	2% pa
NIE Distribution (1997)	1997-2002	1.7% pa
NIE Supply (1997)	1997-2001	1.5% pa
Water/Sewerage (1994)	1995-2000	2% pa
Water/Sewerage (1999)	2000-2005	2.7% pa

Source: Europe Economics: A report for the Office of the Rail Regulator

Europe Economics has also examined the unit operating cost reductions actually achieved by UK privatised network businesses and the evidence from this study is set out in Table 7.4 below:

Table 7.4: Compound Annual Real Reductions

Water	-3.7%
Sewerage	-4.1%
Electricity transmission	-6.5%
Electricity distribution	-6.8%
Gas transportation	-9.1%

Note: unit operating costs exclude depreciation
Source: Europe Economics: A report for the Office of the Rail Regulator

Such comparisons suggest substantial cost reductions in the range 4% to 9% were achievable by these businesses since privatisation, while efficiencies actually achieved in fact exceeded those set by the regulators. The Europe Economics study also highlights that falling unit costs were accompanied by improved service quality in these industries while the trend in unit operating costs is seen to continue to decline with the length of the period since privatisation. Their assessment of privatisation literature identified a further feature, namely that privatised industries have achieved productivity growth significantly faster than the economy as a whole and generally faster than they managed before privatisation.

The above provides a useful context in terms of regulatory precedent and the actual efficiencies achievable by businesses operating in those industries that in many important respects share common features with GEL.

7.2. Overhead costs [Confidential]

7.3. Generation costs [Confidential]

7.4. Pass-through of fuel and imported electricity costs [Confidential]

8. Cash Reserves

The general financial policy specified for GEL is that of "Save to Spend". As already set out, for purposes of the next regulatory price control, this is proposed as a cash reserve that is available to fund all efficient capital expenditure and working capital needs of the core business.

The Panel have summarised their understanding of this issue as follows:

"*The general financial policy specified for GEL is that of "Save to Spend", whereby capital expenditure is financed from accumulated surpluses rather than borrowing. Within this policy, the States specify a desirable level of GEL's cash reserve, which is held on deposit at T&R in the form of gilt-edged securities. The desired cash reserve is set in relation to expected investment over several years. Compared with utility finance in many other jurisdictions, where gearing (debt as a percentage of the RAB) of 50-75% is considered optimal, this may appear to be an inefficient capital structure. But it has been consciously chosen by the States*." (paragraph 13, IEP Final Report)

In order to protect consumers' interests the DG places emphasis on ensuring tariff levels do not contribute to an excessive build-up of cash reserves, whilst balancing this objective with the need to ensure GEL has sufficient funds to pay for its capital expenditure each year. The DG's objectives in setting these levels for the current price control are consistent with the most recent States guidance that the policy of meeting capital expenditure primarily from cash reserves should continue. Relevant to this, and therefore issues on which the DG is required to come to a view as regards cash reserves for the next price control are:

- the potential need for adjustment to the opening level of cash reserve;
- an appropriate criterion for the level of cash reserve over the period of the price control;
- a targeted level of reserves for end of time horizon; and
- mechanisms for distribution of cash reserves and controls on draw-down from cash reserves.

The DG has been advised by the Panel who concluded the following regarding the issue of cash reserves:

- Designation of an initial capital expenditure reserve should be ring-fenced for future approved capital expenditure, the remainder should be placed in a different account, to be used either for dividend payments, cash withdrawals, or held on account for consumers.
- Cash reserves will earn interest and this should be considered as part of the core income of GEL in determining the required revenue to cover efficient operating expenditure and capital expenditure.
- In order to predict the future cash reserves, T&R will have to agree the policy for the capital expenditure reserves and the rate at which any cash surpluses are to be disbursed.
- It would simplify matters if all interest income is attributed to the cash reserves, so that the amount required for capital expenditure will take account of interest earned.

The discussion below sets out a more detailed examination of the issues and options for implementation of these recommendations where applicable.

8.1. Adjustment to opening cash reserve

The level of cash reserve available to GEL prior to the current price control was lowered by GEL's acquisition of non-core assets in 2004. Guidance had been given to GEL in 2002 that investments made must take account of the benefit to its electricity customers. Since acquisition of non-core assets did not provide benefits to electricity customers, the DG took account of this by adding back the acquisition cost of the non-core assets to the cash reserves. GEL was given the discretion to return the funds to the core business by selling the non-core asset or make good the deficit through alternative means. On this basis the DG set the opening level of cash reserves on the basis that the reduction in cash reserves would be corrected. It is intended that this approach would be applied for any future price control.

The DG requires a sound basis for including a premium to customer tariffs to build up cash reserves for future capital expenditure. Taking into account the existing level of cash reserves will be an essential part of that consideration. At the end of 2005/06 GEL reported cash deposits with States Treasury of £19.8m. Where the DG considers GEL's cash reserves are higher than necessary a clear mechanism is needed for the treatment of any excess cash reserves that exist at the commencement of the next price control to address what the Panel might describe as a 'distributable surplus'. However, to avoid duplication a discussion of this and related issues are dealt with in section 8.4.

8.2. Level of 'Save to Spend' reserve

The 'Save to Spend' policy implies cash reserves should be set at a level that takes account of the need to fund efficient capital expenditure. A business such as GEL has capital expenditure requirements for expansion, as well as maintenance of existing assets. Once a view is taken on the efficient level of capital expenditure it is a relatively straightforward process to set prices at levels intended to provide sufficient funds for capital expenditure each year. The volatility of such capital expenditure from year to year can be significant however, and to cater for this a smoothing of cash reserve levels will be necessary to avoid large changes in tariffs from year to year.

The Panel assessed the implication of a 'Save to Spend' reserve on the regulation of GEL's price control and consider that:

> *"...the level of cash reserve required under the Save to Spend policy should be clarified and more closely linked to future investment needs.*" (Executive summary)

The DG concurs, as the rationale for the 'Save to Spend' policy is linked directly to GEL's capital expenditure programme. An appropriate criteria as to the appropriate level of cash reserve would appear to be one set in relation to identified capital expenditure needs over a defined time period.

An additional consideration is that account might also be taken of unforeseen events such as unexpected increases in equipment costs, mechanical failure, or natural disaster. There is however a risk that the level at which cash reserves could be set to

cover such eventualities is potentially limitless. There is also a question as to whether cash reserves are in fact the most effective means to mitigate such risks or even whether the 'Save to Spend' policy is intended to provide for this.

Where cash reserves are seen as an appropriate means of mitigating such risk, it will require the DG to take a view on the likelihood of such events and the degree to which cash reserves should be increased above known efficient capital expenditure needs to allow for such eventualities. A detailed risk assessment of such an event or combination of events would however involve significant resources. The DG is therefore not minded to pursue such an option where more general reference points are available as a proxy for such an assessment, in the event that it was considered appropriate. In the event of such unforeseen events it may in fact be more efficient for GEL to meet such a shortfall through borrowing, as one-off events are by definition rare and the need to seek funds in this way would by definition be exceptional. It is the DG's view that the permanent maintenance of an allowance for cash reserves to cater for events that are unlikely to occur is an excessively costly approach and likely to be both disproportionate and subjective.

Q14) Views are invited on the criteria on which the level of 'Save to Spend' cash reserve for the period of this price control might be based? In particular, respondents are invited to comment on whether criteria should be set in relation to identified capital expenditure needs over a defined time period?

8.3. Targeted level of 'Save to Spend' reserve for end of time horizon

The current price control was set at a level where the cash reserve was sufficient to fund GEL's capital expenditure for each year up to 2016/17 with a minimum level of £17m (nominal) targeted for the end of 2016/17. The rationale for such a targeted end level of reserves was largely to avoid a sizeable step change in prices should reserves need to build up rapidly to meet requirements for years after the price control period.

There is a question as to whether the setting of an efficient level of cash reserves, with or without some provision for 'external shock's factors, is consistent with a targeted level of reserves materially above zero for the end of the time horizon. For example, a six year price control set over a ten year horizon in terms of cash reserves implies a subsequent price control some four years before the end of the current investment cycle. This may provide sufficient lead-time for a more accurate assessment of the desired growth path for cash reserves needed to support the subsequent investment cycle. Such an approach may also reduce the need to set cash reserve levels based on forecasts further into the future. It may instead be more proportionate in these circumstances to target a level of cash reserves of zero for the next price control. Rebuilding of reserves could then be based on a clearer indication of capital expenditure needs and therefore the capital expenditure path for the next investment cycle.

Q15) Comments are sought on the appropriate level of cash reserves at the end of 2016/17?

8.4. Distribution of cash reserves

The Panel's recommendations in this area require a distinction to be made between a cash reserve established to meet the Save to Spend objective, and that of a 'distributable surplus' from which the shareholder withdraws dividends at a normal rate or uses it to provide customer dividends. The DG has been advised by the Panel on this issue, whose view is that there are essentially two alternative uses for any distributable surplus and the choice between the different approaches is one for the States, taking account of broader public policy objectives. The Panel also indicated that where the shareholder either does not or cannot utilize the full extent of dividends paid out the alternative is for these to be used to offset electricity price increases through payment of a customer dividend.

The Panel's key recommendation here is therefore that the distributable surplus could:

"either be transferred as dividends set at a normal rate to the owner, the States, for worthy purposes (such as reducing other taxation, reinvestment for a rainy day in other profitable on or offshore investments, etc) or used to provide dividends to consumers to offset higher electricity bills". (paragraph 45, IEP Final report)

The DG notes the regulatory framework for price control recommended by the Panel is likely to lead to the shareholder earning returns above the historic levels required by the States. There is also the issue of dealing with any potential excess in cash reserve against a given criteria at the outset of the next price control as raised in section 8.1.

The DG must therefore set prices based on whether the shareholder intends to alter the current guidelines or continue with the current dividend guidelines. The mechanism by which the shareholder makes this choice should be transparent, consistent and clear in order to uphold regulatory independence and efficiency pressure on GEL. In the absence of such transparency, consistency and clarity there is a risk that the shareholder is drawn into an arbitration role, basing its decision on whether to take full return or provide for a customer dividend depending on the regulated company's objections to efficiency pressures or other aspects of control that lead to a lower allowable revenue than GEL has argued for. It is for such reasons that a situation where the shareholder makes no decision and leaves the funds within the cash reserve is not an alternative provided for in the Panel's recommendations, which the DG endorses. The DG intends to seek clarity on this point from the shareholder prior to any decision.

The Panel proposed designating an initial capital expenditure reserve to be ring-fenced for future approved capital expenditure, and if GEL invested efficiently the sum would suffice without borrowing. The remainder would be placed in a different account, to be used either for dividend payments, cash withdrawals, or held on account for consumers. These cash reserves will earn interest and this should be considered as part of the core income of GEL in determining the required revenue to cover efficient operating expenditure and capital expenditure. In order to predict the future cash reserves, the Panel's view is that T&R would have to agree the policy for the capital expenditure reserves and the rate at which any cash surpluses are to be disbursed. A number of the above points have already been presented in this document. The issue of ring-fencing of cash reserve is however a further issue identified by the Panel as an essential requirement.

Q16) Comments are therefore invited on ring-fencing of a 'Save to Spend' reserve and, the 'Distributable surplus' and the options for implementation? In particular views are sought on realistic and verifiable means of implementing and monitoring any ring-fencing approach?

8.5. Time Horizon

In setting a price control, given GEL's financial structure, forecasts of the level of Save to Spend reserve are required beyond the price control period itself. As already mentioned the 2005 price control was set at a level where the cash reserve was sufficient to fund agreed capital expenditure for each year up to 2016/17.

The DG understands that GEL favours a time horizon of 10 years. GEL's view is that as a capital intensive business it must examine the periods which contain large investment in capital assets, which for GEL means the years when the business either enhances the cable link or buys new engines for on-island generation. In the 10 years from 1 April 2007 to 31 March 2017 GEL has assumed a plan to do both and the preference is therefore for a 10 year horizon.

Q17) Comments are sought on the appropriateness of a 10 year time horizon or some other alternative time horizon?

9. Other issues

9.1. Fixed and variable charges

To maintain incentives for efficiency, the Panel considered that customers should face efficient tariffs at the margin which in its view implies that :

- price controls should reflect an allowed return on new investment since 2002 (net of depreciation on that investment) equal to the risk-based WACC; and
- that the variable element of electricity tariffs should be based on commonly accepted economic principles, also reflecting this WACC.

(paragraph 35 – IEP Final report)

Q18) Comment is sought on the Panel's recommendation that the variable element of electricity tariffs should be based on commonly accepted economic principles, also reflecting the risk-based WACC?

The Panel also recommended that the effect on GEL's allowed revenue of the lower allowed return on pre-2002 assets (net of depreciation on those assets) should be reflected in fixed or capacity charges that do not affect consumption decisions. (paragraph 36)

19) Comments are sought on the Panel's recommendation that the effect on GEL's allowed revenue of the lower allowed return on pre-2002 assets (net of depreciation on those assets) should be reflected in fixed or capacity charges that do not affect consumption decisions?

9.2. Security of supply costs

A further area on which the DG wishes to consult is the allocation of capital costs to maintain the 'n-2' security of supply requirement. This level of security of supply is significantly higher than that seen in other countries such as the UK where the surplus of generation capacity over forecast peak demand is approximately 22%[7]. Approximately 130MW of available capacity is currently employed to serve a Guernsey customer base of 28,400 representing a margin of some 86%. A failure by two of the highest capacity sources of electricity would amount to a loss of around 40MW of capacity leaving on-island capacity at around 90MW. While this would reduce to some extent as demand grows over future years, even in the event of failure of the two largest electricity sources the Island's generation capacity, a capacity margin of over 35% for 2005/06 is apparent.

Given such a margin and taking account of future growth in demand, even without the capacity needed to satisfy the 'n-2' provision there remains a substantial safety margin in terms of generation capacity on-island. Such a margin is to some extent justifiable given the context of an Island without recourse to a network grid from

[7] National Grid – Winter Outlook 2006/07 consultation document, page iii

which to draw supplies relatively easily from the generation sources of neighbouring countries, for example.

It is the DG's understanding that the 'n-2' security of supply is however essentially justified by the need to maintain supplies to the businesses operating on the Island and, in particular the finance sector, where security of electricity supply is a significant priority. The NAO report[8] set out the following view:

"*Business users we interviewed had two different views about the importance of security of supply and cost. A view shared by many in the financial services sector is that security of supply is of primary importance and cost is secondary. Other business sectors - agriculture for example - feel that the cost of electricity is the main consideration as it added so much to fixed overheads. They felt that more should be done to keep costs under control and at a reasonable level*." (paragraph 3.12)

It may be reasonable to argue that all customers on the Island should share in the costs of maintaining capacity margins at a level of some 35%. The question however arises as to whether it is appropriate that all customers should share in the capital costs required to maintain a security of supply level above a margin of 35% or whether an efficient pricing regime should in fact allocate these costs to those customers that place such demands on capacity margins.

Q20) The DG invites views from interested parties on whether all customers should share in the capital costs required to maintain a security of supply level above a margin of 35% or whether these should be allocated to those customers placing such demands on capacity margin?

9.3. Incentives and Annual adjustment

The Panel was concerned that, as currently drafted, the Financial Framework may give insufficient incentive to GEL to deliver improved efficiency. Unlike the situation facing a privately owned company, there are no clear market incentives to out-perform efficiency targets and no market pressures for increasing dividends. The Panel were therefore of the view that T&R as shareholder should consider the introduction of a management incentive plan for GEL management. This was recommended by the NAO report on commercialisation, and is common for commercialised companies under public ownership. It was proposed that such a plan would be based on delivery of regulatory targets including customer service. The Panel's view was that the OUR should therefore be consulted as to whether the incentive plan does indeed focus on appropriate measures.

Q21) The DG wishes to consult on whether the current management incentive plan for GEL does focus on appropriate measures and seeks comments on whether management incentives elsewhere provide useful references for best practice?

As outlined in this document, the price control should be set such that GEL will recover its allowed revenue through charges to customers. The allowed revenues are

[8] Review of Commercialisation and Regulation in the States of Guernsey, Report by the National Audit Office, September 2005.

the DG's view on what GEL requires to cover its costs, which include all the efficiencies detailed in this paper. If GEL spend more than allowed revenues, or spend less than allowed revenues, any deficit or excess is not passed on to the customer[9]. The unit prices during the next control period therefore depend on GEL's allowed revenues, but also on forecast customer numbers and demand (e.g. unit throughput).

Both of these factors require a number of assumptions. The setting of allowed revenues require that forecasts are made on items such as pass-through costs, uncertain costs and annual inflation rates. Customer numbers and unit demand are also best forecasts made at the start of the control period.

In practice, these forecasts and assumptions will be different to the actual turn-out for these items in each year of the price control. The question is whether:

a) an annual correction mechanism is employed to account for these differences or
b) the differences due to these factors is accounted for at the end of the control period.

Pass-through arrangements discussed in section 7.4 are also related to this issue, given the mechanism and timing of any annual adjustments is likely to involve common elements.

Q22) The DG invites views on the issues and potential mechanisms for annual adjustments during the price control period?

[9] This assumes that the opex and capital expenditure programmes are completed as planned, i.e. the volume and quality of work is completed.

10. Next Steps

Following receipt of comments on this consultation the DG will considered the issues identified in this document further. A number of issues highlighted in this document require discussion and agreement with the shareholder and the DG will also write formally to the shareholder on these issues as well as any other relevant parties so that a final price control decision can be made

The DG proposes to form preliminary views on these issues at the earliest opportunity to facilitate the submission of tariff proposals from GEL. These will then be considered further in the draft decision.

Ends/

Annex A:

Guernsey Electricity: Regulatory Issues
Report by Sir Ian Byatt, David Newbery and Chris Bolt

Annex B:

Efficiency Study of Guernsey Electricity's Generating Portfolio [Confidential]

Annex C:

GEL Financial Framework