Fair Trading Commission

Consultation Paper

FUEL ADJUSTMENT CHARGE

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TABLE OF CONTENTS

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PURPOSE OF THIS CONSULTATION

The objective of this consultation is to educate the public on the fuel adjustment charge element of the electricity tariff and obtain feedback from the public on the issue in order to assist in the Commission's decision-making on the same.

What is the Fuel Adjustment Charge?

The cost of providing electricity service to customers is affected by a level of uncertainty due to the fluctuation of oil prices on the international market. Since the cost of fuel is one of the main inputs in establishing the cost of electricity, the volatility of oil prices can have the effect of creating considerable uncertainty over the price of this utility service.

The fuel adjustment charge eliminates the need for a rate hearing to be conducted every time there is a change in the cost of fuel. Through this mechanism the changes in cost of the fuel are passed through to consumers.

The fuel adjustment charge allows the company to modify the amount charged to customers in their monthly bills to reflect the changes in the cost of fuel that is used to generate electricity.

Fuel Adjustment Charge Consultation

The Commission considers that the fuel adjustment charge which was prescribed by the Public Utilities Board in the 1983 decision should be reviewed to ensure its applicability to present circumstances. The Commission is conducting this review as part of its ongoing mandate to monitor utility rates and standards of service of service providers.

SECTION 1 – FUEL ADJUSTMENT CHARGE

1. BACKGROUND

The Commission is required to regulate the rates to customers of utilities under the Utility Regulation Act, CAP 282. In this legislation the Commission has a mandate to ensure rates are reasonable. Section 3(1) provides:

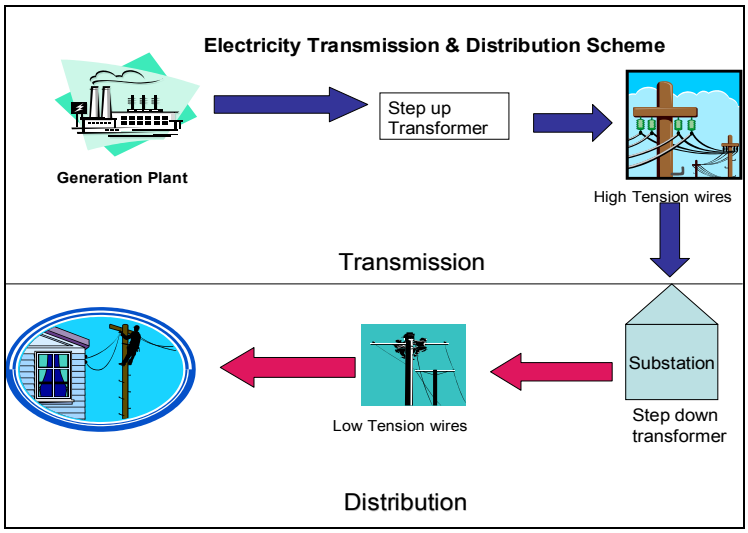
> *"3. (1) the functions of the Commission under this Act are in relation to service providers, to*
>
> *(a) establish principles for arriving at rates to be charged*
>
> *(b) set the maximum rates to be charged*
>
> *(c) monitor the rates charged to ensure compliance*
>
> *(f) carry out periodic reviews of the rates and principles for setting rates and standards of service."*

Generating and Delivering Electricity

In order to understand the basis of the rates charged by Barbados Light & Power (BL&P) and the resulting fuel adjustment charge it is important to be familiar with the process used by the company in producing and delivering electricity to customers. Barbados Light & Power is a vertically integrated monopoly which means that it is responsible for generation, transmission and distribution of electricity.

Figure 1 below outlines the overall process used by the company; this scheme is typical of most electric utilities which use a fossil fuel source of energy.

Figure 1



2. REGULATORY FRAMEWORK

The company is the only entity permitted to commercially provide electricity in Barbados. The rates charged are designed to recover the cost of all processes, as shown in Figure 1, involved in making electricity available to customers.

The Commission is responsible for ensuring that all these expenditures are prudent and it is in this context that the fuel adjustment charge which relates specifically to fuel costs needs to be periodically reviewed.

The cost of service to the utility includes capital costs such as building, plant equipment, vehicles and other fixed assets.

There are also costs incurred on an ongoing basis (operating costs); this includes the cost of fuel. Examples of other operating costs are maintenance, accounting, marketing, public education and management.

If the company wishes to change any rate which is currently in place it is required to make an application to the Fair Trading Commission. The system of regulation applicable to the electricity sector in Barbados is rate of return. In this system the company must establish its revenue requirement[1] which is based on its cost of service. The Revenue Requirement is designed to cover various expenses incurred by the company.

The company is also allowed to earn a maximum rate of return on rate base. The rate base is composed of the net value of the utilities tangible property used and useful in providing electricity. The maximum rate of return is established by the Commission and is chosen at a level which is typical of similar utilities or competitive businesses with a comparable risk. The revenue requirement may be defined as the funds needed by the utility to cover operational expenses and investments needed to ensure that the company can satisfy the required demand for electricity at all times. The rate base is the critical element in calculating the revenue requirement.

[1]The revenue requirement is established using the following equation.

RR = E+ d +T+ (V-D) R

Where RR= Revenue Requirement, **E** = Operating expenses, **d**= Depreciation expenses, **T**= Taxes**, V**= Gross Valuation of the property**, D**= Accrued Depreciation**, (V-D)** = rate base, **R**= Rate of return (%) (see Garfield. P, Lovejoy W, 1964 Public Utility Economics, p.45)

In calculating the revenue requirement the company must consider the value of the plant, equipment and other fixed assets, depreciation rates and taxes in addition to determining an appropriate rate of return.

2.1 Composition of Tariffs

After the revenue requirement is established, a rate structure is put in place which allows this level of revenue to be achieved. Customers are grouped into classes. Within each class the customers have similar usage characteristics and technical requirements. The price of electricity to users does not always reflect the exact cost of providing the service. Although the distribution costs for domestic customers is much higher than for industrial customers, the price per kilowatt hour (KWh) for both classes is comparable. This discrepancy exists due to the social obligation of the company to maintain affordable rates for all domestic customers.

The current customer classes [2] are shown below:

1. **Domestic**- Residential customers
2. **Commercial (General service) -** Customers using electricity in commercial business activity
3. **Secondary Voltage Power** - Industrial with supply provided through secondary voltage (Lower voltage) of transformer
4. **Large Power** - Industrial with supply provided through primary voltage (higher voltage) of transformers.

[2] Included in the classes which the Fuel Adjustment Charge applies are the classes of 'employees' and' street lights'.

Within each customer class rates are comprised of the following charges:

I. **Customer charge:** A fixed charge which is applied to domestic and commercial classes. This charge covers administrative and billing costs as well as costs for access to service;

II. **Energy Charge:** This is a charge per KWh which is applicable to all customer classes. The charge per KWh is constant for each KWh used for all classes except the domestic class where the structure is an ascending block structure. Within this ascending block structure the cost per KWh is higher for greater usage; this is designed to promote efficiency of use;

III. **Demand charge:** This is a charge per KVA; this refers to the peak power recorded each month. This charge is applicable to secondary voltage power and large power classes. This charge is designed to provide revenue required to facilitate additional capacity needed to supply peak power; and

IV. **Fuel Adjustment charge:** The present charge was established by the Public Utilities Board (PUB) in its Decision of May 12th 1983. The fuel clause is defined as follows in Appendix B of this decision:

> *"1) As the price of fuel increases or decreases , the monthly KWh charge for energy shall be increased or decreased by an amount calculated according to the following formula:*
>
> $$\frac{\text{Cost of Fuel}}{\text{KWh sales}} - 2.64 \text{ cents}$$

2 a) The cost of fuel shall be calculated by the Company using fuel prices provided by the fuel supplier, and the quantity of the fuel used by the Company during the month proceeding the billing month.

b) The KWh sales shall be the number of KWh sold during the month preceding the billing month.

3) A monthly reconciliation shall be made of the fuel revenue and the actual cost of fuel above or below 2.64 cents per KWh sold. Any over or under-recovery shall be deducted from or added to the projected monthly cost of the fuel in the second month following the month billed.

4) The calculation of the actual cost of fuel used in the above reconciliation shall include amounts paid for purchased power."

2.2 Current Electricity Tariffs

Monthly Rates All energy tariffs are subject to fuel adjustment charge. The price of electricity includes Value Added Tax (VAT) which has been included since 1997. There have been no other change to the base cost of electricity since 1983.

Table 1: Current Electricity Tariff Structure

Domestic Service

Fixed Charge $/month	3.45
Energy Charges	
First 100 KWh	20.2cents/KWh
Next 900 KWh	22.5cents/KWh
Over 1000 KWh	24.8cents/KWh

Domestic customers are entitled to a 10% discount on fixed and energy charges if they pay their bills within 15 days of the issue date.

General Service

Fixed Charge $/month	5.75
Energy Charge	25.9cents/ KWh

Secondary Voltage Power

Demand Charge	$4.60 /KVA
Energy Charge	23.6 cents/KWh

Large Power

Demand Charge	$3.00 /KVA
Energy Charge	19.6 cents/KWh

At the end of 2002 the company had a total of 105,195 customers of which 91,641 were domestic. This represented about 82 % of the customers.

2.3 Reporting and Monitoring

The Commission is required to monitor that rates are implemented. In order for the Commission to fulfill this mandate the company is required to send monthly reports on the following activities:

a) Fuel statistics
b) Gas turbine use
c) Reconciliation of fuel adjustment charge
d) Computation of fuel average cost
e) Revenue Summary
f) Major Outages Statistics

It should be noted that the information regarding the fuel adjustment charge is submitted in the month following that in which it is applied.

The company also submits annual audited financial reports. The Commission is required to give approval for all generation plant and equipment which the company plans to purchase to fulfill the increasing electricity demand.

2.4 Recovery of Fuel Costs

The Barbados Light & Power is allowed to recover the cost of fuel through the fuel adjustment charge as well as the basic fuel charge.

1. **Basic Fuel Charge** Every customer pays 2.64 cents per kilowatt hour towards the cost of fuel. This cost is calculated simply by multiplying no. of KWh generated by this constant. For example in the month of April 2004, the number of kilowatt hours of electricity generated was 71, 249, 541 and the revenue derived from the basic charge was $1,885, 739
   (i.e. 71,249,541 x $0.0264).

2. **Fuel Adjustment Charge** The remaining cost of the fuel is recovered through the fuel adjustment charge which is calculated based on [(fuel cost + over / under recovery -2.64 cents) / Total electricity sales in KWh].

3. HISTORY OF THE FUEL ADJUSTMENT CHARGE IN BARBADOS

The Fuel Adjustment Charge was introduced in 1965 for commercial and industrial customers and was extended to include all customers in 1974.

The PUB in its Decision, of 12th December 1973 stated:

> *"the World Energy shortage in November 1973 and after resulted in reduced supplies of fuel to the company. So that the company's rates were inevitably too low for continued consistency with costs. Because of the continued erratic, sudden and big increases in fuel prices, the company in December 1973 requested the Board to allow the company to apply a fuel adjustment clause to domestic users of electric energy. The Company had for several years been permitted to apply a fuel adjustment clause to all other consumers. The effect of such a clause is that it would operate automatically to adjust the charges for electric service to an extent required by changes in fuel costs. The board therefore permitted the Company to apply a fuel adjustment clause to consumers, so designed, that domestic users paid 2 cents per KWh less than other users as from January 1, 1974."*

The decision further stated that

> *"The Board will keep a close look at the cost of fuel and the effect of the Fuel Adjustment Clause as it applies to various classes of consumers and may make adjustments whenever it deems appropriate."*

The decision by the PUB in 1983 provides the basis of the current application of the fuel adjustment charge.

The Decision of 12th May 1983 provided:

> *"In order to generate electricity for the use of its consumers, the Company has to purchase certain quantities of fuel, and it is permitted with the approval of the Public Utilities Board to recover such expenditures through two mechanisms. One of these mechanisms is the imposition of a 2.64 cents per kilowatt hour charge in the basic rates, and the other is the fuel adjustment charge clause which has been amended from time to time to reflect changes in the types of machinery in use by the company , and to improve its efficiency."(p.5)*

The definition of the mechanism has been provided previously on page 8 of this paper.

4. PRESENT METHOD OF APPLICATION BY BL&P

In the decision issued by the PUB in 1983, the fuel adjustment charge applied each month was set based on the over recovery/under recovery from the preceding 2 months.

The company has however made modifications to the system in the following way:

1. the fuel cost for each month is based on projections rather than purely on the over or under recovery of the previous months; and
2. The over recovery is maintained as a line item on the balance sheet but is not directly added or subtracted from the fuel cost of the month following.

The company wrote to the PUB in 1985 justifying the change on the basis that the new method produced less dramatic changes month to month and was therefore less of a burden on the company from an accounting standpoint as well as on customers.

Appendix 1 indicates the difference in variations when the two methods are compared.

The fuel adjustment charge in this method is not calculated but preset in order to minimise the over or under recovery. In general if the previous month's revenue results in a high over recovery the company will set the charge at a level to compensate with a high under recovery.

Since there is no specific formula given to calculate this over and under recovery the method is not as transparent as the previous one prescribed by the PUB. The information submitted monthly to the Commission gives an indication of the over and under recovery position of the company. It shows the amount of revenue for fuel obtained through the basic fuel charge of 2.64 cents per kWh as well as the amount gained through the fuel adjustment charge.

5. FUEL ADJUSTMENT CHARGE AND OVERALL RATE BASE

The discussion above shows that the fuel adjustment charge is only one aspect of the bill contributing to the revenue requirement of the company.

In assessing the fuel adjustment charge the issue of the overall rate base also needs to be considered. An analysis of one component of the rate independently could affect the overall economic viability of the company. Although mechanisms for application of the fuel adjustment charge must be explored, an analysis of the rate base is also required since no rate hearing has been held since 1983. The energy charge includes other factors in the rate base and an analysis of these will need to take place to help determine whether 2.64 cents is still a reasonable portion of the energy charge to allocate to fuel. If this value has increased in comparison to other factors such as

operation and maintenance costs, the level of fuel adjustment charges could be reduced by placing a greater proportion of the fuel cost in the base energy rate.

Many of the disadvantages of the fuel adjustment charge relate to the overall rate of return system. This regulation does not give the company incentive to be efficient, which means over capitalisation can occur. In analysing the rate base the choice of equipment is important especially with respect to the type of fuel used by the particular equipment. If this choice sought to minimise the operational fuel cost then the fuel adjustment charge will also be reduced.

It is for these reasons that the Commission considers that the final decision regarding the fuel charge will need to be made in the context of a rate hearing.

6. ALTERNATIVE METHODS OF REGULATING FUEL CHARGE

In all electricity utilities which have cost of service regulation there needs to be a mechanism whereby the company can recover at least part of the increases in cost that they incur when there is an increase in oil prices. At times this is done by setting a variable fuel charge which may be modified periodically. In other instances the additional charge is reported as a separate line item with its own KWh charge.

Below are general advantages and disadvantages of the use of a Fuel Adjustment Charge.

Advantages

1. Allows company to recover any changing costs in fuel, allowing for greater stability, this is important to investors in the utility and the overall viability of the system; and

2. Allows for changes to occur in tariffs from month to month without the necessity of engaging in rate hearings. This therefore reduces the regulatory cost.

Disadvantages

1. The company is not given an incentive to choose the most economic fuels;
2. The system is not always transparent to customers/regulators; and
3. Over collection is not necessarily resolved on the following month or months to arrive at net value of zero.

In the current scheme the company has no incentive to reduce the cost of fuel by increasing efficiency.

In this section, alternative means through which the change in costs of fuel can be passed through to customers are considered through analysis of mechanisms utilized in three jurisdictions:

- Monthly adjustments **(Regulated Industries Commission, Trinidad & Tobago)**
- Six month Reconciliation **(Public Service Commission, Kentucky, U.S.A.)**
- Annual Reconciliation **(Public Utilities Commission, Texas, U.S.A.)**

6.1 Monthly Adjustment of Fuel Charge

In this system, the fuel charge is set for each month based on a determined average but is adjusted monthly based on increases or decreases on the cost of fuel. The Regulated Industries Commission in Trinidad regulates the fuel charge through this method as described below.

Public Utilities Commission[3], Trinidad & Tobago

Reference:

Order No. 80 (Issued 21st September, 1992)

> *"Fuel Clause*
>
> *Statement*
>
> *For every one cent change from 218.9 cents in the gross price per 1,055,100 KJs (1 million Btus) of fuel used in a month, the charge per kilowatt hour will be increased or decreased by 0.0154 cents.*
>
> *Rules of Application*
>
> 1. *The fuel charge is to be applied to all kilowatt-hours billed (including that associated with street lighting) in the month corresponding to that for which the charge was calculated.*
>
> 2. *The fuel charge revenue will be billed to customers in the month following that for which the charge was calculated and applied."*

In this jurisdiction no projected values for fuel adjustment are used. This method varies from that which was prescribed by the PUB in Barbados in the following ways.

1. The charge is applied to the month for which the charge has been calculated and is not carried forward as an over or under recovery or subtracted or added to costs for the following month.

[3] *The Public Utilities Commission was replaced by the Regulated Industries Commission in 1999 who now have regulatory responsibility for electricity.*

2. The revenue from the charge is applied to customers in the following month, therefore reconciliation occurs monthly.

The advantage of this system is in its transparency, since the fuel adjustment charge is based on actual results rather than projections which can be erroneous.

The disadvantage lies in the fact that this method may lead to large fluctuations in charges from month to month which may cause difficulties to customers and the utility.

6.2 Reconciliation after Six (6) Months

In other jurisdictions a base cost of fuel is used and set for a period of 6 months after which customers are either granted a refund in the case of over collection or required to pay a surcharge in the case of under collection. Below is an example of this system which is presently used by the Public Service Commission Kentucky, USA.

Public Service Commission, Kentucky, U.S.A

Reference:

807 Kentucky Administrative Regulations (KAR) 5:056. Fuel Adjustment Clause

Kentucky Revised Statutes (KRS) 278.30.

> *"Fuel Adjustment Clause*
>
> *Section 1*
>
> *The fuel clause shall provide for periodic adjustment per KWh of sales equal to the difference between the fuel costs per KWh and sale in the base period and in the current period according to the following formula.*

Adjustment Factor = $\frac{F(m) - F(b)}{S(m) - S(b)}$

Where F is the expense of fossil fuel in the base (b) and current (m) periods; all as defined below.

In this jurisdiction the charge is reviewed after six months, and an evaluation of operation of the clause is evaluated every 2 years.

The following refers to the process which the Commission has in place to evaluate application of the clause

At the time the fuel clause is initially filed, the utility shall submit copies of each fossil fuel purchase contract not otherwise on file with the Commission and all other agreements, options or similar such documents, and all amendments and modifications thereof related to the procurement of fuel supply and purchased power. Incorporation by reference is permissible. Any changes in the documents including price escalations, or any new agreements entered into after the initial submission, shall be submitted at the time they are entered into. Where fuel is purchased from utility owned or controlled sources, or the contract contains a price escalation clause, those facts should be noted and the utility shall explain and justify them in writing. Fuel charges which are unreasonable shall be disallowed and may result in the suspension of the fuel adjustment clause. The Commission on its own motion may investigate any aspect of fuel purchasing activities covered by this administrative regulation."

In this jurisdiction the rules are very stringent regarding calculation and reporting of the fuel adjustment clause. This method may not be suitable in the Barbados context in that the regulatory costs will be high due to the regular number of hearings.

6.3 One Year Reconciliation

The Public Utility Commission in Texas allows the utility to set a fuel charge which is based on one year projections of the cost of fuel. The fuel charge for the year is based on predicted costs and revenues. If the projections used lead to an over recovery at the end of the year, the company is required to pay a fuel refund to the customer, if the projection leads to under recovery customers are required to pay a fuel surcharge. The utilities are allowed to apply for change in the charge a maximum of twice per year if there are significant deviations from projections.

This system is ideal if the projections are accurate and the level of refund or surcharge is not substantial, as fuel charge does not show a monthly variation. If the over or under recovery is large this may lead to the company or consumers being disadvantaged over a sustained period before the end of the year reconciliation.

7. COMMISSION COMMENTS ON METHOD OF FUEL ADJUSTMENT CHARGE APPLICATION

The Commission recognises that the method adopted by the Barbados Light & Power Co. Ltd reduces the spikes and thus reduces the effect of large monthly changes. However the system employed needs a level of transparency which will satisfy customers and the Commission considers that a method should be adopted whereby the charge can be mathematically calculated rather than chosen based on information which is not readily available to consumers.

The use of a Fuel Adjustment Charge is not the only method used for recovering costs of fluctuations. In Trinidad the fuel charge changes monthly depending on increase in the price of fuel from the previous month, reconciliation therefore

always occurs on the month following . Some jurisdictions use a fuel charge which is annually determined and then reconcile at the end of six months or one year.

Whichever method is chosen, the transparency of the process could be increased if the Commission is required to receive relevant information on choice of generation fuels. This issue is discussed in more detail later in the paper.

Q1. What are your views on the method currently used by BL&P to set the fuel adjustment charge? Do you have any suggestions for an alternative method?

Q2. Do you have any suggestions for an alternative to the Fuel Adjustment Charge that can be applied?

8. GENERATION MIX AND ACCUMULATED PRODUCTION RATIO (APR) REQUIREMENT

The generation mix of the company significantly affects the cost of fuel used in producing the electricity and thus determination of the level of the fuel adjustment charge. The monthly generation mix is determined by the maintenance needed on generation equipment, both scheduled and unexpected, as well as the choice of generation technology that the company makes in planning for expansion. In recognition of this, the PUB in 1977 established a limit to the use of gas turbines which were less fuel efficient and used more expensive fuel for operation. The gas turbines were not to be responsible for more than 5% of the electricity generated per month from all generation. This variable in the generation mix was defined as the Accumulated Production Ratio (APR).

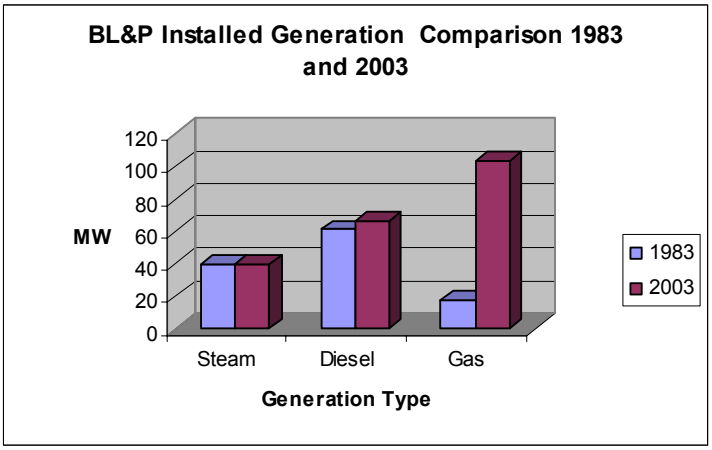
The Public Utilities Board decision of August 25th, 1977 stated the following:

> *"The board however views with considerable concern the situation which could arise in the event of extended use of the Gas Turbine. With the high firm generating capacity which now exists, the probability of prolonged use of the Gas Turbine should be remote, although the Board recognizes that routine maintenance procedures will dictate its occasional use. The Board therefore directs that use of this plant be kept at a minimum and that at no time shall the accumulated production ratio for the Gas Turbine exceed 5% without the prior permission of the Board. The Fuel Clause has been altered to reflect this direction."*

This action was taken since the fuel for the gas turbine was more expensive than Bunker "C" used in the other plant. Subsequent to 1977 the company has expanded its plant and the generation mix has changed significantly.

8.1 Comparison of Installed Generation Plant at BL&P 1983 to 2003

The chart below shows the comparison of installed generation comparison of Barbados Light & Power in 1983 and 2003. The graph indicates the significant increase in gas turbine installed capacity during the period.



Generation sets may be operated by the fuels shown below:

Steam Turbines	**-** Bunker "C" diesel, natural gas
Low Speed Diesels	- Bunker "C", diesel
Gas Turbines	**-** Diesel, Jet fuel.

Gas turbines represent the largest share of the generation mix 49%, compared to 15% in 1983. This increase has led to a steady increase in the APR well above the initial stipulation of 5%. The Barbados Light & Power endorsed the Commission of this situation and the Commission appreciated that some revision of the 5% was required. This view was also supported by the Report prepared by Kenderhall Enterprises Limited for the PUB in April 2001.

The 60 MW of diesel plant being installed at Spring Garden is expected to be in operation before the end of 2004 and this should lead to reductions in the APR of the gas turbine and fuel adjustment charges

Of the four fuel types used by Barbados Light & Power, aviation jet fuel and diesel are the most expensive. The diesel price is set by government and is currently $590 per tonne. Aviation fuel is similar in price but varies with international petroleum prices.

The retail price of Bunker "C" fluctuates between $300 and $400 per tonne as illustrated in Appendix 2. Bunker "C" is the predominant fuel used in the steam and low speed diesel sets which operate 24 hours per day.

Natural gas is the cheapest of the fuels used in generation, but is only used when available from National Petroleum Corporation. The use of this fuel has reduced in the last five years as the use of natural gas has been used to service domestic needs.

The attractiveness of natural gas use is enhanced by the fact that this source produces less carbon dioxide per tonne burned than other fossil fuels. This is significant as the emission of carbon dioxide has been linked to climate change phenomena such as rising sea levels, and inundation of coastlines.

Barbados and Caribbean countries are extremely vulnerable to the effects of climate change. This vulnerability has led to the consideration of the use of non fossil fuel sources such as wind and biomass in energy generation. If these are introduced this could further reduce fluctuations in resulting fuel adjustment charges.

The large share of the generation by gas turbines means that the cost for generating electricity is higher than if diesel or steam turbines were used to a greater extent. This consequently has a considerable impact on the level of the fuel adjustment charge.

In most cases, the least expensive fuel is the first choice for generation. However, in certain instances the technical specifications require that some quantity of the more expensive fuel is used during operation. Diesel, for example, is sometimes required for start up of the low speed diesel sets.

The table below shows the changes in plant composition made by BL&P between the rate hearing in 1983 and the present

Table 2: BL&P Plant Composition Changes Subsequent to 1983

Year	Change in Plant Composition
2004	Installation of 60 MW low speed diesel plant
2002	Installation of 20 MW gas turbine
2001	Retiring of 16 MW low speed diesel plant
1999	Installation of 20MW gas turbine
1996	Installation 13MW gas plant
1991	Installation 0.4MW low speed diesel
1990	Installation 13MW gas turbine and 6.5 MW diesel
1987	Installation of 12MW low speed diesel
1985	Installation of 1.1 MW low speed diesel

An analysis of the fluctuations in oil prices with the fluctuation in fuel adjustment charge as shown in Appendix 3 indicates that variations were similar to changes in international fuel prices. However in 2000 there was a marked increase in the fuel adjustment charge relative to the price index of fuel. This correlated with the increase in the gas turbine generation in 1999 which was followed less than 2 years later by the retirement of 16MW of low speed diesel capacity which was operated primarily on Bunker "C". This meant that in this period more baseload capacity was provided by the gas turbines. This increase in fuel adjustment charge was made even more significant by the large increase in the prices of jet fuel that occurred almost simultaneously. The PUB accepted the application of the BL&P to install gas turbines based on the low cost of the fuel at the time of installation and the projected future costs to the company. The steep rise in prices of this fuel however indicates that the projections used to justify the use of this fuel did not predict accurately the changes that occurred.

9. COMMISSION COMMENTS ON GENERATION MIX

The discussion in Section 8 illustrates a number of challenges that exist in terms of eliminating fluctuating fuel adjustment charges as well as minimising consumer costs. Decisions regarding the best way to use existing plant are currently made by the management of BL&P who have a level of expertise in this area. It is, nonetheless also critical to establish that the company demonstrates due diligence in maintaining its plant and equipment to ensure that customers are not unduly burdened when base plant load machinery is out of use.

The Commission is of the view that justification and basis for projections in use of plant should be submitted to the Commission as well as the expected maintenance schedule for equipment. In jurisdictions such as Kentucky USA, the utility is required to justify the fuel purchases made in order to apply the fuel adjustment charge.

The Commission realises that with oil prices still being unpredictable a mechanism where the company can recover these increased costs is essential. There however needs to be an incentive to encourage the company to continually strive for the least cost fuel options. The APR level of 5% does not appear to be relevant given current technology but the Commission is of the view that limits should still be set in terms of the mix of generation fuels. This would be preferable to an indicator set in terms of generation technology which is not necessarily a measure of efficient fuel use.

Q3. Do you consider that the APR limitation of 5% should be enforced on the company by the Commission? Give reasons.

Q4. Do you have any alternative suggestions of a mechanism to ensure efficiency of fuel use?

Q5. Do you consider that BL&P should be required to submit the maintenance schedule for generation plant to the Commission?

Q6. Do you consider that the company should be required to submit projections of prices of fuel inputs periodically and methodological basis of these to the Commission?

10. CONSULTATION PROCESS

10.1 Background

The Fair Trading Commission ("the Commission") established by the Fair Trading Commission Act, CAP 326B, is the independent regulator of international and domestic telecommunications services and electricity services.

In carrying out its duties as an independent regulator, the Commission must operate in a transparent, accountable and non-discriminatory manner. Consultative documents and the public consultation process are the main ways in which the Commission discharges its responsibilities relating to transparency and accountability.

In addition, the Commission is specifically charged under the Fair Trading Commission Act CAP 326B to consult with interested persons when it is discharging certain functions.

Section 4(4) of the *Fair Trading Commission Act, CAP. 326B* states:

> *"The Commission shall, in performing its functions under subsection (3)(a), (b), (d) and (f)[4], consult with the service providers, representatives of consumer interest groups and other parties that have an interest in the matter before it."*

[4] Section 4(3) of the Act states:

The Commission shall, in the performance of its functions and in pursuance of the objectives set out in subsections (1) and (2):

(a) establish the principles for arriving at the rates to be charged by service providers;
(b) set the maximum rates to be charged by service providers;. . .
(d) determine the standards of service applicable to service providers;. . .
(f) carry out periodic review of the rates and principles for setting rates and standards of service of service providers.

10.2 Consultative Documents

On important issues that arise in the regulation of the utility industries, the Commission may issue a consultative document, a public discussion paper, in which the Commission:

(a) brings to public attention important issues relating to utility regulation to promote public understanding and debate;
(b) puts forward options and/or proposals as to the approach to adopt in dealing with these issues, to seek to resolve them in the best interests of the consumer, the service provider and the society at large; and
(c) invites comments from interested parties, such as consumers, service providers, businesses, professionals and academics.

The issues at hand will influence the nature of the document and its content. On some issues, the Commission may simply set out what it regards as the available options and, although there would be some analysis of the pros and cons of the options, it might be that no one option emerges as the favoured or proposed approach. On other issues, the Commission might set out a clear preference for a particular approach and invite comments on this basis.

The views and analysis set out by the Commission in a consultative document are intended to invite comments which may cause the Commission to revise its views.

The consultative document generally includes a series of specific questions on which the Commission is particularly seeking comments. To ease the task of analysing comments, respondents should reference the relevant question numbers in the document. If they consider it appropriate, respondents may wish to address other aspects of the document for which the Commission has not prepared specific questions. Failure to provide answers to all questions will in no way reduce the

consideration given to the entire response. Commercially sensitive material should be clearly marked as such and included in an annex to the response.

10.3 Responding to this Consultation Paper

The Commission invites and encourages written responses in the form of views or comments on the matters discussed in the Paper from all interested parties including Barbados Light & Power Ltd., other regulated or soon to be regulated utilities, other licensed operators, government ministries, non-governmental organisations (NGO'S), consumer representatives, residential consumers, business of all sizes and their representatives, the academic community and all other stakeholders.

The Consultation period will begin on **September 13th, 2004** and end on **November 29th, 2004 at 4.00 p.m**. All written submissions should be submitted by this deadline. The Commission is under no obligation to consider comments received after 4:00 p.m. on November 29th, 2004.

Copies of this Consultation Paper can be collected between the hours of 9.00 a.m. to 4.00p.m, Mondays to Fridays during the consultation period from the Commission's offices at the following address:

Fair Trading Commission
Manor Lodge
Lodge Hill
St. Michael
BARBADOS

The Consultation Paper can also be downloaded from the Commission's website at http://www.ftc.gov.bb

Respondents to the Consultation may submit responses in electronic format. The Commission would prefer that email responses be prepared as word documents, attached to email cover letter and forwarded to: info@ftc.gov.bb

Responses can be faxed to the Commission using fax number (246) 424-0300.

Mailed or hand delivered responses should be addressed to the Commission Secretary at the above mailing address.

10.4 Confidentiality

The Commission is of the view that this consultation is largely of a general nature. The Commission expects to receive views from a wide cross section of stakeholders and believes that views and comments received should be shared as far as possible with all respondents.

Respondents should therefore ensure that they indicate clearly to the Commission any response or part of a response that they consider to contain confidential or proprietary information.

10.5 Analysis of Responses

The Commission expects, in most consultations, to receive a range of conflicting views. In such circumstances, it would be impossible for the Commission to agree with all respondents. Through its documents the Commission will seek to explain the basis for its judgments and where it deems appropriate give the reasons why it agrees with certain opinions and disagrees with others. Sometimes analysis of new evidence presented to the Commission will cause it to modify its view. In the interests of transparency and accountability, the reasons for such modifications will

be set out and, where the Commission disagrees with major responses or points that were commonly made, it will in most circumstances, explain why.

10.6 List of Questions

Q1. What are your views on the method currently used by BL&P to set the fuel adjustment charge? Do you have any suggestions for an alternative method?

Q2. Do you have any suggestions for an alternative to the Fuel Adjustment Charge that can be applied?

Q3. Do you consider that the APR limitation of 5% should be enforced on the company by the Commission? Give reasons

Q4. Do you have any alternative suggestions of a mechanism to ensure efficiency of fuel use?

Q5. Do you consider that BL&P should be required to submit the maintenance schedule for generation plant to the Commission?

Q6. Do you consider that the company should be required to submit projections of prices of fuel inputs periodically and methodological basis of these to the Commission?

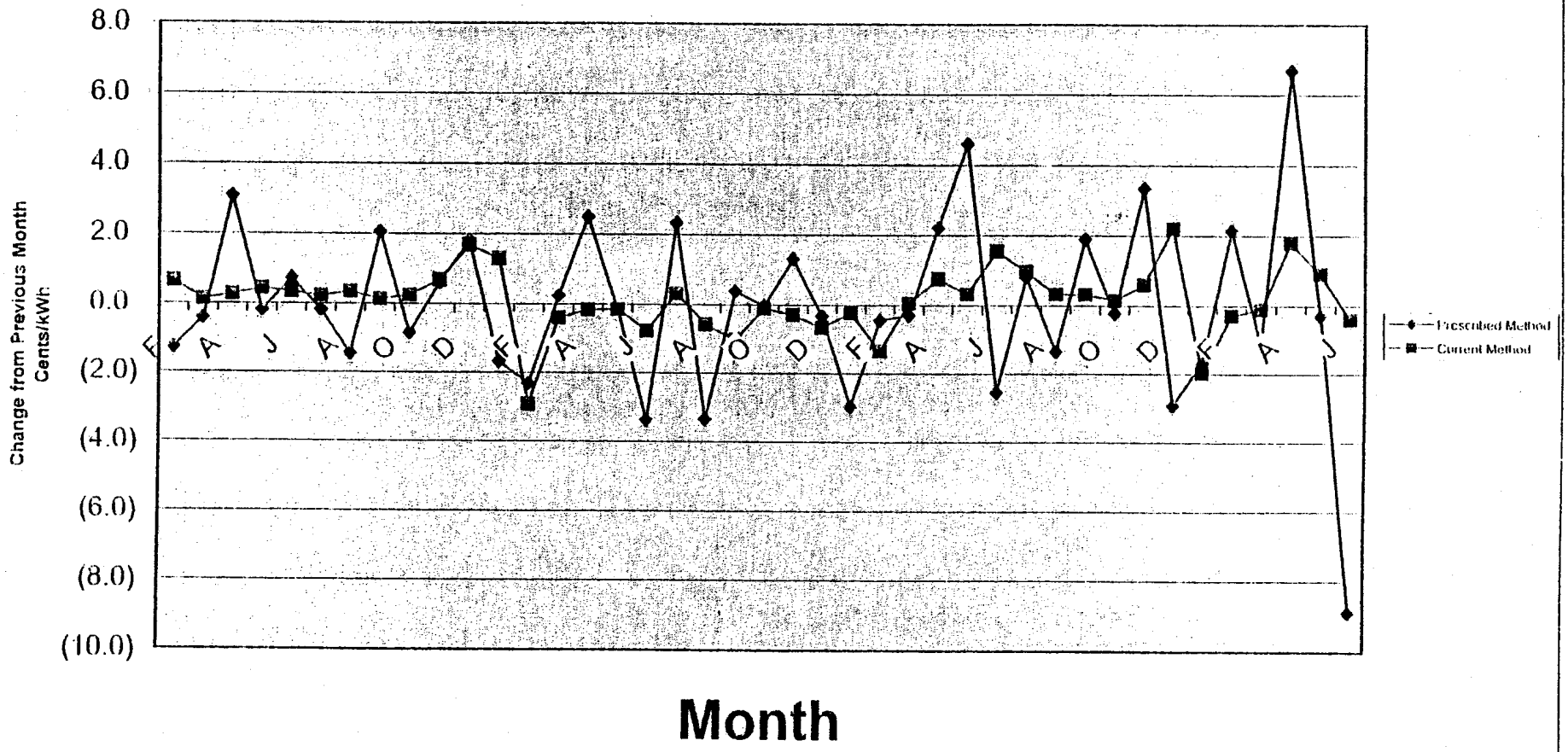
APPENDICES

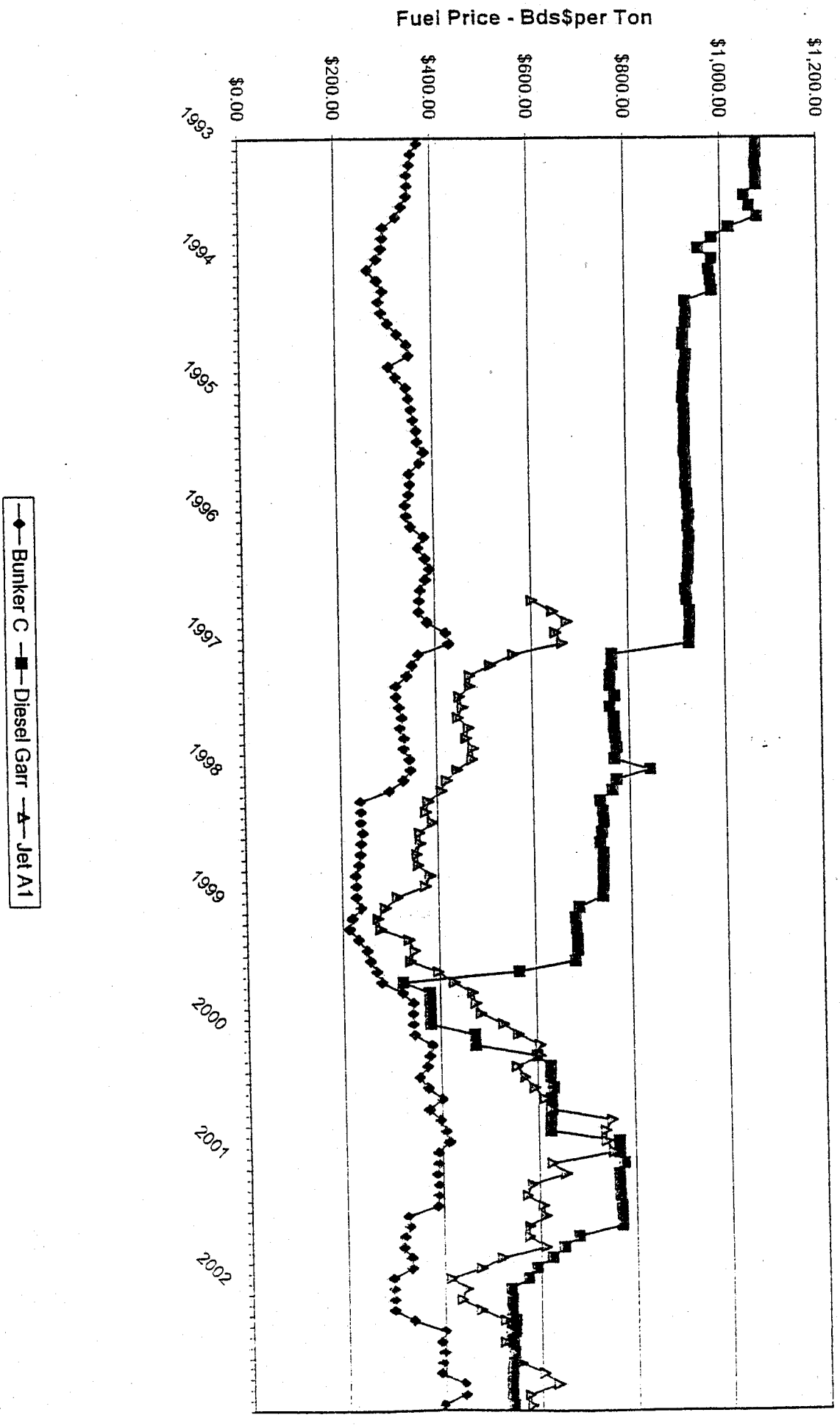
1. **Monthly Variations in Fuel Clause Adjustment Jan 2000 to June 2003**
2. **Barbados Light & Power Co. Ltd Average Prices of Fuel Delivered**
3. **Fuel Prices vs Fuel Adjustment Charge**

These graphs showing variations of costs of fuels and fuel adjustment charge were provided by the Barbados Light & Power Co. Ltd.

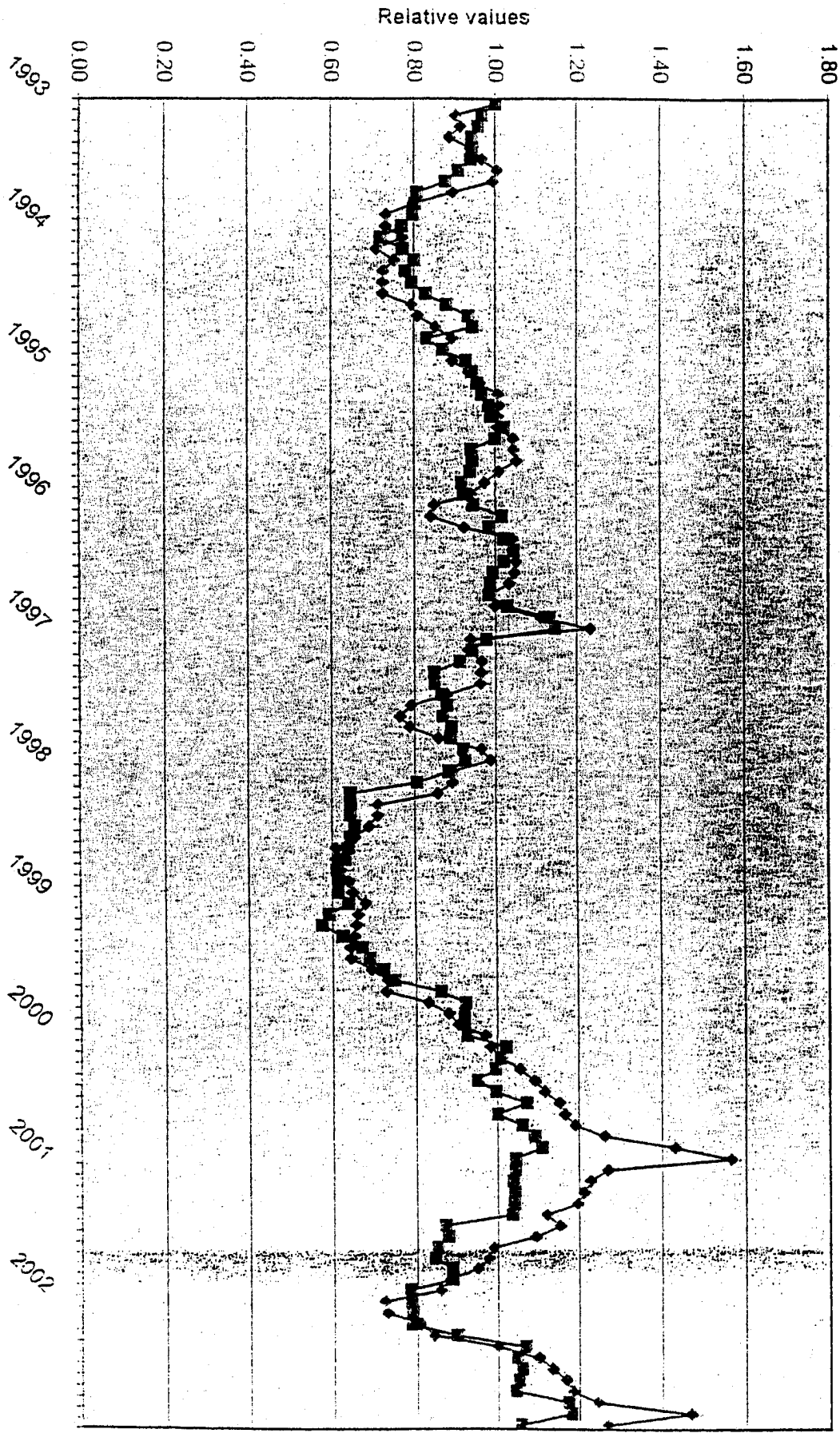
Appendix 1

Monthly Variations in Fuel Clause Adjustment
Jan 2000 to June 2003
Prescribed vs Current Method




The Barbados Light & Power Co. Ltd
Average Prices of Fuel Delivered
Fuel Price - Bds$per Ton
$1,200.00
$1,000.00
$800.00
$600.00
$400.00
$200.00
$0.00
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
Bunker C
Diesel Garr
Jet A1

Fuel Prices vs. Fuel Adjustment



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