DECISION DOCUMENT

TARIFF REGIME

FOR

DOMINICA ELECTRICITY SERVICES LTD

Document Ref: 2009/004/D

Independent Regulatory Commission
42-2 Kennedy Ave. 3rd Floor,
Roseau, Commonwealth of Dominica
Office: 767 440 6634/7247 Fax: 767 440 6635
www.ircdominica.org

INDEPENDENT REGULATORY COMMISSION

Decision

Electricity Supply Act No 10 of 2006

This document sets out the Decision of the Independent Regulatory Commission – **2009/004/D "Tariff Regime for Dominica Electricity Services Ltd"** - taken by the Commission at its meeting on April 17, 2010.

The Commission now **ORDERS** that these Rules, made pursuant to Sections 40 and 41 of the Electricity Supply Act No 10 of 2006, will become effective on the date given below.

Effective date: April 30, 2010

By Order

……

LANCELOT MCCASKEY
EXECUTIVE DIRECTOR
On Behalf of the Commission
April 17th, 2010

Table of Contents

Part A - Tariff Regime For Dominica Electricity Services Ltd

Introduction

The Independent Regulatory Commission established pursuant to the Electricity Supply Act 10 of 2006 (the ESA, the Act) has responsibility for regulating the electricity sector in the Commonwealth of Dominica. Amongst its principal responsibilities is the duty to set tariffs that are cost reflective and balance the interests of consumers and the service providers alike.

The previous Act, the Electricity Supply Act of 1996, was repealed with the enactment of the later Act, that of 2006. Although there is an incumbent monopoly provider of electricity services, Dominica Electricity Services Ltd (DOMLEC), the Act provides for competition in generation, transmission, distribution and supply, and this regime is expected to continue at least until 2015 when the DOMLEC Licence expires.

The procedures for setting tariff are provided for in the Act and notwithstanding the provisions that previously obtained in the 1996 Act, the Commission determined on November 27, 2008 that it would not undertake further tariff adjustments under those arrangements. The Commission is mindful that a new tariff regime has to be established with some urgency and in January 2009 it signaled that it would be initiating a proceeding to consult on the matter. The Commission has also been of the view that a new tariff regime must be cast as a long term arrangement, perhaps even in the context of a new Licence for DOMLEC and therefore it has been seeking to identify and address the critical issues that would inform the development of the tariff regime.

The Commission had retained a consultant in 2008 to review the existing tariff and to recommend a tariff model for introduction under the Act. This work was completed in December 2008; the Commission had a public meeting in January 2009 to discuss the consultant's report and recommendations.

The Commission, having had regard to the various inputs from the public, the Tariff Consultant and DOMLEC, now sets out its thinking regarding the Tariff regime for DOMLEC.

In this document, levels of tariff are not considered. The Commission is of the view that the governing principles for the development and setting of the tariff are the critical matters which must be put into Rules. Once these are promulgated, the matter of the actual tariff will be follow as a matter of course.

Legal Framework

The primary legislation governing the electricity sector in the Commonwealth of Dominica is the Electricity Supply Act 2006 (the Act, ESA 2006). It establishes the IRC as a body corporate for "*the purpose of performing the functions and carrying out the duties conferred on it ….*". Among other things, the Act provides the framework for the Commission to grant, amend or revoke licences for generation and/or transmission and/or distribution and supply of electricity, to set prices and tariffs, and to protect the interests of consumers and investors alike. The Act also grants a licence to DOMLEC to generate, transmit, distribute and supply electricity up to December 31, 2015, subject to the regulatory jurisdiction of the IRC.

The independence of the Commission in so far as the performance of its duties under the Act is enshrined at Section 18.

Section 18

> *"The Commission shall be independent in the performance of its functions under this Act and shall not be subject to the direction and control of the Government or of any other person, corporation or authority, except that the Commission shall have due regard to the public interest and overall Government policy as embodied in legislation"*

The Commission's general powers, duties, responsibilities and functions are provided for at Sections 19, 20, 21 and 22.

Section 19

> *"The commission shall have sole and exclusive authority to regulate all electricity entities that are subject to this Act and shall have full powers to regulate all licencees with regard to all economic and technical aspects of regulation in accordance with this Act especially with regard to the determination of tariff or electricity charges."*

S. 20. 1 prescribes the general duties of the Commission:

> *The Commission shall, without limiting the generality of this section, have a duty to perform and exercise its functions and powers under this Act which it considers best calculated to:*

(a) *encourage the expansion of electricity supply in Dominica where this is economic and cost effective and in the public interest;*
(b) *encourage the operation and development of a safe, efficient and economic electricity sector in Dominica;*
(c) *ensure the security and efficiency of supply of electricity in Dominica through the conduct of an efficient long – term supply planning process with due regard to future potential generation sources such as geothermal and wind energy;*
(d) *facilitate the promotion of fair and sustainable competition in the electricity sector where it is efficient to do so;*
(e) *protect the interests of all classes of consumers…. as to the terms and conditions and price of supply;*
(f) *ensure the availability of health and safety guidance in relation to electricity supply to the public;*
(g) *ensure that the financial viability of efficient regulated undertakings is not undermined;*
(h) *facilitate the collection, publication and dissemination of information relating to standards of performance by licensed operators and for the electricity sector in Dominica for use by the electricity industry and consumers and by prospective investors in the sector; ……*

While some of the general functions of the Commission, as provided at S. 21 (1), are:

(a) …….
(b) issue, monitor and amend licences;
(c) establish, maintain review and amend as appropriate technical and performance standards for all types of facilities including hydro in the electricity sector and enforce compliance;
(d) establish, maintain, review and monitor safety standards for all types of facilities, including hydro facilities, in the electricity sector and shall monitor and enforce compliance with such safety standards;
(e) establish, maintain, review, monitor and amend as appropriate, customer care standards;
(f) regulate prices charged to consumers where this is not supplied on a competitive basis, and the methods by which they are to be charged;
(g) approve, modify, monitor and enforce terms and conditions for the supply of electricity to consumers;
(h) review, approve and propose modifications to the transmission codes and to the distribution codes that govern sector entities;
(i) ……..
(j) ……
(k) ……
(l) ……..…

(m) monitor the performance of licencees against mutually agreed targets and bench marking standards;
(n) review development plans, expansion programmes and fuel cost efficiencies of licencees;
(o) mutually agree with electricity providers and set operational and efficiency standards and bench marks for licencees;
(p) review and report on the efficiency of asset utilization and optimization and the appropriateness and implications of rate structures;
(q) …….

The Procedure for the setting and review of tariffs for electricity supply is provided at Sections 23 and 24.

Section 23
(1) An electricity service provider shall not –

(a) Offer service unless it has, prior to offering such services, filed its proposed tariffs with the Commission and such tariff rates and charges have come into effect pursuant to section 24; and

(b) Make changes on tariffs, or other terms of the service after proposed tariffs have been filed with the Commission, except as authorized under this section.

(2) An electricity service provider shall submit tariff proposals in conformity with this section in writing to the Commission with respect to the tariffs it intends to apply for the use of its systems, facilities and services.

(3) Proposed tariffs filed under subsection (2) shall contain all relevant information concerning rates and charges for services, including deposits, non-recurring charges and monthly charges as well as terms and conditions applicable to the provision of services, including disputes or claims over billing or provision of services.

(4) A Licencee shall make tariffs available to the public by publishing such tariff in the Gazette and two local newspapers.

(5) All proposed tariffs filed with the Commission shall be kept complete, accurate and up to date.

(6) After a proposed tariff has been filed with the Commission and has come into force and effect, no changes may be made in the rates, charges or other terms of service relating to all the services provided under the tariff, except upon the filing and review of tariffs as provided in this Act.

(7) Proposed Tariffs shall:

(a) Be accompanied by all accounting and costing information as the Commission may require; and
(b) Comply with all the other requirements and conditions as shall be applicable to the licensee concerned.

Section 24

(1) All tariffs proposed by a licensee shall conform with the principles and provisions governing tariff formulation established by the Commission pursuant to the legislation for the time being and shall be submitted to the Commission for review as to their conformity with such principles and provisions.

(2) The Commission shall within 60 days of the submission of the tariff proposed under subsection (1), make a determination to:

(a) approve the tariff without amendment
(b) conditionally approve the tariff subject to amendments specifically proposed by the Commission being accepted by the licensee; or
(c) reject the tariff proposal outright, stating clearly in writing the reasons for such rejection, which reasons may include a determination that the tariff is not ripe for review.

(3) In the event that the Commission makes a determination under subsection (2) (b) the licensee may submit a revised tariff within 30 days of the determination; and the Commission shall make a new determination in accordance with one of the three options specified in subsection (2) within 30 days of such submission.

(4) In the event of an outright rejection of the proposed tariff under subsection 2 (c), the Licencee may file a new tariff at any time; or may file a petition to the Commission for reconsideration of such rejection.

(5) A petition shall be filed within 30 days of the rejection and shall state the Licencee's basis for reconsideration, which may include fundamental change in circumstances from the conditions that prevailed when the tariff was originally rejected by the Commission.

(6) In the event that the Licencee files a petition for reconsideration under subsection (4), the Commission shall act upon such petition within 30 days and make a determination in accordance with one of the three options set forth in subsection (2).

(7) If the Commission fails to act on a tariff submission pursuant to this section within the timeframes for determination specified in subsections (2), (3) and (6), the tariff shall be deemed approved until such time as the Commission makes a determination.

S.86. repeals the 1996 Act and establishes the Commission's jurisdiction over Dominica Electricity Services Ltd (DOMLEC), *the Company.*

Section 86

(1) The Electricity Supply Act 1996 is hereby repealed.

(2) Not withstanding subsection (1) and any other law –

(a) The Company shall be licensed to generate, transmit, distribute and supply electricity up to December 31, 2015 subject to the regulations imposed by the Independent Regulatory Commission.

(b) If the Company fails to conform to the regulations imposed by the Commission, the Company's licence shall be revoked by the Commission if in the opinion of the Commission the revocation of such Licence will serve the public interest.

(c) *Within six months of the establishment of the Commission, the company shall comply with the provisions of this Act and in particular section 23 and section 24 as if it has not been licenced under this Act and seek to get the tariff approved by following the procedures prescribed in the aforementioned sections.*

Regulatory Policy Objectives

The Commission's regulatory policy is to establish a tariff which balances the interests of the consumers and investors alike where the investors have the opportunity to realize a fair return on investment while customers can expect an efficient, responsive and economical service in an environment where the rights of all stake holders are preserved. The Commission will not guarantee a rate of return to the investors but will seek to create a regulatory environment where the incentives are such that the company through efficient operational practices and continual efficiency improvements will have the opportunity to achieve the desired rate of return during any tariff period.

Tariff Principles

There are basically two models for a tariff structure which could apply in the Dominica situation.

1. A tariff which includes all the costs including the costs of fuel, based on a projected cost of fuel over the tariff period; or

2. A two part tariff comprising (i) a non fuel base rate and (ii) a fuel charge, which fully recovers the cost of fuel (subject to efficiency factors) and no more.

Both methods use the same techniques and parameters for estimating revenue requirements the exception being that in the first case fuel is included in the revenue requirements while it is not in the second case. The options for treating with fuel costs is discussed separately. The Commission has accepted option No. 2 and will allow a 100% pass-through of fuel costs.

The average tariff that will be in effect from time to time shall be consistent with the following:

$$\mathbf{RR = OC + FC + GO}$$

Where

RR = Revenue Requirement
OC = Operating Cost
FC = Financing Cost
GO = A provision to recover or return the cost of Obligations imposed by government which were not known or anticipated at the tariff review.

The "Average Rate" then becomes the Revenue Requirement ($) divided by the forecast sales (kWh).

$$\textit{Average Rate} = \textit{Revenue Requirement (\$)} / \textit{Sales (kWh)}$$

Revenue Requirements

The Utility's revenue requirement is calculated as the sum of its estimated costs of providing service, where a fair return is included as one of those costs. These forecasted funding levels have to be sufficient to get the required work done without adversely impacting quality of service, or compromising reliability, customer service or safety: any disallowance resulting in deferral of projects or work activities must be carefully considered and weighed against these criteria.

The Revenue Requirement consists of the sum of Operating Costs and Financing Costs required for providing electricity service.

RR = Operating Costs + Financing Costs

Where RR = Revenue requirement
Operating Costs = Costs of labour, non-generation fuel, depreciation, income taxes, deferred costs
Financing Costs = Cost of capital which includes cost of debt and equity.

The critical exercise is to determine the forecast of the revenue requirements based on a sustainable and defensible estimate of the expenses for the base year. One approach is where the base year is the year for which the most recent published annual reports and audited financial statements are available and from which the ***Test Year***[1] (the forecasted year), representing a forecasted statement of expenses and costs that are known and measurable is derived.

In any event, in all cases, the expenses that are ultimately approved for inclusion will be those that are determined by the Commission to be prudent.

The non-fuel revenue requirement is developed based on a combination of demonstrated historic costs and forecast costs. The fuel revenue requirement is by definition a 100% pass-through of actual cost and will change monthly according to an agreed-to formula.

The revenue requirement for the Base Rate is then:

Base Rate RR = NFOC + FC + GO + RF

Where:

RR = Revenue Requirement
NFOC = Non-Fuel operating Costs (this includes non-generation fuel)
FC = Financing Costs
GO = Government Obligations, and
RF = Regulatory Fees

The Cost of Fuel is defined as the cost of fuel delivered to its storage facilities at its thermal generating stations. Fuel Operating Costs will be calculated with the use of the weighted average cost of fuel consumed during the month in question.

[1] A "Test Year" is a 12-month period used as the basis for presenting information to regulators regarding the results of a utility's past or future operations. This period may or may not coincide with calendar years.

The cost of fuel will be a 100% pass through and shown as a line item charge in the tariff.
The Revenue requirement will, therefore, be based on a test year which will take into account all efficient non fuel operating costs (including non-generation fuel costs), depreciation expenses, taxes and a fair return on investment.

Forecasting Methodologies: Operating Costs

Operating Costs

Operating Costs = Costs of labour, non-generation fuel, depreciation, income taxes, deferred costs, etc

"Operating Costs" refer to Operation, Maintenance and Administrative (OMA)[1] costs required to provide the utility service, which typically include the cost of labor, fuel, depreciation, income taxes, and certain deferred costs. The comparison of OMA expenditures starts with escalating the recorded costs for the period under review; "***Historical adjustments***" are made to remove cyclical and unusual expenses incurred during that recorded period. These are **normalized adjustments** to the utility's historical data for costs incurred for non-recurring, unusual, or one-time expenditures for ratemaking purposes to reflect what should be the utility's normal and reasonable costs of doing business. An example of one-time expenditures to be removed would be costs of one off specific studies that will not be continued or replicated in the future. The forecast then has to account for "***future adjustments***" to incorporate anticipated cyclical and unusual activities and expenses that the utility plans in the forecasted period. Non-fuel operating costs are all prudently incurred costs which are not directly associated with investment in capital plant including OMA expenses.

There are several forecasting methods that can be used to develop an estimate of Test Year expenses. The four methods most often applied are: linear trending, averaging, last recorded year, and budget-based estimates.

1) If recorded expenses in a particular account have shown a trend in a certain direction over the period under review, then the most recent point in the trend is the most appropriate base estimate for the Test Year. As a general rule of thumb, if there is a downward/upward trend in the cost history then the last recorded year can be indicative of future cost estimates.

2) Averaging is an appropriate forecasting methodology when the underlying activities and related expenditures are cyclical in nature

[1] OMA expenses refer to expenses incurred for normal plant operations.

or when they are influenced by weather or other external forces beyond the control of the utility.

3) The last recorded year method can be used where programmatic changes are instituted, which will likely impact future costs in the same way.

4) A budget-based forecast generally will be given less weight than forecasts based on recorded spending, because for on-going functions a multi-year historical spending pattern suggests a utility's willingness and ability to commit to a budgetary plan on a sustained basis. A budget-based estimate becomes more appropriate than historical costs where the focus and structure of an organization was constantly changing during the historical period, i.e. due to reorganization, in such instance historical costs are not relevant for forecasting purposes.[1] A budget-based methodology can be considered as a viable forecast in instances where there is no cost history, for example the introduction of new programs.

Typically, the utility's OMA expenses will remain relatively constant from year to year reflecting primarily the impact of inflation in current terms. Expenses associated with extraordinary events, say, the impact of natural disasters, are usually readily identifiable and should not be included in forecasted costs.

Elements of the OMA expenses

The typical elements OMA expenses are

- Employee salaries, wages and benefits
- Travel
- Communication
- Information technology
- Office expenses
- Public relations
- Legal and professional
- Equipment and line repair/maintenance
- Insurance
- Bank and credit card charges
- Security
- Commercial costs – meter reading, billing, etc

[1] If the budget-based method is selected then a comparison still has to be made with historic data.

- Other expenses

There are a number of other expenses, which must be considered including Depreciation, Taxes and Deferred Costs.

Depreciation Estimate

Depreciation is the most significant expense for most utilities and it is the means by which the utility recovers from ratepayers funds (over time) provided by investors (up front) for the construction or acquisition of tangible assets and utility plant. This systematic recovery of an asset's cost over its useful life is recorded in the company's income statement as an expense. In determining the depreciation rates to recover the cost of capital assets over their remaining useful life, the only assets to be considered are those that have been allowed into rate base. Since the depreciation expense is an estimate, any over or under recovery is reconciled in future depreciation charges. It is recommended that DOMLEC conducts depreciation studies periodically.

The purpose of depreciation is to allow a utility to recover the original cost (less net salvage) of fixed capital investment over the useful life of the plant by means of an equitable plan of charges through operating expenses. The depreciation expense is a function of the level of plant balance and of the parameters (net salvage value and service life) that are applied to the gross salvage amount received less the cost of removing the asset.[1] The depreciation calculation can be made using a straight-line remaining life basis method, which uses depreciation rates based on net salvage, average service lives, remaining lives and mortality dispersion patterns developed from a depreciation study.[2]

Depreciation rates can change over time. However it is incumbent on the utility to provide *Depreciation Studies* to justify any changes to the estimated removal or decommission cost, the estimated salvage value and the estimated remaining useful life in years. These are all the estimates necessary to determine annual depreciation:[3] any changes to these parameters have to be approved by the regulator to ensure reasonable capital recovery.

---

[1] Net salvage represents the gross salvage amount, less the cost of removing the asset when it is retired from service. It can either be positive or negative. The salvage is negative when it costs more to remove and dispose than the asset is worth. Net negative salvage value is determined by subtracting the cost of removing the asset from the salvage value.

[2] See NARUC on Depreciation Practices.

[3] Depreciation is calculated as follows:

Annual Depreciation= (B-A+R-S) ÷ RL
B= Original Cost (or Net Book Value)
A= Accumulated Depreciation
S= Estimated Salvage Value
RL= Estimated Remaining Useful Life in years

DOMLEC will carry out a Depreciation Study prior to the second Tariff Review.

Tax Expense Estimate

If *income taxes* are charged to the utility, there are two ways to treat income taxes as an expense: i) reflect only income taxes payable during the period under review; or ii) reflect income taxes related to the period under review regardless of when they are paid. The latter is the most prevalent approach among utilities. Tax expense is the composite of projected taxable income streams, book expenses, special tax deductions, and tax credits. It is calculated as stipulated under tax law but it may be subject to a different treatment for regulatory purposes as determined by the Commission.[1]

Deferred Cost Estimate

Deferred costs are costs that have been incurred by the utility that have not yet been recovered from ratepayers. These cost deferrals occur because in determining revenue requirements estimates are used, which may vary from actual costs. The utility can record these costs in a deferral account and, once regulatory approval is obtained, these costs can be recovered from ratepayers through an adjustment in future rates. This treatment of deferred costs allows for rate stability and predictability. It is advisable that these costs be recovered as close as possible to the time they are incurred, i.e. usually within two to three years.

If the utility requests funding for projects that were deferred during the historic period, then it has to provide the analysis identifying the positive and negative impact of deferring each project, such as recorded incidents of adverse quality of service, reliability, customer service or safety due to the project or work activity deferrals.[2]

Provisions for costs incurred as a result of natural disasters

DOMLEC, like other utilities in the hurricane belt of the Caribbean region, has not, in recent years, been able to access insurance coverage for outside plant at reasonable costs. The Commission believes that it would not be unreasonable for DOMLEC to make provision in its revenue requirements for a self insurance fund and to provide other mechanisms to ensure that in the event of a disaster, the company will have immediate access to a sufficiency of funds to meet its immediate needs for restoring supplies.

[1] The accounting treatment of tax expenses for tax filing purposes can be different from submissions for regulatory purposes.

[2] An example common for many utilities was the deferral of costs due to Y2K in 1999. These utilities still had to justify the expenses of deferred projects/programs if they were included in a subsequent Revenue Requirement application.

The rules and procedures for managing and accessing the fund will be subject to the approval of the Commission. DOMLEC will be required to submit its proposals in respect of such Rules and Procedures to the Commission within 90 days of the coming into effect of the tariff regime.

Treatment of Fuel Costs

The volatility in world oil prices during 2008 in particular, resulted in alarm and customer dissatisfaction at the impact on electricity prices. In Dominica, both the Independent Regulatory Commission and DOMLEC, from their respective points of view, encountered considerable challenges in facing the customer fall out.

The structure for fuel cost recovery is a critical element in the tariff regime.

Possible mechanisms for fuel cost recovery

The overriding regulatory principle is that the utility must be allowed to recover its legitimate costs. The regulator can and should impose performance criteria to encourage the utility to be prudent and efficient in its operations and therefore a penalty can be applied for failure to meet the performance criteria but it should not impose penalties on the cost of inputs to the utility thus preventing the utility from recovering its legitimate costs.

The Commission has accepted that a full pass through of fuel costs would be allowed, adjusted for efficiency factors and that this should be applied in the context of a two part tariff.

The Commission will replace the fuel surcharge with a fuel charge shown as a line item without putting fuel costs in the base revenue requirement as part of the energy charge.

Forecasting Methodologies: Financing Costs

Financing Costs = Cost of capital which includes cost of debt and equity.
= Rate Base x Cost of Capital Rate

Rate Base

The rate base represents the utility's investment on which it is allowed to earn a return and consists of the amounts that the utility has paid out but has not yet recovered from customers.

The purpose of determining the Rate Base[1] is to develop an appropriate level of utility investment on which a return can be earned. The Rate Base items to be considered are: Fixed Capital Costs, Adjustments, Working Capital and Deductions for Reserves.

Rate Base is calculated on a weighted average basis to properly reflect the fact that additions occur throughout the year. For example, the weighted average is calculated using the sum of the monthly balances of all the Rate Base Items for the current year[2] divided by 12.

Forecasting Methodologies: Fixed Capital Costs (Electric Plant-in-Service)

Fixed Capital Costs, otherwise known as Electric Plant-in-Service, refer to assets in generation, transmission, distribution, shared services, information technology, capitalized software, and corporate center.

The methodology for reviewing Fixed Capital Costs consists of determining the historic spending pattern and then adding any specific plant budget items for the Test Period. Some utilities use a ***project-by- project review*** of the actual capital work that needs to be performed. Capital expenditures are directly related to the forecasted plant in service levels if capital projects and blanket work orders are on schedule and on target.[3]

It is important to note that while this methodology may seem more reliable than a forecast based on the level of past spending, in actuality there is no obligation on the part of the company under conventional cost-of-service ratemaking or incentive ratemaking to spend budgeted amounts during the relevant time period. No matter how detailed the utility showing is through a project by project review, it may not necessarily carry out those plans. There could be many reasons for this because a utility requires flexibility to optimally respond to changing

[1] Rate Base is net of depreciation expense, because depreciation will be factored as an Operating Cost. See previous section on Depreciation Estimate.

[2] "Current year" has to be defined as calendar year (Jan to Dec) or some other designated period (i.e. Mid Dec '06 to Dec '07).

[3] If there is no discernible categorization for a certain capital project they can be included as "blanket work orders or blanket budget items." These are a variety of projects with smaller capital expenditures, which are on-going projects with no one completion date, covering on-going expansion, replacement, and upgrade activities. Blanket work orders are established to simplify the approval process for expenditures involving multiple locations or projects.

circumstances, i.e. plant reliability or operability changes, results of studies and conceptual or preliminary engineering, industry developments, replacement energy costs, and other evolving factors.

An averaging approach may be used to forecast future capital expenditures. While historical spending patterns reflect not only past spending plans, but also the utility's willingness and ability to carry out those plans. The Commission is of the view that this methodology would be inappropriate for the stage at which the public electricity supply system in Dominica finds itself as the Commission anticipates that DOMLEC must embark on a major capital projects to reinforce and upgrade and expand the system to meet future demand.

If future capital projects are deemed as prudent, a ***blended approach*** of averaging of historical capital expenditures and adding certain capital projects is a different methodology used to determine the appropriate level of future expenditures. These capital projects, though, have to be properly vetted and approved through the utility's internal review process. The utility has to make a showing to the Commission justifying the need for these projects with supporting data, i.e. work scope data for each capital project, including a detailed cost breakdown of estimates.

Another way to detect whether Test Year capital forecasted expenditure levels are prudent is by comparing the level of capital expenditures actually incurred and the forecasted costs. The 2008 data should be readily available for the Commission to consider.

One of the determinations to be made is whether the utility under-spent or altogether omitted expenditures on capital additions/replacements that was planned in the past and included in past rates. Since this can be perceived as double charging ratepayers, the regulator has to make a determination of whether there should be a disallowance for those capital expenditures or whether they have to be incurred for continued safe, compliant, and reliable operation.

Similar to expensed deferred costs, deferred capital projects in the historic periods -which are included in subsequent Revenue Requirement applications - need to be justified on their own merit.

It is incumbent on the utility to determine and quantify whether there will be O&M savings resulting from capital investments. These O&M savings fall into two categories: 1) estimated reductions in future years and 2) avoided increases in future years. The Commission can require a utility to show cost savings for ratepayers.

Capital investment may be required for: 1) safety, 2) reliability, 3) environmental, and 4) lost generation. The majority of the capital expenditures incurred by DOMLEC in the historical period are aimed at improving reliability, increasing capacity, improving service quality, reducing system losses, health & safety and replacement of obsolete equipment.

Once the utility has justified the need for each capital project on the basis of performance objectives, then it has to explain its ***prioritization criteria*** in the selection of critical projects: for example, the reason for including or excluding a needed project in meeting reliability performance.

While a simple averaging method can be used to forecast annual capital expenditures to be included in rate base for the Test Period, the ultimate objective is to forecast the level and timing of additions to plant-in-service for each year. Ideally, the utility's computer model should automatically calculate the Weighted Average plant-in-service balances based on the completion dates of each of the proposed capital projects: these amounts are then included in rate base on which a utility earns its rate of return.

DOMLEC is required to file its Capital budget and updated five year Capital Investment Plan annually with the Commission .

While the Commission does not expect to manage the company's capital budget, it wishes to satisfy itself that the company is pursuing investments in accordance with the approved IRP and the associated capital investment programme.

Adjustments

Adjustments are also referred to as "No Cost Capital." These are funds received by a utility to which it is not entitled to earn a rate of return and as such these amounts are not included in rate base.

These adjustments consist of customer advances, which are funds paid by customers for the construction of facilities required to service those customers, or to finance future payments, such as non-current liabilities, deferred credits, etc…

For the Revenue Requirement estimate, the following would be identified as adjustments and excluded from rate base:

- Customer Advances for Construction (=referred as "deferred revenue" in DOMLEC's financials)
- Consumer deposits (i.e. for connections)
- Capital Grants and
- Other revenue (= interest income)

Ideally, a weighted average of balances for each of these adjustments would be calculated and subtracted from rate base.

Working Capital

Working Capital consists of Materials & Supplies and Working Cash.

Materials & Supplies (M&S) represent the balance of inventories maintained for new plant construction, as well as for the operation and maintenance of existing plant. There could be several different accounts to track Materials & Supplies, as well as tracking unpaid invoices which are deducted from M&S. In developing a forecast one needs to assess whether there is a correlation between M&S balances and plant additions, since it is feasible that M&S inventories may increase if the level of plant additions increased. If that holds true, one can consider using the same forecasting methodology used for Fixed Capital costs.

Working Cash refers to the funds advanced by shareholders to pay for expenses before a utility receives any revenue from ratepayers. These funds have to be included in rate base to compensate investors for those advances. Working Cash is the average amount of capital, over and above the investment in plant and other line items identified in rate base, whereby investors supply funds to bridge the gap between the time expenditures are made to provide service and the time when rates are collected for that service. This time lag poses challenges in establishing an appropriate measurement for this component.

A proper calculation of Working Cash consists of: 1) identifying the operational cash requirement based on a standardized factor, i.e. the operating expenditures for a typical number of days representing the gap (less depreciation, taxes and fuel cost); and 2) the so-called lead/lag calculation, which is based on studies measuring the net difference between the time when service is rendered and revenues are collected from ratepayers, and the time when these costs are incurred and paid; then multiplying this net difference by the average daily operating expenses.[1]

Deductions for Reserve

Deductions for Reserve is composed of different account balances, such as Accumulated Depreciation Reserve, Accumulated Amortization, Accumulated Deferred Taxes, Unfunded Pension Reserve. These amounts have to be removed from rate base, because they have already been collected from ratepayers.

As previously pointed out, the depreciation expense is calculated using a straight-line method. *Accumulated Depreciation* indicates the amount of total depreciation that was previously collected from customers and as such these amounts have to be removed from rate base.

[1] Ensure that these costs are strictly needed to finance operations.

Similarly, *Accumulated Deferred Tax* is deducted from rate base, because as a deferred tax reserve it represents accumulated amounts resulting from the time difference between when the tax expense is recognized (=recorded) and when it is incurred in actual tax returns. Utilities are allowed to include an amount of income tax expense that is higher than what they will actually pay.[1]

Cost of Capital Rate

The *Cost of Capital Rate* is the weighted average of the cost of rates for the various items in the utility's capital structure, i.e. debt, preferred equity, and common equity.

This estimate is the rate of return investors will receive and it is applicable to the Rate Base. DOMLEC, in making its tariff submission, is required to make detailed proposals along with supporting analysis to the Commission on its derivation of the WACC to be applied in its revenue requirements determination.

Weighted Average Cost Of Capital

The cost of capital is a weighted average of the cost of debt, preferred equity, and common equity, where the weights are the market-value percentages of debt, preferred equity, and common equity in a firm's capital structure. The overall cost of capital, which is called the firm's "weighted average cost of capital" (WACC), is specified by the following formula:

$$WACC = w_d k_d + w_c k_s + w_p k_p \qquad (1)$$

where,

w_d = the fraction of debt in capital structure,
w_c = the fraction of equity in capital structure,
w_p = the fraction of preferred stock in capital structure,
k_d = cost of debt,
k_s = cost of equity,
k_p = cost of preferred stock.

To apply the formula, one must estimate the cost of debt, preferred stock and common equity using methodologies accepted by both financial economists and regulators. In addition, one must estimate the capital structure mix of debt, preferred stock, and common equity. With these inputs, the WACC can be calculated from the above equation.

The cost of debt, interest payment, and the cost of preferred stock, dividend payment, are fixed by a contract and therefore are relatively easy to measure. The measurement of the cost of common equity, on the other hand, is more involved since return to common equity is not fixed, and thus is not known with certainty.

[1] See previous description on the Tax Expense Estimate.

Instead, return on equity must be estimated. The estimation of return on equity is based on the principle that rational investors will not invest in a particular investment opportunity if the expected return is less than the return expected from alternative investments of comparable risk. Therefore, return on equity is calculated by measuring the expected returns on alternative investments of comparable risk.

Estimating the return on equity may give rise to two types of errors. First, the use of any specific model may give rise to errors or biases unique to that model. To reduce errors that may result from the application of any one model, several financial models have been employed to estimate the cost of equity. The final cost of equity figure used in calculating an overall rate of return is the average of the results of the models applied. Second, the measurement of the cost of equity for any individual company may involve errors. To reduce errors that may result from the estimation of the cost of equity for a single company, the models are applied to a group of companies of similar risk.
Next, the selection of comparable companies for DOMLEC is explained.

Comparable Companies

The comparable group of companies is an important factor in both the Discounted Cash Flow (DCF) model and the Capital Asset Pricing Model (CAPM. To select a comparable group that provides reasonable risk proxies, analysts rely on companies' bond ratings and safety ranks. Bond ratings and safety ranks are viewed by investors as measures of investment risk. For the U.S., the Value Line Investment Survey provides bond ratings and safety ranks for large number of public companies in various industries. Value Line bond ratings and safety ranks are used to exclude companies that have a speculative bond rating. In the absence of similar information for Dominica, companies will have to be identified for which information is available.

Models for Estimating Cost of Equity Capital

There are two widely accepted models for estimating the cost of equity capital. The first, the Discounted Cash Flow (DCF) model assumes that the current market price of a company's stock is equal to the discounted value of all expected future dividends. There are various formulations of the DCF model based on different projections of future dividend growth. The version of the DCF typically applied is the constant growth or the Gordon model. The second, the Capital Asset Pricing Model (CAPM) assumes that the cost of equity investment is equal to the risk-free rate of interest plus the risk premium on the market portfolio adjusted by the company-specific risk factor, beta.

An average of the costs of equity derived from the DCF and CAPM models could then be used as the appropriate value for Cost of Equity.

Government Imposed Obligations

1. In this Section:

   "Government Imposed Obligation" means any obligation imposed by the Government or its agencies on DOMLEC, after the date of implementation of the Tariff, in the areas of -

   - § environmental standards, laws and regulations
   - § licence fees
   - § taxes other than general income, corporate or general consumption tax, taxes on fuel, etc

2. A Government Imposed Obligation shall be deemed to be material only if the annual incremental costs or savings to the Licensee that result therefrom amount to at least EC$100,000.00 adjusted annually for Dominican inflation from the date of tariff and will apply until the next tariff review when the impact of the obligation will be fully taken into account.

3. DOMLEC may file, with the Commission, a proposal to apply a surcharge as a result of the effects of a Government Imposed Obligation which is deemed to be material. This proposal will be subject to notice and protest, including prudence review. The Licensee shall provide with such proposals, a detailed explanation of the need for the surcharge. Such details shall include a demonstration that the Government Imposed Obligation is material and is known, measurable, reasonable, prudently incurred, mitigated and the cost for which a surcharge is being requested and arises solely from the Government Imposed Obligation. DOMLEC shall not apply any surcharge in respect of Government Imposed Obligation without the approval of the Commission.

4. DOMLEC shall on its own volition or when directed to do so by Commission file a proposal for a refund to its customers the amounts equal to the value of any savings resulting from a Government Imposed Obligation which is deemed to be material. The procedure to be followed shall be analogous to that used in applying for the imposition of surcharge resulting from a Government Imposed Obligation.

5. The Licensee shall submit, with its filing for the annual adjustment or at the end of any surcharge period, whichever is appropriate, a report reconciling the surcharge and the actual costs relating to Government Imposed Obligation. In the event that amounts obtained through the said surcharges exceed the said actual costs incurred, the Licensee shall refund to its customers such excess amounts, adjusted for interest. The Licensee shall

file a report of refunds with the Commission giving details of the distribution of the refunds to its customers within 30 days of filing the reconciliation report.

6. In the event that the amounts obtained through the surcharge are less than the actual costs incurred by the Licensee as a result of the Government Imposed Obligation, DOMLEC shall be allowed to recover such amounts from its customers. It shall file a report with the Commission giving details of the shortfall and the recovery mechanism, for approval.

Sales, Customers & Present Rate Revenues

In previous sections the forecast methodology focused on expenditures, in this section a sales forecast is considered.

Econometric models are usually used in determining a forecast for electricity sales and customer growth for residential, commercial, industrial and other classes of services. These econometric models need to establish a relationship between electric consumption, electricity prices, conservation, and economic/demographic conditions in the utility's service area. Some of the economic and demographic conditions in DOMLEC's service area could include personal income, population, and employment.

For Residential Sales forecasts, the residential sales per household can be determined in the econometric model as a function of real average electricity price, real personal income, heating degree days, seasonal variables, delayed billing variables, and adjustments based on correlation. A monthly model can be developed using data from a historical period of ten years prior. Once the residential sales per household are determined, then it can be multiplied by the number of households to derive the Residential Sales forecast.

Similarly for the Commercial Sales forecast, the commercial square-foot can be determined in the economic model as a function of real average electric price, employment, heating degree days, seasonal variables, delayed billing variables, and a time trend. A similar period as in the Residential Sales forecast is estimating the monthly model, then the commercial sales per commercial square-foot is multiplied by commercial square feet to derive the Commercial forecast.

For the Industrial Sales forecast, the industrial sales per manufacturing square-foot is similarly determined as a function of real average electric price, employment, wage and salary in manufacturing sector, heating degree days, seasonal variables, delayed billing variables, a time trend, and adjustments for serial correlation. Again, the same period is used for all customer classes in estimating the monthly model for industrial sales, and then the industrial sales per

manufacturing square feet are multiplied by manufacturing square-foot to derive the Industrial Sales forecast.

For the Agricultural Sales forecast, the assumption will be that these sales are constant unless Dominica plans to expand activities in this sector.

New Customers Additions have to be determined for each customer class in order to arrive at the Total Number of Customers. Residential Customer Additions can be determined by the number of building permits for the service area and by subtracting residential demolitions. Another variable that can be considered is a moving average serial correlation correction, particularly if there are a substantial number of emigrants. The Commercial Customer Additions are determined by residential construction and new commercial floor space. Other Customer Additions, i.e. industrial and agricultural, are based on recent historical trends. In general to determine the reasonableness of any Customer forecast methodology, it has to be compared with historical trends, including average population growth.

The Commission, under a separate proceeding, "Integrated Resource Plan – Demand Forecast Document Ref 2009/003/CD-01", will make a determination on the Demand forecast which will inform the assumptions to be used in the development of the sales forecast for the first tariff review. Likewise, Demand Forecasts will be available for subsequent tariff reviews. It is important to note that growth rates are not necessarily uniform for all customer classes, especially if the forecast methodology outlined earlier is adopted.

Tariff Design

1) Once the Commission approves the Revenue Requirement Application, there will be changes to the rate schedules, i.e. any increase or reduction in approved revenues has to be applied on an equal percentage basis to all customer groups.
2) The Rate Design will remain the same as currently in place. The utility needs to take time to study the most appropriate Rate Design to meet its future business objectives and ensure its financial stability. The Commission is mindful of the implications that might arise out the future decisions on the development of energy policy associated with, e.g the geothermal development and that some transmission facilities may have to be constructed sooner rather than later. The proceeding on Integrated Resource Planning (IRP) will provide guidance on how DOMLEC can structure its Tariff and Rate Design proposals.

3) As a follow up to the IRP proceeding and anticipated government policy, DOMLEC will be required to develop Interconnection procedures and corresponding Tariff schedules and rates.
4) A Tariff document has to be created and posted on DOMLEC's website once the Commission's approval has been granted. The IRC will establish a similar link from its website.
7) In order to provide some immediate relief during peak periods, for customers connected to the grid DOMLEC must develop: an *Interruptible Program* for customers with a consumption level of 20kWh and greater and *Net Metering* provisions for customers using below 20kWh. Tariff schedules and discount rates have to be developed accordingly, with due consideration given to how these changes will impact other customers and DOMLEC's ability to implement these changes in the short-term.

8) DOMLEC will eventually need to submit a detailed Rate Design Application, including proposals for Tariff development. As the Commission implements a transition to cost-based rates, DOMLEC has to address in its Rate Design Application:
    a. Fully Allocated Cost of Service Study indicating the functionalization, classification, allocation of costs, and meter replacement costs.
    b. Revenue Allocation.
    c. Billing Determinants.
    d. Rate Rebalancing.
    e. Restructuring of Customer Groups.
    f. Restructuring of Rates. Currently only residential customers have inclining block rates, all other customers are charged a flat rate.
    g. Phasing out of rates.
    h. Elimination of rates.
    i. Demand Charges
    j. Fees and connection/reconnection charges.
    k. Billing Impact.
    l. New & Revised Terms & Conditions for Service.
        i. System Extension Policy
        ii. Distribution Extension Policy
        iii. Prepaid Meters
        iv. Security Deposits
        v. Minimum Connection Charges

vi. Minimum Reconnection Charges
vii. Miscellaneous Charges.

The Commission requires that this Cost of Service and Cost Allocation Study be completed before the second application for a tariff review.

Quality of Service Standards

The Commission conducted a consultation on Quality of Service Standards for DOMLEC during the period April to June 2009. The outcome of that consultation was the Decision of the Commission to introduce a set of Guaranteed Standards and Overall Standards into the regulatory regime for DOMLEC which was ordered by the Commission on December 14, 2009.

The Guaranteed Standards which attract compensatory payments to be paid by the utility company in circumstances where these are breached provide a mechanism for service quality measures to be introduced into the relationship between the company and the individual customer. The system of compensatory payments introduces immediate redress by the company.

The Overall Standards however, introduce measures that are intended to encourage the utility to focus on the quality of service to groups of customers on a system wide basis. The proposed Overall Standards will not come fully into effect until January 2011 when full monitoring will commence. The Commission will introduce a methodology for assessing performance against the overall standards and to factor this into the tariff adjustment. The basis for this is that the company may have to make investments to comply with or meet the performance standards, investments which will be recovered through the tariff. The Commission believes that penalties, commensurate with the contributions made by customers, must therefore be attached to unsatisfactory performance. The criteria for determining the level of these penalties were developed through consultation with the company and will be introduced at the next tariff review.

Performance Targets

The Electricity Supply (Amendment) Act 2003 introduced performance targets into the operational framework for DOMLEC. These targets which applied to the financial year 2004 were intended to encourage the company to improve and maintain efficiencies in critical areas and which, if achieved, would have direct impact on prices.

The Commission retains the regime of performance targets and decided on the following targets for the tariff period.

PERFORMANCE TARGETS		
Parameter	**Financial Year**	
	2009	2011
Line losses (% of the electricity supply)	Not greater than 12.5	Not greater than 11.75
Plant efficiency (kWh/gallon of diesel or blended fuel)	Not less than 17.25	Not less than 17.25

In this section:
"electricity supply" means the total energy (kWh) supplied by the company and shall be defined as the sum of electricity generated by the company at its own generating stations plus electricity purchased by the company from other generators;
"line losses" means the difference between the electricity supplied (kWh) and the final consumption of electricity (including unbilled electricity) of all customer categories minus the electricity consumption by the company in its generating stations (station use).
"plant efficiency rate" means the number of kWh of electricity generated per imperial gallon of fuel in the company's generating stations.

The Commission is of the view that the opportunity to improve the overall plant efficiency will be influenced by the opportunities taken to invest in new more efficient plant. The Commission is aware that the impact of the new plant that was installed at Fond Cole in 2009 should reflect improvements in the plant's efficiency performance. The Commission is therefore signaling that this performance target will be the subject of critical review at the second tariff review.

Procurement of Fuel

The company shall take all reasonable measures to secure the lowest prices, through competitive procurement, for fuel for use in its generating plant and shall be required to routinely provide the Commission with evidence that fuel procurement is conducted on a competitive basis.

Duration of Tariff

The Commission intends that the tariff arising from the first tariff review will remain in effect for three (3) years.

At the beginning of years 2 and 3, the tariff will be adjusted by the point to point inflation rate recorded in the Dominican economy over the previous twelve months. The net adjustment may take into account the financial impact of the

company's compliance with the performance standards. At the second tariff review (to come into effect at the beginning of year 4), the adjustment for inflation between year 2 and 3 will be taken into account in the computation of any new tariff that may be determined at that review.

An incentive/performance based methodology will be considered for implementation at the second tariff review.

Tariff reviews will be conducted at three yearly intervals.

Principles for calculating fuel costs

The Commission will adopt the same principles to calculate the fuel charge as those that were set out in the repealed Electricity Supply Act 1996 as amended by the Electricity Supply (Amendment) Act 2003 with the exception that the Discount Factor as provided in the Electricity Supply (Amendment) Act 2003 will not be applied.

The provisions in the Electricity Supply (Amendment) Act 2003 for adjusting the rate for excess fuel costs will also have application in the fuel rate calculation.

The Commission sets, as its regulatory policy, a full pass through to customers of the cost of fuel having regard to and taking into account the cost of fuel utilized by Domlec, IPP costs, fuel efficiencies and prescribed system performances..

The pricing model adopted by the Commission, will reflect a regulatory environment where the company, through efficient operational practices and continual efficiency improvements; with regards to fuel use, will have the opportunity to commensurately enjoy gains or absorb losses depending on whether or not it meets the prescribed efficiency and performance targets. Consumers, on the other hand, will pay a fair rate for the direct cost of fuel consumed, related to energy usage conditioned by efficiency factors set by the Commission.

The Commission is inclined to adopt the formula that is currently in use as a basis for modeling the fuel pass through charge and cost of power purchase from IPP's.

The Commission will treat purchases from independent power producers as a "fuel cost" to Domlec.. The intent is to adopt the formula prescribed in the 1996 Electricity Supply Act, with appropriate adjustments to reflect the current environment.

The formula is as follows:

Fuel Charge = (A + B + C)/ D
where;

A is the cost of the total number of Imperial gallons of diesel fuel used at all DOMLEC's generating stations in Dominica during the calendar month immediately preceding the calendar month during which meters are read multiplied by the current price in cents for diesel fuel oil delivered to DOMLEC generating stations in Dominica.

B is the cost of the total number of Imperial gallons of blended fuel oil used at all DOMLEC's generation stations in Dominica during the Calendar month immediately preceding the calendar month during which meters are read multiplied by the current price for blended fuel oil delivered to DOMLEC's generating stations in Dominica.

C is the total amount paid for other sources of supply (including IPPs) than those listed in A and B (including but not limited to electricity generated by the use of geothermal means), supplied to DOMLEC during the calendar month immediately preceding the calendar month during which meters are read.

D is the total units sold in Dominica during the calendar month immediately preceding the calendar month during which meters are read.

Tariff Review Procedure

Rates for Electric Power

The rates for electric power shall consist of the following components:

- A Non-Fuel Base Rate ("Non-Fuel Base Rate") which is adjusted annually by the Inflation rate in Dominica as fixed by the Statistical Bureau of the Government of Dominica.

- A Fuel Rate which is adjusted monthly to reflect a full pass through, subject to performance measures, of the actual costs of fuel.

- Other extraordinary costs related to Government imposed obligations and which were imposed subsequent to that tariff review and approved by the Commission.

- Regulatory fees imposed by the Commission and approved by the Cabinet.

Initial Rates

The initial tariff and rates which will serve as the starting point for the first tariff review are those which were in effect at January 1, 2010.

General procedures for the review of tariffs

The procedure for review of tariffs shall be carried out in accordance with Sections 23 and 24 of the Act.

Section 23

(1) An electricity service provider shall not –

(c) Offer service unless it has, prior to offering such services, filed its proposed tariffs with the Commission and such tariff rates and charges have come into effect pursuant to section 24; and

(d) Make changes on tariffs, or other terms of the service after proposed tariffs have been filed with the Commission, except as authorized under this section.

(2) An electricity service provider shall submit tariff proposals in conformity with this section in writing to the Commission with respect to the tariffs it intends to apply for the use of its systems, facilities and services.

(3) Proposed tariffs filed under subsection (2) shall contain all relevant information concerning rates and charges for services, including deposits, non-recurring charges and monthly charges as well as terms and conditions applicable to the provision of services, including disputes or claims over billing or provision of services.

(4) A Licencee shall make tariffs available to the public by publishing such tariff in the Gazette and two local newspapers.

(5) All proposed tariffs filed with the Commission shall be kept complete, accurate and up to date.

(6) After a proposed tariff has been filed with the Commission and has come into force and effect, no changes may be made in the rates, charges or other terms of service relating to all the services provided under the tariff, except upon the filing and review of tariffs as provided in this Act.

(7) Proposed Tariffs shall:

(c) Be accompanied by all accounting and costing information as the Commission may require; and

(d) *Comply with all the other requirements and conditions as shall be applicable to the licensee concerned.*

Section 24:

(1) All tariffs proposed by a licensee shall conform with the principles and provisions governing tariff formulation established by the Commission pursuant to the legislation for the time being and shall be submitted to the Commission for review as to their conformity with such principles and provisions.

(2) The Commission shall within 60 days of the submission of the tariff proposed under subsection (1), make a determination to:

(a) approve the tariff without amendment

(b) conditionally approve the tariff subject to amendments specifically proposed by the Commission being accepted by the licensee; or

(c) reject the tariff proposal outright, stating clearly in writing the reasons for such rejection, which reasons may include a determination that the tariff is not ripe for review.

(3) In the event that the Commission makes a determination under subsection (2) (b) the licensee may submit a revised tariff within 30 days of the determination; and the Commission shall make a new determination in accordance with one of the three options specified in subsection (2) within 30 days of such submission.

(4) In the event of an outright rejection of the proposed tariff under subsection 2 (c), the Licencee may file a new tariff at any time; or may file a petition to the Commission for reconsideration of such rejection.

(5) A petition shall be filed within 30 days of the rejection an d shall state the Licencee's basis for reconsideration, which may include fundamental change in circumstances from the conditions that prevailed when the tariff was originally rejected by the Commission.

(6) In the event that the Licencee files a petition for reconsideration under subsection (4), the Commission shall act upon such petition within 30 days and make a determination in accordance with one of the three options set forth in subsection (2).

(7) If the Commission fails to act on a tariff submission pursuant to this section within the timeframes for determination specified in subsections (2), (3) and (6), the tariff shall be deemed approved until such time as the Commission makes a determination.

The procedure for initiating and conducting a Tariff review and the information requirements for such filing are set out in Part B.

First Tariff Review

DOMLEC may submit its application for the first tariff review after the effective date of this tariff regime at any convenient time.

Subsequent Tariff Reviews

Subsequent tariff reviews will be conducted on application by DOMLEC, in conformity with the established procedures, at three yearly intervals.

PART B

Standard Filing Requirements for Rate Review Application

Part B - Standard Filing Requirements For Rate Review Application

1.0 Notice of Intent to File

1.1 At least 30 days prior to the filing of application pursuant to section 23 of the Electricity Supply Act No. 10 of 2006 (the Act), DOMLEC shall give notice, in writing, to the Independent Regulatory Commission (IRC, the Commission), of its intent to file an application for a tariff review and of the proposed rates to be contained therein. This will be recognized as the Pre-filing Notice (PFN).

1.2 The following information shall be provided with the PFN.

(a) PFN Exhibit 1
-Statement of notice of intent to file for an adjustment in rates.
-Dates of proposed test year.

(b) PFN Exhibit 2
"Typical Bill Comparison"

(c) A proposed notice for newspaper publication fully disclosing the substance of the application for adjustment in rates.

(d) The proposed notice for newspaper publication shall include the following information and / or similar language:

(i) A copy of the application is available for inspection at the office of Independent Regulatory Commission (IRC) at 42-2 Kennedy Avenue, Roseau, Commonwealth of Dominica or on the IRC's website: www.ircdominica.org.

(ii) The percentage increase in operating revenue requested by the utility on class of service or rate schedules basis.

2.0 General Instructions

2.1 Purpose

The standard filing requirements are designed to assist the Commission to perform a thorough and expeditious review of applications for rate changes. Schedules contained in the filing requirements are designed to provide support for the utility's position or to provide supplemental information to facilitate the Commission's review of the rate review application.

2.2 Applicability

The schedules contained in this standard filing requirements are applicable to DOMLEC

2.3 Minimum requirements

In this section, unless otherwise stated "day(s)" means "working day(s)".

The standard filing requirements contain the minimum information which DOMLEC is required to submit with its application for a tariff review. The schedules contained in the filing requirements will provide the basic information normally required to support the rate request. If DOMLEC believes that additional information is necessary to support its case or is proposing a position which requires a departure from the basic schedules (e.g., a special revenue adjustment proposal), it should supplement the standard filing requirements with data and information to support its position. In addition, the Commission may require supplemental information to these requirements during the course of the review of a specific case.

2.4 **Waiver of information requirements and determination of filing date**

(a) All information required by these standard filing requirements must be included with the application to the Commission, unless:

(i) the utility has applied and requested a waiver from the Commission,

(ii) the utility has applied for a waiver and the Commission's approval is pending, or

(iii) the Commission has granted a waiver on its own motion.

N.B. The Commission may reject any filing that is not in compliance with these requirements or request DOMLEC to re-file the items found in non-compliance. An application filed during the pendency of waiver requests which are subsequently denied in whole or in part will be considered as failing to comply with the standard filing requirements and be treated as being out of conformity with section 23(7) of the ESA 2006 and rejected as provided for in section 24(2) (c) of the Act.

(b) Processing of the Application for Compliance

(i) If, in the opinion of the staff of the Commission, an application fails to substantially comply with the standard filing requirements, the staff shall inform the applicant within twenty days of the

original filing date by letter from the Executive Director of any defects or deficiencies. Upon the filing of such supplemental information rendering the application in technical compliance with the standard filing requirements, unless waived, the application will be deemed as having been filed as of the date upon which supplemental information rendering the application in technical compliance with the standard filing requirements was received for the purposes of calculating the time period provided in section 24(2) of the Act.

(ii) If, in the opinion of the staff of the Commission the application as originally filed is in technical compliance with the standard filing requirements, the staff shall so notify DOMLEC within seven days (7) of the date of the original filing by letter from the Executive Director.

(iii) DOMLEC shall file its response within seven days of the date of the letter. Provided that the DOMLEC has complied with paragraph (2.4) (a) if the Commission issues no notice to DOMLEC pursuant to (b) (i), within twenty-one days from the date of the original receipt of the application by the Commission, the application shall be deemed to be in compliance with the standard filing requirements and as having been filed as of the date of the original receipt of the application for purposes of calculating the time period provided in section 24(2) of the Act.

If DOMLEC fails to comply with paragraph (2.4) (a) the application will not be considered as having been filed, unless otherwise ordered by the Commission, for purposes of calculating the time periods provided in section 24 (2) of the Act.

(c) Processing of Waiver Request

A request for waiver of any of the provisions of the standard filing requirements must set out the specific reasons in support of the request. The Commission shall grant the request for a waiver upon good cause shown by DOMLEC. In determining whether good cause has been shown, the Commission shall give due regard, among other things, to:

(i) Whether other information, which the utility would provide if the waiver is granted, is sufficient to enable the Commission's staff to effectively and efficiently review the rate application.

(ii) Whether the information, which is the subject of the waiver request, is normally maintained by the utility or reasonably available to it from the information which it maintains.

(iii) The expense to the utility in providing the information, which is the subject of the waiver request.

(d) Time for Filing Waiver Request.

Except for good cause shown, all waiver requests must be filed thirty days or more before the submission of the application to the Commission. In normal circumstances these would be submitted with the PFN. If, by complying with this requirement, the waiver requests are received before the filing of the PFN, the proceeding reference number of the rate case series will be assigned to the waiver request. This same reference shall then be used for the PFN and the application for a tariff review.

2.5 **Definition and intent of terms**

"Test year"– The test period, unless otherwise ordered by the Commission, shall be the twelve month period beginning six months prior to the date the application is filed and ending six months subsequent to the application filing date. In no event shall the test period end more than nine months subsequent to the date the application is filed. It should include:

(i) Normal operational conditions, if necessary;

(ii) Such changes in revenues and cost as are known and measureable with reasonable accuracy at the time of filing and which will become effective within twelve months of the time of filing. Cost, as used in this paragraph, shall include depreciation in relation to plant in service during the last month of the test period at the rates of depreciation specified in the schedule to the utility's license. Extraordinary or Exceptional items as defined by Generally Accepted Accounting Principles shall be apportioned over a reasonable number of years not exceeding five years and

(iii) Such changes in accounting principles as may be recommended by the independent auditors of the licensee.

"Calendar Year Data" - some schedules throughout these filing requirements contain provisions for financial data for both a test year and the most recent calendar years. As used in these filing requirements, "most recent calendar years" are the latest calendar years for which actual historic information is available at the date of filing.

"Projected test year data" - to comply with the requirements regarding the test year, DOMLEC may use estimated valuation data and up to twelve months of estimated operating income data in its application. However, if estimated valuation data and/or more than nine months of estimated operating income data are provided in the application, the utility must provide within one month of the date of filing, actual valuation data and operating income statements which include no less than three months of actual data. DOMLEC must also explain any material differences between the estimated and actual data. The utility must file a comparison of the twelve-month actual income statement versus the partially forecasted income statement and any variances within three months after the end of the test year. Any material differences between estimated and actual data must also be explained.

"**Average Data"** - some schedules throughout these filing requirements require that "average" data be provided. The term "average" refers to a thirteen-month average. The test year thirteen-month average calculation shall be based on the same timeframe as the test year. Where actual month end balances are not available, DOMLEC shall use estimated data for those months of the test year. The test year thirteen-month average calculation shall be updated to reflect no less than four actual month end balances.

"Data" - most schedules contain an area specified as "Data". Indicate in the area provided the number of actual and estimated months of information reflected on the schedule or whether the valuation data represents actual or estimated information.

"**Days"**- Unless otherwise stated days are working days.

"Executive summary" - the term as used herein refers to a summary statement of the essential components of DOMLEC's management process that will succinctly explain the manner in which the organization operates at the top corporate level and/or in a specific functional area. It should be to the point but sufficiently developed to assist the Commission in performing a thorough and expeditious review of the DOMLEC's management policies, practices and organization. The executive summary may be supported by an explanatory booklet, publication or other material which addresses the management process.

2.6 **Schedule format**

The schedules shown are for illustrative purposes only and can be modified to fit DOMLEC's operations as long as the data intent is complied with. It is not required to submit data on reproduced copies of the schedules, but should submit the data in

substantially the same format as contained in the schedules. All schedules submitted to the Commission should be in hard copy and also submitted in electronic form (PDF, MS WORD and MS EXCEL). Additional schedules should be submitted as required to support the company's application; such schedules should be identified by the next assigned schedule in the appropriate section.

The Schedules attached to this rate review application are as follows:

(i) Schedule A: Revenue Requirement

(ii) Schedule B: Rate Base

(iii) Schedule C: Income Statement

(iv) Schedule D: Rate of Return

(v) Schedule E:Rate and Tariff

2.7 **Working papers**

All working papers supporting the standard filing requirements schedules and any other associated studies shall be delivered to the Commission. The utility shall provide a comprehensive explanation of the bases for all schedules contained in the application. The working papers that are to be delivered to the Commission shall include:

a. any and all pertinent data used by the utility to prepare its application and

b. other such information that may be requested by the Commission to be filed as working papers as specified in other sections of the filing requirements. Pertinent data shall be interpreted as including, but not limited to, all supporting working papers prepared by the utility for the application, and a narrative or other support of assumptions made for the working paper schedule amounts. Working papers and documents containing additional explanatory material shall be submitted on letter size paper (unless absolutely impractical) and shall be marked, organized, and indexed according to the standard filing schedules to which they relate. Working papers must contain the date prepared and should be cross-indexed and cross-referenced wherever possible. Data contained on working papers should be footnoted so as to identify the source document.

2.8 **Management policies, practices and organization of utility companies.**

1. Information to be filed under paragraphs (3.0) (7) and (8) is required for the purposes of the Commission's consideration of the DOMLEC's management policies, practices and organization in fixing rates. These

filing requirements are designed for DOMLEC to provide the Commission with sufficient knowledge to enable it to make a reasonable assessment of the utility's management processes or systems.

2. If DOMLEC is a subsidiary of a holding company or is affiliated with other companies, then DOMLEC is required to explain the level of participation of the parent company/affiliate company in its management process.

3. Any proprietary or confidential information will be handled in accordance with the Independent Regulatory Commission's Rules of Practice and Procedure, Document Ref:2008/004/D, Part 9_Rule 9.1 and Rule 9.2.

4. If the activities and the functional areas specified in paragraph (3.0)(7) do not correspond directly with DOMLEC's organization structure, they should also include those functional areas and activities not specifically set forth. DOMLEC may explain its management process in a manner that is most suitable to its particular organization, provided that there are specific references to indicate where the information on specific activities can be found in its filing. If DOMLEC believes that information required to be filed has been previously submitted to the Commission, in whole or in part, then a photocopy of such information shall be provided with this filing. If DOMLEC believes that a particular activity is not applicable to its operation, this should be explained

5. DOMLEC shall satisfy all standard filing requirements relating to management policies, practices and organization in its first rate filing after their adoption. Thereafter, only changes, enhancements and modifications to the applicant utility's management process are required in subsequent rate filings.

3.0 **Supplemental Filing Requirements**

The following information, if applicable, should be included as part of the application:

A (i) Most recent annual capital budget providing the following (Identified as Schedule B):

(a) Date project started;

(b) Estimated completion date;

(c) Total estimated cost of construction by year;

(e) Accumulated costs incurred as of the end of the most recent calendar year.

(f) Current estimate of total cost to completion.

(ii) Aggregate cost for all other construction in progress.

B. Capital Investment Program for next five (5) years

1. CWIP included in the DOMLEC's rate base (incorporate by reference that data which is already provided on a Schedule B).

   (a) List the project number and cost.

   (b) Completion date or in service date (whichever was first)

2. Most recent five-year financial forecast identified as Schedule C, providing for each forecast year:

   (a) Income statement;

   (b) Balance sheet; and

   (c) Statement of changes in financial position (source and application of funds statement).

3. The financial forecast should be supported by the underlying assumptions made in projecting the results of operations, such as:

   (a) Load forecasts

   (b) Employee growth;

   (c) Known labour cost changes; and

   (d) Capital structure requirements/assumptions.

   (e) Mix of Generation

   (f) Mix of Fuel

4. The projection of revenue requirements shall be accompanied by the following balance sheet items for each forecast year (identified as Schedule C and D):

   (a) Gross plant in service;

   (b) Accumulated depreciation;

(c) Construction work in progress;

(d) Long-term debt;

(e) Common equity;

(f) Preferred Equity

5. In addition, the following elements of a statement of changes in financial position (sources and uses) should be provided (Identified in Schedule D)

   (a) Change in cash balances;

   (b) Retained earnings;

   (c) Depreciation accruals;

   (d) External funding;

      (i) Long term debt;

      (ii) Common equity;

   (e) Deferred income taxes; and

   (f) Deferred investment tax credit.

6. A proposed notice for newspaper publication fully disclosing the substance of the application for adjustment in rates

   The proposed notice for newspaper publication shall include the following information and/or similar language:

   (a) A copy of the application is available for inspection at the office of Independent Regulatory Commission (IRC) at 42-2 Kennedy Avenue, Roseau, Commonwealth of Dominica.

   (b) The percentage increase in operating revenue requested by the utility on a class of service or rate schedules basis.

7. An executive summary of DOMLEC's corporate process utilized by the board of directors and corporate officers. This would include a discussion of all pertinent elements of DOMLEC's management process addressing such areas as policy and goal setting, strategic and long-range planning, organization structure, decision-making, controlling process, internal and external communications

8. An executive summary of DOMLEC's management policies, practices and organization employed to meet the corporate goals determined by the board of directors and corporate officers. This would also include a discussion of all pertinent elements of the applicant utility's management process as they relate to each of the following functional areas.

   (a) Plant operations and construction:

      (i) Plant/facilities planning process;

      (ii) Operations and maintenance policies and procedures;

      (iii) Plant productivity and performance evaluation;

      (iv) Customer and usage growth forecasting;

      (v) Demand and capacity load forecasting;

      (vi) Construction project management and control;

      (vii) Research and development; and

      (viii) Environmental management.

   (b) Finance and accounting:

      (i) Cash management;

      (ii) Accounting systems and financial reporting;

      (iii) Budgeting and forecasting;

      (iv) Financial planning process and objectives;

      (v) Materials and inventory management and control; and

      (iv) Internal Auditing

   (c) Rates and tariffs:

      (i) The system or program for managing rate related operations and rate reform projects:

(a) Specify objectives of the rate program;

(b) Describe the process and procedures for achieving the Stated objectives; and

(c) Describe the organizational structure and available resources.

(ii) Rate program analytical process:

Describe the performance of the following activities and describe how they contribute to the adequacy of the rate program and specific projects:

(a) Planning;

(b) Operating impact evaluation;

(c) Cost analysis;

(d) Benefit analysis;

(e) Data collection;

(f) Risk assessment; and

(g) Revenue and earnings stability.

(iii) Implementation management:

(a) Describe the implementation management process for rate reform projects.

(b) Describe the significant projects in progress and the corresponding implementation timeframes.

(c) Describe how the projects are intended to meet the stated program objectives.

(iv) Customer involvement:

Describe the process and significant vehicles in the process for introducing customer interests in rate operations.

(v) Commission and staff reporting:

Describe the process for reporting operations and rate reform programs to the Commission.

(d) Communication and public affairs:

(i) Customer service and information;

(ii) Credit and collections;

(iii) Customer conservation programs;

(iv) Marketing; and

(v) External relations.

(e) Administrative and corporate support services:

(i) Transportation;

(ii) Legal;

(iii) Data processing;

(iv) Management information systems;

(v) Insurance;

(vi) Land management; and

(vii) Records management.

(f) Human resources:

(i) Salary and benefits administration;

(ii) Recruiting and selection;

(iii) Training and career development;

(iv) Performance evaluation and appraisal; and

(v) Work force productivity.

9. The required data for paragraphs (7) and (8) shall be adequately supported by:

    (a) Organization charts, diagrams, flow-charts, etc;

    (b) Performance indicators and quantitative comparisons;

    (c) Standards of performance;

        (i) Criteria established by the company.

        (ii) Generally accepted industry standards.

10. Supplemental Information

    DOMLEC must deliver four hard copies of the following information, at the time of the filing of the application, unless previously provided, in hard copy and electronic form

    (1) The utility's current annual statistical report.

    (2) Prospectuses of current stock offering of DOMLEC. In the event there are no current offerings, then provide the most recent offerings.

    (3) Annual reports to shareholders of DOMLEC, for the most recent five years and the most recent statistical supplement.

    (4) Working papers supporting the schedules and/or as requested in the schedule instructions.

    (5) Worksheet showing monthly test year data and totals. Taxes other than income taxes should be itemized and totaled.