CONSULTATIVE DOCUMENT

Document Reference : 2024/004/CD-01

Revenue Requirement and Rate Base

for

Dominica Electricity Services LTD (DOMLEC)

SEPTEMBER 2024

Independent Regulatory Commission
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CONSULTATION PROCESS

Persons who wish to participate in this consultation and to express opinions on this Document are invited to submit comments in writing to the IRC. Reponses/Comments should be sent to:

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Responses, clearly showing the Document Reference identification, may be sent by mail to the address above or by e-mail to: admin@ircdominica.org.

Confidential information provided with responses should be submitted as a separate document and clearly identified as such.

In order to stimulate debate, the IRC will place any responses received on its website at www.ircdominica.org immediately following the last date for receipt of responses. Comments on the responses will also be entertained by the IRC which should, likewise, be submitted by the date indicated.

The references and proposed timetable for this consultation are:

Document Ref No: 2024/004/CD-01
Document Title: DOMLEC's Revenue Requirement and associated Rate Base

EVENT	PROPOSED DATES
Publication of First Issue of Document	October 8th, 2024
Public Consultations	October 8th to 28th, 2024
Responses Closed – *End of Phase 1 of Consultation*	October 29th, 2024
Comments on First Response and Publication of Second Issue of Document	November 12th, 2024
Responses close - *End of Phase 2 of Consultation*	November 26th, 2024
Statement of Results and Commission's Decision	December 3rd to 10th, 2024

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Introduction and Background

DOMLEC informed the Commission of its need to initiate a tariff review in 2021 and the process of the tariff review was initiated later that year.

The Commission is of the view that in order to ensure timely completion of its review of any application for a tariff review submitted by DOMLEC it would consider certain critical issues in separate proceedings leading up to the conclusion of the tariff review. These issues, which are critical inputs to the tariff determination, are:

- Depreciation Study
- The Weighted Average Cost of Capital (WACC)
- The Revenue Requirement and Rate Base
- Review and approval of 5-Year Investment Plan.
- Review and approval of the Cost of the Service Study.
- Review and approval The Rate Proposal

The Commission will, conduct its review of and make determinations on these issues prior to the formal submission of DOMLEC's Intent-to-File on the presumption and condition that the Commission's Decisions on these issues will be final and used by DOMLEC as the input in the tariff calculations.

In this regard, DOMLEC has submitted its Revenue Requirement and Rate Base for the Commission's consideration. This consultation document sets out the Commission's thinking in response to DOMLEC's submissions.

The Commission's objective in this proceeding is to consider and decide on the proposed revenue requirement and Regulated Asset Base for DOMLEC.

The Commission would be interested in receiving stakeholders' views in this regard.

Policy and Legal Framework

Legal Framework

The Commission's duties and functions regarding tariff making are provided for pursuant to provisions in three principal instruments:

(i) the Act,
(ii) the Licence and;
(iii) Commission's Determination as per its "*Tariff Regime for Dominica Electricity Services Ltd Document Ref: 2009/004/D"* (the Determination).

The Act provides at Section 18

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

At 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 licencee 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.

At Section 20

(1) The Commission shall, without limiting the generality of this section, have a duty to perform and exercise its functions and powers under this Act in the manner 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;

(d) facilitate the promotion of sustainable and fair competition in the electricity sector where it is efficient to do so;

(e) protect the interests of all classes of consumers of electricity as to the terms and conditions and price of supply;

(g) ensure that the financial viability of efficient regulated electricity undertakings is not undermined;

The Act gives the **Commission full authority to act independently** in the performance of its duties under the Act – specifically having regard to public interest considerations and government policy, as embodied in legislation. In providing for its functions the ESA (S20) mandates the Commission to act in a manner which it considers best calculated to achieve a number of policy objectives and in this regard clauses (a), (b), (d), (e) and (g) of S20, reproduced above, are instructive.

Furthermore, *Section 20. (1) (c)* of *the Act* provides a duty for the Commission to *"ensure the security and efficiency of the supply of electricity in Dominica, through the conduct of an efficient long term planning process with due regard for future potential generation sources such as geothermal and wind energy"*.

Additionally the Determination sets out in detail the methodology and process for determining the tariff for DOMLEC.

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 are 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:

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).

Average Rate = Revenue Requirement ($) / Sales (kWh)

<u>Revenue Requirements</u>

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 must 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 (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

DOMLEC has carried out and completed its proposed determination on the Revenue Requirement and Rate base as part of this Tariff Review application which was initiated in 2021 and has been file application and schedules for Revenue Requirement and Rate Base with the Commission.

The completed Revenue Requirement and Regulated Asset Base with supporting schedules are now available to the public and relevant stakeholders for review and comment for this consultation. The following questions may facilitate the process.

DOMLEC's Revenue Requirement and Rate Base

DOMLEC's proposals were submitted under cover of a document "Application to the IRC for Approval of Rate Base with supporting shared dataset and Application for Approval for Revenue Requirement for – Dominica Electricity Services Ltd" dated February 28th, 2024, but was received by the Commission on August 16, 2024.

The Commission executed an audit of DOMLEC fixed Capital cost or physical assets and Inventory balance in 2022. The purpose of the audit was to ascertain the reasonableness of gross plant in service and inventory balances to be considered used and useful in the determination of Regulated Asset Base for the tariff setting.

The Commission conducted a comprehensive review of the share dataset containing details of the accounting records to include fixed assets by categories, capital project data and operating expenses among others and reconcile items against supporting worksheets. The Commission noted the list of items not considered used and useful for the purposes of rate making.

Additionally, the Commission reviewed DOMLEC's Application for the Approval of the Rate Base as introduced in its submission:

"Rate Base is the value of utility plant financed by the Company and investors that is prudently incurred and "used and useful" in public service and is valued on the original or historic cost basis. In the Company's application, the calculation of the Rate Base as shown in Schedule B-1 is computed using six months actuals (January 1st 2023 to June 30th 2023) and six months projected (July 1st 2023 to December 31st 2023) of the test year 2023. The Company has only included in the Rate Base plant which it has determined to be "used and useful". The reserve for accumulated depreciation is deducted from the historic cost to determine net plant in service. The Schedule also provides for the inclusion of construction work in progress (CWIP) and working capital allowance. There are also deductions from rate base for funding sources other than investors such as customer deposits, capital grants, deferred revenue and deferred income tax liability. The Company's proposed rate base of $163,484,106 is submitted in Schedule B-1.

UTILITY PLANT IN SERVICE

Table 1.0 ---The historic cost of utility plant of the Company (net of adjustments) is categorized as:

▪	*Land*	-	*$ 3,007,417*
▪	*Building & Construction*	-	*$ 72,263,565*
▪	*Plant & Machinery*	-	*$ 98,917,048*
▪	*Transmission & Distribution*	-	*$195,517,052*
▪	*Vehicles*	-	*$ 8,123,416*
▪	*Furniture & Fittings*	-	*$ 18,753,125*
	TOTAL	***-***	***$396,581,624***

These categories are summarized by accounts and sub-accounts in Schedule B-2.1.

Land - *$ 3,007,417*

Land consists of land which are "used and useful" for the purpose of electricity generation. This excludes land at Tarou and Melville Hall of $1,392,263 which are considered not "used and useful" at the time of this Tariff review process.

Building & Construction - *$72,263,565*

Building & Construction assets consist of various structures and improvements associated with generation and administrative or general-purpose functions. The category also includes the headworks and pipelines associated with the Hydro plants.

Plant & Machinery - *$98,917,048*

Plant & Machinery assets comprise of Generation plants, accessories and tools & equipment.

Transmission and distribution assets - *$195,517,052*

Transmission and distribution assets are the facilities and equipment used to deliver the electricity produced from the generating stations to customers across the island.

Motor Vehicles - *$8,123,416*

This category is made up of two sub-categories, i.e. light and heavy vehicles, and each sub-category attracts a different depreciation rate.

Furniture & Fittings - $18,753,125

Furniture & Fittings consist of furniture, computers, software and office equipment.

Valuation of Utility Plant

Utility plant is stated at historic cost. Cost represents expenditures that are directly attributable to the acquisition of the plant and includes the cost of materials, direct labour, project supervision, engineering services and interest during construction. Additions to utility plant are included in the asset's carrying value or recognized as a separate asset.

Treatment of Capital Expenditure

In its application the Company has capitalized investment at December 31, 2023 for all plant in service as of that date. Contributions received from customers towards construction of utility plant are credited to deferred revenue while the costs of construction are categorized with Transmission & Distribution assets. In those cases where construction is still in progress the costs form part of Construction Works in Progress-(CWIP). Interest charges are accrued during the period of construction of property, plant and equipment and are capitalized until the asset is brought into service, at which time capitalization of interest stops and depreciation starts.

RESERVE FOR ACCUMULATED DEPRECIATION **-** *($219,720,276)*

Depreciation is the cost associated with the consumption or using up of physical capital, including generation and power delivery facilities. The depreciation policy shows up in two major dimensions of depreciation cost:

a) *the rate of capital depletion, reflected as the annual charge for depreciation in the Statement of Income; and*

b) *the accrued level of capital depletion used to determine the net value of capital resources referred to as reserve for accumulated depreciation in the rate base.*

Land is not a depreciable asset. No depreciation is provided on CWIP until the assets involved have been put into service.

The Company has used the new depreciation rates resulting from the Depreciation Rates Study of 2021 for the test year 2023 to arrive at the accumulated depreciation to be included in rate base." See Schedule B-3 and B-3.2

CONSTRUCTION WORK IN PROGRESS (CWIP) - *$ 7,835,279*

CWIP represents new utility plant that is not yet in service. Schedules B-4 and B-4.1 detail the projects under construction for an annual average for 2023.

WORKING CAPITAL ALLOWANCE - ***$19,675,310***

Inventories

Inventories shown in Schedule B-5 include the cost of materials and supplies purchased for use in the utility business for construction, operation and maintenance purposes. All utilities maintain such supplies for use in their normal day-to-day operations. This is especially important in an island environment where replacement parts have to be acquired from overseas. Materials & Supplies include stocks of fuel, lubricants, generation plant spares, poles and accessories etc. Materials and supplies when issued are charged to the appropriate construction or operating expense account on the basis of a unit price determined by the use of average method of inventory accounting in conformity to accepted accounting standards consistently applied.

The levels of inventory change daily. As with all inventories, different items may be needed at different times. It is thus possible that the level of Materials & Supplies at any given point in time would not be an accurate reflection of the ongoing inventory levels. The inventory of $14,970,172 included in the rate base is calculated as the average balance. Pending recovery of these costs from its customers, the Company is entitled to earn a return on the funds used to finance these inventories.

Working Cash

Cash working capital of $4,705,138 shown in Schedule B-5 is the average amount of capital (in excess of that used to finance net utility plant and other separately identified rate base components) necessary to operate the business. Working capital included in the rate base provides return on the capital used to purchase inputs when the cost of such inputs cannot be recovered in revenue immediately. The Company needs money to operate between the time the Company must pay its suppliers and its employees for their work and the time the service is paid for by the customers. Essentially, cash working capital bridges the time gap between cash outflows to fund resource inputs, and cash inflows (revenues) for service provided to customers.

Across the regulated electric utility industry, a commonly applied guideline to determine the working capital amount is one-eighth of the utility's operations and maintenance (O&M)

expenses. This methodology is often referred to as the '45-Day Rule' or formula approach. The 45-Day Rule has withstood the test of time and accordingly has been widely adopted by both utilities and regulatory agencies in the United States as a standard cost-efficient approach.

The Independent Regulatory Commission has accepted the 45-day rule. The Company has used the 45-day rule (1/8 O&M) to determine the cash working capital needs. The Company's cash working capital determination reflects known and measurable charges to the 2023 Test Year O&M expenses.

OTHER RATE BASE ITEMS - ***($40,705,771)***

These adjustments to rate base referred to as "No Cost Capital" are funds received by the utility to which it is not entitled to earn a rate of return. These adjustments excluded from rate base are summarized in Schedule B-6 and are as follows:

1. ***Consumer Deposits*** ***($3,730,478)***

Consumers requesting energy connections are required to pay a security deposit which is refundable when service is no longer required.

2. ***Deferred Revenue*** ***($15,773,704)***

When a customer applies for service and the existing plant is unable to provide that service because of distance or load, then that customer may be asked to make a contribution towards the additional work required to effect service. Contributions may also be required when customers request changes to existing plant e.g. realignment of poles. The funds paid to the Company are credited to deferred revenue. When the asset is completed and transferred to property, plant and equipment, the deferred revenue is amortized. customer-provided funds are deducted from the Company's rate base.

3. Deferred Income Tax Liability ***($21,201,589)***

The major regulatory treatment of corporate income taxes is the normalization method of accounting for the benefits that arise from tax policy. The Company employs capital intensively and tax policy in the form, of accelerated depreciation can produce significant non-investor provided cash flow benefits. As a consequence, the manner in which these benefits are captured within the regulatory process is important. The general view in this respect is that accumulated deferred income tax liabilities represent a source of interest free funds or loans supplied by the government that the utility is free to use in support of rate base investment. Therefore, the rate base must be reduced by the accumulated deferred income tax liability to avoid the Company receiving a return on funds that are cost free."

The Commission notes that the *Tariff Regime Decision Document Ref:2009/004/D* explicitly details what constitutes operating expenses, rate base and revenue requirement and the methodology utilized in determining these values.

The computation of DOMLEC's proposed rate base and revenue requirement as computed by DOMLEC are summarized in tables 2.0 and 3.0 below:

Table 2.0: Computation of the Rate Base

Computation of DOMLEC's Rate Base		
Rate Filing for 2023 Test Year		
Description	**Test Year EC$**	**Test Year EC$**
Plant In Service/Fixed Capital		396,581,624.00
Reserve for Accumulated Depreciation		(219,719,153.84)
Net Plant In Service		176,862,470.16
Construction Work In Progress 51.7% Complete		7,835,278.50
Working Capital Allowance:		
Inventory	14,970,172.00	
Working Capital	4,705,138.00	19,675,310.00
Other Rate Base Items		
Customers Deposit	(3,730,478.00)	
Deferred Revenue	(15,773,704.00)	
Deferred Income Tax Liability	(21,201,589.00)	(40,705,771.00)
Rate Base		**163,667,287.66**

Table 3.0: Computation of DOMLEC's proposed Revenue Requirement:

COMPUTATION OF DOMLEC Proposed Revenue Requirement		
	Rate Filing for 2023 Test Year	
Description		
Operating Costs:		**EC$**
Purchased Power Expense		61,083.03
Operating Expenses		37,580,024.08
Depreciation Expense		13,249,972.56
Income Taxes		3,064,721.81
Total Operating Expense		53,955,801.48
Finance Cost :		
Rate Base	163,667,289	
After-Tax Rate of Return	7.95%	
Pre-Tax Rate of Return	9.82%	
Financing Costs		13,003,521.56
Revenue Requirement		**66,959,323.04**

The Commission notes that DOMLEC's proposed revenue requirement of $66,959,323.04 is considered reasonable and falls in sync with DOMLEC's base revenue from electricity sales from 2019 to 2023 as depicted in the table below.

The work conducted by the Commission, in collaboration with DOMLEC, has reassured the Commission that the proposed revenue requirement accurately reflects DOMLEC's costs under normal operating conditions. In such circumstances, DOMLEC is expected to operate efficiently and adhere to this business plan, ensuring that its operations align with the projected financial framework. In the event of any exorbitant increase in the annual revenue requirement beyond forecasted operating revenue DOMLEC is required to provide to the Commission justification that reflects the excessive funds.

Table 4.0: DOMLEC's Revenue from Electricity Sales from 2019 to 2023

Summary of 5-Year Revenue Requirement					
	2019	2020	2021	2022	2023
	$	$	$	$	$
Base Revenue	**55,337,521.00**	**58,700,742.00**	**60,972,056.00**	**60,807,273.00**	**65,001,191.00**

Consultation Questions

The Commission would be interested in receiving stakeholders' views in this regard.

Consultation Question No 1:

Do respondents agree that it is not only in order but also prudent for the Commission to accept for its consideration the Application of Revenue Requirement and Rate Base submitted by DOMLEC?

The Determination notes that the Revenue Requirement is the key component to derive the average tariff for DOMLEC. The Commission thinks DOMLEC's operation is capital intensive with major investments including Generation and Transmission and Distribution Assets among others. To provide reliable and efficient services, operating expenses should be aligned as far as possible to Gross Plant in Service.

The Revenue requirement will, therefore, be based on a test year which will consider all efficient non-fuel operating costs (including non-generation fuel costs), depreciation expenses, taxes and a fair return on investment

Consultation Question No 2:

Do respondents consider as fair and reasonable the operating expenses of $53,955,801.00 proposed by DOMLEC as shown in the appendices be factored in the determination of the revenue requirement for this Tariff rate review?

If not, please provide reasons?

The Tariff Regime Decision Document defines operating costs as:

> *"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 must 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."*

Typically, the utility's OMA expenses will remain relatively constant yearly, reflecting mainly 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.*
    - Other expenses

There are other expenses, including Depreciation, Taxes and Deferred Costs.

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 different treatment for regulatory purposes as determined by the Commission.

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 must 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.

The Commission notes that Operation, Maintenance and Administrative (OMA) expenses form an integral component of the utility's Revenue Requirement. The increase in inflation has been driven by the rising costs in the supply chain. The pressure of increase in cost of goods reflect a dramatic change in business operation and consumers lifestyles since the early stage of the COVID Pandemic. To date, the prices of commodities are increasing at an alarming rate.

The regulatory framework dictates that the utility should provide efficient and reliable services to customers at affordable prices and receive a fair and reasonable return on investments. As noted in the tariff decision document, the current impact of inflation needs to be reflected in the utility's OMA expenses. The Commission notes that DOMLEC's Operation, Maintenance and Administrative OMA expenses excluding fuel costs for the 2023 Test year is $53,955,801.00. This figure represents 6 months actual OMA costs and 6 months forecasted expenditure that were scheduled from July to December 2023 only.

The Commission believes that published Consumer Price Index from credible sources should be used to determine the inflation rate to forecast DOMLEC's Operation, Maintenance and Administrative OMA expenses during any tariff period. The Commission proposes that an inflation rate of 4.45% for 2023 as published by Central Statistical Office of Dominica be applied annually to DOMLEC's Operation, Maintenance and Administrative expenses for the 3-year tariff period.

Provisions for costs incurred because 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.

The rules and procedures for managing and accessing the fund will be subject to Commission approval. DOMLEC must submit its proposals in respect of such Rules and Procedures to the Commission within 90 days (about 3 months) of the tariff regime's coming into effect.

Treatment of Fuel Costs

The volatility in world oil prices during 2008, 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** (adopting a complete pass-through mechanism) shown as a line item without putting fuel costs in the base revenue requirement as part of the energy charge.

DOMLEC in its submission proposed a fuel charge of $46,467,998.00.

Consultation Question No 3:

Do respondents consider as fair and reasonable the value for inclusion of DOMLEC's proposed fuel charge of $46,467,998.00 as full pass-through costs to customers used in the generation of energy?

Forecasting Methodologies:

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

Consultation Question No. 4

Do respondents consider as fair and reasonable the values for inclusion of the historic costs of Utility's Plant (net of adjustments) of $396,581,624, Construction Work-In-Progress (CWIP) of $7,835,279.00 and Inventory balances of $14,412,432.00 as provided by DOMLEC be factored in the determination of Rate Base?
If not, please provide a reason.

Consultation Question No. 5

Do respondents consider as reasonable that $1,392,263.00 be disallowed from the Regulatory Asset base as amounts not considered used and useful for this rate making exercise?

If note, please provide reasons.

The rationale for this question stems from the list of amounts to disallow from the Regulated Assets base as proposed by DOMLEC.

These amounts are detailed as follow:

Land at Tarrou	$	1,383,229.00
Land at Melville Hall	$	9,034.00
	$	1,392,263.00

These amounts reflect land not in used and not considered useful in the generation, transmission and distribution to electricity to customers for the tariff period. The Commission noted that only assets that are considered used and useful for the 3-year tariff period should be recognized as part of the Regulated Assets Base.

Consultation Question No. 6

Do respondents agree to the methodology or approach used by DOMLEC that determines the proposed rate base of $163,667,289.00 as denoted in Table 2.0 above? If not, please provide reasons?

Consultative Question No. 7

Do respondents consider the proposed Revenue Requirement of $66,959,323.04 determined by DOMLEC and illustrated in Table 3.0 above as reasonable and acceptable value that would enable DOMLEC to provide efficient and reliable services and at the same time achieve a fair return on investment? If not, provide reasons.

Consultation Question No. 8

Do respondents agree that an inflation rate of 4.45% for 2023 as published by the Central Statistical Office in Dominica be used to forecast DOMLEC's Operation, Maintenance and Administrative expenses for the 3-year tariff period?

Consultation Question No. 9

Do respondents have any other (related) comments or recommendations?

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

The Tariff Regime Decision document Ref:2009/004/D prescribes the steps used in deriving the rate base:

The determination notes that

> *"The purpose of determining the Rate Base 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.*
>
> *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.*

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

While the Commission does not wish to manage the company, it needs to satisfy itself that the amount approved for the Revenue Requirement and Rate Base is fair and reasonable for providing reliable service to its customers and attract an adequate return on investment.

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 the 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 must be included in the 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.

Deductions for Reserve

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 must be removed from the rate base, as they have been collected from ratepayers.

As previously pointed out, the depreciation expense is calculated using a straight-line method. Accumulated Depreciation indicates the total depreciation that was previously collected from customers, so these amounts must be removed from the rate base.

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 pay."

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 applicable to the Rate Base. DOMLEC, in making its tariff submission, must make detailed proposals and support analysis to the Commission on its derivation of the WACC to be applied in its revenue requirements determination.

The Commission's Considerations

The Commission is in general agreement with and will consider as part of the Regulated Asset Base the following asset categories:

- Buildings and Construction.
- Plant and machinery – Hydro and Thermal.
- Network.
- Tools and Equipment.
- Vehicles.
- Office Furniture.
- Office Equipment (Appliances).
- Software (Intangible Assets) Concluding Comments.

For this consultation specific to the Revenue Requirement and Rate base submitted by DOMLEC in 2024, the Commission invites and will note all comments and questions with a view towards responding as efficiently and effectively as possible.

Reference is made to Schedule 1 page 27 & 28, of the Commission's Rules of Practice and Procedures 2008; Decision Document Ref: 2008/004/D:

"The views and analysis set out by the Commission in the said Consultative document shall be for discussion purposes only and are not final. The purpose of the consultative document is to invite comments and evidence to be supplied, which may assist the Commission in the formulation, and, if need be, revision of its views. The Consultative document may include a series of questions the Commission is seeking comments on. If the Commission considers it appropriate, respondents may wish to address other aspects of the document for which the Commission has not prepared any specific question. If respondents may only wish to answer some of the questions posed – failure to provide answers to all questions will in no way reduce the considerations given to the response.

Following careful consideration of the responses and, if necessary, undertaking additional analysis and evidence gathering, the Commission shall publish a further document in which it provides comments on the responses. On major and/or complex issues, this may be another Consultative document with a view to inviting comments on matters not fully explored in the first Consultative document. Once the Commission has gathered all responses on all relevant aspects of the issue and has completed its analysis, it shall publish a decision/statement or policy position paper with the basis for its judgement….."

Therefore, in compliance with its core corporate values of professionalism, predictability, integrity, responsiveness, teamwork and transparency, the Commission is always guided by the principle to garner the widest possible range of views on the matter under consideration.

The Commission will explain the basis for its decisions and factors influencing its position in any given matter through its published documents.

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