DECISION

REGULATORY POLICY AND PROCEDURE

ADDING CAPACITY TO THE PUBLIC ELECTRICITY SUPPLY SYSTEM

Document Ref: 2008/002/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 2006

This document sets out the Decision of the Independent Regulatory Commission **2008/002/D – "Regulatory Policy and Procedure - Adding Capacity to the Public Electricity Supply System"** - taken by the Commission at its meeting on July 29, 2009.

Effective date: July 29, 2009

By Order

……..

On Behalf of the Commission

July 29, 2009

Contents

1.0 Introduction

The Commission issued an NPRM, Document Ref. 2008/002/NPRM-01 – "Regulatory Policy and Procedure - Adding Capacity to the Public Electricity Supply System", setting out its proposals for the policy and procedural framework for adding capacity to the public electricity supply system, which is owned and operated by Dominica Electricity Services Ltd (DOMLEC).

Few comments or responses were received on the document and the Commission wishes to thank those who commented, in particular DOMLEC, who provided a comprehensive formal written response. The Commission subsequently issued Document Ref No: 2008/002/NPRM-01.2 entitled "Regulatory Policy and Procedure - Adding Capacity to the Public Electricity Supply System (Comments on Responses)" on April 15, 2009 in which it set out its responses to the comments received and invited further comments. No further comments were received.

The Commission, being mindful that the Government is developing an overall energy policy as well as a specific policy to address the development of renewable energy, is seized with the imperative of the need for consistency with government's policy and recognizing that the procedures resulting from this consultation, in particular, must be in absolute harmony with such policy, sought and received further clarification on the status of evolving energy policy. It is also aware of the ongoing initiatives to develop Dominica's geothermal resources for electricity production, a matter for which the policy and legal framework also has to be crafted.

With this background of policy uncertainty the Commission has concluded that it is difficult to establish meaningful regulatory policies and procedures relating to the addition of significant blocks of generating capacity to the public electricity supply system. It has therefore decided to defer decisions on a number of issues that were addressed in this consultation and to revisit these at such time that the Energy Policy has been promulgated.

The Commission now sets out its Decision "Regulatory Policy and Procedure for adding Capacity to the Public Electricity Supply System".

2.0 Decisions

Regulatory Policies and Decisions

Regulatory Policy Statement 1.0
As a matter of policy, to the extent technically feasible and economically reasonable, the Commission will encourage the participation of multiple participants in the generation market and where feasible new participants will be allowed entry or new facilities added by way of a competition.

Decision 1.0
Despite its overall objective to promote competition, The Commission feels unable, at this time, to prescribe the requirements or rules for the competitive procurement of generation capacity but will await the promulgation of the Government's Energy Policy and any related amendments to legislation.

Decision 2.0
Multiple participants will be encouraged to invest in the electricity sector, all of whom will have to enter into Power Purchase Agreements (PPAs) with the primary Electric Utility.

Decision 3.0
DOMLEC is required to prepare regulatory accounts where there is separate reporting for its generation and its TD&S functions. DOMLEC and the Commission will agree on the structure of these accounts within 12 months of the effective date of this Decision with a view to the first accounts being presented on this basis within 24 months of this Decision.

Regulatory Policy Statement 2.0
The Commission will, as a matter of policy, cause long term plans for the development and expansion of the public supply system to be prepared which will be used as a tool for decision making on the addition of capacity to ensure security and adequacy of supply at the least cost. Such plans will be updated periodically consistent with prudent utility practice.

Decision 4.0

The Commission will consult periodically on the Demand Forecast prepared by DOMLEC and other relevant agencies, the results of which will be used as input to the preparing of the IRP and the LCEP.

Decision 5.0

The Commission will conduct the preparation of the IRP in accordance with the procedure set out in the Table D5.0 below.

Table D - 5.0

The Planning Procedure.

Step	Activity
1	IRC and DOMLEC agree on the system planning parameters; these are codified
2	IRC and DOMLEC agree on the assumptions to input into the IRP - Demand Forecast
3	DOMLEC submits its Demand Forecast to the IRC. The IRC reviews, consults and provides feedback to DOMLEC
4	DOMLEC prepares a draft IRP and submits to the IRC
5	IRC reviews plans but simultaneously makes public for a consultation
6	IRC reviews the results of the consultation incorporate these into feedback to the DOMLEC
7	DOMLEC adjusts the plan to reflect the feedback from the IRC and resubmits.
8	IRC approves and make public.

Decision 6.0

Under the guidance of the IRC, DOMLEC is required to prepare and update, periodically, a Least Cost Expansion Plan in accordance with prudent utility practice, based on the Demand Forecast approved by the Commission, which shall be submitted to the IRC for review and approval.

Regulatory Policy Statement 3.0

The Commission will use the results of the IRP as the basis for determining the quantum of and timing for the addition of new capacity.

Decision 7.0

The Commission will adopt the process described in Table D-6.0 as the procedure for adding capacity.

Table D - 6.0
The procedure for adding capacity

Step	Activity
1	The IRC publishes IRP and/or LCEP
2	Based on IRP/LCEP – all qualified organisations, including DOMLEC, submits proposals to IRC for satisfying demand. Proposal will include detailed economic analysis of options both in terms of size and technology and proposed in-service date. This would normally be initiated 3½ to 4 years before the desired in-service date.
3	IRC consults with principal stakeholders and responds to all qualified organisations, including DOMLEC, offering other options, as appropriate, but confirming or otherwise DOMLEC's recommendations as to the need for additional capacity.
4	All qualified organizations, including DOMLEC, refines proposals having regard to the Commission's views and resubmits proposals.
5	IRC approves and authorizes implementation of approved course of action. This approval should normally occur 3 - 3½ years before the in-service date.
6	IRC publishes decision.

Regulatory Policy Statement 4.0
The Commission will, as a matter of policy, promote the development of renewable energy resources for inclusion in the generation mix.

Regulatory Policy Statement 5.0
To the extent that renewable energy or alternative energy are economically competitive with conventional generation technologies, these technologies will be favoured where they satisfy the technical requirements of the system's operation and development.

Decision 8.0
The Commission will await the issue of the Government's Policy on renewable energy before embarking on any far reaching decisions for the introduction of these technologies into the public electricity supply system but it will immediately allow the development of facilities not exceeding 2.5% of the total system capacity.

Decision 9.0
DOMLEC is required to prepare and publish the procedure and terms for interconnection of renewable and alternative energy generation sources owned by third parties to the public electricity supply system. This Policy is subject to review and approval by the Commission and will also include specimen interconnection/power purchase agreements. DOMLEC is required to deposit with the Commission copies of all interconnection/power purchase agreements. This policy and procedural framework shall be submitted to the Commission for review and approval within 90 days of the effective date of this decision.

3.0 Reasons

Policy and Legal Framework

3.1 Policy Environment

Ideally, regulatory policy takes its lead from the overall policy for the sector as articulated by the government. While laws will reflect the basic tenets of policy, the policies will change over time and thus regulatory policy will also change.

The Commission is, unfortunately, in a situation where Government policy on energy and, more narrowly, electricity has not been formally developed. The Act, however, was enacted relatively recently and there are very clear signals, which should still be relevant, as to the government's policy on key issues that face the sector. The fundamental policy position of the Government is the establishment of the IRC, itself, as the independent regulator of the electricity sector. The Act provides some guidance as to the overarching policy objectives which speak to:

- Competition in the delivery of services, if feasible
- Cost reflective pricing of service
- Promotion and exploitation of renewable energy resources
- Protection of consumers
- System expansion based on sound investment planning
- Due regard for renewable sources in system development.

In seeking to achieve these objectives, the Act supports a policy for the unbundling of and competition in the three service sectors of generation, transmission and distribution and supply, if feasible.

The absence of specific policy, however, introduces gaps which the Commission finds difficult to bridge as it seeks to set regulatory policy for a number of key issues. These issues, which emerged during the consultation, relate more specifically (i) to the addition of large blocks of capacity where DOMLEC would be required to enter into Power Purchase Agreements (PPAs) for capacity and energy; whether there is a policy commitment to a structure for a competitive process for adding capacity and (ii) to the policy framework for the treatment of renewable energy. These issues are of such import that the Commission could find itself in contention with industry and other stakeholders if the regulatory policies and procedures were seriously in conflict with government policies, once introduced. These issues are highlighted below.

Structure of competitive environment

The Government has initiated and appears committed to a project to add some 5 MW of capacity to the public electricity supply system. While this initiative predated the establishment of the IRC, there are regulatory issues, should the project be implemented, which will have to be addressed by the Commission to ensure that any potential benefits from this arrangement accrue to consumers. The uncertainty of arrangements for the development of the geothermal resources pose other problems in that should the potential be fully exploited, the mechanism for introducing this capacity into the public electricity will also introduce another set of regulatory and operational challenges. The mechanisms for procuring the capacity may very well be tied to the prospecting arrangements and therefore outside of the conventions of a strict competitive regime. DOMLEC has itself suggested a regime for competitive procurement of capacity which does not recognize the initiatives being taken by the government. The Commission believes that the introduction of regulatory policies at this stage, before the government is in a position to clearly articulate its position on these issues either through clear policy directions or enactment of legislation, will only confuse the sector and introduce uncertainty as to the stability of the regulatory regime.

Policy framework for the treatment of renewable energy

Renewable energy technologies do not necessarily introduce opportunities for immediate reductions of electricity costs to consumers. There are benefits to the society and the national economy however which are persuasive arguments for the introduction of these technologies in the mix of generation in the public supply system. Not the least of these benefits is the positive environmental impact, the lessening of dependence on imported fuels and the consequential savings in foreign exchange, the ability to diversify the "fuel" mix and a greater sense of "fuel" security for electricity sector. Critically, however, renewable plants do not always offer firm capacity and the utility therefore has to plan for and have available standby capacity to meet demand

when renewable plant capacity is not available. Examples include the uncertain capacity of run of the river hydro plant during dry seasons and the variability in wind speed impacting on the output of wind turbines. Usually, regulators have difficulty approving investment in renewable capacity because of the unfavourable economics and therefore incentives are usually provided by way of government policy to allow these investments. For these reasons, renewable capacity has to be carefully integrated into the public supply system to achieve a reasonable balance between the competing factors of environmental needs and national economy imperatives with the electricity costs and system stability. The Commission is therefore of the view that policy framework for renewable energy has to be settled before any regulatory policy and procedures can be promulgated for the introduction of meaningful blocks of capacity utilizing renewable energy.

3.2 Legal Framework

The Act provides the legal underpinnings for the regulatory process. S. 19 provides for the powers of the Commission:

> *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 licencees with regard to all economic and technical aspects of regulation in accordance with this Act especially with regard to 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 licence will be the principal instrument for regulating the companies providing electric utility services and in this regard it will expand on the principles set out in the legislation. The Act provides, at S. 29, a requirement for persons *who engage in the operation of facilities or systems in order to carry out any of the functions of generating electricity (except where excluded under the Act), transmitting , distributing or supplying electricity* to be licensed while S. 30 sets out the general conditions relating to a generation licence. S. 31 (1) and S. 31. (2) are of particular importance where they provide:

(1) Generation licences shall be required for all generation facilities that are interconnected to the national grid, and are issued for the purpose of promoting safe, reliable and economically efficient operation of the national electricity system and shall expressly state:

(a) The nature of the service to which the licence applies;
(b) The location of the generation facilities or group of generation facilities;
(c) The duration of the licence, which shall be related to the useful life of the generation facilities; and
(d) The conditions applicable to licence as are prescribed under this Act or Regulations made under the Act or prescribed by the Commission.

(2) All applications for generation licences shall be considered by the Commission.

While S. 20. (1) encourages expansion of the system in an economic and efficient manner and espouses competition where efficient. S. 31 (2) suggests that an application for a licence could reach the Commission without having been the subject of a competition. In these circumstances, it compels the Commission by virtue of S. 21 (1) (f) to regulate the prices charged by the licencee.

4.0 Regulatory Policy

The Commission is a creature of statute and has to be guided at all times by its statutory mandate however it seeks to reflect the following principles in its policies:

- Fairness
- Transparency
- Certainty
- Non discrimination
- Consistency

With respect to its overall policy regarding the addition of capacity the following principles are of importance:

- Adequacy of capacity to meet demand
- Energy/fuel efficiency
- Lowest price to consumers
- Promotion of indigenous resources
- Fuel diversity
- Preservation of the environment

In practice it will be difficult to give equal weight to all of the principles indicated but where conflicts arise, the Commission will, as a rule, adopt the course of action which, in its view, will result in the lowest price to consumers. The Commission is, however,

mindful of its duty to balance consumers' interests with environmental considerations and investors viability whilst taking government policy into account.

5.0 Industry Structure

The Commission's first consideration is to decide on an appropriate industry structure designed to achieve the objectives of the Act and specifically 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;

Generally, the objectives of reforms, privatization and the introduction of competition in the sector are intended to reduce costs to customers by making the sector more competitive and efficient. Ideally, this is achieved by separating the vertically integrated utilities into the three service sectors – generation, transmission, distribution (and supply) – and by creating multiple companies in these elements. To function properly competitive markets really require many buyers and many sellers. Given the size of Dominica's electricity system, there are no economies of scale to be gained by such separation and therefore the key criteria for a competitive environment cannot be satisfied.

The Commission is of the view, however, that, although limited, there may be opportunities to introduce competition in the development and operation of new sources of energy which could, possibly, create opportunities for the participation of multiple players to invest in generation; opportunities in which DOMLEC will be able to participate.

The increases in fuel prices on the world market during 2008 which resulted in significant increases in electricity prices brought to national attention just how vulnerable and dependent Dominica's electricity supply is to fuel costs. The Government's announcements regarding exploration for and development of geothermal resources in Dominica, the potential for wind and to some extent hydro offer real opportunities to diversify from fuel oil and, more importantly, realize real reductions in the retail cost of electricity. The opportunity to export the electricity produced from the geothermal sources is of profound importance as it is by these means that the Dominica system will benefit from the economies of scale offered. It does offer an opportunity for Dominica to be a low cost green energy producer with real possibilities to transform the economy. The Commission is of the view that these developments will require significant regulatory

attention as there will be impact on the existing investments in generation and transmission line infrastructure.

Even as these issues are being considered, the Government has announced that, through its access to grant funds, it will invest in a 5MW medium speed diesel plant using No 2 fuel and that it will seek to enter into a Power Purchase Agreement (PPA) with DOMLEC. DOMLEC commissioned into service a new 5MW diesel plant utilizing No 6 fuel in early 2009.

Even though these developments were initiated before the IRC was established and have since continued in an environment where the Commission has not yet promulgated it policies and rules regarding the addition of new capacity to the public supply system, the initiatives themselves are of concern to the Commission as, taken together, the DOMLEC addition and that proposed by the Government at 10 MW represent over 60 percent of the peak demand and the Commission is not aware of any studies or analyses that would have informed both decisions. The Commission is therefore not in a position to advise consumers from an objective basis of the expected impact of these facilities on electricity prices.

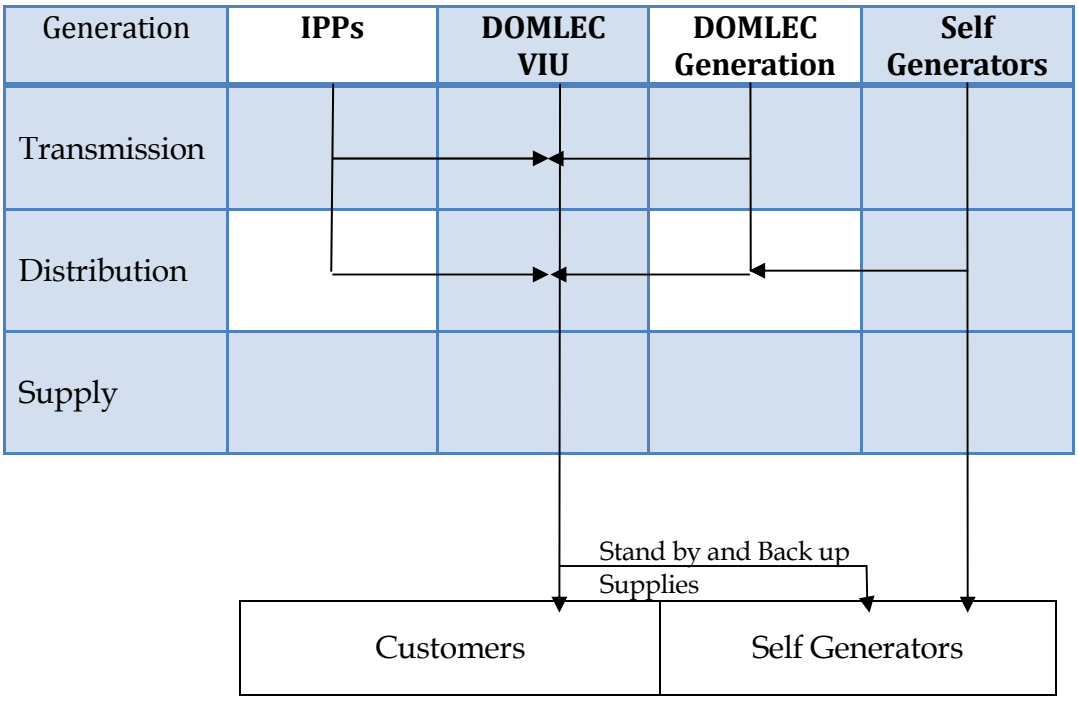
The Commission has introduced this discussion as part of this Decision out of a concern that, as a consequence of these additions of capcity, it may find itself constrained in its future decisions on adding capacity.

> **Regulatory Policy Statement 1.0**
> As a matter of policy, to the extent technically feasible and economically reasonable, the Commission will encourage the participation of multiple participants in the generation market and where feasible new participants will be allowed entry or new facilities added by way of a competition.

Chart 5.1 shows the Commission's long term view of Dominica's generation environment.

This model provides for the introduction of IPPs and other classes of generators into the market whilst it recognizes that DOMLEC as a vertically integrated utility (VIU) operates significant generation resources. In this context IPP is to be interpreted broadly as any generator (who does not supply himself) that has a contractual arrangement with DOMLEC to supply capacity and/or energy to the public electricity supply system. Self generators supply themselves and may also supply the DOMLEC system. For the avoidance of doubt, the Commission is not at this time proposing or considering the breakup of DOMLEC into separate businesses but for regulatory purposes, DOMLEC will be required to prepare regulatory accounts where there is accounting for the Generation and TDS components of its business.

Chart 5.1
The model for Dominica's generation environment



Decision 1.0
Despite its overall objective to promote competition, The Commission will not, at this time, prescribe the requirements or rules for the competitive procurement of generation capacity but will await the promulgation of the Government's Energy Policy and any related amendments to legislation.

Decision 2.0
Multiple participants will be encouraged to invest in the generation sector, all of whom will have to enter into Power Purchase Agreements (PPAs) with DOMLEC.

Decision 3.0
DOMLEC is required to prepare regulatory accounts where there is separate reporting for its generation and its TD&S functions. DOMLEC and the Commission will agree on the structure of these accounts within 12 months of the effective date of this Decision with a view to the first accounts being presented on this basis within 24 months of this Decision.

6.0 Policy and Procedure for the Addition of Capacity

6.1 System expansion planning

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*". There are basically two elements to the planning process - first the preparation of an Integrated Resource Plan (IRP) followed by a Least Cost Expansion Plan (LCEP). The first step in this process, however, is to agree on system planning parameters the outcome of which will influence system reliability and investment dollars which ultimately translates into the tariff.

(1) Integrated Resource Plan

The Integrated Resource Planning process will:

- provide energy and demand forecasts;
- identify the gap in base, intermediate and peaking capacity;
- identify the time in which new capacity is required;
- identify the schedule for retiring assets;
- identify any Demand Side initiatives; and
- identify the performance and constraints of the transmission and distribution network.

The IRP will identify the specific projects, including Demand Side initiatives, required to fill any gap between forecasted demand and supply. It will not initially specify technology types, unit size or similar details.

DOMLEC will undertake the preparation of the IRP under the IRC's supervision following a process outlined at Table 6.1.

(1) Least Cost Planning

While the IRP will identify the long run development needs for the system, the Least Cost Expansion Plan, which is to be prepared by DOMLEC, produces more granular results and selects the technology of the plant which would offer the least cost option for the assumptions made. This process is important particularly if generation is to be added without the benefit of competition. The Commission shall approve the Least Cost Plan prepared by DOMLEC.

(2) Demand Forecast

The critical input to the Integrated Resource Plan (IRP) and/or a Least Cost Expansion Plan (LCEP) is the demand forecast as this will drive the decisions on size and timing for new capacity. If the forecast is conservative a shortage of

capacity could lead to suboptimal capacity additions while a more aggressive forecast could lead to overinvestment – both scenarios, therefore, having a deleterious impact on prices to consumers.

Table 6.1
The Planning Process.

Step	Activity
1	IRC and DOMLEC agree on the system planning parameters; these are codified
2	IRC and DOMLEC agree on the assumptions to input into the IRP - Demand Forecast
3	DOMLEC submits its Demand Forecast to the IRC. The IRC reviews, consults and provides feedback to DOMLEC
4	DOMLEC prepares a draft IRP and submits to the IRC
5	IRC reviews plans but simultaneously makes public for a consultation
6	IRC reviews the results of the consultation incorporate these into feedback to the DOMLEC
7	DOMLEC adjusts the plan to reflect the feedback from the IRC and resubmits.
8	IRC approves and make public.

As a practice the Commission will consult periodically on the Demand Forecast The inputs of Ministries, government planning agencies, industry, tourism and commerce interests are important to this process as, in order to be credible, the forecast must be based on the best information available and resonate positively with the major stake holders.

Regulatory Policy Statement 2.0

The Commission will, as a matter of policy, cause long term plans for the development and expansion of the public supply system to be prepared which will be used as a tool for decision making on the addition of capacity to ensure security and adequacy of supply at the least cost. Such plans will be updated periodically consistent with prudent utility practice.

Decision 4.0

The Commission will consult periodically on the Demand Forecast prepared by DOMLEC, the results of which will be used as input to the preparing of the IRP and the LCEP.

Decision 5.0

The Commission will conduct the procedure for preparation of the IRP in accordance with the procedure set out in the Table D5.0 below.

Table D - 5.0

The Planning Procedure.

Step	Activity
1	IRC and DOMLEC agree on the system planning parameters; these are codified
2	IRC and DOMLEC agree on the assumptions to input into the IRP - Demand Forecast
3	DOMLEC submits its Demand Forecast to the IRC. The IRC reviews, consults and provides feedback to DOMLEC
4	DOMLEC prepares a draft IRP and submits to the IRC
5	IRC reviews plans but simultaneously makes public for a consultation
6	IRC reviews the results of the consultation incorporate these into feedback to the DOMLEC
7	DOMLEC adjusts the plan to reflect the feedback from the IRC and resubmits.
8	IRC approves and make public.

Decision 6.0

DOMLEC is required to prepare and update, periodically, a Least Cost Expansion Plan in accordance with prudent utility practice, based on the Demand Forecast approved by the Commission, which shall be submitted to the IRC for review and approval.

6.2 Addition of Capacity

The Commission is not at this time issuing a decision on the procedure for adding capacity through the competitive process but will revisit this matter after the Government issues its Energy Policies and related legislation.

In the meantime, the results of the IRP will provide the basis for determining the quantum of and timing for the addition of new capacity. The Commission will rely on the results of the Least Cost Planning process to rank the options for new capacity

according to economic merit. Having established that there is need to add capacity, the Commission will consider proposals from DOMLEC based on economic analysis of options, which may include proposals from third parties (including opportunities provided through government to government arrangements) for providing such capacity. The Commission, in evaluating the proposals will, among other things, have regard to and be informed by the long run incremental cost (avoided cost) derived from the LCEP. The procedure for adding capacity is described at Table 6.2.

Table 6.2
The Procedure for adding Capacity

Step	Activity
1	The IRC publishes IRP and/or LCEP
2	Based on IRP/LCEP – DOMLEC submits proposals to IRC for satisfying demand. Proposal will include detailed economic analysis of options both in terms of size and technology and proposed in-service date. This would normally be initiated 3½ to 4 years before the desired in-service date.
3	IRC consults with principal stakeholders and responds to DOMLEC offering other options, as appropriate, but confirming or otherwise DOMLEC's recommendations as to the need for additional capacity.
4	DOMLEC refines proposals having regard to the Commission's views and resubmits proposals.
5	IRC approves and authorizes implementation of approved course of action. This approval should normally occur 3 - 3½ years before the in-service date.
6	IRC publishes decision.

Regulatory Policy Statement 3.0
The Commission will use the results of the IRP as the basis for determining the quantum of and timing for the addition of new capacity.

Decision 7.0
The Commission will adopt the process described in Table D-6.0 as the procedure for adding capacity.

Table D - 6.0
The procedure for adding capacity

Step	Activity
1	The IRC publishes IRP and/or LCEP
2	Based on IRP/LCEP – DOMLEC submits proposals to IRC for satisfying demand. Proposal will include detailed economic analysis of options both in terms of size and technology and proposed in-service date. This would normally be initiated 3½ to 4 years before the desired in-service date.
3	IRC consults with principal stakeholders and responds to DOMLEC offering other options, as appropriate, but confirming or otherwise DOMLEC's recommendations as to the need for additional capacity.
4	DOMLEC refines proposals having regard to the Commission's views and resubmits proposals.
5	IRC approves and authorizes implementation of approved course of action. This approval should normally occur 3 - 3½ years before the in-service date.
6	IRC publishes decision.

6.3 Renewable and Alternative Energy

The Commission is mindful that, in its long term planning process, the Act provides that it must have "*due regard for future potential generation sources such as geothermal and wind energy*". Strictly, these technologies ought to be introduced on the basis of the least cost of the alternative options. The introduction of renewable or alternative energy will be consistent with any target level of firm capacity for renewable energy which may be set and take into account any incentives that may be provided for in the Government's energy policy. The Commission will, therefore, not now issue decisions regarding renewable or alternate energy that will have far reaching implications until the government has settled its policy on this matter. The Commission is mindful however that opportunities will arise, in the meantime, for introducing small blocks of renewable energy into the public electricity supply system and because of the implications for reducing the impact of imported fuel, the Commission wishes to take advantage of these opportunities. In this regard the Commission will allow the introduction of discrete blocks of renewable energy

not exceeding 1 .0 MW on an energy only basis. By renewable or alternate energy, the Commission means technologies for producing electricity from energy sources such as wind, solar, wave, biogas, hydro and fuel cells. DOMLEC will be required to prepare, maintain and make public an Interconnection Policy, which sets out the procedure and terms for interconnection of renewable and alternate energy generation sources owned by third parties to the public electricity supply system. This Policy, which will also include specimen interconnection/power purchase agreements, is subject to review and approval by the Commission. DOMLEC is required to deposit with the Commission copies of all interconnection/power purchase agreements for facilities over 100kW. All facilities that are connected to the DOMLEC system will require a licence issued by the Commission.

For facilities over 100kW the Policy and Procedure prepared by DOMLEC shall as a matter of form require the applicants to include the following:

- Identification of ownership group
- Size and type (technology) of facility
- Fuel type (if applicable)
- Detailed description of technology
- Technical details of proposal
- Projected capacity and annual energy supplies to the grid
- Tentative project implementation milestones
- Proposed pricing structure
- Status of site selection or acquisition
- Proposed interconnection arrangements
- Proposed metering arrangements
- Financial commitments
- Proposed operations structure
- Any other information deemed relevant by the proposer which might be peculiar to the technology being employed

Regulatory Policy Statement 4.0

The Commission will, as a matter of policy, promote the development of renewable energy resources for inclusion in the generation mix.

Regulatory Policy Statement 5.0

To the extent that renewable energy or alternative energy are economically competitive with conventional generation technologies, these technologies will be favoured where they satisfy the technical requirements of the system's operation and development.

Decision 8.0

The Commission will await the issue of the Government's Policy on renewable energy before embarking on any far reaching decisions for the introduction of these technologies into the public electricity supply system but it will

immediately allow the development of facilities not exceeding 1 MW for connection to the system.

Decision 9.0

DOMLEC is required to prepare and publish the procedure and terms for interconnection of renewable and alternate energy generation sources owned by third parties to the public electricity supply system. This Policy is subject to review and approval by the Commission and will also include specimen interconnection/power purchase agreements. DOMLEC is required to deposit with the Commission copies of all interconnection/power purchase agreements for facilities over 250kW. This policy and procedural framework shall be submitted to the Commission for review and approval within 90 days of the effective date of this decision.

Attachment 1 Model Power Purchase Agreement

This Power Purchase Agreement is made this ……..day of ……. 20…
BETWEEN

(Insert Company A) a company incorporated in the Commonwealth of Dominica and having its registered office at **(insert address of registered office)** hereinafter referred to as **XXX** which expression shall where the context so admits, be deemed to include its successors and assigns of the one PART;

AND

Dominica Electricity Services Ltd, a company incorporated in the Commonwealth of Dominica and having its registered office at 18 Castle Street, Roseau hereinafter referred to as DOMLEC which expression shall where the context so admits, be deemed to include its successors and assigns on the other PART;

WHEREAS:

Insert recitals

NOW THEREFORE in consideration of the mutual benefits to be derived and the presentations and warranties, conditions and promises herein contained, and intending to be legally bound, the PARTIES HERBY AGREE AS FOLLOWS:-

1. **DEFINITIONS AND INTERPRETATION**
   - 1.1 **DEFINITIONS**
     In this Agreement, unless the context otherwise requires the following words and expressions shall have the following meanings:-
     The definitions to be agreed by the parties as the circumstances warrant
   - 1.2 **INTERPRETATION**
     In this Agreement,
     a) Headings are for convenience only and shall not be considered in construing this Agreement;
     b) Abbreviations and Acronyms used in this Agreement are set out in Schedule 1 of this Agreement;
     c) The singular includes the plural and vice versa;
     d) References to Articles, Sections, Annexes and Schedules are, unless the context otherwise requires or states, references to Articles, Sections, Annexes and Schedules to this Agreement;

e) Unless otherwise provided herein, where a consent or approval is required by one of the Parties from the other Party, such consent or approval shall not be unreasonably withheld or delayed.

2. **APPROVAL BY THE INDEPENDENT REGULATORY COMMISSION**
This Agreement is not binding on the Parties unless it has been approved by the Independent Regulatory Commission

3. **BINDING NATURE AND DURATION OF THE AGREEMENT**

4. **DURATION**
This Agreement shall come into force on the date of the signing hereof and shall remain in force until the expiry of a duration of (**insert period in years**) unless earlier terminated by one of the Parties in accordance with its terms.

The duration may be extended, subject to agreement in wring by the Parties and Approval by the Independent Regulatory Commission to such extension, at the latest twelve months (or such reasonable period as the Parties may agree with the concurrence of the Independent Regulatory Commission) prior to its expiry, and on such terms as the Parties may agree, subject to the approval of the Independent Regulatory Commission.

5. **CONDITIONS PRECENDENT**
Conditions precedent that either Party shall be required to fulfill are set out in the Schedules to this Agreement which shall include obtaining the necessary permits, approvals and Licences; but specifically the following:
    - Generation Licence issued by the Independent Regulatory Commission, pursuant to the ESA No 10 of 2006 of the Commonwealth of Dominica;
    - Environmental approvals issued by the Environmental Control Unit of the Government of the Commonwealth of Dominica.

6. **TECHNICAL ISSUES**
This article will deal with without limitation, issues such as
    a) Compliance with applicable environmental, health and safety laws, regulations and standards
    b) The responsibilities of the parties relating to construction of the generating stations and interconnection and other facilities.
    c) Commissioning and testing
    d) Compliance with any applicable rules, and codes issued by the Independent Regulatory Commission
    e) Operating and dispatch procedures
    f) Maintenance responsibilities

(Details of these may be set out in Schedules to this Agreement)

7. **SALE AND PURCAHSE OF ELECTRICITY**

This Article shall set out:-

a) Terms and conditions for sale and purchase of electricity
b) The quantum of payments for energy and capacity (or the pricing formula)

The detail could be recited as a Schedule

8. **FUEL PROCUREMENT**

This Article will set out the principles for the terms and conditions for the procurement of fuel, if relevant. (The fuel procurement plan should be include as a Schedule)

9. **METERING AND BILLING**

In this Article the Parties shall set out the metering and billing arrangements, which shall include, without limitation:-

a) Obligations of each party
b) Repair, adjustment and replacement of defective metering equipment
c) Applicable standards for metering equipment
d) Sealing of metering equipment
e) Meter tampering
f) Reading of meters
g) adjusting, testing and recalibration of metering equipment
h) preparation and issue of bills
i) content of bill and due date for payment
j) late payment
k) disputed payments
l) currency of payment.

The technical details of the metering system and specifications should be set out in the Schedules

10. **RECORDS AND CONFIDENTIALITY**

This Article will set out the provisions for managing and disclosing Confidential Information.

11. **FORCE MAJEURE**

This article will define Force Majeure and address the obligations of the Parties under conditions of Force Majeure

12. **LIABILITY AND INSURANCE**

This Article shall set out issues relating to insurance requirements and the liabilities of each Part under the Agreement

13. **DEFAULT, TERMINATION**

12.1 **DEFAULT**

Either Party reserves the right to terminate the agreement if there is a default on the part of the other party by service of notice of **(…insert period…**) months.

12.2 **TERMINATION**

Conditions for termination to be inserted under this Article.

It would be useful to describe in detail the process for termination and the responsibilities of both parties to secure safety of plant and personnel, continuity of service etc.

14. DISPUTES

This article will address the management and resolution of disputes and should place time bound provisions for settlement at the various levels. The process could include in escalating order:-

a) Local level negotiation between the parties
b) Reference to the Independent Regulatory Commission
c) Other Alternative Dispute Resolution options
d) Arbitration
e) The Courts

Disputes referred to the Courts shall be to the Supreme Court of Judicature of the Eastern Caribbean, whose decision shall be final.

15. JURISDICTION, CHANGES OF LAW, TAXES AND STATUTORY LEVIES

The laws of the Commonwealth of Dominica shall be the applicable Law.

IN WITNESS WHEREOF the Parties, etc

Authorized Officers to sign as appropriate.

16. SCHEDULES TO POWER PURCHASE AGREEMENT

(*These Schedules are for guidance only and may be varied as the circumstances dictate and as the Parties may agree)*

SCHEDULE 1. ABBREVIATIONS AND ACRONYMS

SCHEDULE 2. CONDITIONS PRECEDENT

SCHEDULE 3. FACILTIES TO BE INSTALLED BY EACH PARTY

SCHEDULE 4. METERING SYSTEM

SCHEDULE 5. DELIVERY POINTS AND INTERCONNECTION ARRANGEMENTS

SCHEDULE 6. TESTING AND COMMISSIONING PROCEDURES

SCHEDULE 7. FUEL PROCUREMENT PLAN

SCHEDULE 8. OPERATING AND DISPATCH PROCEDURES

SCHEDULE 9. PAYMEMTS AND CHARGES

SCHEDULE 10. APPLICABLE CODES

ADD OTHERS AS MAY BE NECESSARY