CARILEC

Position Paper on Regulation and Renewable Energy

(Minimization of Barriers and Provision of Incentives for Renewable Energy Technologies and Alternative Fuels)

1st March 2010

Prepared for CARILEC by

EXECUTIVE SUMMARY

Assuring a secure and reliable supply of electricity is an important condition for economic development in the Caribbean region. Availability of predictably-priced electricity allows economic processes to take place on a continuous and reliable basis. Caribbean electric utilities are fully aware of the important role that the power sector plays in the development of their economies. At the same time, it should also be recognized that power utilities play a key role in capital market development and help to increase the flow of foreign capital into the region and provide opportunities for regional/local capital investment.

The Caribbean power sector is witnessing important changes in the regulatory framework, featured by the introduction of regulatory entities, competition, and an increasingly important role for renewable technologies. In order to address the barriers to allow renewable technologies to be introduced, a change in the regulatory framework and the introduction of policy initiatives are required. At the same time the limitations of renewable technologies in addressing the energy needs and the necessity of maintaining sufficient back-up supply from the grid should also be recognized.

The Caribbean Association of Electric Utilities (CARILEC) and its Member Utilities recognize the benefits of the changes in the power sector and welcome them. In order to increase the involvement of electric utilities in the Caribbean regulatory policy process, CARILEC has prepared this Position Paper, which sets out the views of CARILEC's member utilities on the issue of regulatory reform in the Caribbean and in particular in the context of the minimization of barriers to the implementation of renewable energy technologies (RET) and the establishment of incentives for RETs and alternative fuels.

In the ongoing discussion about regulation and renewable energy in the Caribbean power sector, CARILEC wishes to express its view through the following position statements:

1. CARILEC welcomes and supports regulation in the Caribbean and believes that it will play a crucial role in further shaping and developing the power sectors in the region. To assure that regulation is effective, the design of the regulatory framework needs to properly incorporate the specific characteristics and realities of the Caribbean region.

2. A stable, competent, and independent regulatory framework is important to assure a financially healthy sector in which investments can be undertaken to

facilitate the growth in demand and thus sustain economic development of the Caribbean countries.

3. The electric utility should continue to be responsible for planning of the power system and the identification and tendering of new capacity, including those based on renewable technologies.

4. Where competition is introduced in electricity generation this should be based on the Single Buyer Model. This applies to additions of both conventional and large-scale renewable capacity. The utility should also be in the position to bid for new capacity.

5. For small-scale renewable energy, regulation should be in place that allows customers to use and interconnect these systems to the main grid taking into account technical conditions and with the allocation of a viable grid services fee that reflects the utility cost of providing grid services to such customers.

6. Incentives in the area of tariff setting and quality standards should be fair and symmetric. Utilities should not only be penalized for low performance but should also have the ability to be rewarded in case of good performance.

7. Governments, with the help of the utility, should actively promote support renewable technologies. Where applicable, Government can provide incentives but these should be outside the tariff system and should not affect the utility financially.

8. Regulation in the Caribbean should be in line with the principles of best-practice regulation namely independence, communication, consultation, consistency, predictability, flexibility, capacity, effectiveness, accountability, and transparency.

9. CARILEC and its member utilities will continue to play a constructive role as subject matter experts in the further progressing of the regulatory landscape in the Caribbean in order to move towards an effective regulatory framework for the Caribbean power sector.

Table of Contents

1. INTRODUCTION

Electricity and the Economy

Electricity plays a vital role in economic development. Availability of predictably-priced electricity allows economic processes to take place on a continuous and reliable basis and accommodates the introduction of modern and more efficient production techniques. Also, access to electricity results in a higher standard of living as consumers are able to utilize more sophisticated electrical equipment and further improve their quality of life.

The relationship between energy usage and economic development is illustrated in the following figure, which displays the correlation between these two variables for different countries. The figure clearly demonstrates that higher economic development is associated with higher energy usage, and vice versa. Here, economic development is represented by the Gross Domestic Product (GDP) per capita. Energy usage is represented by the average kWh consumption per capita. For reference, the positions of the Caribbean countries have been highlighted.

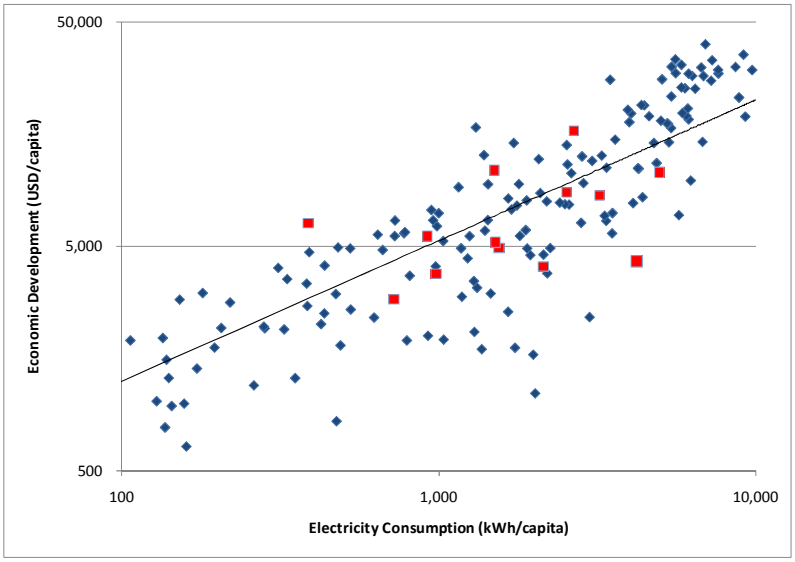

Figure 1 Relationship between electricity consumption and economic development for different countries; Caribbean countries are highlighted in red squares. Source: KEMA.

Assuring a secure and reliable supply of electricity is an important condition for economic development. Caribbean electric utilities are fully aware of the important role that the power sector plays in the development of their economies. This

awareness is reflected in the efforts made by electric utilities to ensure the supply of electrical power at lowest possible cost and the highest reliability.

At the same time, it should also be recognized that power utilities play a key role in capital market development in the region, especially in those jurisdictions in which the utility has significant private capital in its ownership structure and is listed on regional or national security exchanges. The Electricity Industry is one of the most capital intensive sectors in the economy and therefore is an important vehicle to increase the inflow of capital into the region and provide opportunities for local/regional capital investment and hence achieve further economic growth. An effective regulatory framework is crucial in creating an attractive investment climate with stable returns for investors. This increases access to capital, reduces the costs of capital, and creates spin-off effects for other parts of the economy as well. Also, in the light of the recent international financial turmoil, Caribbean power utilities can provide attractive investment opportunities and play a major role in attracting a stable flow of foreign capital into the region as well as provide attractive options to encourage Caribbean capital to invest in the region.

Drivers for Power Sector Reform

Traditionally, electric utilities have been operating as vertically integrated monopolies in the power sector. It was generally perceived that the task of electricity supply is best left to the monopoly of the electric utility. In recent years however this view has changed. In the developed countries, such as the United States and EU Member States, technological improvement in bulk electricity production has been the main driver for introducing competition into the power sector. Technology has developed such that it is now possible to consider competition in the production and supply of electricity. The network part of the power sector however remains a natural monopoly.

The impetus for regulatory reform in the Caribbean comes from the observation that most Caribbean Utilities continue to operate as monopolies while there is a trend in the more developed countries to introduce competition in the power sector. This impetus seems to have received much attention due to the success of the introduction of competition in other sectors such as telecoms.

The slow pace of the introduction of renewable technologies has led some policy makers to conclude that this is the demonstration of unwillingness of utilities operators to invest in these technologies rather than real barriers which exist and must be overcome in order to make large-scale investment in renewables a reality.

The other impetus is driven by the observation that the introduction of renewable generation technologies will help to increase energy security in the region. The role of renewables is particularly important in the context of the recently experienced volatility in international oil prices. In a previous Position Paper on Energy Policy CARILEC already highlighted the need for fuel diversification through the introduction of renewable energy sources in order to increase security of supply and reduce exposure to international fuel prices.[1]

There is a need to understand that in order to address the barriers to allow renewable technologies to be introduced, a change in the regulatory framework and the introduction of policy initiatives are required. This will require the establishment of new regulatory entities as well as a change in the regulatory approach with respect to the market, tariffs, and quality.

Power Sector Regulation

The topic of power sector regulation in the Caribbean has recently received considerable attention. In a number of countries regulators have already been introduced such as Barbados, Belize, Cayman, Dominica, Jamaica, and Trinidad & Tobago. In other countries the introduction of a power sector regulator is being considered, for example ECERA (Eastern Caribbean Electricity Regulatory Authority) which is envisaged to regulate the power markets in the OECS countries.

Competition is generally considered an important mechanism to achieve higher productivity and provide customers with goods that match their quality expectations. In the power sector, effective competition cannot exist without effective regulation. There is a need for proper regulatory and legislative frameworks to accommodate competition and to effectively coordinate between all power sector entities – both the incumbent utility and new entrants. Regulation needs to assure that all power sector entities are treated fairly, rules and regulations are enforced, and the sector is able to operate in a reliable and efficient manner.

Another important area where regulation plays an important role is in creating a predictable and low risk environment under which necessary investments in the power

[1] CARILEC (2008), Position paper on energy policy, January 2008.

sector can be undertaken in an efficient manner. The electricity sector is highly capital intensive and the cost of capital forms a significant part of the sector's overall costs. A well-regulated sector provides for a stable environment with lower risk. The presence of an independent and competent regulator is crucial in this regard as this reduces the costs of capital and allows investments to be undertaken efficiently, eventually to the benefit of customers as they can be served with a reliable service at the lowest possible price.

Objectives of this Position Paper

The Caribbean power sector is witnessing important changes in the regulatory framework, evidenced by the introduction of regulatory entities, competition, and an increasingly important role for renewable technologies. The Caribbean Association of Electric Utilities (CARILEC) and its Member Utilities recognize the benefits of these changes and welcome them.

At the same time, CARILEC believes that it is important that the new regulatory frameworks are effectively designed and lead to productive outcomes for all stakeholders involved. This requires regulation to be customized to the specific characteristics and realities of the Caribbean region.

Member Utilities of CARILEC are of the opinion that electric utilities can and should provide valuable input in helping shape the regulatory frameworks for the power sectors in the region. Indeed, international experience shows that the experience and knowledge of utilities is an important factor in assuring the development of an effective regulatory framework.[2]

In order to increase the involvement of electric utilities in the Caribbean regulatory policy process, CARILEC has prepared this Position Paper on Regulation and Renewable Energy. Through this paper, CARILEC utilities collectively express their views on the important issue of regulation and renewable energy for their countries and/or the Caribbean region.

[2] See for example World Bank (2006), Reforming Power Markets in Developing Countries: What Have We Learned? Energy and Mining Sector Board Discussion Paper No 19, Washington DC.

Paper Outline

The remainder of this paper is set out as follows.

- Section 2 provides an outline of the objectives of regulation, its main areas and the preferred approaches for the Caribbean.
- Section 3 focuses on the role of regulation specifically in the area of renewable energy and technologies.
- Section 4 sets out a list of generally accepted best-practice regulatory principles, which should also be followed in the Caribbean.
- Section 5 summarizes CARILEC's positions with respect to regulation and renewable energy in the Caribbean.

2. DEVELOPING THE REGULATORY FRAMEWORK

Objectives of Regulation

Regulation can broadly be described as government imposed control on commercial activity. The main tasks of regulation are to make sure that electricity prices are kept low as possible, electricity is delivered at reliable levels, while at the same time utilities are able to operate in a financially sustainable manner.

Worldwide a change can be observed in the regulatory approach for the power sector. This is witnessed by the establishment of independent regulators, the introduction of competition, and a change in the regulatory approach for setting prices and quality targets.

Changes in the regulation of the power sector are also being witnessed in the Caribbean. It is important that the new/to be developed regulatory models suit the specific Caribbean situation. Models that work well outside the region may not be entirely applicable for the Caribbean. This section provides a general outline of the preferred regulatory approaches for the region. Here, a distinction is made between the three main regulatory areas namely (1) Market regulation, (2) Tariff regulation, and (3) Quality regulation.

Market Regulation

Market regulation of the power market is associated with setting in place proper rules that regulate the competition process and the interfaces between the different power sector stakeholders in order to assure an effective and reliable power supply.

The introduction of competition implies that the incumbent utility will no longer be the sole entity active in the power sector. To assure the safe and reliable operations of the system, there will be a need for clear regulations to govern the conditions under which new producers enter the market, how energy is supplied to the power system, and the technical characteristics that need to be complied with.

When introducing competition, the international experience presents three main models: (1) Wholesale Competition, (2) Retail Competition, and (3) Single Buyer Model. As will be made clear, for the Caribbean the Single Buyer Model is the preferred option.

Wholesale Competition and Retail Competition models have been applied in for example Europe and the USA. These models are however only effective in relatively large markets, unlike the ones that can be witnessed in the Caribbean. Experience shows that in order to even start considering wholesale or retail competition, a market size of at least 1,000 MW is necessary in order for competition to be effective. For the Caribbean in general these models will therefore not be practical. An additional disadvantage of the wholesale and retail models is that they result in the problem of stranded assets.

When considering introducing competition in Caribbean power markets, the Single Buyer Model is the most effective choice. Here, competition is introduced by setting in place a competitive bidding process for new generation capacity. Any Independent Power Producer (IPP) as well as the incumbent utility can participate in the bidding process. The winning bid then earns the right to build and operate new capacity and enter into a power purchase agreement (PPA) with the utility.

An important advantage of the Single Buyer Model is that it allows competitive pressure to exist, but at the same time does not make its effectiveness a function of the scale of the market. This makes it particularly suitable in the context of the relatively small power markets in the Caribbean.

The role of the Single Buyer is best fulfilled by the incumbent electric utility. Most of the Single Buyer's main functions are normally already being carried out by the utility: (1) planning of the power system and identification of new capacity need, (2) organization of the tendering process for new capacity, (3) evaluation of the bids, (4) enter into PPA's with the winning parties to procure their power, and (5) sell this power to electric customers.

It is also important that the incumbent utility is provided the opportunity to bid for new capacity as well. Clearly, this can give rise to a conflict of interest if the bid evaluation were to be done by the utility. In those cases, it is therefore appropriate that the preparation of the bidding documents and the evaluation of the bids are performed by an independent party.

Tariff Regulation

Tariff regulation relates to the application of methodologies to set the tariffs that electric utilities can charge their customers. In most cases a distinction is made between the fuel charge and the base charge. The fuel charge consists of the costs of fuel and related items, which are passed through to customers on the basis of actual

costs. With the introduction of competition care should be taken that the energy purchase costs paid by the utility are appropriately allocated into the fuel charge.

The base charge generally consists of the non-fuel costs incurred by the utility i.e. the operational and capital costs. The base charge will need to be set by the regulator at a level that allows the utility to cover its costs of running and maintaining the system and to assure sufficient funds to invest to assure a safe and reliable service. The utility will need to be able to operate as a viable enterprise that is fully able to satisfy all its financial obligations and continuously attract capital to fund expansions of the system and do so in an efficient manner.

International experience shows that the introduction of competition and the associated change in regulatory framework is often accompanied by a change in the tariff methodology used by regulators. This new approach in setting prices is generally known as price-cap regulation. Price-cap regulation has, for example, been widely applied in Europe, Australia, Asia, and Latin-America. Also in the Caribbean examples of price-cap regulation may be observed.[3]

The price-cap approach is generally favored by regulators as it promotes higher productivity in a manner similar to the incentives experienced under competition. Under price-caps, the base charge is no longer set on actually observed costs but rather on a benchmark target set by the regulator.[4] In developing this benchmark, the regulator takes into account cost projections including operational and maintenance costs and capital costs. The base charge is subsequently set based on these cost projections. With the base charge disconnected from the utility's actual base costs, improvements in cost effectiveness by the utility translate into higher profitability. This creates incentives for the utility to improve its productivity.

In order for price-cap systems to be effective it is important that the regulated utility is provided a fair chance to actually retain the productivity improvements that it is able to achieve. This in fact is the true incentive to engage into productivity improvements in the first place. At the same time, it is also important to realize that the unlinking of actual costs and prices introduces risks for the utility. These risks will need to be reflected in the allowance for the costs of capital faced by the utility.

[3] Price-cap systems are for example applied in Belize, Jamaica, and Trinidad & Tobago.

[4] As fuel costs depend on fuel prices, which are outside the utility's control, the price-cap method is not applicable to the fuel charge.

Quality Regulation

Another area where a change in the regulatory approach can often be observed is the area of quality regulation. Under the price-cap system, there is a risk that part of the desired cost savings will be achieved through quality reduction rather than through cost improvements. To prevent this, the price-cap is typically augmented with quality incentive schemes.

Different approaches exist for establishing quality regulation. Minimum standards are commonly used by regulators. These specify the minimum level of performance to be achieved by the utility. In case that the minimum target is not met, the utility could be penalized financially. Areas where these standards apply include for example the reliability of the system, the handling of complaints and phone calls from customers, the speed of providing new connections, etc.

Some regulators also use quality incentive schemes, which are an extension of minimum standards. These impose a more direct relationship between performance and financial outcome. The advantage of incentive schemes is that rather than only getting penalized for low performance, there is also the possibility to be rewarded in case of superior performance.

The introduction of quality regulation requires proper judgment about the appropriateness of the desired level of performance as reflected in the setting of targets. Performance levels which are observed elsewhere may well be achieved in the Caribbean as well, but may come at considerable costs. The performance observed elsewhere may thus not be realistic for the Caribbean region. Furthermore, where improvements in quality performance are required, it should be realized that this will require investments, which should also be reflected in the tariffs.

3. REGULATION WITH RESPECT TO RENEWABLES

Renewable Energy Policy

Renewable technologies offer the possibility to diversify, reduce dependency on fossil fuels, and increase energy security. To achieve this potential, the regulatory framework will need to accommodate the introduction of renewable technologies. Furthermore, Governments may provide additional incentives to promote the use of renewable energy.

At the same time it should also be taken into account that most of these technologies are still developing. Furthermore, some technologies such as wind and solar are intermittent and will still require back-up supply from the grid. Generally a limit is set to the degree of penetration. For example, Martinique and Aruba use a 30% limit while, in Curacao it is 20%. Internationally a penetration of 20% is typically applied although this can vary as a function of the specific technology and storage possibilities (e.g. using batteries). In this light, renewable technologies should not be considered an immediate replacement of existing generation capacity but rather as a long-term strategy to increase fuel independence and security of supply.

The introduction of renewable energy technologies will not necessarily result in a reduction of electricity costs. Even though the variable costs of renewable sources are minimal, there are still significant capital costs involved which are orders of magnitude larger than those of for example diesel generators. These capital costs will need to be properly reflected in the electricity tariffs. For this, an effective regulatory framework is crucial. Experience so far shows that, apart from hydro as a renewable source, only larger scale wind power in areas with a favorable wind regime can be delivered at the utilities' avoided costs.

To promote the renewable technologies Government should undertake specific initiatives such as the provision of land for renewable energy projects (such as wind), financial incentives (including feed-in-tariffs where feasible), underwriting debt with sovereign guarantees, or subsidies. Such measures can include for example grants to reduce upfront capital costs, soft loans, loan guarantees, tax credits, and other financial assistance. Such incentives should however be paid to developers or customers directly by Government and should be outside the electricity tariff system.

Planning of Renewable Energy

The potential of renewable energy sources varies from one island to the other. An appropriate renewable energy policy will therefore need to be island-specific. In this respect, governments together with their utilities should seek to identify available renewable energy sources and technologies that are practical, commercially viable, environmentally appropriate, and suited for their respective island. Where feasible, the option of submarine cable interconnecting island systems with each other should also be considered.

Renewable energy should form an integral part of the utility's power sector planning process. In doing so, applicable reliability margins and operational constraints as well as the technical and economic feasibility of different renewable technology options will need to be considered. Also, the penetration of renewable generation sources should be compatible with applicable technical limits in order to assure a safe and reliable operation of the power system.

To assure the effective addition of renewable energy sources to the system, it is important that clear regulations and procedures are in place governing the application for interconnections, the technical and safety standards, and the commercial and tariff aspects of the interconnection. A distinction can be made between two classes of renewable power namely (1) Large-Scale Renewables, and (2) Small-Scale Renewables.

Large-Scale Renewable Power

Large-scale renewable power generation applies to the situation where electricity generation has a commercial nature. Here, the renewable energy producer will need to enter into a PPA with the utility. In order to obtain the PPA, a competitive bidding process will be followed.

Large-scale renewable power can be integrated into the Single Buyer process. The need for new renewable capacity will be identified during the planning process undertaken by the utility. This would contemplate differential commercial consideration for intermittent versus firm assets, as well as requisite performance bonds from IPPs.

Small-Scale Renewable Power

Small-scale renewable generation applies to the situation where the primary purpose is self-generation by customers and where no commercial motivation is present other than reducing the customer's electricity bill and contributing to the reduction of greenhouse gasses, even at a small scale. Small-scale renewables include technologies such as roof-top solar panels and small wind turbines.

Given the nature of small-scale renewable technologies, it is important that a standardized process is in place that allows customers to easily use and interconnect these systems to the main grid. Regulations will need to prescribe the steps involved in the interconnection, the technical conditions to be met, and any other provisions required to assure the safe and reliable operation of the system.

Regulations should also include the financial and tariff aspects of the interconnection. The costs involved in realizing the connection will need to be properly remunerated. The regulations should also clearly set out what tariffs will apply for feeding into the grid. The utility should not pay more than avoided costs per kWh. Where financial incentives are provided by Government, these should be treated outside the tariff system.

Even when customers have installed renewable sources, they will normally still be connected to the grid. During certain hours of the day, electricity will still be procured from the grid. The costs of the grid connection (whether to consume or feed-in) would thus still need to be paid by the customer. Tariff regulation will need to properly reflect this requirement.

4. REGULATORY PRINCIPLES

Best Practice Regulation

There has already been significant experience with the regulation of power sectors in numerous countries in the world. Different studies have been performed on regulatory effectiveness and these form a good starting point in developing regulatory principles for regulators in the Caribbean. Based on the international experience, a number of main principles can be identified that characterize best practice regulatory behavior:[5]

1. Independence
2. Communication
3. Consultation
4. Consistency
5. Predictability
6. Flexibility
7. Effectiveness
8. Efficiency
9. Accountability
10. Transparency

The above principles are closely related to each other and some of them will tend to conflict with each other. Good regulatory performance implies a proper degree of balancing between the different principles.

Independence

Regulatory independence is the most important and also the most challenging regulatory principle that should be considered in the Caribbean region. Regulatory

[5] The principles discussed here are primarily based on: ACCC (1999), Best practice utility regulation, Utility Regulators Forum, Australia.

decisions must be free from undue political or other influences that could compromise regulatory outcomes. The principle of independence is a necessary element in providing stakeholders with confidence in the regulatory system, and is linked to achieving the principles of consistency and predictability. Independence also has implications for accountability and facilitates transparency in processes. A confident, independent regulator will not seek to hide the processes used to reach decisions. Independence, when openly exercised, builds trust and confidence in the regulator.

Communication

Effective communication assists all stakeholders to understand regulatory initiatives and needs. Effective communication is both educative and informative, and can help to build commitment to regulatory initiatives through better understanding of the regulatory objectives and rationales. Regulators should always provide an explanation to enable stakeholders to understand the background and rationale for a decision. The aim is to assist participants to understand specific issues and inform them of policy objectives and requirements. In addressing the principle of communication, regulators should assure that communication is relevant comprehensive, accessible, timely, and inclusive.

Consultation

Effective and early consultation between regulators, customers and utilities is an essential component for ensuring appropriate regulatory systems are established. Consultation assists regulators to understand the implications of their regulations on industry participants, and enables stakeholders to discuss the impact of regulation and suggest alternatives and improvements. Proper consultation engenders trust and helps to avoid an adversarial relationship in which the exchange of information is restricted.

Consistency

Consistency of treatment of participants across service sectors, over time and across jurisdictions, is a key principle for providing confidence in the regulatory regime. This principle is linked to the provision of consistent and fair rules that do not adversely affect the business performance of a specific participant.

Predictability

The principle of predictability of regulation is an essential requirement for utilities to be able to confidently plan for the future and be assured that their investments will not be generally threatened by unexpected changes in the regulatory environment. The principle is particularly important in the utility sector, which is characterized by major infrastructure works with long investment time horizons. Regulators need to appreciate the long-term nature of assets and related investment decisions in the utility sector. The implementation schedule of regulations that will affect the cost or price structure of utilities must therefore be taken into account.

Flexibility

Flexibility involves the use of a mix of regulatory tools and the ability to evolve and amend the regulatory approach over time as the external environment changes. For example, CARILEC member utilities may in the (near) future want to develop Smart Grid implementation for the sake of more efficient use of the grid, two-way communication with customers, optimal integration of small and large scale renewables, improved performance, and other objectives. The regulatory framework will need to be able to accommodate such technological innovations.

Capacity

There needs to be a stock of technical knowledge within the regulatory body to ensure that informed decisions can be made. Regulatory authorities should therefore invest in attracting, training and keeping good staff. Given the small scale in the Caribbean it may therefore be preferable to consider regulatory bodies covering multiple services (electricity, water, telecom, etc) as well as different countries (such as being initiated in the OECS).

Effectiveness

Best practice regulation should include an assessment of the effectiveness of the proposed regulation. Regulatory bodies must have access to information that relates to the operations of the utility. It is important that the information required should be limited to that required for them to carry out their functions. There needs to be a balance between the disclosure of information required for regulation and the resources put in by the utility in making available this information to the regulator.

Suitable measurements should be established to allow independent assessments to evaluate the costs and benefits by the regulatory body.

Accountability

Accountability involves regulators taking responsibility for their regulatory actions. This requires regulators to establish clearly defined decision-making processes and provide reasons for decisions. Supporting the decision-making processes should be effective appeal mechanisms and adherence to principles of natural justice and procedural fairness.

Transparency

Transparency requires regulators to be open with stakeholders about their objectives, processes, data and decisions. Regulators should establish visible decision-making processes that are fair to all parties and provide rationales for decisions. Such openness can assist in gaining stakeholders' confidence and acceptance of the regulator's decisions.

There are circumstances in which it is impossible to provide information by reason of its confidentiality. The rules about treatment of information, including rules about what information will be regarded as confidential, or to which access will be restricted for any reason, should be identified early in the decision-making process and explained to stakeholders.

5. CARILEC'S POSITION ON REGULATION IN THE CARIBBEAN

This Position Paper sets out the views of CARILEC's member utilities on the issue of regulatory reform in the Caribbean and in particular in the context of the minimization of barriers and the establishment of incentives for renewable energy technologies (RETs) and alternative fuels.

In the ongoing discussion about regulation and renewable energy in the Caribbean power sector, CARILEC wishes to express its view through the following position statements:

1. CARILEC welcomes and supports regulation in the Caribbean and believes that it will play a crucial role in further shaping and developing the power sectors in the region. To assure that regulation is effective, the design of the regulatory framework needs to properly incorporate the specific characteristics and realities of the Caribbean region

2. A stable, competent, and independent regulatory framework is important to assure a financially healthy sector in which investments can be undertaken to facilitate the growth in demand and thus sustain economic development of the Caribbean countries.

3. The electric utility should continue to be responsible for planning of the power system and the identification and tendering of new capacity, including those based on renewable technologies.

4. Where competition is introduced in electricity generation this should be based on the Single Buyer Model. This applies to additions of both conventional and large-scale renewable capacity. The utility should also be in the position to bid for new capacity.

5. For small-scale renewable energy, regulation should be in place that allows customers to use and interconnect these systems to the main grid taking into account technical conditions and with the allocation of a viable grid services fee that reflects the utility cost of providing grid services to such customers.

6. Incentives in the area of tariff setting and quality standards should be fair and symmetric. Utilities should not only be punished for low performance but should also have the ability to be rewarded in case of good performance.

7. Governments, with the help of the utility, should actively promote support renewable technologies. Where applicable, Government can provide incentives but these should be outside the tariff system and should not affect the utility financially.

8. Regulation in the Caribbean should be in line with the principles of best-practice regulation namely independence, communication, consultation, consistency, predictability, flexibility, capacity, effectiveness, accountability, and transparency.

9. CARILEC and its member utilities will continue to play a constructive role as subject matter experts in the further progressing of the regulatory landscape in the Caribbean in order to move towards an effective regulatory framework for the Caribbean power sector.