

## TC ABSTRACT

### I. Basic project data

▪ Country/Region:	Caribbean
▪ TC Name:	Support for CARILEC's Climate Change Adaptation and Sustainable Energy Programming
▪ TC Number:	RG-T2382
▪ Team Leader/Members:	Team Leader: Gerard Alleng (INE/CCS); Team Members: Lumas Kendrick (ENE/CJA), Sara Valero (INE/CCS), Emiliano Detta (INE/CCS), y Milagros de Pomar (INE/CCS).
▪ Indicate if: Operational Support, Client Support, or Research & Dissemination.	Client Support
▪ If Operational Support TC, give number and name of Operation Supported by the TC:	n/a
▪ Reference to Request:	IDBdocs# 37673069
▪ Date of TC Abstract:	07/02/2013
▪ Beneficiary:	The Caribbean Electric Utility Services Corporation (CARILEC)
▪ Executing Agency and contact name:	The Caribbean Electric Utility Services Corporation (CARILEC), Andrew Thorington, Acting Executive Director
▪ IDB Funding Requested:	USD\$476,625
▪ Local counterpart funding, if any:	USD\$95,325
▪ Disbursement:	22 months
▪ Required start date:	October 1 <sup>st</sup> , 2013
▪ Types of:	Firms and individual consultants
▪ Prepared by Unit:	INE/CCS
▪ Unit of Disbursement Responsibility:	CBA
▪ Included in Country Strategy (y/n);	N
▪ TC included in CPD (y/n):	N
▪ GCI-9 Sector Priority:	The project contributes to the following GCI-9 lending targets (i) supporting development in small and vulnerable countries and (ii) climate change, sustainable (including renewable) energy, and environmental sustainability

### II. Objective and Justification

The Caribbean Region continues to experience the adverse effects of rising oil prices on electricity costs and the resulting negative impact on its economy. As a result of being comprised mainly of small island developing states (SIDS), the region is also very vulnerable to the adverse effects of climate change. In the past few years there have been a number of initiatives in the region that have attempted to mitigate the economic impacts of the rising fuel and electricity costs and to reduce the risks posed by climate change and the burning of fossil fuels. While these efforts have had some small measure of success, stakeholders agree that significantly more needs to urgently be done. In 2009, the Bank –through its Climate Change and Sustainability Division (INE/CCS) - provided funding to CARILEC for the *Energy Efficiency and Renewable Energy Project for CARILEC (RG-T1639)*, which was successfully executed and was completed in December 2012. The project focused on enhancing CARILEC's capability to assist in improving efficiency and promoting the use of renewable energy technologies and alternative fuels among its members in the Caribbean region. This support provided has helped CARILEC to set the

foundation for some of its plans and targets but there is much more to be done. The proposed operation will support CARILEC in the development and implementation of (i) climate change adaptation strategies for its electric utilities; and (ii) strategies for optimizing generation, transmission and distribution with increased RE penetration and reduction of operational losses of its members. This will support the Banks efforts to strengthen and enhance the region’s capacity to adopt climate change adaption strategies and regional integration of energy efficiency (EE) and RE efforts within the electricity sector.

**III. Description of activities and outputs**

The Project will be comprised of four components, as described below:

**Component 1 - Adaptation to Climate Change Action Plan and Strategies:** This component will develop an action plan and adaptation strategies to improve resilience to the impacts of climate change for selected utility members of CARILEC (utilities plant, equipment and infrastructure so as to ensure sustainability of the electricity utility). This will include the development of detailed investment options for selected utilities in order to support their investment programs for becoming more resilient to the impacts of climate change as well as to improve their business continuity and overall efficiency.

**Component 2 - Strategies for Supply-side Energy Management:** This component seeks to identify areas for specific investments opportunities involving both investor-owned and government-owned utilities, and will include strategies for the evaluation and introduction of the Supply-side management techniques including: (i) supply side energy audits at selected member utility companies, (ii) the introduction of energy management strategies to mitigate price shocks and improve environmental performance, and (iii) analysis and strategies for the deployment of Smart-Grid technologies.

**Component 3 - Strategies for Demand-side Energy Management:** Based on the Benchmarking Studies conducted under Phase I (RG-T1639), this component will seek to develop a demand side management program which will provide detailed direction regarding areas in which the utility can improve technical and environmental performance. These efforts will include: (i) demand side energy audits through the selected utilities’ service territories with the specific objective of promoting load-shaping objectives (peak-load reduction, load shifting, or off-peak load building) and energy efficiency and Demand-Response measures; (ii) developing a mechanism for establishing Energy Services Company (ESCO) services among CARILEC’s member utilities; (iv) development of a model Energy Performance Agreement (EPA); and (v) investigation of regulatory and financing strategies for the recovery of investments in energy efficiency programs.

**Component 4 – Dissemination of Information:** This component envisions the implementation of at least one workshop for CARILEC members (e.g. at CARILEC’s CEOs annual meeting to disseminate the information produced under the program), together with the presentation of a technical paper at a major regional conference focusing on the subject matter of this technical cooperation.

**Project coordinator:** A technical resource person with project management skills will be contracted as a Project Coordinator for 18 months to assist with overseeing all the activities developed under this proposal.

**IV. Budget**

Components	IDB	Counterpart	TOTAL
Component 1: Adaptation to Climate Change Action Plan and Strategies	\$110,000		\$110,000

Component 2: Supply-side Management programme	\$135,000	\$40,000	\$175,000
Component 3: Demand-side Management programme	\$125,000	\$37,000	\$162,000
Component 4: Dissemination of Results	\$10,000	\$2,500	\$12,500
Project Coordinator	\$50,000	\$20,000	\$70,000
Auditing	\$15,000	-	\$15,000
Monitoring and Evaluation	\$20,000	-	\$20,000
<b>Sub-Total</b>	\$465,000		
Caribbean Development Bank - Financial Agent Contract Fee (2.5%)	\$11,625	-	\$11,625
<b>GRAND TOTAL</b>	<b>\$476,625</b>	<b>\$95,325</b>	<b>\$571,950</b>

## V. Executing agency and execution structure

The executing agency for this operation will be the Caribbean Electric Utility Services Corporation (CARILEC) which is a not-for-profit regional association of electric utilities, suppliers, manufacturers and other stakeholders operating in the electricity industry in the Caribbean based in St. Lucia since 1990. The organizational structure of CARILEC consists of a Board of Directors, which comprises of 13 utility CEOs/Directors, one Associated Member representative and the Executive Director. Through its administrative and technical staff, the Secretariat has the capacity to coordinate the conduct of regional and operational studies. This TC will be executed by the CARILEC in collaboration with the Bank through the Climate Change and Sustainability Division (INE/CCS). CARILEC will coordinate with its members on the various activities of the proposal and will be responsible for the hiring of the consultants for the activities under the Project. The IDB's Country Office in Barbados (CBA) will assist in the Program's execution by liaising with the EA when required, providing fiduciary support and ensuring that disbursement requests are received and processed in a timely manner.

## VI. Project Risks and issues

The expected risks for this operation are as follows:

1. Lack of institutional capacity within the executing agency to implement the project which will be mitigated by undertaking an institutional assessment and implementation of its recommendations.
2. Lack of familiarity with IDB's Procurement and Fiduciary procedures by the executing agency which will be mitigated by scheduled Procurement and Fiduciary training undertaken by IDB's local country office.
3. There is also a risk that interested utilities will not follow through with their initial expression of interest in regards to future investment options to improve their resilience and efficiency. To mitigate this risk, the investment options will be accompanied by a cost-benefit analysis in order to provide a motivation and justification for the investments.

## VII. Environmental and Social Classification

It is not anticipated that the activities to be financed in this TC will have negative direct social or environmental effects. Therefore the team considers that, according to the Bank's Safeguards Screening Toolkit, this operation should be given a classification of "C": (i) no environmental or social risks; (ii) direct contribution to solve an environmental issue.