# **TC Document**

# I. Basic Information

■ Country/Region:	Suriname
■ TC Name:	Support to Suriname's Power Sector
■ TC Number:	SU-T1077
■ Team Leader/Members:	Carlos Echeverria (ENE/CGY) Team Leader; Malaika Masson (INE/ENE) Alternate Team Leader; Roger Sallent (INE/ENE); Wilkferg Vanegas (INE/ENE); Virginia Snyder (INE/ENE); Haydemar Cova León (INE/ENE); Paula Louis-Grant (FMP/CGY); Shirley Gayle (FMP/CTT); Steven Hofwijks (CCB/CSU); andMaría Elisa Arango (LEG/SGO)
■ Taxonomy:	Operational Support (OS)
• If Operational Support TC, give number and name of Operation Supported by the TC:	Support for the Implementation of the EBS Investment Plan (SU-L1039). Support to the Institutional and Operational Strengthening of the Energy Sector III (SU-L1036)
■ Reference to Request:	Mission Aide Memoire
■ Date of TC Abstract authorization:	August 29 <sup>th</sup> , 2014
<ul><li>Beneficiary:</li><li>Executing Agency:</li></ul>	Government of Suriname (GOS), Ministry of Natural Resources (MNH) and <i>N.V. Energy Bedrijven Suriname</i> (EBS)  Inter-American Development Bank through
Executing regency.	Energy Division (INE/ENE)
■ Donors providing funding:	InfraFund (IPF)
■ IDB Funding Requested:	US\$410,000
■ Local counterpart funding, if any:	US\$60,000 (In-kind)
■ Disbursement period:	24 months
■ Execution period:	18 months
Required start date:	January 2015
■ Types of consultants:	Consulting firms and individuals consultants
Prepared by Unit:	INE/ENE
<ul><li>Unit of Disbursement Responsibility:</li></ul>	INE/ENE
■ Included in Country Strategy (y/n);	No
■ TC included in CPD (y/n):	No
■ GCI-9 Sector Priority:	Infrastructure for Competitiveness and Social Welfare (Energy)

# II. Objectives and Justification

- 2.1 The Inter-American Development Bank (IDB) is supporting Suriname's power sector through the Sustainable Energy Framework for Suriname (SEFS), which consists of a series of lending instruments and grant operations to support the Government of Suriname (GOS) to organize the power sector, and shape the conditions for its sustainability in economic, financial and environmental terms. The establishment of the SEFS will require achieving numerous definitions and consensuses in order to implement it in a sustainable manner.
- 2.2 The SEFS includes a Policy-Based Programmatic (PBP) Program "Support to the Institutional and Operational Strengthening of the Energy Sector" consisting of three loan operations (SU-L1022, SU-L1035 and SU-L1036), which support reforms in the energy sector and the implementation of an institutional and regulatory framework. The first two PBL loans were approved and disbursed in 2012 and 2013 respectively.
- 2.3 Additionally, the IDB approved in 2013 the Investment Loan "Support to Improve Sustainability and Accessibility of the Electricity Service" SU-L1009 which contributes to the SEFS by: (i) helping to improve EBS' operation; (ii) improving the reliability and cost-effectiveness of energy supply in rural areas by expanding the network and incorporating non-conventional RE; and (iii) rehabilitating critical infrastructure required for the effective operation of the electricity system.
- 2.4 The Investment Grant "Development of Renewable Energy, Energy Efficiency and Electrification of Suriname" SU-G1001, approved in 2013, contributes to the SEFS by promoting the use of non-conventional Renewable Energy (RE) and Energy Efficiency (EE) and promoting access to sustainable energy in the Hinterlands.
- 2.5 With the objective of extending the support to the GOS, and in line with the objectives of the SEFS, the IDB is currently preparing: (i) a new investment loan, "Support for the Implementation of the EBS Investment Plan" (SU-L1039), which will facilitate the implementation of EBS' mid-term Strategic Business Plan; and (ii) the final loan operation of the PBL Program, "Support to the Institutional and Operational Strengthening of the Energy Sector III" (SU-L1036), which is intended to catalyze institutional and regulatory framework reforms.
- 2.6 The IDB is working towards the leverage of funds from the European Union's Caribbean Investment Facility (CIF), in order to further support rural electrification. The CIF contribution of 5 million Euros is expected to finance the deployment of RE technologies in the interior of Suriname, to expand sustainable electricity provision in the Hinterlands. This contribution is expected to be approved by the CIF Board in the fourth quarter of 2014, while IDB approval is expected in late 2015.
- 2.7 Finally, the IDB is currently carrying out two regional activities on which Suriname is part of the beneficiary countries. The first activity is the development of feasibility studies to analyze the overall viability of establishing a competitive commercial supply chain for Natural Gas (NG) in the Caribbean region. The second is an assessment of the potential development of an electrical interconnection between Suriname, Guyana, French Guiana and the northern

- Brazilian cities of Boa Vista (State of Roraima) and Macapá (State of Amapá) "Pre-Feasibility Study for the Arco Norte Interconnection Project". Both studies are expected to be completed by the last quarter of 2014.
- 2.8 The objective of the proposed TC is to extend the support to the GOS in the development of key activities to continue with the transformation of the energy sector in Suriname. The specific objectives are: (i) to support EBS through consultancies that will contribute to expedite loan eligibility; (ii) support MNH with the execution of follow-up activities related to the PBL; and (iii) to support the preparation of new IDB operations for the energy sector in Suriname.

# III. Description of activities/components and budget

- 3.1 Component I. Support for the execution of SU-L1039
- 3.2 **Support to EBS to meet loan conditions.** This sub-component will support EBS with specific consultancies which will expedite the actions required to fulfill the loan's special conditions precedent for the disbursements. The output will be the achievement of such requirements and the main result will be to obtain expedited loan eligibility.
- 3.3 **Support to the execution, monitoring and evaluation of EBS Investment Loans.** This sub-component will finance consultancy services to update the Risk Matrix of SU-L1009 which will also update the SU-L1039 Risk Matrix and the identification of proposed mitigation measures. The output will be the identification of recommendations and monitoring measures for the consolidation and sustainability of the program's achievements. The results will be an updated Risk Matrix.
- 3.4 Component II. Support for the preparation of IDB operations and follow-up on the result of the PBP series.
- 3.5 **Follow-up on the PBP.** This sub-component will fund the preparation of an independent evaluation of the PBP program which will include an ex-post Cost-Benefit Analysis (CBA) of the third and last PBP operation, in order to follow up on the result of the PBP series. The evaluation report will support the analysis and identification of future activities to be implemented in the sector.
- 3.6 **Support to the development of sector's policy documents.** This sub-component will support GOS in the completion of the fulfillment of the conditions according to the SU-L1036 Policy Matrix. The output will be the achievement of such requirements and the main result will be an expedited disbursement.
- 3.7 **Support to the electricity sector planning.** This sub-component will support the development of the Electricity Sector Plan (ESP), which will become the first national mid to long term strategy for the electricity sector. Once the Energy Authority of Suriname (EAS) is created, the ESP will be used by this new agency as a roadmap. The ESP will be a key element of the implementation of the new sector model that will cover, among other critical things, a long-term national energy demand forecast and the expansion plans required to meet the future demand. The main output will be the ESP study with the expected result being a more effectively planned demand-supply service in Suriname. The development

- of the proposed consultancy will be coordinated with GOS's staff currently preparing the energy sector framework.
- 3.8 **Support for the preparation of the CIF.** This sub-component will support the preparation of the CIF operation to be approved by the IDB's Board of Directors in 2015. The outcome will be the preparation of pre-feasibility studies for rural electrification projects, economic evaluation, risk assessments and fund site visits among other activities. The expected result will be the CIF operation's approval by the Board in 2015.

Indicative Results Matrix							
Activity	Unit of measure	Baseline	Year 1	Year 2	Means of Verification		
Component I.							
Support to EBS to meet loan conditions.	#	0	1	0	Consultancy.		
Support to the execution, monitoring and evaluation of EBS Investment Loans.	#	0	0	1	Updated Risk Matrix.		
Component II.							
Follow-up on the PBP.	#	0	1	1	Reports (Ex-post CBA and PBP evaluation report).		
Support to the development of sector's policy documents.	#	0	1	1	Consultancy/Reports.		
Support to the electricity sector planning.	#	0	0	1	Reports (ESP).		
Support for the preparation of the CIF.	#	0	1	0	Consultancies/Reports.		

Indicative Budget								
Activity	Description	IDB Funding (US\$)	Counterpart Funding (in kind)	Total Funding (US\$)				
Component I.								
Support to EBS to meet loan conditions.	Institutional streng- thening to support the achievement of the initial conditions to be included in the new investment loan.	10,000	5,000	15,000				
Support to the execution, monitoring and evaluation of EBS Investment Loans. Component II.	Updated Risk Matrix.	10,000	5,000	15,000				
Follow-up on the PBP.	Development of ex-post CBA and evaluation report.	25,000	5,000	30,000				
Support to the development of sector's policy documents.	Consultancies to support the fulfillment of policy conditions.	105,000	5,000	110,000				
Support to the electricity sector planning.	Development of the ESP.	200,000	35,000	235,000				

Support for the preparation of the CIF.	Consultancies.	60,000	5,000	65,000
Total		410,000	60,000	470,000

## IV. Executing Agency and Execution Structure; Monitoring and Evaluation

- 4.1 At the request of the GOS (See Annex I), the Bank through INE/ENE will be the executing agency of the TC in order to support the various operations that the IDB currently has in the country. The request is consistent with the criteria set forth in IDB's Technical Cooperation Guidelines, as INE/ENE has regional expertise in activities as proposed in the TC. As such, the procurement of consultancy services will be carried out in accordance with IDB Policies for the Selection and Contracting of Consultants (GN-2350-9) and the respective Procurement Plan. In close coordination with GOS, INE/ENE will coordinate government input to the final products, and will undertake the technical review of the products. The executing team will include a team of energy specialists and consultants from Country Office Suriname and Headquarters. The execution from INE/ENE will allow for a more expeditious coordination with the key GOS agencies and counterparts, including MNH and EBS.
- 4.2 The TC includes US\$60,000 of in-kind counterpart resources, which will be provided by the GOS as follows: (i) US\$5,000 for each activity described in the Indicative Budget table, including secretarial support, means of transportation, and office space, in support to the execution of the abovementioned activities; and (ii) US\$30,000 as GOS's staff time for the coordination of the consultancy described in ¶3.7.
- 4.3 The supervision of the consultancy works contemplated as part of this TC, as well as coordination support, will be carried out by the Team Leader and Alternate Team Leader supported by a Project Team, according to the program workload flow. Annual reports will be prepared by INE/ENE to provide updates regarding the status of main outputs and outcomes under each component, including summary information on: the results of the works performed, the additionality of the Fund's intervention and the Bank's participation financing the projects associated with the TC. The Project Team will also prepare a TC Completion Report within two months after the completion of the TC.

# V. Major issues

5.1 The main risk of this TC is the potential delay arising from difficulties in coordinating with multiple stakeholders from the government. This risk will be mitigated by involving the counterpart from the beginning of the implementation of the TC, seeking feedback and regularly presenting and discussing progress reports.

# VI. Exceptions to Bank policy

6.1 None.

# VII. Environmental and Social Strategy

7.1 The TC is classified as category "C", as it does not have associated social and environmental risks. "Safeguard Policy Filter Report (SPF) and Safeguard Screening Form (SSF)".

# **Required Annexes:**

- Annex I. Request from the client (Preparation Mission Aide Memoire).
- Annex II. Indicative Terms of Reference.
  - o <u>IDBDOCS#38941574</u>
  - o IDBDOCS#38987095
  - o IDBDOCS#38924757
  - o IDBDOCS#38941601
- Annex III. <u>Procurement Plan</u>.



# AIDE MEMOIRE Energy Mission Suriname, May 6-9, 2014

# I. Introduction of the Mission

A mission from the Energy Division of the Inter-American Development Bank (IDB) visited Paramaribo, Suriname from May 6 to 9, 2014. The mission team led by Carlos Echeverria (ENE/CGY), included Malaika Masson (INE/ENE), Steven Hofwijks (CCB/CSU) and Roger Sallent (ENE/CSU). The mission met with the Ministry of Natural Resources (MNH) represented by the Permanent Secretary Mr. Rudi E.H. Schillevoort; EnergieBedrijvenSuriname (EBS) represented by Mr. Willy Duiker and Mr. Marcel Eyndhoven; and the Project Execution Units (PEU) of currently ongoing projects.

For the IDB team, this was the second joint mission with the Agence Françoise de Développement (AFD) represented by Mr. Yves Malpel.

The members of the mission would like to express their gratitude to the representatives of the Central Bank, the Ministry of Finance, the Joint Desk, the MNH, and EBS for their collaboration in achieving the objectives of the mission.

# II. Objectives

The main mission's objective was to discuss details of the components to be included in the "Support to the Implementation of EBS' Investment Plan (SU-L1039)" investment loan programmed for approval in 2014. The loan will contribute to strengthening EBS's operational performance, rural electrification and improving the sustainability and reliability of the power infrastructure.

The mission also supervised the progress of current ongoing operations, such as the "Support to Improve Sustainability and Accessibility of the Electricity Service" (SU-L1009); the GEF investment grant, "Development of Renewable Energy, Energy Efficiency and Rural Electrification" (SU-G1001), and followed up with ongoing consultancies supporting the Government of Suriname.

#### III. Activities

Discussions with EBS focused onthe structure of SU-L1039 and it was agreed that the loan will have a scope similar to the current loan in execution (SU-L1009), in terms of providing support for institutional strengthening, including investments for the critical upgrade of power infrastructure and the inclusion of rural electrification projects.

With regards to the component focused on critical infrastructure upgrades, EBS provided a list of priority projects, "EBS Transmission Capital Project List for Second IDB Financing", for the mission team to analyze its inclusion intoComponent III "Critical Infrastructure" of the Ioan, SU-L1039. Theidentified projects consist of substation and distribution network upgrades, andnew power infrastructure. The mission team, in coordination with EBS, made a preliminary assessment of the list of projects, in order to clarify specific characteristics and an approach to a deeper analysis of the appropriate projects to be included in the Ioan.

In addition, EBS relayed the sense of urgency for addressing institutional strengthening and agreed to provide witha list of priority areas and activities to be financed by a Component in the investment



loan on "Institutional Strengthening". EBS also agreed to provide a list for projects to be considered for a Component on "Rural Electrification".

A parallel meeting with EBS' PEU, currently executing SU-L1009, provided an opportunity for the teams to describe progress of the loan and to present the next milestones. Discussions centered on some of the challenges related to the tight scheduling for execution of the impact evaluation study and the organization implications of purchasing certain prepaid or smart meters.

A meeting was held with the Permanent Secretary (PS) of the MNH, in order to discuss the progress and schedule of the draft Electricity and Energy Sector Entity Bills and the variety of inputs from key government stakeholders. MNH explained that the next step towards the implementation of a sector framework will be the development of an Energy Sector Plan after the Electricity Bill is approved. MNH discussed future IDB assistance for the drafting of the Energy Sector Plan and the IDB team agreed to consider how best to tailor support for this activity.

Additionally, MNH requested IDB support for the implementation of a steering committee structure that would have strategic oversight over progress with regards to the investment loans for EBS. The mission team clarified that the current investment loan in execution by EBS ("Support to Improve Sustainability of the Electricity Service", SU-L1009) includes the creation of a Steering Committee, chaired by MNH, with representatives from EBS and the Ministry of Finance. A key objective of the Steering Committee is tooversee aspects of the execution of EBS' loans. The IDB will follow up on the schedule for the Steering Committee meetings.

The mission arranged a videoconference between IDB's Headquarters and GEF operation PEU, in order to present the River Hydrokynetic Energy technology. The presentation introduced various models and systems related to river hydrokinetic energy as a new renewable energy technology based on river currents and emphasized its potential in the Latin American and Caribbean region. A key highlight is that the Energy Division is currently designing a Regional Technical Cooperation to assess the potential for this technology in LAC, for which interested countries need to submit a letter of request to be part of the beneficiary countries.

# IDB's support and Next Steps

Based on the above discussions, the following next steps were agreed:

- Before the end of May, EBS to provide a list of eligible projects to be included in Component I - "Institutional Strengthening and Transition Management" of SU-L1039.(completed on June 18, 2014)
- EBS will provide a list of potential projects for the Component II "Sustainable rural electrification" of SU-L1039. (completed on June 18, 2014)
- With regards to the provided list of projects to be included in Component III "Critical Infrastructure", the mission team will further analyze the technical information and select appropriate projects for its inclusion. (July, 2014)
- IDB and AFD to agree the scope and allocation of financial support to EBS. (July, 2014)
- IDB will proceed with the preparation of a non- reimbursable Technical Cooperation to support the preparation and execution of the loans SU-L1036 and SU-L1039. This Technical Cooperation will be executed by the Bank, in coordination with the Government of Suriname



in terms of sharing the Terms of Reference and products of the consultancies. (approval scheduled for August 2014)

 IDB will identify resources to support the development of the Energy Sector Plan (ESP) and will draft Terms of Reference for such consultancy. (Second Semester 2014)

 The Government of Suriname requests to participate in a Regional Technical Cooperation for the development of feasibility studies to assess River Hydrokinetic potential in Suriname through the Ministry of Natural Resources.-

Hon. Gillmore Hoefdraad

Governor

Central Bank of Suriname

Mr. Willy Dulker

CEO a.i. EBS H.E. Minister Jim Hok Minister

Ministry of Natural Resources

Mr. Carlos Echeverria Team Leader

Inter-American Development Bank

#### **SURINAME**

#### SUPPORT TO EBS TO MEET LOAN INITIAL CONDITIONS

#### TERMS OF REFERENCE

#### I. BACKGROUND

- 1.1 Since 2008, the Government of Suriname (GOS) has assessed options to strengthen the institutional and regulatory framework of the energy sector, improve the financial situation of the electricity sector and guarantee its sustainable long-term development.
- This effort has resulted in a comprehensive reform agenda that will impact different agents in the sector. It is expected that the reform process will entail changes such as: (i) the creation of an Energy Authority, to provide technical support to the Ministry of Natural Resources (MNH) on long-term expansion planning, policy making, regulation and supervision of the sector; (ii) the introduction of a single buyer model to procure the supply of electricity to meet demand under competitive bidding procedures; (iii) the authorization of Independent Power Producers (IPPs) to participate in competitive bids and develop new generation projects; (iv) the unbundling of *N.V. Energy Bedrijven Suriname* (EBS) with separate business units (generation, transmission and distribution) while remaining a state-owned utility; and (v) the gradual adjustment of electricity tariffs to efficiently cover supply costs.
- 1.3 IDB is supporting Suriname's power sector reform through the Sustainable Energy Framework for Suriname (SEFS) agreed with the GOS. In addition to the current operations that IDB has in the sector1, the IDB is preparing: (i) the final operation of a Policy Based Programmatic Loan Program (PBL), "Support to the Institutional and Operational Strengthening of the Energy Sector III" (SU-L1036), which is intended to catalyze institutional and regulatory framework reforms; and (ii) a new investment loan, "Support to the Implementation of EBS' Investment Plan" (SU-L1039), that will support the implementation of EBS' mid-term Strategic Business Plan.
- 1.4 Technical Cooperation (TC) SU-T1077, will support the regulatory reform process, key institutions within Suriname's energy sector, and will also contribute to the preparation and execution of the two new operations for Suriname.
- 1.5 Sub-component 2.1 of the SU-T1077 will support EBS in facilitating the fulfilment of the loan's special conditions precedent to the first disbursement. The output will be the achievement of such requirements and the result will be the start of the investment operation in Suriname.
- 1.6 The Government of Suriname (GOS) requires support for facilitating the preparation of the loan's special conditions precedent to the first disbursement. These Terms of Reference establishes the objectives, scope, main activities, deliverables, organization and timetable of a contractual agreement with an individual.

<sup>&</sup>quot;Support to Improve Sustainability and Accessibility of the Electricity Service" (SU-L1009); "Development of Renewable Energy, Energy Efficiency and Electrification of Suriname" (SU-G1001) and "Introduction of Sustainable Business Models in Suriname Rural Electrification Project" (SU-M1019); Pre-Feasibility Study for the "Arco Norte" Interconnection Project (RG-T2257); and "Support for the Preparation of the Sustainable Energy Framework" (SU-T1055).

1.7 Therefore, in order to support to the preparation of planning documents for the Program, an individual will be hire to prepare the following planning documents: (a) the Program Operations Manual (POM); (b) the procurement plan and; (C) the Annual Operating Plan.

#### II. OBJECTIVES OF THE CONTRACTUAL AGREEMENT

- 2.1 The objectives of the contractual agreement will be to provide support to the EBS in the preparation of the following planning documents:
- 2.2 (i) the Program Operations Manual (POM);
- 2.3 (ii) the Procurement Plan; and
- 2.4 (iii) the first Annual Operating Plan (AOP) of the Program SU-L1039.

#### III. SCOPE OF WORKS

- 3.1 The individual under this contractual agreement will undertake as part of the assignment the following activities.
- 3.2 Review official literature of the sector related with the Program and all documentation produced at project preparation stage, namely the Loan Proposal and its annexes.
- 3.3 Review Bank Policies and document templates for reporting requirements with emphasis on Procurement, Financial and contractual reporting.
- 3.4 Draft a comprehensive Operations Manual to facilitate the successful execution of the Program, including inter alia the following:
- 3.5 Program Description and Contractual Requirements
  - Institutional Framework
  - Coordination mechanism with other stakeholders
  - Activities and Workflow
  - Procurement
  - Internal Controls
  - Technical, Social and Environmental Requirements
  - Reporting, monitoring and Evaluation
  - Annexes containing applicable templates
- 3.6 Integrate all comments and recommendation from GOS and the Bank.

- 3.7 Revise and update the first Annual Operating Plan to assist the EA in the execution and supervision of the program.
- 3.8 Revise and update the program's first procurement plan, ensuring that the selection and hiring of consultant/consulting firms and the procurement of goods for the development of the activities comprised by this Project are in accordance with the IDB's policies and procedures (GN-2349-9 "Policies for the Procurement of Goods and Works financed by the Inter-American Development Bank" and GN-2350-9 "Policies for the Selection and Contracting of Consultants financed by the Inter-American Development Bank").

### IV. DELIVERABLES

- 4.1 Deliverables include:
  - a. Draft OM, AOP and Procurement Plan submitted to EBS and IDB for comments;
  - b. Final approved OM, AOP and Procurement Plan.

#### V. SCHEDULE OF PAYMENTS

- 5.1 Payment schedule should be as follows and all the payments are upon approval of the Energy Specialist:
- 5.2 30% upon contract signature;

**Type:** Individual

7.1

- 5.3 30% upon submission of deliverable "a";
- 5.4 40% upon submission and approval of deliverable "b".

#### VI. COORDINATION AND SUPERVISION

6.1 The coordination of this contractual agreement will be responsibility of Mr. Carlos Echeverria, (carlosec@iadb.org) (INE/CGY), Energy Specialist.

#### VII. CHARACTERISTICS OF THE CONTRACTUAL AGREEMENT

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7.2	<b>Duration of the assignments:</b> 25 non-consecutive working days between

- In addition a total of two missions of five working days each one to Paramaribo, Suriname is contemplated during this assignment.
- 7.3 **Place of work and mission:** Office of the consultant and Paramaribo, Suriname during the proposed mission.

7.4 **Qualifications and Experience:** The individual must hold a professional degree in project management, public sector management, business administration or related field of study. At least five years of experience in the preparation, execution, monitoring and evaluation of development assistance projects at both, bilateral and multilateral level. Previous experience working on energy sector projects and knowledge of utility operations would be an advantage. An excellent command of English for both written and verbal communication is required.

#### **SURINAME**

### TERMS OF REFERENCE

Consultancy to update the Risk Matrix for SU-L1039

### I. BACKGROUND

- 1.1 Suriname is a small middle-income country of 163,820 square kilometers (km²), with an estimated population of 541,683 concentrated in the coastal areas, and a sparsely populated interior that extends to the Amazon Rainforest (the Hinterlands). Indigenous and Maroon populations are predominant in the Hinterlands, where more than 200 villages, can only be reached by boat or plane.
- 1.2 The responsibility for energy policy and supervision of the energy sector lies with the Ministry of Natural Resources (MNH), which also supervises *N.V. EnergieBedrijven Suriname* (EBS), the state-owned utility company. EBS operates under a 50-year countrywide concession since 1973, covering transmission, distribution and commercialization of electricity.
- 1.3 The Government of Suriname (GOS) is assessing options to strengthen the institutional and regulatory framework and improve the financial situation of the power sector, in order to guarantee its sustainable long-term development. Based on the Green Paper issued in 2012, MNH initiated the process of preparing draft legislation to implement a new energy sector model, which considers: (i) creation of an energy authority responsible for providing technical support to MNH on long-term expansion planning, policy making, regulation and supervision of the power sector; (ii) introduction of a single-buyer model to procure the supply of electricity to meet demand under competitive bidding procedures; (iii) authorization of independent power producers (IPP) to participate in competitive bids to develop new generation projects; (iv) unbundling of EBS in three business units with separate accounts (generation, transmission and distribution); and (v) gradual adjustment of electricity tariffs to focalize subsidies on low income consumers, reducing transfers from the national treasury and providing sufficient revenues to EBS to cover efficient supply costs.
- 1.4 The Inter-American Development Bank (IDB) through the "Support to the Implementation of EBS' Investment Plan" (SU-L1039) will provide funding to the GOS with the objective of supporting the implementation of EBS' 2011-2020 Investment Plan in an integrated manner such that the utility improves its corporate capabilities and delivers on its commitments to provide vital power infrastructure.
- 1.5 The objective of this investment loan (SU-L1039) is to contribute to the sustainability of the power sector by: (i) strengthening EBS' operational procedures and corporate performance; (ii) expanding reliable electricity coverage in the Hinterlands; and (iii) upgrading critical infrastructure in the national power system.

1.6 In this regard, the Bank is providing GOS with the requisite support for the timely updating of the Risk Matrix for the SU-L1039 operation.

#### II. OBJECTIVE

2.1 The **objective** of this consultancy is to provide support to the GOS in the updating of the Risk Matrix.

### III. CHARACTERISTICS OF CONSULTANCY

- 3.1 **Type:** International Individual Consultancy under a lump-sum contract
- 3.2 **Duration of the assignments:** 15 non-consecutive days on a timeframe to be determined in the near future. A total of four working days mission to Paramaribo, Suriname is contemplated during this assignment.
- 3.3 **Place of work and mission:** Office of the consultant and Paramaribo, Suriname, during the proposed mission.
- Qualifications and Experience: The consultant must hold a professional degree in project management, engineering or related field of study with at least five (5) years of experience in distribution networks and an understanding of electricity loss issues (technical and non-technical). Previous experience working in Suriname and knowledge of GOS' operation will be an advantage.

## IV. SCOPE OF WORKS

- 4.1 The Consultant will undertake, as part of the assignment, the following activities.
  - 1. Review official literature of the sector related with the Program and related documentation such as the loan proposal, operations manual, progress reports; so as to understand the Risk Matrix:
  - 2. Review and discuss with GOS' relevant staff the approved Risk Matrix of the Program and verify its validity in terms of current project execution and GOS' present status.
  - 3. Recommend corrective or monitoring measures for the consolidation and sustainability of the program's achievements;

#### V. DELIVERABLES

- 5.1 The consultant will prepare a first report and a final report and will work with the project team leader in the updating of the Risk Matrix.
  - a. Report I Update of the Risk Matrix.

b. Final Report – Report of with PMR final updated Risk Matrix.

# VI. PAYMENT

- 6.1 The consultancy developed under a lump-sum basis and will follow this structure of payments:
- 6.2 30% upon approval of work plan;
- 6.3 30% upon approval of Report I;
- 6.4 40% upon approval of Final Report.

# VII. COORDINATION

In representation of the IDB, the coordination for this consultancy rests with Carlos Echeverria (<a href="mailto:carlosec@iadb.org">carlosec@iadb.org</a>).

### **SURINAME**

# Support to the Institutional and Operational Strengthening of the Energy Sector III

(SU-L1036)

### **Contractual Agreement for Economical Assessment**

### TERMS OF REFERENCE

# I. Background

- 1.1 Suriname has an area of approximately 165,000 km², and an estimated population of 515,000. About 90% of the population lives on the country's north coast, where the capital Paramaribo is located, the rest of the population lives in the interior (the Hinterlands), and also in the Amazonic Jungle. The country is rich in terms of its natural resources, principally gold, oil and bauxite. Moreover, Suriname basin is ranked 2<sup>nd</sup> for undiscovered oil resources potential and 6<sup>th</sup> in the world with respect to fresh water availability. Alumina, gold and oil account for 80% of export receipts and 50% of GDP. The Energy Sector is characterized by a large participation of the Government of Suriname (GSU), both in the Electricity and in the Oil sectors.
- 1.2 The Ministry of Natural Resources (MNH) has the primary responsibility for the sector including rural electrification; with very limited resources to effectively undertake regulatory tasks. The tariff policy and the tariff adjustments are under its responsibility. The Energy Advies Commissie (EAC) is involved in the development of electricity tariffs but it only has an advisory role.
- 1.3 Relations among the main players for the purchase of electricity in Suriname are contractual. Some of the most relevant contracts in effect are: (i) between the Suriname State and Suralco regarding the purchase of the electricity produced by the Afobaka dam<sup>1</sup>; (ii) between the Suriname State and EBS regarding the supplying to EBS of the electricity bought by the State from Suralco<sup>2</sup>; (iii) between the State and EBS regarding the concession of supply and distribution of electricity to the public in Suriname. However, concession activities do not cover production, transmission and distribution of electricity which today require specific regulations and standards to be effective.
- 1.4 Self-generation is permitted but not regulated. The Afobaka dam supplies about a half of the national electricity demand under the self-generation regime in the framework of a mining concession.

Brokoponto overeenkomst 27 januari 1958; bijgevoegde energie overeenkomsten tussen de Republiek van Suriname and Suralco van 31 mei 1985, van 25 mei 1990 en van 16 september 1999.

Stroomleverings-overeenkomst tussen de Republiek van Suriname and EBS van 16 december 1972 en overeenkomst voor de levering van additionele energie tussen de Republiek van Suriname and EBS van augustus 1985.

Concessiekontrakt tussen de Republiek van Suriname and EBS betreffend het leveren van electrische energie aan derden van 22 juni 1973.

- 1.5 There is no specific Electricity Act or similar instrument adopted by the Parliament. The only regulation in force at present is the "Algemene voorwaarden voor aansluiting en/of levering van elektrische energie door de N.V. Energie Bedrijven Suriname (E.B.S.) anders dan volgens bijzonder kontrakt, vastgesteld bij Besluit van January 11th, 1973 en goedgekeurd bij resolutie d.d. September 7th, 1973 n°9277".
- 1.6 *Mining subsector*. The GSU initiated a process to diversify this activity and to take additional measures to increase part of the State income.
- 1.7 *Oil subsector:* The State Oil Company of Suriname (Staatsolie Maatschappij Suriname N.V) is involved in all aspects of exploration, production, refining and marketing of crude oil and refined products. The company's oil production in 2009 totaled 5.9 million barrels, with an average daily production of 16,000 barrels per day (bpd). The limited refining capacity determines that 80% of diesel is imported.
- 1.8 Staatsolie reflected healthy financial indicators in 2009 with a gross turnover of US\$425 million, an EBITA of US\$181 million and a Return on Equity (ROE) of 28%. In the same year, Staatsolie ratified its position as one the largest tax contributors with US\$124 million. In its planning period (2008-2012), Staatsolie included and investment program of US\$1 billion to be supported with own resources up to US\$680 million and US\$320 million from external financing. Two of Staatsolie's key projects in the following years is the completion of the expansion of the refinery (from 7,000 bpd to 15,000 bpd) and the development of new capacity with renewable, mainly hydropower.
- 1.9 Staatsolie also has a participation in the power sector, with a 15 MW thermal power plant that supplies energy to the state's electrical company, Energy Bedrijven Suriname (EBS). Staatsolie changed its business focus from oil production to that of an energy company in 2007. Staatsolie plans to supply 5 to 10 MW of electricity to the grid through cogeneration with bagasse from its \$163 million planned ethanol plant in Nickerie. In order to implement these initiatives, Staatsolie created the Renewable Energy Unit.
- 1.10 The power sector. Suriname's power sector consists of a number of individual power systems: the EPAR system, covering Paramaribo and the surroundings, the ENIC system, for New Nickerie in West Suriname and other smaller systems. These systems operated by EBS receive electricity from diesel thermal and hydro power generation from the Suralco Hydro Power Plant (HPP) (180-MW); Suralco Thermal Power Plant (78-MW). EBS (82-MW); and Staatsolie (15-MW). EBS (Energie Bedrijven Suriname) is a statutory corporation under the policy direction of the MNH and with the monopoly in transmission and distribution of electricity. EBS shares its responsibility with the Department of Rural Energy of the Ministry of Natural Resources (DEV). Due to an increase in residential demand and production activities, the electric power growth rate in Suriname is one of the highest in the region and the demand of electricity is expected to increase in 155 MW (44%) by 2023, posing additional pressure on EBS to cope with

the growing demand in the short and medium-term. The level of power losses of EBS is approximately 10%, which is not critical.

- 1.11 EBS faces several operational and financial challenges which require Government's intervention with adequate regulations and management practices to: (i) reduce production costs from US\$0.20/kWh to US\$0.11/kWh; (ii) address financial sustainability issues with the review of the tariff structure; (iii) increase the average electricity rate from US\$0.07/kWh to about US\$0.16/kWh; (iv) address the issue of supply of electricity with new investments and through the establishment of an adequate model of contract for the purchase of reliable electricity, and (iv) reflect adequate financial indicators, including the Cash Recovery Index and the Free Cash Flow (FCF)<sup>4</sup>.
- 1.12 **Rural electrification:** In Hinterland, the GoS has heavily subsidized energy access (driven by political motives) to keep electricity and fuels within reach of the poor, inducing inefficiencies, increasing cost per unit of electricity and difficulties to meet demand. In coastal zone, the same political driver together with sufficient hydropower capacity combined with favorable hydrocarbon prices had delayed the decision to establish the adequate tariff rate to cover operational and maintenance costs of the service. In the last decade, this situation has represented a burden to new investments due to the low financial capacities of the Utility and to the Government to cover operational and maintenance costs of the service both in coastal zone and in the Hinterlands.
- 1.13 The work between the GSU and IADB: The new Government of Suriname (GSU) worked with IDB's technical units to identify the priority areas which are pivotal to Suriname's development and where IDB can provide specific support. Among these areas the IDB and the Minister of Natural Resources (MNH) agreed on the importance of moving forward activities related to the development of the energy sector's institutional and normative framework. Based on this, a sector strategy is being devised with support from IDB, to design and establish a Sustainable Energy Framework for Suriname (SEFS). The objective of this framework is to increase the efficiency, transparency, sustainability and accountability of the power sector. The necessity to establish tariff schemes consistent with the financial sustainability of the electricity sector, and the introduction of renewable energy (RE) and energy efficiency (EE) technologies will play a key role in the framework.
- 1.14 The SEFS will be implemented through Government-budgeted activities and a series of IDB loans and investment grants which include among others, a Policy-Based Loan Program (hereinafter Program) under a programmatic modality (programmatic policy-based loan or PBP) in support of policy reform in the energy sector. The Program will consist of three individual operations (SU-L1022, SU-L1035 and SU-L1036), each with specific institutional and policy goals to be met in 2012, 2013 and 2014, respectively.

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<sup>&</sup>lt;sup>4</sup> EBS's current revenue only covers 1/3 of its total operation cost.

1.15 The three operations will be independent of one another though technically interlinked. The specific objectives of this Program are to develop an energy framework and to strengthen the sustainability and corporate capabilities of the sector. The first and second operations have been approved already in 2012 and 2013 respectively.

# II. Objectives

The overall objective is to prepare: (i) the Ex-post Cost Benefit Analysis (CBA) report for the PBL program in Suriname (operations SU-L1022, SU-L1035, SU-L1036.

- 2.1 All the reports should be prepared following IADB methodologies and guidelines.
- 2.2 The individual should contribute to the final project operation document for operation SU-L1036.
- 2.3 The bank will provide with all the required templates for the reports, as well as the necessary documentation.

#### III. Activities

- 3.1 Develop the **Ex-Post Cost Benefit Analysis** (CBA) of the operation for which the individual will:
  - Review the CBAs prepared for operation SU-L1022, SU-L1035 and SU-L1036;
  - Describe the methodology used to quantify costs and benefits;
  - Present all the assumptions utilized in the Ex-post CBA;
  - Describe in detail all the assumptions used for the proposed calculations;

## IV. Outputs and Reporting

- 4.1 The following reports should be prepared:
- 4.2 After contract signature, present a **work program** including the main activities to be performed.
- 4.3 A preliminary Final Report outlining: (i) preliminary **draft of the economic evaluation of the PBL**, and (ii) **draft of the Assessment of previous PBLs (SU-L1022 and SU-L1035).**
- 4.4 A **Final CBA Report** including the complete analyses of the items presented in the Intermediate Report, including adjustments resulting from comments from GSU and IDB team; and (ii) **final assessment report of PBL SU-L1022 and SU-L1035.**

## V. Schedule of payment

- 5.1 Payment schedule should be as follows and all the payments are upon approval of the Energy Specialist:
  - 30% after receiving the work program;
  - 30% after first preliminary Ex-post CBA analysis;
  - 40% Final product.

# VI. Coordination and supervision

6.1 The coordination of this contractual agreement will be responsibility of Mr. Carlos Echeverria, (carlosec@iadb.org) (INE/CGY).

# VII. Characteristics of the contractual agreement

- 7.1 **Type of contractual agreement:** Products and External Services Contractual (PEC).
- 7.2 **Duration:** TBD
- 7.3 **Place of work:** Suriname and consultants office

# **VIII. Qualifications:**

International expert on policy, institutional and regulatory issues related to the energy sector. Relevant experience in public functions related to formulation or implementation of sector policies and specialized knowledge of economic analysis of energy projects. Extensive knowledge of the energy sector in Latin America, particularly electricity, is also required.

**Payment and Conditions of Employment:** If the work will be carried out at Bank headquarters in Washington D.C. Remuneration will be determined in accordance with Bank regulations and criteria. The Bank will additionally contribute toward travel and moving expenses, if applicable. If a candidate is not a citizen or resident of the United States, the Bank will apply for a G-IV visa from the consulate of the United States in the candidate's country of origin. If a candidate cannot obtain a visa to work at the IDB the contractual offer will be rescinded.

**Consanguinity:** Individuals with relatives working for the IDB within, and including the fourth degree of consanguinity and the second degree of affinity are not eligible for employment as staff, contractuals, or contractors through firms or agencies. Candidates must be citizens of a member country of the Inter-American Development Bank

#### **SURINAME**

### PREPARATION OF AN ELECTRICITY SECTOR PLAN

#### TERMS OF REFERENCE

#### I. BACKGROUND

- 1.1 Since 2008, the Government of Suriname (GOS) has assessed options to strengthen the institutional and regulatory framework of the energy sector, improve the financial situation of the electricity sector and guarantee its sustainable long-term development.
- 1.2 This effort has resulted in a comprehensive reform agenda that will impact different agents in the sector. It is expected that the reform process will entail changes such as: (i) the creation of an Energy Authority, to provide technical support to the Ministry of Natural Resources (MNH) on long-term expansion planning, policy making, regulation and supervision of the sector; (ii) the introduction of a single buyer model to procure the supply of electricity to meet demand under competitive bidding procedures; (iii) the authorization of Independent Power Producers (IPPs) to participate in competitive bids and develop new generation projects; (iv) the unbundling of *N.V. Energy Bedrijven Suriname* (EBS) with separate business units (generation, transmission and distribution) while remaining a state-owned utility; and (v) the gradual adjustment of electricity tariffs to efficiently cover supply costs.
- 1.3 IDB is supporting Suriname's power sector reform through the Sustainable Energy Framework for Suriname (SEFS) agreed with the GOS. In addition to the current operations that IDB has in the sector1, the IDB is preparing: (i) the final operation of a Policy Based Programmatic Loan Program (PBL), "Support to the Institutional and Operational Strengthening of the Energy Sector III" (SU-L1036), which is intended to catalyze institutional and regulatory framework reforms; and (ii) a new investment loan, "Support to the Implementation of EBS' Investment Plan" (SU-L1039), that will support the implementation of EBS' mid-term Strategic Business Plan.
- 1.4 Technical Cooperation (TC) SU-T1077, will support the regulatory reform process, key institutions within Suriname's energy sector, and will also contribute to the preparation and execution of the two new operations for Suriname.
- 1.5 Sub-component 1.2 of the above mentioned TC will support the development of the Electricity Sector Plan (ESP). The third PBL operation includes the creation of the Energy Authority of Suriname (EAS) as a condition, and the ESP will be used as a roadmap for the EAS.
- 1.6 A key element for improving sector planning and regulation is the preparation of an Energy Sector Plan at least every 5 years. The ESP should define for the quinquennium, among other things, the generation and transmission expansion plan, the investment needs in generation, transmission and distribution, the quality and reliability standards for

<sup>&</sup>quot;Support to Improve Sustainability and Accessibility of the Electricity Service" (SU-L1009); "Development of Renewable Energy, Energy Efficiency and Electrification of Suriname" (SU-G1001) and "Introduction of Sustainable Business Models in Suriname Rural Electrification Project" (SU-M1019); Pre-Feasibility Study for the "Arco Norte" Interconnection Project (RG-T2257); and "Support for the Preparation of the Sustainable Energy Framework" (SU-T1055).

- the provision of electricity service, the cost of electricity supply and the proposed tariff structure and tariff adjustment program, and a rural electrification plan.
- 1.7 The Electricity Sector Plan will become the first national mid to long term strategy for the electricity sector. The third PBL operation includes the creation of the Energy Authority of Suriname (EAS) as a condition, and the ESP will be used by this new agency as a roadmap. The ESP will be a key element of the implementation of the new sector.
- 1.8 The Government of Suriname (GOS) requires consultant services to support the preparation of the first ESP. These TORs establishes the objectives, scope, main activities, deliverables, organization and timetable of the consultant services.

### II. OBJECTIVE OF THE CONTRACTUAL SERVICES

- 2.1 The main objective of the contractual services will be to prepare an initial ESP which will provide the basic policies and strategies to implement the new power sector model and address the main issues faced by the energy sector to achieve a long-term sustainable development.
- 2.2 The main output will be the ESP study with the expected result being a more effectively planned demand-supply service in Suriname.

#### III. SCOPE OF WORKS

3.1 Development of the first national mid to long term strategy for the electricity sector - Electricity Sector Plan. The ESP should cover, among other critical things, a long-term national energy demand forecast and the expansion plans required to meet the future demand.

#### IV. DELIVERABLES

- 4.1 The following table summarizes the deliverables:
  - a. Work plan for the preparation of the ESP;
  - b. First draft of the ESP;
  - c. Final ESP which should include all the comments and feedback received by the different stakeholders and IDB.

#### V. SCHEDULE OF PAYMENTS

- 5.1 Payment schedule should be as follows and all the payments are upon approval of the Energy Specialist:
  - a. 25% after receiving the work plan;
  - b. 35% upon receiving the first draft of the ESP;
  - c. 40% upon approval of the Final version of the ESP.

# VI. COORDINATION AND SUPERVISION

6.1 The coordination of this contractual agreement will be responsibility of Mr. Carlos Echeverria, Energy Specialist (carlosec@iadb.org) (INE/CGY).

### VII. CHARACTERISTICS OF THE CONTRACTUAL AGREEMENT

- 7.3 **Place of work and mission:** Office of the consultant and Paramaribo, Suriname during the proposed mission.
- Qualifications and Experience: The individual must hold a professional degree in project management, public sector management, business administration or related field of study. At least five years of experience in the preparation, execution, monitoring and evaluation of development assistance projects at both, bilateral and multilateral level. Previous experience working on energy sector projects and knowledge of utility operations would be an advantage. An excellent command of English for both written and verbal communication is required.

Inter-American Development Bank -VPC/FMP

DESCRIPTION TO AN FOR NON DEMANDERS TO SURVEY TO SURVEY SO OF THE TOTAL SO OF										
Country: Suriname			Executing agency: Inter-American Development Bank on behalf of the government of Suriname  Public or private sector: (indicate which applies)							
Project	Project number: SU-T1077					Support to S	uriname's Powe	r Sector		
Period o	overed b	y the plan: December 2014 - December 2016		T	1					
Thresho	ld for ex	post review of procurements: N/A		Goods and serv	ices (in US\$): N/	-	Consulting ser	rvices(in US\$):	410,000	
Item No.	Ref. POA	Description (1)	Estimated contract	Procurement Method (2)	Review of procurement (ex-ante or ex-	Source of t and perc IDB		Estimated date of the procurement notice or start of the	Technical review by the PTL	Comments
Consulti	ng Servio	or	cost (US\$)		post)	%	%	contract	(4)	
Compor										
1.1		Support to EBS to meet loan conditions	10,000	NICQ	n/a	100%				
1.2		Support to the execution, monitoring and evaluation of EBS Investment Loans	10,000	IICQ	n/a	100%				
Compor	ent II				<u> </u>				<u> </u>	
2.1		Support for the completion and follow-up on the PBP	25,000	IICQ	n/a	100%				
2.2		Support to the development of sector's policy documents	105,000	IICQ	n/a	100%				
2.3		Support to the electricity sector planning	200,000	IICQ	n/a	100%				
2.4		Support for the preparation of the CIF	60,000	IICQ	n/a	100%				
		Total		Prepared by: Vir	·		Date: Novemb			
(1) Grouping together of similar procurement is recommended, such as computer hardware, publications, travel, etc. If there are a number of similar individual contracts to be executed at different times, they can be grouped together under a single heading, with an explanation in the comments column indicating the average individual amount and the period during which the contract would be executed. For example: an export promotion project that includes travel to participate in fairs would have an item called "airfare for fairs", an estimated total value od US\$5,000, and an explanation in the Comments column: "This is for approximately four different airfares to participate in fairs in the region in years X and X1".										
(2) Goods and works: CB: Competitive bidding; PC: Price comparison; DC: Direct contracting.										
(2) Consulting firms: CQS: Selection Based on the Consultants' Qualifications; QCBS: Quality and cost-based selection; LCS: Least Cost Selection under a Fixed Budget; SSS: Single Source Selection; QBS: Quality Based selection.										
(2) Individual consultants: IICQ: International Individual Consultant Selection Based on Qualifications; NICQ: National Individual Consultant Selection Based on Qualification; SSS: Single Source Selection.										
(3) Ex ante/ex post review: In general, depending on the institutional capacity and level of risk associated with the procurement, ex post review is the standard modality. Ex ante review can be specified for critical or complex process.										
(4) <u>Techr</u>	ical revie	y: The PTL will use this column to define those procurement he/she considers "critical" or "co	mplex"that requ	ire ex ante review	of the terms of ref	erence, technical sp	pecifications, repo	rts, outputs, or other items.		

## SUPPORT FOR THE POWER SECTOR REFORM

### SU-T1077

### CERTIFICATION

I hereby certify that this operation was approved for financing under the Infrastructure Project Preparation Fund-InfraFund (IPF) through a communication dated October 31, 2014 and signed by Gerhard Lair (ORP/GCM). Also, I certify that resources from said fund are available for up to US\$410,000 in order to finance the activities described and budgeted in this document. This certification reserves resources for the referenced project for a period of six (6) calendar months counted from the date of eligibility from the funding source. If the project is not approved by the IDB within that period, the reserve of resources will be cancelled, except in the case a new certification is granted. The commitment and disbursement of these resources shall be made only by the Bank in US dollars. The same currency shall be used to stipulate the remuneration and payments to consultants, except in the case of local consultants working in their own borrowing member country who shall have their remuneration defined and paid in the currency of such country. No resources of the Fund shall be made available to cover amounts greater than the amount certified herein above for the implementation of this operation. Amounts greater than the certified amount may arise from commitments on contracts denominated in a currency other than the Fund currency, resulting in currency exchange rate differences, for which the Fund is not at risk.

ORIGINAL FIRMADO	<b>DEC 11, 2014</b>
Sonia M. Rivera Chief Grants and Cofinancing Management Unit ORP/GCM	Date
APPROVAL	
Approved: ORIGINAL FIRMADO	DIC 16, 2014
Ariel Yepez Division Chief Energy Division INE/ENE	Date