



REQUEST FOR PROPOSAL FOR THE SUPPLY OF GENERATION
FOR THE BELIZE ELECTRICITY LIMITED'S POWER SYSTEM

Public Utilities Commission

November 2013

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LIST OF ACRONYMS AND DEFINITIONS

List of Acronyms

BAPCOL	Blair Athol Power Company Limited
BECOL	Belize Electric Company Limited
BEL	Belize Electricity Limited
BOO	Build, Own and Operate
BOOT	Build, Own, Operate and Transfer
CFE	Comisión Federal de Electricidad (of Mexico)
DOE	Department of Environment (of Government of Belize)
ECP	Environmental Compliance Plan
EIA	Environmental Impact Assessment
GOB	Government of Belize
GWhs	Giga watt-hours
IPP	Independent Power Producer
MESTPU	Ministry of Energy, Science and Technology and Public Utilities
MW	Mega-watt
NEAC	National Environmental Appraisal Committee
PUC	Public Utilities Commission
PPA	Power Purchase Agreement

LIST OF ACRONYMS AND DEFINITIONS

Definitions

"Firm Capacity" is defined as generating capacity that has an annual equivalent availability factor of 90% or greater, where the equivalent availability factor is calculated as the aggregate number of hours that the plant was available to produce energy at its full rating, excluding planned and maintenance outages (to be approved by the Utility), divided by the maximum possible hours for which the plant could have been available multiplied by 100.

"Base Load Duty" is defined as generating capability that is available for continuous dispatch and can be dispatched at full capacity for an equivalent 90% of the time in any calendar year.

"Intermediate Load Duty" is defined as a generating capability that is available for daily dispatch and can be dispatched at full capacity for an equivalent 60% to 90% of the time in any calendar year.

"Levelized Cost of Electricity" (LCOE) is defined as the Annuity of the Accumulated Present Value (APV) of ALL projected costs associated with each Project, divided by the average annual Project production energy forecasted.

"Installed, nominal or rated capacity" is defined, regardless of the exact expression used, as the capacity indicated on the nameplate of any relevant equipment or component of a generating or supply facility.

EXECUTIVE SUMMARY

Executive Summary

THE PURPOSE

The purpose of the Request for Proposals (RFP) is to secure adequate electricity generation or supply capacity to satisfy all reasonable demands for the supply of electricity in the country of Belize for the next fifteen (15) years at least cost, through a competitive bidding process as is required by the Laws of Belize.

The Public Utilities Commission (PUC) of Belize, the Ministry of Energy, Science and Technology and Public Utilities (MESTPU), on behalf of the Government of Belize (GOB), and the Belize Electricity Limited (BEL) have identified the need for the phased addition of new generation or supply capacity to Belize's National Electricity System of some sixty (60) Mega-watts of Firm Capacity over the period from 2013 to 2023.

Pursuant to the stated policy of the MESTPU/GOB to promote clean, renewable energy supply in Belize, and as a viable means of displacing higher cost thermal generation where feasible, proposals are also being invited for the addition of some fifteen (15) MWe of rated capacity generation or supply facilities utilizing wind or solar technology or other non-firm renewable generation sources.

Consideration will also be given to generation or supply schemes that may not be considered as firm capacity but which may complement the full scope of generation sources available to Belize in a beneficial manner (for example: schemes that may replace reduced available capacity from hydro sources during dry seasons).

THE PARTICIPANTS

The determination of the parameters and generation and supply needs assessment for the RFP:

- ⇒ PUC
- ⇒ MESTPU
- ⇒ BEL

Submission of Bids for satisfying needs identified in the RFP:

- ⇒ Any Interested Party capable of satisfying bid requirements, including BEL

Management and administration of RFP process, including evaluation of Bids:

- ⇒ PUC
- ⇒ MESTPU
- ⇒ BEL

EXECUTIVE SUMMARY

Contract [Power Purchase Agreements (PPA)] negotiations and award:

⇒ PUC

⇒ BEL

Project implementation for successful Bids:

⇒ PUC

⇒ BEL

⇒ MESTPU

⇒ MINISTRY OF NATURAL RESOURCES AND AGRICULTURE (MNRA)

⇒ MINISTRY OF FORESTRY, FISHERIES AND SUSTAINABLE DEVELOPMENT

⇒ ANY OTHER RELEVANT MINISTRY OR AUTHORIZING BODY IN BELIZE

LEGAL REQUIREMENTS

The entire RFP process and the subsequent construction and operation of any facilities for generation and supply are subject to the Laws of Belize. All prospective bidders are therefore strongly urged to practice due diligence and prudence by becoming familiar with all relevant Laws and the potential implications of such on any proposals made.

Relevant legislation that prospective bidders are urged to become familiar with includes, but is not limited to, the following:

Public Utilities Commission Act;

Electricity Act;

Environmental Protection Act;

National Integrated Water Resources Act;

Land Acquisition Act (Public Purposes);

Land Acquisition Act (Promoters);

Forest Act;

Wildlife Protection Act.

Bidders are also advised to consider any relevant subsidiary legislation made under such Acts. Depending on the details of any generation/supply scheme contained in any proposal, additional legislation not included immediately above may be relevant.

BACKGROUND

1. Background

1.1 BELIZE'S EXISTING POWER SYSTEM DESCRIPTION

1.1.1 The Belize Electricity Limited (BEL) is the holder of a License to generate, transmit and supply electricity in Belize, where it is incorporated, and is majority owned as of 2011 (68%) by the Government of Belize (GOB). Under its License granted by the Public Utilities Commission (PUC), BEL generates, purchases, transmits and supplies electricity throughout the country of Belize. In December of 1998, BEL completed an inter-connection between its transmission system and that of Comisión Federal de Electricidad (CFE) of Mexico. The inter-connection was done at 115 kV and completed the existing 115 kV Transmission Grid System. In 2005, BEL completed a 69 KV Transmission Facility that allowed for the connection of all the southern load centers (Dangriga, Independence/Placencia and Punta Gorda) and completed the existing National Transmission Grid System whereby ALL load centers in the Country were connected except for Caye Caulker. The National Transmission Grid currently services approximately 98% of the country's electricity demand. During 2012, the peak demand was 82 MW with net generation requirements of 522 GWhs.

1.1.2 The following generation and supply sources are connected to the National Transmission Grid:

Generation Source	Description
BEL owned LM2500 Gas Turbine (2003)	22.8 MW Gas Turbine GE LM2500 (uses No. 2 Diesel fuel)
BECOL owned Chalillo Hydro Plant (2005)	An impoundment water storage Dam for annual water regulation for 3 cascaded hydro plants (Chalillo, Mollejon and VACA Plants) with 2 by 3.5 MW (total of 7MW) hydro generating units with approximately 31 GWhs of energy production annually
BECOL owned Mollejon Hydro Plant (1995)	A daily regulation water storage Diversion Structure with 3 by 8.4 MW (total of 25.2 MW) hydro generating units with approximately 133 GWhs of energy production annually
BECOL owned VACA Hydro Plant (2010)	A daily regulation water storage Diversion Structure with 2 by 9 MW and 1 by 1 MW (total of 19 MW) hydro generating units with approximately 61 GWhs of energy production annually.

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Hydro Maya Limited owned Hydro Plant (2007)	A run-of-river hydro plant with maximum capacity of 3 MW
BELCOGEN an affiliated company of Belize Sugar Industries (BSI) (2010)	Primarily a bagasse fueled generating facility with 1 by 12.5 MW back-pressure steam turbine, 1 by 15 MW condensing extracting steam turbine, both fueled by bagasse, and 2 by 2 MW HFO generating units not in operation. BECOGEN has a PPA to supply BEL with up to a maximum of 16.5 MW of power.
BAPCOL, the successor company to Belize Aquaculture Limited (BAL) (BAL - 2009/BAPCOL - 2013)	An HFO fueled generating plant with 3 by 7.85 MW units. BAPCOL currently has a PPA to supply BEL with up to a maximum of 15 MW of power.
Mexico Interconnection – BEL grid system connection to the grid system of Comisión Federal de Electricidad (Latest Agreement 2012)	The National Transmission Grid is linked to the CFE grid system at 115 kV at the CFE owned XUL-HA substation located near to the town of Chetumal. Maximum power transfer from CFE to BEL has been negotiated to be 50 MW. BEL/CFE has entered into agreements for the 2-way trade in the supply of Opportunity Energy and Emergency Energy.

- 1.1.3 The National Transmission Grid, along with connected sub-transmission substations and distribution (load) substations, are described as follows (reference BEL Power System SLD May 2012 attached).
- 1.1.3.1 A 115 kV transmission line (approx. 100 miles) running from the XUL-HA substation located in Mexico to the West Lake Substation in Belize located 8.3 miles on the George Price Highway (previously the Western Highway) from Belize City with taps at the Buena Vista substation and the Maskall substation.
- 1.1.3.2 A 115 kV transmission line (approx. 8 miles) running from the West Lake substation to the Belize City substation.
- 1.1.3.3 A 115 kV transmission line (approx. 100 miles) running from the Mollejon Hydro Plant to the West Lake substation with taps to VACA Hydro Plant, San Ignacio substation, Belmopan substation and the La Democracia substation.
- 1.1.3.4 A 69 kV transmission line (approx. 130 miles) running from the La Democracia substation to the Punta Gorda distribution substation, with taps to the Dangriga substation, the BAPCOL generating plant and the Independence substation.

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1.1.3.5 Details of the sub-transmission substations and distribution (load) substations are shown on the BEL Power System SLD May 2012, which is attached. Historical and projected loadings for these substations are available from the PUC and/or BEL on request.

1.1.4 Power Purchase Agreements (PPAs) exist between BEL and its suppliers, with highlights of such Agreements as follows:

- a) The PPA between BEL and Belize Electric Company Limited (BECOL) for the power and associated energy supply from the Chalillo and Mollejon Hydro Plants:

Price for energy in any Operating Year - (a) energy \leq 100 GWhs @ US\$ 0.0875/kWh, which escalates by 1.5% per year starting April 1, 2001, until April 1, 2036; (b) energy > 100 GWhs @ US\$ 0.05/kWh; (c) an O&M fee equal to 5% of the gross electrical revenues received by BEL for the resale of the Project Energy received during the Operating Year.

Dispatch: Controlled by a committee formed between the BEL and BECOL. Average expected output per year is estimated at 164 GWhs.

Contract Termination: 2055.

- b) The PPA between BEL and BECOL for the power and associated energy supply from the VACA Hydro Plant:

Price for energy in any Operating Year - (a) capacity payment of US\$ 200,000 per month; (b) all energy @ US\$ 0.0755 per kWh; both are subject to an annual escalation commencing in the year 2010 based on 50% of the annual change in the US PPI.

Dispatch: Controlled by agreement between BEL and BECOL. Average expected output per year estimated at 61 GWhs.

Contract Termination: 2060.

- c) The PPA between BEL and Belize Co-Generation Energy Limited (BELCOGEN) for power (max 16.5 MW) and associated energy from the bagasse generation plant:

Price for energy in any Operating Year - (a) all energy @ US\$ 0.1056 per kWh in 2009, with an escalation of approximately 1.5% per annum.

Dispatch: Controlled by agreement between BEL and BELCOGEN. Average expected output per year estimated at 71 GWhs.

Contract Termination: 2024.

- d) The PPA between BEL and Hydro Maya Limited (HML) for the power and associated energy from the HML Hydro Plant:

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Price for energy on any Operating Year - (a) US\$ 0.0675 per kWh fixed without escalation for the term of the agreement.

Dispatch: Run of river plant with all energy dispatched. Average expected output per year estimated at 12 GWhs.

Contract Termination is 2020.

- e) The PPA between BEL and Blair Atholl Power company Limited (BAPCOL) for the power and associated energy from the BAPCOL HFO plant:

Charges in any Operating Year - (a) A Capacity Payment of US\$ 12/KW-Month in 2013 and with 40% of the Capacity Charge being escalated annually using the US CPI; (b) An Operations and Maintenance Fee at predetermined rates dependent on the readiness state of the machines (2 sold standby; 1 cold/1 hot standby; 2 hot standby; 1 on-line; and 2 on-line) which are escalated using US CPI and US PPI; (c) Reimbursement for fuel and lubricants expenses (cost of No. 6 HFO delivered to plant) in connection with energy supply by BAPCOL, with the fuel efficiency of the machines being pre-determined by BEL/BAPCOL.

Dispatch – Controlled by BEL. Plant run in economic dispatch mode or in emergencies.

Contract Termination to be determined.

- f) The Agreements between BEL and Comisión Federal de Electricidad (CFE) A Framework Contract, an Energy Assistance Agreement and an Opportunity Energy Agreement:

The Opportunity Energy Agreement is based on node prices (short run marginal cost of supply) and allows both parties to purchase energy from one another. The historical movement of the *Costas Totales de Corto Plazo* (CTCP; the relevant prices) may be reviewed on the CFE's website. The Energy Assistance Agreement is similar except that energy prices are expected to be higher. BEL can purchase up to 50 MW of power from CFE.

No date is set for Contract Termination.

- 1.1.5 BEL conducted a Least Cost Generation Plan (LCGP) study in 2009. The report by consultant SIEMENS is available (electronic format) and the bidders should and can review this report and discuss with the PUC and/or BEL any clarifications they may need in connection with the study. Proposals from prospective bidders may include but should not be confined to those included in the report. The LCGP Study also makes reference to two (2) other studies which are of interest. These are:

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- a) The Hydro Electric Potential Assessment report prepared by Poyry Energy Limited (Zurich, Switzerland) in 2006 that assesses the potential for hydro development on several rivers in Belize.
- b) The Pre-feasibility Study for the Belize Wind Power Project report prepared by Global Energy Concepts LLC (Kirkland, Washington, USA) in 2001 that identifies potential areas in Belize for the development of Wind Farms.

Both these studies are available in electronic format from the PUC and/or BEL.

- 1.1.6 JICA Solar Facility (480KWp) – Hourly data for August 2012 to July 2013 is available from the PUC and/or BEL.
- 1.1.7 Actual hourly demand and actual hourly generation dispatch reports from BEL for calendar years 2011 and 2012 are available upon request from the PUC and/or BEL. Although the Caye Caulker (CC) Load is expected to be added to the National Transmission Grid over the period under review (2013 to 2028), the CC load has not been included in the load projections as it would not cause a major change to the loading assumptions made.

1.2 REGULATORY REGIME

- 1.2.1 The Public Utilities Commission Act of 1999 established the PUC and conferred upon it the powers to regulate public utility providers and licensees in the electricity, telecommunications and water and sewerage sectors in Belize, and to administer the relevant Acts and subsidiary legislation related to the three (3) sectors. A primary function of the PUC under the Electricity Act is to promote competition in the supply of electricity. The Electricity Act requires that the PUC exercises its powers in a manner it thinks is best calculated to secure that all reasonable demands for electricity services are satisfied and that persons authorized to provide such services are allowed to charge such rates that afford them reasonable opportunity to recover the cost of providing such services and earn a reasonable rate of return on investment when operating in a relatively efficient manner.
- 1.2.2 The Electricity Act also confers certain powers upon the Minister responsible for Public Utilities, including the power to make Byelaws and Regulations to give greater effect to the Act and for the better management and development of the electricity sector in Belize. The PUC may also make such Byelaws and Regulations with the approval of the Minister.
- 1.2.3 The Electricity Act further conveys certain rights and obligations on licensees and provides the general framework for the regulation of such licensees by the PUC.
- 1.2.4 In addition to the Public Utilities Commission Act, the Electricity Act and subsidiary legislation made under these Acts, the PUC and licensees are required to adhere to all relevant and applicable Laws of Belize.

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- 1.2.5 BEL is the only entity in Belize currently licensed to transmit, distribute and supply electricity to the public in Belize. Subsequently, the model in Belize is generally that of a single purchaser (BEL) and multiple suppliers (generation licensees, CFE, etc.).
- 1.2.6 The rates charged by generation licensees to BEL are governed by any PPAs between BEL and such licensees, as approved by the PUC. Annual rate reviews are conducted to set rates charged by BEL for supply to the public.
- 1.2.7 Successful bidders in this RFP process shall be required to obtain a license and any necessary consents or authorizations from the PUC to generate electricity and supply same to BEL according to the terms and conditions of any approved PPA. The license granted by the PUC shall set out certain rights and obligations, the terms and conditions for the operation of the generating facility, and the general conduct and codes of practice of the licensee.
- 1.2.8 Entities granted licenses as a result of this RFP process shall be considered an integral part of the National Electricity System and be declared Public Utility Providers under the Public Utilities Commission Act.

1.3 ROLE OF PARTICIPANTS

- 1.3.1 The general roles of the primary participants in the RFP, other than persons submitting bids, are described generally as follows:
 - i) The Public Utilities Commission (PUC) – Overall responsibility for the bidding process with the objective to ensure the process is transparent and allows for fair competition. The PUC shall also review, enter into negotiations where appropriate, and approve final contractual terms and conditions. The authorizing body for the granting of necessary licenses and consents to construct and operate generation facilities.
 - ii) The Ministry of Energy, Science and Technology and Public Utilities (MESTPU) – Participation in evaluation of bids and review of final contractual terms and conditions. The MESTPU and the Government of Belize (GOB) are naturally interested parties, whose relevant policies and overall macro-economic strategies must be considered in the evaluation of bids and in the negotiation of contractual terms. The MESTPU will also be a liaison between the developer and other GOB Ministries such as the Ministry of Natural Resources (for land acquisition and/or easements, rights of way, etc.) and the Department of the Environment for Environmental Approvals, amongst others.
 - iii) The Belize Electricity Limited (BEL) – BEL is the Generation, Transmission and Distribution/Supply Licensee to whom the electricity supply being sourced will be

BACKGROUND

provided and to whose electricity grid all interconnections will be made. Despite its right to do so as a licensed generator, BEL is not interested in participating as a bidder. Consequently, BEL shall be involved in bids evaluation and necessarily has to be a party to any contract negotiations and execution.

- iv) Other relevant Ministries or Authorizing Bodies – Depending on the location, physical parameters or operational characteristics of any generation facilities that may be required, other Ministries and Authorizing Bodies may be involved in the granting of other permits, consents or licenses. Such may include civil aviation consents/permits, trade licenses, extraction permits, etc. All projects located in Belize will require an Environmental Impact Assessment (EIA), an Environmental Compliance Plan (ECP) where warranted, and may be subject to review and approval by the National Environmental Appraisal Committee (NEAC).

POWER NEEDS ASSESSMENT

2. Power Needs Assessment

2.1 NEW GENERATION REQUIREMENTS

2.1.1 Capacity balance forecasts for the National Electricity System are shown below:

Firm Capacity Analysis BEL's Power Grid 2012 to 2023													
	Units	Year											
		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Available Firm Capacity From ALL Sources													
Cascade Hydro (Chal/Moll/VACA)	MW	17.66	17.66	17.66	17.66	17.66	17.66	17.66	17.66	17.66	17.66	17.66	17.66
BELCOGEN - Bagasse and 2 by 2 MW HFO Units	MW	7.00	7.00	7.00	11.00	11.00	13.50	13.50	13.50	13.50	13.50	13.50	13.50
Hydro Maya - Hydro	MW	-	-	-	-	-	-	-	-	-	-	-	-
BEL Gas Turbine - Diesel	MW	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
BAL/ BAPCOL - 2 by HFO Units	MW	-	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
JICA - Solar Facility - 480 KWp	MW	-	-	-	-	-	-	-	-	-	-	-	-
Mexico - CFE - Interconnection	MW	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Firm Capacity Generation Additions RFP 2013 (projected)	MW	-	-	-	-	25.00	25.00	25.00	40.00	40.00	40.00	60.00	60.00
Total Firm in Country	MW	44.66	59.66	59.66	63.66	88.66	91.16	91.16	106.16	106.16	106.16	126.16	126.16
Total Firm incl. CFE	MW	94.66	109.66	109.66	113.66	138.66	141.16	141.16	156.16	156.16	156.16	176.16	176.16
BEL System Maximum Demand	MW	82.09											
1.50% Low Forecast		82.09	83.32	84.57	85.84	87.13	88.43	89.76	91.10	92.47	93.86	95.27	96.70
4.00% Medium Forecast		82.09	85.37	88.79	92.34	96.03	99.87	103.87	108.02	112.34	116.84	121.51	126.37
6.50% Hi Forecast		82.09	87.42	93.11	99.16	105.60	112.47	119.78	127.56	135.86	144.69	154.09	164.11
Low Percent Reserve - In Country	%	-46%	-28%	-29%	-26%	2%	3%	2%	17%	15%	13%	32%	30%
Med	%	-46%	-30%	-33%	-31%	-8%	-9%	-12%	-2%	-6%	-9%	4%	0%
Hi	%	-46%	-32%	-36%	-36%	-16%	-19%	-24%	-17%	-22%	-27%	-18%	-23%
Low Percent reserve incl. CFE Mexico	%	15%	32%	30%	32%	59%	60%	57%	71%	69%	66%	85%	82%
Med	%	15%	28%	24%	23%	44%	41%	36%	45%	39%	34%	45%	39%
Hi	%	15%	25%	18%	15%	31%	26%	18%	22%	15%	8%	14%	7%

Figure 1 – Capacity Balance 2012 to 2023 – National Electricity System

2.1.2 The forecast expects that the system load duration curve (LDC), load factor and load profile for the grid will remain fairly constant throughout the forecast period. Historical average peak demand growth for the period 2001 to 2012 was recorded as 4.74% per annum.

2.1.3 It is desired that in-country generation reserves are maintained at a level above minus ten percent (-10%); that is, generation equivalent to no less than 90% of peak demand to be in-country. The forecast (assuming medium growth and current conditions) therefore requires, ideally, the following additions to the system on or prior to the years specified below:

Year 2016	Total of 25 MW (1 or more projects), Firm Capacity, running at Base or Intermediate Load Duty
Year 2019	Total of 15 MW (1 or more projects) Firm Capacity, running at Base or Intermediate Load Duty
Year 2022	Total of 20 MW (1 or more projects) Firm Capacity,

POWER NEEDS ASSESSMENT

running at Base or Intermediate Load Duty

- 2.1.3.1 Expressed immediately above is an approximation of the ideal schedule of addition of the 60 MW Firm Capacity to maintain a minimum 90% of expected peak demand in generation capacity within Belize. It is understood that different projects and different technologies will have different lead times between concepts and commissioning, therefore the actual schedule for addition may be determined to a substantial extent by such necessary lead times or even the generation capacity of specific project proposals.
- 2.1.3.2 The schedule of addition of the 15 MWe of Solar or Wind Capacity or other Non-Firm Renewable Generation sources will be determined according to cost and the incremental amounts the National Electricity System can accommodate without creating unmanageable technical problems.
- 2.1.3.3 It should be noted that when considering hydroelectric projects, firm capacity and base or intermediate load duty capability calculations shall take into consideration all the characteristics of the proposed scheme, including storage capability and availability of water which can be used during periods that the hydro plant is available. The firm capacity and base or intermediate load duty capability may therefore be determined to be less than the installed or rated capacity.
- 2.1.4 Sources of generation for firm capacity projects are not restricted to any particular type, and can be hydro, co-generation schemes, conventional power plants fueled by renewable biomass fuels or by fuel oil, or other generation schemes employing any available technology. Bidders will be required to Build, Own, and Operate (BOO) or Build, Own, Operate and Transfer (BBOT) the power generation facilities being proposed for the term of operation as specified in their proposal or for any such term as is agreed upon during contract negotiations.
- 2.1.5 Design of all generation or supply facilities should consider allowance for the dispatch of the facilities from zero output to full output. It is projected that this capability may be particularly beneficial during the initial years of operation.

THE BIDDING PROCESS

3. The Bidding Process

3.1 INVITATION TO BID

3.1.1 The Public Utilities Commission (PUC) and the Ministry of Energy, Science and Technology and Public Utilities (MESTPU) and the Belize Electricity Limited (BEL) hereby formally invite all interested and capable parties to submit Bids for the generation and/or supply of electrical energy to the Belize Electricity Limited (BEL) for further supply to the public in Belize to satisfy the following:

3.1.1.1 The development on a Build, Own and Operate (BOO) or Build, Own, Operate and Transfer (BOOT) basis of the cumulative total of 60 MW of Firm Capacity to be operated with associated Base or Intermediate Load Duty, to be installed and available preferably over the period 2013 to 2022.

3.1.1.2 A cumulative total, on a BOO or BOOT basis, of up to 15 MWe of wind and/or solar generation or other non-firm renewable generation sources to be added over the next 10 years (2013 to 2023).

3.1.1.3 Projects to be contracted on a BOOT basis shall be those which use existing public assets or resources and for which the projects may cause permanent or long-term alteration to the natural characteristics of such assets or resources.

3.1.1.4 The PUC, MESTPU and BEL are expressly inviting prospective bidders to consider the potential for development of the Chalillo II and Vaca II sites identified within the report referred to in paragraph 1.1.5 (a) of this document.

3.2 INFORMATION FOR BIDDERS

3.2.1 GENERAL AND TECHNICAL INFORMATION

3.2.1.1 The size of each generating plant or supply facility proposed shall be the decision of the bidder, provided that it is understood that under this RFP any award shall be for up to a cumulative total of 60 MW. The technology to be used for each generating plant or supply facility will also be the choice of the bidder, provided that such technology proposed is mature, has a proven track record of success, and the expected fuel supply is adequate to meet the output specifications of the plant.

3.2.1.2 Conventional electricity generation technologies worthy of mention for application in Belize are hydro, wind, solar, the burning of bio-mass in boilers/steam turbines, biomass gasification/pyrolysis for use in turbines/engines, waste-to-energy solutions, and the use of fossil fuels in gas turbines and internal combustion engines. However, other electricity

THE BIDDING PROCESS

generation technologies if offered will be reviewed for acceptability under this Request for Proposals (RFP).

- 3.2.1.3 Bids submitted shall specify the generation/supply voltage and location of any proposed facility.
- 3.2.1.4 Bidders will be fully responsible for the identification, acquisition (to be facilitated by the PUC according to all applicable laws where acquisition by agreement is not successful) and development of a site for any generating plant or supply and transmission facility proposed. Bidders shall be responsible for all costs related to any necessary acquisition of lands and/or rights over any such lands.
- 3.2.1.5 Consideration should be given to the proximity of such sites to the proposed site of interconnection as the total estimated cost of interconnection, as determined according to the interconnection standards established by BEL, will be taken into account in the evaluation of the bids.
- 3.2.1.6 Bids may also include proposals to finance the construction of any interconnection facilities, for which successful bidders would be compensated by a fixed monthly payment from BEL. In such instances, ownership of such facilities would be transferred to BEL who will be responsible for the operation and maintenance of such facilities. Relevant terms for such transactions shall be included in any approved PPA between BEL and the successful bidder.

3.2.2 ELECTRICITY GENERATION/SUPPLY POLICY

- 3.2.2.1 The energy sector, and by inclusion the electricity sub-sector, is a critical component in the enabling environment for the vibrant and positive development of the social, environmental and economic well-being of Belize. Stable, predictable, and reliable electricity supply at affordable prices is an essential ingredient in the development formula and is key to industry competitiveness and the overall standard of living for energy users, including households and small businesses.

The Public Utilities Commission (PUC) was established as the regulator of the electricity sub-sector in August of 1999 in order to establish a more transparent and open regulatory regime for the sector and to attract private sector participation in investments within the sector where appropriate. The PUC is required, as a part of its legal mandate, to promote competition in the generation and supply of electricity.

In moving the electricity sub-sector from a monopoly in generation, transmission, and distribution/supply to a more competitive position, the PUC, whenever appropriate, implements a competitive process for contracting new generation and/or supply of electricity. That is, any new, expansion or replacement of generation and supply facilities for connection to the National Transmission Grid, will be achieved through competition.

THE BIDDING PROCESS

The main aim of the competitive process is to secure an appropriately stable, diverse and sustainable mix of generation and supply sources that would ensure adequate supply to the public, in terms of quality and reliability, at best market prices. The competitive process necessarily requires the promotion and encouragement of private sector participation in investment in generation and supply facilities/ventures.

The above-stated electricity generation and supply policy is mandated by current legislation. In addition, there are policy strategies adopted by the Government of Belize (GOB) that are not legislated but explicitly stated.

Such stated policies of GOB include promotion of the development and harnessing of available energy resources within Belize, particularly renewable resources of a sustainable nature, that contribute to the overall economic development goals of Belize.

In view of the importance of the long-term investments necessary in the electricity sector, the PUC is expected and is committed to provide the degree of transparency and clarity required to achieve confidence in current and future investment decisions. The present additional generation and/or supply needs of Belize will be competed for in this Request for Proposals (RFP). Each successful Bidder will enter into a Power Purchase Agreement (PPA) with BEL. In order to ensure fairness, transparency and equity, the results of the evaluation process and the terms and conditions of any PPA negotiated with BEL (and the PUC, as warranted) shall be made public.

3.2.3 FUTURE CONSIDERATIONS

3.2.3.1 The MESTPU, on behalf of GOB, is currently exploring financing to conduct a feasibility study to determine the potential benefits/costs of regional integration of electricity generation, transmission and supply under the “Connecting the Americas 2022” initiative proposed by the Government of Columbia and generally endorsed by the Governments of the Western Hemisphere, and the SIEPAC (Systema de Interconexion Electrica para America Central) initiative undertaken by the Governments of Central American countries excluding Belize.

These initiatives may provide further opportunities for investments in electricity generation and supply in Belize. Therefore, future and additional consideration beyond the needs identified in this RFP document, may be given to proposals received during this RFP process.

3.2.4 CONFIDENTIAL INFORMATION

3.2.4.1 Bidders may request confidential treatment for any commercially sensitive information submitted in a bid.

THE BIDDING PROCESS

- 3.2.4.2 When submitting information deemed to be confidential, the bidder shall submit a petition for confidential treatment that sets forth the justification for confidential treatment and shall clearly mark the information deemed to be confidential.
- 3.2.4.3 Only such information as is commercially sensitive should be marked as confidential and, where only a portion of a document includes confidential information, an expurgated copy shall be submitted with the full document.
- 3.2.4.4 Confidential information shall be treated confidentially unless the PUC and BEL finds that the information is not commercially sensitive and so notify the bidder who submitted the information in writing. In such case, the bidder may withdraw the information by written notice to the PUC and BEL instead of having it disclosed. The PUC and BEL may, at their discretion, not consider the information so withdrawn in its evaluation of bids.

3.2.5 RIGHTS RESERVED BY THE PUC, MESTPU AND BEL

- 3.2.5.1 To require that bidders explain, clarify or submit additional information not submitted in initial bids.
- 3.2.5.2 To reject all or any bid, or declare the event null without any responsibility on their part.
- 3.2.5.3 To amend the parameters of the RFP process as may be warranted from time to time, including on the basis of comments, concerns or recommendations received from participants.
- 3.2.5.4 To appoint experts/consultants to assist in the execution of any process related to this RFP.
- 3.2.5.5 To accept bids beyond the needs identified in this RFP document as conditions warrant.
- 3.2.5.6 To establish NORMATIVE LIMITS (pricing limits for the Cost of Electricity for each technology based on the Levelized Cost Of Electricity), which may be revealed either at the Pre-bid Meeting or at the Opening of Bids, and to reject all bids that exceed such NORMATIVE LIMITS.

3.2.6 RFP PROCESS MILESTONE SCHEDULE

- | | |
|---|-------------------|
| a) Launch of RFPEG Belize 2013 – | October 7, 2013 |
| b) Deadline for Expressions of Interest and Payment – | November 8, 2013 |
| c) Issuance of RFPEG Belize 2013 Package Commencing – | November 11, 2013 |
| d) Deadline for Notice of Intent to Bid – | December 20, 2013 |
| e) Pre-bid Meeting – | January 9, 2014 |
| f) Deadline for Submission of Bids – | May 15, 2014 |

THE BIDDING PROCESS

- | | |
|--|---------------------|
| g) Opening of Bids - | May 16, 2014 |
| h) Bid Evaluation/Selection Period Ending - | August 18, 2014 |
| i) Contract Negotiations/Award Period Ending - | November 17, 2014 |
| j) In-Service Date for Projects - | As per negotiations |

INSTRUCTIONS TO BIDDERS

4. Instructions to Bidders

4.1 SELECTION PROCESS

The award of contract(s) if so offered will be to the bidder(s) who meets the conditions and requirements of this RFP and who have proposed the technical and economic proposition that best satisfies the demands for electricity services in Belize over the relevant period. The PUC and MESTPU shall classify the remaining bidders in descending order according to their proposition offered. The highest ranked bids whose sum results in a total of 60 MW phased for addition over the period from 2013 to 2023 shall be selected for contract negotiations. Bids for wind/solar projects or other non-firm renewable generation projects shall also be evaluated and ranked where applicable. Where negotiations fail with any successful bidder within the established time notified and where the PUC and MESTPU so desire, negotiations may commence with the next ranked successful bidder in line.

The evaluation and ranking of bids will be conducted according to the process described in Section 4.12 below.

4.2 BID PREPARATION COSTS

The Bidder(s) shall bear all costs associated with the preparation and submission of bid(s), and neither the PUC, MESTPU nor BEL will be responsible or liable for such costs, regardless of the outcome of the bidding process.

4.3 LANGUAGE OF BIDS

The bid prepared by the Bidder and all correspondence and documents related to the bid exchanged by the Bidder and the PUC shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language, as long as such literature is accompanied by a translation of its pertinent passages in the English language, in which case, for purposes of interpretation of the bid, the translation shall govern.

4.4 PRE-BID MEETING

The PUC, MESTPU and BEL will conduct a pre-bid meeting in Belize City at a time and place to be announced at least two (2) weeks prior to the scheduled date of the meeting which is January 9, 2014, at which time the PUC will give a general presentation describing the National Electricity System and future generation plans and also answer any questions that bidders may have concerning the bidding process or the requirements. At this meeting, Bidders may also request additional information from the PUC, MESTPU and BEL in regard

INSTRUCTIONS TO BIDDERS

to the RFP. Such requests will be noted and thereafter the PUC, MESTPU and/or BEL will provide answers to the requests within a reasonable timeframe.

4.5 CLARIFICATION OF PARAMETERS OF RFP

Any technical, legal, economic clarification or clarification of any other nature from prospective bidders may be forwarded to the PUC who will subsequently provide a response for such clarification and will provide a copy of the response to all bidders who have received the RFP documents. Requests for clarification by bidders will be accepted by the PUC up to 14 days before the required date for bid submissions. Letters of clarification and responses will be accepted by mail, fax or electronic mail. The PUC's address for the receipt of information is as follows:

Attn: Engineering Officer
Electricity Sector
Public Utilities Commission
41 Gabourel Lane
P.O. Box 300
Belize City
Belize, C.A.
Fax - 501-223-6825
Tel - 501-223-4938
Email - rfpeg2013@puc.bz

4.6 AMENDMENT OF THE RFP

The PUC and MESTPU may make reasonable and warranted modifications and additions to the present RFP up to thirty (30) days before the required date for bid submissions, making such modifications known to all the interested parties who have requested a bid document.

4.7 PROPOSAL VALIDITY

The validity of offers shall be no less than 210 days after the Proposal Due Date.

4.8 BID SECURITY

4.8.1 The bidder shall present, in Envelope "B" (Economic Bid) a Bid Bond equivalent to BZ dollars fifty thousand (BZ\$ 50,000). This bond will cover the encompassing period from the date of receipt of the bid up to the signing of any PPA or any other contractual agreement, with a grace period of 30 days. Projects slated for commissioning after 2019 will result in a contractual agreement to commence PPA negotiations by an appropriate future deadline.

4.8.2 The bond may be in the form of a cashier's check or certified check, a letter of credit or an unconditional bond from a reputable financial institution within the country of Belize. The

INSTRUCTIONS TO BIDDERS

PUC further advises that no interest will be paid on the bond so held for the period of time as defined herein. The PUC also advises that bids submitted without the required Bid Security shall be dis-qualified at Bid Opening and there shall be no further consideration of such bids by the evaluating team.

4.9 BIDDERS REQUIREMENTS

4.9.1 Bidders shall be required to have obtained a copy of the RFP from the PUC.

4.9.2 Bids shall be presented in such a way as to satisfy the requirements of the RFP, which bidders are expected to fully understand and examine carefully to ascertain what is established therein, declaring in their bid submission that they have knowledge of such contents and expressly indicated their acceptance of each and every condition set.

4.9.3 Bidders shall also provide the required information, the Bidder having carefully examined the conditions of this RFP and stating at the time of presentation of the bid that the Bidder has investigated and is aware of the conditions that the Bidder shall comply to.

4.10 SUBMISSION OF BIDS

Bids are required to be submitted in writing to the Offices of the PUC located at 41 Gabourel Lane, Belize City, Belize, no later than May 15, 2014. Late bids will not be accepted.

4.11 OPENING OF BIDS

Bids shall be opened publicly in Belize City at a time and place to be announced at least two (2) weeks prior to the scheduled date, which is May 16, 2014. The following information shall be read out for each bid so opened:

- a) The Name of the Entity (individual, company, joint venture) submitting the bid;
- b) The Name or Names of the representatives responsible for the bid;
- c) Evidence of Bid Security;
- d) The technology and capacity proposed in the bid;
- e) The expected initial capital investment;
- f) The Levelized Cost of Electricity (LCOE) for each proposed project.

Each bid must therefore be accompanied by a summary containing the information to be read out at opening.

INSTRUCTIONS TO BIDDERS

4.12 BID EVALUATION PROCEDURES AND AWARD OF CONTRACT

A points system will be used to determine an **Initial Ranking** of the proposals, whereby points will be awarded for the technical and financial proposal and for the socio-economic benefits of the project. The maximum points awarded for each of the three components will be as follows:

4.12.1 Technical, Financial and Management Component **20 Points**

i) The technical merit of the project (15 Points)

The Project technology should be proven and efficient, with realistic objectives. Sufficient technical support should be in evidence to substantiate a high probability of success and the project objectives should be able to be technically attained with the described approach including an adequate level of reliability and availability (please see Section 5 Item 5.1 (e) and Item 5.1 (g)). The bidder should demonstrate that the project can be completed and operational within the required timeframe;

Bidders shall as a minimum provide the following information:

- I. Design basis;
- II. System key equipment design including 1 line diagram;
- III. Procurement design;
- IV. Permitting and construction plan;
- V. resource assumption or data;
- VI. Developer/Engineering Procurement Contractor(EPC)/Original Equipment Manufacturer (OEM)role in Project;
- VII. EPC firm experience in designing and constructing similar projects;
- VIII. OEM experience for similar projects;
- IX. Operations and Management firm experience for similar projects;
- X. Preliminary designs for interconnection.

ii) Financial and management competence (5 Points)

Bidders should exhibit relevant experience (including past performance on similar projects involving the same level of complexity) and possess the capability and resources to ensure that the project is properly managed, engineered, constructed and operated.

Bidders shall as a minimum provide the following information:

- I. bidders relevant experience;
- II. Other information as required by addendum 1 attached.

4.12.1.1 **Assessment of the Technical, Financial and Management Component** - Bidders will be awarded points for the technical merit of their proposal and their financial and managerial competence based on demonstration in their submission that they meet the requirements

INSTRUCTIONS TO BIDDERS

as set out above. Failure to score at least 15 points in this section will disqualify the bid, and no further analysis on the bid will be done.

4.12.2 Price Component

60 Points

The price used for evaluation will be derived by finding the Levelized Cost of Electricity (LCOE) per KWh (in 2013 BZ\$) for BEL to purchase capacity and associated energy from the facility over the term of the contract. It should be noted that to arrive at the LCOE, the cost of interconnecting the facility to the grid to the will be added to the Accumulated Present Value (APV) of the costs for capacity and energy being offered by the bidder. The PUC, MESTPU and BEL will also analyze the generation addition in terms of its potential to cause congestion on the National Transmission Grid. The costs associated with alleviating such Grid congestion SHALL also be added to the APV of costs arrived at by summing the cost of the proposed Project plus the costs for Grid Interconnection Facilities.

Other specific methodologies to be applied are as follows:

- i. The evaluation shall consider that for ALL submissions for Firm Capacity projects, the load duty shall be Intermediate Load Duty at 70% except for hydroelectric projects.
- ii. Hydroelectric projects with storage, which therefore have an associated firm capacity, shall be evaluated based on the maximum annual energy dispatch possible given the associated hydrology of the proposed project.
- iii. After ALL firm capacity projects are analyzed, assessed and ranked, any wind/solar projects or other non-firm renewable generation projects will be analyzed to determine the schedule of addition of the proposed 15 MWe.

For the purposes of the evaluation the following parameters will also be used:

nominal discount rate	10%
For bidders whose proposals require indexation, the Inflation Indexation except for oil and gas shall be (http://www.bls.gov/cpi/)	2.5% per annum
Nominal Escalation rate for diesel and/or heavy fuel oil (http://www.eia.gov/forecasts/steo/report/us_oil.cfm)	0.00 % per annum
Nominal Escalation rate for Natural Gas (http://www.eia.gov/dnav/ng/hist/n9132mx3m.htm)	0.00% per annum

INSTRUCTIONS TO BIDDERS

Base Prices for Diesel, delivered in Belize	US\$ 184/barrel (42 US gals)
Base Price for HFO delivered in Belize	US\$ 109/barrel (42 US gals)
Base Price for Natural Gas (before delivery)	US\$ 4.56 per thousand cubic feet

4.12.2.1 **Assessment of the Price Component** - The lowest price will be awarded the maximum points and other bids will be awarded points based on the following formula:

$$P(\text{bid}) = 60 \times L(\text{min}) \div L(\text{bid})$$

where

$P(\text{bid})$ – is the points being awarded to the bid being evaluated

$L(\text{min})$ – is the evaluated price for the minimum bid

$L(\text{bid})$ – is the evaluated price for the bid being evaluated

4.12.3 Socio-Economic Component

20 Points

- i) General Socio-economic impact of the Project (8 points)

The assessed general direct and indirect socio-economic impact of the project so proposed in Belize, as characterized by i) increased local employment or increase in employment wages; ii) small and/or large business growth in the defined project area or otherwise; iii) increased security in the area; and iv) increase of land value within the defined local project area or otherwise.

- ii) Fuel Source (5 Points)

The use of renewable and/or fuels local to Belize.

- iii) Environmental Impact (7 Points)

At the lower limit the project must comply with the environmental laws of Belize. Points will be awarded for superior environmental performance only.

INSTRUCTIONS TO BIDDERS

4.12.3.1 **Assessment of the Socio-Economic Component** - Bidders will be awarded points for the socio-economic benefits of their proposal based on demonstration in their submission that they meet the requirements as set out above.

4.12.4 Project proposals with more than 15 points in the Technical, Financial and Management Component will receive an **Initial Ranking** based on the summation of the points received for each of the components as set out above, the higher the sum of points the higher the ranking. A fifteen (15) years dispatch simulation exercise will then be carried out for each bid using the associated LCOE as the cost of energy and the associated timing for implementation for the bid in question. Project proposals will then receive a **Final Ranking** based on the analysis of the simulated dispatch of the generation projects where such relates to optimizing the cost of power and satisfying firm capacity needs. Where the dispatch simulation result in equal ranking between project proposals, the **Initial Ranking** will serve as a tie-breaker. Project proposals for firm capacity generation will be evaluated against other such proposals while proposals for wind, solar or other non-firm generation will be evaluated against similar proposals.

4.12.5 Contract negotiations will be conducted thereafter with bidder(s) who singularly or cumulatively satisfy the generation capacity requirements of this RFP in the order of the **Final Ranking**. Where such negotiations fail with any bidder(s), the next highest ranked bidder(s) will be invited to contract negotiations until the generation capacity requirements are satisfied.

4.13 CONTRACT AND PERFORMANCE SECURITY

4.13.1 With regard to project(s) slated for commencement of operations, to guarantee the fulfillment of the contractual obligations, the successful bidder will be required to put in place a contract bond of BZ dollars one hundred thousand (BZ\$ 100,000) per MW of Capacity being proposed for supply by the bidder, which shall be kept while the project is under construction. The bond may be in the form of a cashier's check or certified check, a letter of credit or an unconditional bond from a reputable financial institution within the country of Belize. The PUC further advises that no interest will be paid on the bond so held for the period of time as defined herein.

4.14 BID FORMAT PRESENTATION AND CONTENT

4.14.1 The bidder shall submit their bid proposals in one package, which contains two envelopes:

- Envelope "A", called Technical Bid
- Envelope "B", called Economic Bid

INSTRUCTIONS TO BIDDERS

4.14.2 Both envelopes shall be submitted completely sealed, labeled with the name of the bidding company and addressed to the requestor of these proposals on bond paper or other similar paper and shall include one original and four copies. Each page should be numbered, sealed, and signed by the Legal Representative of the bidder.

4.14.3 Technical Bid (contained in Envelope "A")

This envelope should contain all the technical requirements including the bid's socio-economic information and legal documents in English, required in the Bidding Document within which is included the legal declaration with legal acceptance signatures of the Bidding Document and letter of submission as well as the following information:

- Index of accompanying documents.
- Rights of incorporation or social charter and other dates related there to.
- Indicate place and address to receive notification.
- Details of the company or companies that participate in this bid and information about their principal business.
- Detailed description of the generation technology being used by the bidder to provide the capacity and associated energy being offered.
- A detailed schedule indicating the main activities that the bidder shall implement to carry out the installation of the generating equipment; as well as a time table indicating programmed service interruptions within the first five years of operations.

4.14.4 Economic Bid (contained in Envelope "B")

The envelope containing the Economic Bid should at the minimum include the following:

- The bid bond as required by clause 4.8 above.
- Economic information requested by the Form below labelled "Format for presentation of Economic bid" and any additional information, which the bidder deems necessary to allow for the bid to be properly analyzed.
- A Letter of Intent from a financier expressing his agreement in financing the proposed project. If the Letter of Intent is not prepared, he must convincingly show that he or his business associates submitting the bid, has enough capacity to carry out the planned project, in which case the additional information may be submitted in a separate envelope with a request to treat as confidential.

INSTRUCTIONS TO BIDDERS

Format for presentation of Economic bid

ECONOMIC BID

1. Rated Capacity KW
2. Available Capacity KW
3. Capacity Charge BZ\$/KW if applicable
4. Demand Charge BZ\$/KW if applicable
5. Energy Charge BZ\$/Kwh
6. Indexation for the Capacity Charge and/or Energy Charge
7. Proposed Project Financing schedule showing debt assumptions
8. Project Cost Estimate – Such estimate to include a breakdown of cost into components acceptable under standard engineering cost estimation principles. Such estimate to also include the proposed annual phasing showing when expenditures are expected to be made. Project overhead costs and Interest expenses and their phasing should also be provided.
9. Sufficient information preferably cash flow schedules of benefits and cost, should be provided to allow for the calculation of the "Net Present Value" (NPV), "Internal rate of Return" (IRR) and "Simple Payback Period".
10. Levelized Cost of Electricity (LCOE) as defined in Section 3.2.1.7, and using the discount rate as per the Table in Section 4.11.2. It should be noted that this information shall be read out at the Bid Opening and is therefore essential.
11. Bidder(s) should note that even if they are ranked for contract award during evaluation, that the PUC and/or BEL reserve(s) the right to negotiate with such bidders based on the analysis of the information required above (i.e. NPV, IRR and "Simple Payback Period") and also on any other relevant derived financial indicators.

5. Contract Basis

The acceptance of any bid, or any subsequent evaluation and ranking will not represent a commitment on behalf of the PUC, MESTPU or BEL to, or bind either party to, any price, condition or term of any project proposal contained in any such bid. This request for proposals process is being undertaken to evaluate and compare competing proposals in an open and transparent manner, and will lead to a queuing of proposals for further contract negotiations leading ultimately to project execution.

The successful bidder(s) shall be therefore required to negotiate and sign a PPA with BEL for the supply of firm capacity and associated energy or for supply of energy only (wind/solar projects or other non-firm renewable generation projects) on appropriate terms and conditions. Where negotiations are successful, any final PPA(s) will require PUC approval. The following major terms will be applicable:

5.1 TERMS OF PPA:

- a. The contract shall specify a firm Commercial Operation Date.
- b. The contract shall include clauses, which set out clearly the responsibilities, financial or otherwise, of both parties for the interconnection of the generating plant(s) to BEL's grid.
- c. The contract(s) resulting from this process shall be on a Build, Own and Operate (BOO) or Build, Own, Operate and Transfer (BOOT) basis, valid for the number of years as agreed to during negotiations, as of the date the generation capacity is made available to the system.
- d. Payments under the contract shall be made in Belize dollars, although portions of the contract value may be pegged to the "US to Belize" dollar exchange rate.
- e. Generating plants classified as firm capacity shall maintain an equivalent availability factor of at least 90% per calendar year whereby such equivalent availability factor is calculated to exclude planned and maintenance outages, and is defined as the aggregate number of hours which the plant was available to produce energy at its full rating divided by the maximum possible hours for which the plant could have been available multiplied by 100. Failure to achieve the availability requirements will result in penalties through the adjustment of capacity or other payments and the payment of liquidated damages.
- f. Planned and maintenance outages shall be done only with the approval of BEL and shall be scheduled in close consultation with BEL.

CONTRACT BASIS

- g. Generating plants shall be designed and operated such as to allow for the synchronization to BEL's system and to allow effective voltage and power output control in a manner compatible to BEL's system and in accordance with prudent utility practices. Failure to meet such standards may result in BEL requiring the plant to be taken off-line and considered to be in forced outage mode until the problems are rectified. Generating plants shall also be designed and operated to adhere to BEL's Transmission Grid Code.
- h. BEL shall be responsible for obtaining, installing, maintaining and certifying/verifying the accuracy of measuring equipment to be used in determining supply or other key operational parameters. Owners of any generating or supply facilities shall also have the right to obtain and install their own measuring equipment for their purposes.
- i. Billing dates and billing periods shall be specified as well as forms of payments, due dates as well as other specifications that the form of payment may require. The procedure to follow in the case of objections, queries and disputes shall be specified. The conditions regarding payment delay and provisions adopted for the calculation of costs shall also be specified.
- j. The awardee shall be allowed to transfer the rights and obligations of the contract to others as long as this transaction does not result in any financial loss to BEL and as long as the consent of the PUC and BEL has been obtained.
- k. The contract shall establish the address of the seller and of BEL.
- l. The contract shall define the scope and causes of force majeure.
- m. If one of the parties does not carry out or delay in complying with the execution of its rights or actions arising from this contract, this will not automatically be considered as a forfeiture or modification of its rights or actions not exercised and thereafter the party may pursue pertinent legal action to protect its rights and investments.
- n. The contract shall include appropriate STEP IN RIGHTS for the benefit of the purchaser after the final commercial operation date should the seller abandon the facility, should the purchaser be entitled to terminate the contract due to a default and operation of the facility is not undertaken by financiers, and for undue or inappropriate refusal of the seller to operate the facility. The contract shall specify the detailed terms, conditions and procedures for exercising such rights.

CONTRACT BASIS

- o. BEL and the successful bidder may agree to renew the electrical energy supply contract within six months of the termination date provided that the PUC approves such new contractual arrangements.
- p. The contract will be subject to Belize Law.

6. Licensing/Consent/Authorizations

6.1 LICENSING

The successful bidder(s) shall be required to obtain a License for generation and supply of electricity to BEL. Such License shall be issued to the developer by the PUC after successful contract negotiations with BEL and the PUC, meaning that the RFP process as it relates to the particular developer can be considered completed. The License shall be issued in compliance with the Electricity Act, Sections 14 to 29.

6.2 REQUIRED CONSENT

Consent shall be required by the developer pursuant to the Electricity Act Section 51, whereby this clause requires that consent be obtained for the construction, extension and operation of generating plants. Consent shall be requested from the PUC for each stage of the project through to operation at which time the developer's facility if so approved by the PUC shall be allowed to interconnect with the BEL Power Grid for the purpose of supplying power and associated energy.

6.3 ENVIRONMENTAL AND OTHER AUTHORIZATIONS

The proposed projects will be subject to various environmental and land use laws, including the Belize Environmental Protection Act. Bidder(s) will be required to determine and obtain the approvals necessary and will be required to bear all costs related to any and all such approvals. It should be noted that BEL is precluded from signing a PPA with the successful bidder(s) until after the GOB Department of Environment (DOE) approval process is concluded.

ADDENDUM 1

7. ADDENDUM 1

7.1 ADDITIONAL INFORMATION REQUIRED FROM BIDDERS

The following information is required from the bidder in writing.

SECTION A to be filled out by all Applicants – LEGAL REPRESENTATIVE

- 1) Name of bidder
 - a) Indicate whether Individual, Company or Partnership
 - b) Postal Address
 - c) Physical Address
 - d) Telephone Numbers
 - e) Fax Numbers
 - f) E-mails
- 2) Name of bidder's Representative in BELIZE if different from the bidder
 - a) Postal Address
 - b) Physical Address
 - c) Telephone Numbers
 - d) Fax Numbers
 - e) E-mails

SECTION B: COMPANY DETAILS

- 3) Name of Company
 - a) Date of Registration and Incorporation
 - b) Registration Number
 - c) Address of Registered Office
 - d) Share Capital in Belize Dollars of Preferred and Ordinary Shares. The par value per share the total number of shares authorized and the total number of shares issued in total and in each category. Set out in an attachment the names, business addresses and dates of appointment of directors, chief executive officer and company secretary.

ADDENDUM 1

- e) Set out in an attachment the names, addresses and country of domicile and shareholdings of all shareholders holding more than 10% of any class of the shares of the company.
 - f) Attach certified copies of the Memorandum and Articles of Association and Certificate of Incorporation
- 4) Bidder's Auditor
- a) Auditor's Name
 - b) Auditor's Fax Numbers
 - c) Auditor's E-mails

SECTION C: HISTORY OF BIDDER

- 5) If yes to any of these questions please provide additional detail information.
- a) Has the bidder ever applied for a license or registration under any Act in Belize and been refused?
 - b) Has the bidder been licensed ever under any Act in Belize?
 - c) Has any previous license of the bidder been revoked?
 - d) Has any connected person previously been granted a license under any Act which was revoked?
 - e) Is the bidder the holder of a license or is engaged in a related business in any other country?
 - f) Has the bidder or any connected person been refused a license in a related business in any other country that has been revoked?
 - g) Has the bidder operated under or carried on business under any name other than the name in this application?

SECTION D: FINANCIAL INFORMATION

- 6) Please attach the three (3) most recent audited Financial where the last dated financial statement should be for a period ending not later than one year prior to the date of this bid submission

SECTION E: BIDDER'S AFFILIATES

- 7) Is there any person or company whose name is not disclosed in section A who has any major financial interest in the bidder, either beneficially or otherwise.

ADDENDUM 1

- a) If yes please provide details including a list of all bidder's parent companies and their percentage ownership
- b) For each parent company list all electricity related businesses within Belize that the parent company is affiliated with.

SECTION F: DECLARATION OF BIDDER

- 8) I/We (Name of Bidder)/(Individual/Company/Partnership) declare that:

All information hereby submitted is true and correct.

I/ (We) understand that, if I/ (We) knowingly make any false statement of a material nature in the information presented that our bid will be disqualified and our bid bond forfeited.

- 9) If the bidder is a company/partnership:

The signature of the Authorizing Officer, his Position or Title in the company, the signature of a witness and the date must be affixed to the declaration.

CONTACT INFORMATION

Contact Information

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