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Environmental Permit (Renewed)

Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.

Reference No:	20170922-HEREB					
Fee:	Medium (C1) - US\$ 500					
Fees Paid:	US\$ 2500 - 5 Years (June, 2024 to July, 2029)					
	Gary Hall					
Addressee:	Divisional Director QSHE & Lab Services					
	Guyana Power and Light Incorporated (GPL)					
	40 Main Street					
	Cummingsburg					
	Georgetown					
	Guyana.					
Activity:	Operation of a 1.5 MW Solar Photovoltaic Grid-Connected					
	System					

Guyana Power and Light Incorporated (GPL), hereinafter referred to as the "Permit Holder", is hereby authorized in accordance with the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, to operate a 1.5 MW Solar Photovoltaic Grid Connected System to be located at Dogg Point, Agatash, Bartica, Region 7, hereinafter referred to as "the Project", in the manner indicated in the renewed application submitted on March 27, 2024, subject to the terms and conditions set forth herein under the Environmental Protection Act, Cap. 20:05 and any forthcoming regulations made under the said Act and/or any other applicable laws, best practices, guidelines and standards relevant to this project.

Environmental Permit, Reference number 20170922-HEREB, issued on January 19, 2022, and expiring on December 31, 2021, is hereby renewed pursuant to the Environmental Protection (Authorisations) Regulations, 2000.

Terms and Conditions for Construction and Operation to be adhered to by the Permit Holder, his Servants, Agents and Sub-Contractors:

1. GENERAL:

1.1 The Permit Holder shall take an application to the Agency to vary this Environmental Permit (Renewed) in instances where it becomes necessary to:

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i. change the construction, operation, structure, or layout of the facility and all associated buildings;

ii. change equipment, machine, apparatus, mechanism, system or technology

serving the facility;

iii. change the position and design of any outlet at the point or points of discharge of effluents; or

- iv. effect any other change outlined in 20(3) of the Environmental Protection (Authorisations) Regulations.
- 1.2 The Permit Holder shall comply with all applicable laws, regulations and guidelines, including but not limited to the following:
 - a. Environmental Protection Act, Cap 20:05, Laws of Guyana;
 - b. Environmental Protection (Water Quality) Regulations, 2000;
 - c. Environmental Protection (Air Quality) Regulations, 2000;
 - d. Environmental Protection (Noise Management) Regulations 2000;
 - e. Environmental Protection (Hazardous Waste Management) Regulations, 2000:
 - f. Occupational Health and Safety Act, Cap 99:10, Laws of Guyana.
- 1.3 The Permit Holder shall make all employees, and third parties under your direction, aware of the conditions of the Environmental Authorisation and provide training on good environmental practices.
- 1.4 The Permit Holder shall continue to utilise the land in accordance with the plan submitted to the Agency. All specifications of location, pathways, reserve and boundary lines shall be adhered to, unless otherwise authorised; evidence of which shall be provided to the Agency.
- 1.5 Guyana Fire Service Approval shall be obtained and maintained annually and shall be submitted as a component of the Environmental Annual Report. The Permit holder shall maintain fire prevention and control equipment in accordance with the Guyana Fire Service Approval.
- 1.6 The Permit Holder shall ensure **prohibition** of hunting, trapping, fishing and trading in endangered and locally protected wildlife species. Further, prohibition of capture, trading and removal of wildlife shall be a term of employment for all contractors and employees.
- 1.7 The Permit Holder shall maintain the photovoltaic system panels in accordance to the manufacturer's installation instructions.
- 1.8 The Permit Holder shall ensure all equipment used shall be monitored and maintained in accordance with the manufacturer's specifications. A maintenance schedule shall be made available to the EPA upon request.
- 1.9 The Solar Photovoltaic Grid shall be at least 100 m from any adjoining community

2024-08-05

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or commercial activities within the Project area.

- Photovoltaic plates shall be placed horizontally at about four (4) ft above ground 1.10 level and tilted at 6° and azimuth at 54° angles in a southern (South East) direction, to minimise sun glare on the surrounding environment.
- The Permit Holder shall continue to ensure that appropriate barriers, 1.11 equipment/material staging areas, and all supporting infrastructure, facilities and equipment associated within the Project site, are maintained and/or removed upon completion of works. Once works are completed, rehabilitation measures shall be implemented to restore any disturbances to the environment.

2. ROAD AND TRANSMISSION LINE

- Road shoulders, transmission line corridor and the total area shall be cleared to 2.1 allow easy access for maintenance.
- Runoff from the road, etc., shall not be discharged directly into natural water ways. 2.2
- The Permit Holder shall avoid erosion of existing roads during upgrading and 2.3 maintenance of transmission lines.
- The Permit Holder shall maintain adequately spaced transmission lines to prevent 2.4 large birds from simultaneously touching two wires; alternatively, insulation sleeves or shrouding covers on towers can be used, where necessary.

WATER AND SOIL QUALITY MANAGEMENT

- Adhere to the provisions of the Environmental Protection (Water Quality) 3.1 Regulations, 2000.
- The Permit Holder shall maintain drains to minimise disturbances to natural 3.2 drainage patterns and incorporate erosion control and storm water management at the project site; the drainage system shall be capable of handling the probable maximum precipitation storm event.
- The Permit Holder shall take all practicable measures to avoid erosion, siltation and 3.3 sedimentation of existing water bodies within the vicinity of the project site. Do not discharge wastewater from washout and/or cleanout of concrete, paint, and other construction materials into waterways unless appropriately treated.
- The Permit Holder shall ensure that all oils, fuel, paints, and chemicals are stored 3.4 in a designated area, at least 10 meters away from waterways.
- The Permit Holder shall avoid soil and water contamination from fuel, grease, waste Page 3 of 10 3.5

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oils and other petroleum products that might be used on site. Store all oils, fuel, paints and chemicals in a designated area, at least 10 meters away from water bodies.

3.6 The Permit Holder shall conduct refueling, maintenance and placement of equipment on an impervious base to prevent any fuel spills/leaks from contaminating the soil and surface water. Oil spills shall be cleaned-up by the Best Available Technology (BAT).

4. AIR QUALITY MANAGEMENT AND NOISE ABATEMENT

- 4.1 Comply with the provisions of the Environmental Protection (Air Quality)
 Regulations 2000 and the Environmental Protection (Noise
 Management) Regulations 2000.
- The Permit Holder shall monitor noise emissions to determine compliance with the **Guyana National Bureau of Standards (GNBS)** Guidelines for Noise Emissions into the Environment. Sound levels from noise-making devices shall not exceed the limits below, at a distance of 15 metres (50 ft) from the source or property boundary, whichever is closer.

During Operation

Residential Limits: 75 dB during the day-time (06:00 hrs.- 18:00 hrs.) 60 dB during the Night-time (18:00 hrs. - 06:00 hrs.)

- 4.3 All sound-making devices, such as generators, must be placed on foundations properly designed to ensure effective damping of vibrations; housed in an enclosure constructed using materials with good insulation properties (e.g., hollow concrete blocks, insulation boards, solid clay bricks, etc.); and equipped with silencers/mufflers to reduce the noise level. Equipment must be consistently maintained and those that become obsolete replaced.
- 4.4 The Permit Holder shall record and promptly investigate and address complaints of excessive noise, dust, and vibrations from the public.
- 4.5 The Permit Holder shall record, investigate and address complaints of excessive noise, dust and vibrations from the public promptly upon receipt. Maintain a record of all complaints received and the action taken.

5. FUEL AND HAZARDOUS/ WASTE MANAGEMENT

The Permit Holder shall adhere to the provisions of the Environmental Protection (Litter Enforcement) Regulations 2013 and the

Page 4 of 10

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Environmental Protection (Hazardous Waste Management) Regulations, 2000.

- The Permit Holder shall adhere to Regulation 6(1) of the Environmental 5.2 Protection (Expanded Polystyrene Ban) Regulations 2015 which states that "no food service establishment shall sell or provide food for consumption, either on or off the said establishment's premises, in expanded polystyrene food service products.
- The Permit Holder shall maintain good house-keeping and hygienic practices and 5.3 improvement in the aesthetic quality of the surroundings.
- The Permit Holder shall promote proper solid waste management and disposal 5.4 practices at the site. In particular, dispose of or contract an authorized waste disposal service to dispose of waste at the nearest designated waste management site. Place covered garbage receptacles at strategic locations around the project site.
- Dumping of waste into the surrounding environment is strictly prohibited. 5.5 Waste, inclusive of waste oil and/or fuel, shall not be stored within 10 meters of any waterways.
- The Permit Holder shall ensure that adequate toilets, waste disposal and sanitary 5.6 facilities are provided at project site.
- The Permit Holder shall maintain the constructed septic system on site; septic tanks 5.7 shall not be located within 1.5 m of any building or property boundary and should be accessible for cleaning and de-sludging. Any modification to the septic tank shall be in accordance with the Guyana National Bureau of Standards (GNBS) Code of Practice for the Design and Construction of Septic Tanks and Associated Secondary Treatment and Disposal Systems.

6. EMERGENCY MANAGEMENT

- The Permit Holder shall employ or designate an employee to the role of an 6.1 Occupational Health and Safety (OHS)/Environmental Officer who would be responsible for the implementation and coordination of all safety requirements and terms and conditions stipulated in this Permit, as well as monitoring, compliance and making all required reports to the EPA.
- The Permit Holder shall monitor the working environment at all times for 6.2 occupational hazards relevant to the specific construction and operation activities of the project.
- The Permit Holder shall equip all employees with and train them in the use of 6.3 personal protective equipment (PPE) relevant to their job specification, such as, hivisibility vests, respirator, hard hats, gloves, and appropriate footwear. Create and 8-P.B-W

Page 5 of 10

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maintain a log of Personal Protective Equipment distributed to employees and provide distribution log to officer of the Agency upon request during compliance inspections.

- The Permit Holder shall ensure that a first aid kit is equipped according to the 6.4 Guyana Red Cross standards and must be located on site at times. Additionally, communication and transportation systems must be in place to respond to emergencies.
- The Permit Holder shall ensure that the Fire Safety Certificate is renewed annually 6.5 and all firefighting equipment are maintained and serviced regularly. Fire Safety Certificate should be submitted to Officers of the Agency upon request during compliance inspection and in the Annual Report.
- The Permit Holder shall ensure all employees are trained in the use of firefighting 6.6 equipment, such as, fire extinguishers and understand the firefighting protocol.

7. COMPLIANCE MONITORING AND REPORTING

- The Permit Holder shall monitor the implementation of the conditions of this 7.1 Environmental Permit, insofar as they involve adherence by employees and all third parties under your direction.
- The Permit Holder shall report to the Agency any non-compliance(s) with this 7.2 Environmental Permit.
 - Within twenty-four (24) hours of the time the Holder of this Environmental Permit becomes aware of the non-compliance, with the anticipated manner in which it may endanger human health or the environment may be impacted.
 - 7.2.2 Within seventy-two (72) hours of the time the Holder of the Environmental Permit becomes aware of the non-compliance, submit to the Agency a written report containing a description of the noncompliance, its cause, the period of non-compliance including exact dates and time and the anticipated time it is expected to continue if the non-compliance(s) has not been corrected.
- The Permit Holder shall submit an Environmental Annual Report to the EPA 7.3 on your compliance with this Environmental Permit on or before March 31, each year.
- The Permit Holder shall notify the EPA within twenty-four (24) hours of the 7.4 occurrence of any environmental emergencies (e.g., oil spills, hazardous materials/wastes spill, sudden onset disaster, natural, technological or human-

Page 6 of 10

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induced factors that cause or threaten to cause severe environmental damage as well as harm to human health or livelihood).

- 7.5 The Permit Holder shall notify the Agency in writing of any change of name or ownership of the Permit Holder's facility within **thirty (30) days** after the change occurs.
- 7.6 The Permit Holder shall notify the Agency within **twenty-one (21) days** in event of death, bankruptcy, liquidation or receivership of the Permit Holder or if the Company becomes a party to an amalgamation.
- 7.7 The Permit Holder shall comply with any lawful directions given by the EPA from time-to-time in furtherance of the implementation of any international or other obligation for the environmental protection of Guyana.
- 7.8 It is the responsibility of the Permit Holder to ensure the permitted activity and premises are secured and that all practicable steps necessary to prevent fires, explosions, leaks or suspected leaks and spills at the permitted premises are taken.

8. INSTITUTIONAL AUTHORITY/LIABILITIES

- 8.1 The Permit Holder shall be liable for any material environmental harm caused by polluting the environment, pursuant to s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.2 The Permit Holder shall be liable for any serious environmental harm caused by polluting the environment, pursuant to s. 39 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.3 The Permit Holder shall be liable for any activity that causes or is likely to cause pollution of the environment unless all reasonable and practicable measures are taken to prevent or minimize any resulting adverse effect, pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.4 The Permit Holder shall be liable for discharging, causing or permitting the entry into the environment, of any contaminant in any amount, concentration or level excess of that prescribed by the regulations or stipulated by this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.5 The Permit Holder shall be liable to compensate any person who suffers any loss or damage as a result of contravening conditions 7.3 and 7.4 of this Environmental Permit (Renewed), pursuant to s. 19 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.

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- 8.6 The Permit Holder shall not be indemnified by the Agency for any activity that causes or is likely to cause pollution to the environment, resulting from adverse effects through the discharge, any contaminant in any amount, concentration, ultra-hazardous substances, chemicals or otherwise, and shall be rendered liable to prosecution and to penalties prescribed under the Environmental Protection Act and Regulations.
- 8.7 The Permit Holder shall be liable of any gross negligence or willful misconduct caused by the Permit Holder, his Servants and/or Agents, to the environment, biodiversity, protected species and natural habitat with respect to any release, discharge, or spill, of contaminant fluids, oil or lubricants.
- 8.8 Should the Permit Holder contravene or be likely to contravene any condition of this Permit, the Agency (EPA) may serve on him an Enforcement Notice in accordance with Section 26 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.
- 8.9 Where it appears to the Agency that the Permit Holder is engaged in any activity that may pose a serious threat to natural resources or the environment, or a risk of serious pollution of the environment or any damage to public health, the EPA may issue to the Permit Holder a Prohibition Notice, which may order him to immediately cease the offending activity, in accordance with **Section 27** of the **Environmental Protection Act, Cap. 20:05**, **Laws of Guyana**.
- 8.10 The EPA reserves the right to conduct regular inspections of the Permit Holder's activities as part of its monitoring and enforcement requirements under the Environmental Protection Act, Cap 20:05, the Environmental Protection (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- 8.11 The Permit Holder, His Servants and/or Agents shall at all times, allow entry to the permitted facility to any Officer designated by the EPA for the purposes of conducting inspections or any other legitimate business of the Agency. Pursuant to Section 38 of the Environmental Protection Act, Cap. 20:05, Laws of Guyana, it is an offence to assault, obstruct or hinder an authorised person in the execution of his/her duty under the said Act or its Regulations and the Permit Holder shall be liable to penalties prescribed under paragraph (c) of the Fifth Schedule for doing so.
- 8.12 The EPA has the right to modify, cancel or suspend this Permit for breach of any of the terms and conditions contained herein.
- 8.13 This Environmental Permit (Renewed) is not the final consent; all relevant Permissions should be obtained from other regulatory bodies for continued operation.

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- 8.14 This Environmental Permit (Renewed) is effective for the period stipulated herein, June 2024, to July, 2029.
- This Environmental Permit (Renewed) shall remain valid until July 31, 2029, unless otherwise suspended, cancelled, modified or varied, in accordance with the the **Environmental** Protection Act. Cap. 20:05, Laws of Guyana, Environmental **Protection** (Amendment) Act, 2005, and Environmental Protection (Authorisations) Regulations, 2000.
- This Environmental Permit (Renewed) shall be renewed by submitting an Application for Renewal of Environmental Authorisation to the Agency at least six (6) months before this Permit expires, that is, no later than February 28, 2029.
- 8.17 Any late submission of renewal application(s) after the specified date as stated above, shall require the Permit Holder to pay, in addition to the renewal fee, a late penalty fee (accruing at the time such obligation was first owed for renewal) at a rate of two thousand dollars Guyana dollars (GYD\$2,000.00) per day for every day late, until such renewal application is submitted to the Agency, without prejudice to any other rights of the Permit Holder in connection therewith.
- 8.18 Failure to comply with the requirements of this Permit or with applicable laws and regulations, whether existing or forthcoming, shall render the Permit Holder liable to prosecution and to penalties, inclusive of civil penalties, injunctive relief and imprisonment, as prescribed under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection Regulations and other applicable Laws of Guyana.

on behalf of the Environmental Protection Agency.

Signed by

Kemraj Parsram **Executive Director**

Date

26.6. 2024

Executive Direct

Issued under the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000.

I hereby accept the terms and conditions upon which this Environmental Permit (Renewed) is granted and agree to abide by the Environmental Protection Act, Cap. 20:05, Laws of Guyana, the Environmental Protection (Amendment) Act, 2005, and the Environmental Protection (Authorisations) Regulations, 2000, and any forthcoming regulations, best practices, guidelines and standards made under this Act.

NAME	Bebe Raozia Bacchus
DESIGNATION	Assistant Environmental officer
SIGNATURE	P. P. Bacelis
DATE	2024-08-05



GBTT # S000015083 H. 2024.08.K. Rate: 2 Environmental Protection Agency File Copy Head Office - Ganges Street, Sophia, Georgetown, Guyana. Tel (592) 225-6048/44 225-5471/67 Fax: (592) 225-5481 Date: Branch Office - Berbice (Whim, Corentyne) - Tel (592) 337-2201/2207 Linden (LEN Building, Mackenzie) - Tel (592) 444-2313 No. 28777 Received From: Gupna fower and Light Ir The Sum of: Cash Cheques Transfer Balance due **PAID** Amt. \$_ Signature