# **PMR Public Report**

<b>Operation Number</b>	GY-G1007	Chief of Operations Validation Date	11/18/22
Year- PMR Cycle	First period Jan-Jun 2022	Division Chief Validation Date	
Last Update	11/18/22	Country Representative Validation Date	
PMR Validation Stage	Completed by Team Leader		
Basic Data			
<b>Operation Profile</b>			
<b>Operation Name</b>	Guyana Utility Scale Solar Photovoltaic Program (Guysol)	Loan Number	GRT/NG-19288-GY
Executing Agency	GUYANA POWER AND LIGHT, INC.	Sector/Subsector	ENERGY-ENERGY EFFICIENCY AND RENEWABLE ENERGY IN END USE
Team Leader	MASSON, MALAIKA EBONY ANIETIA	Overall Stage	Approved/Pending Signature
Operation Type	Investment Grants	Country	Guyana
Lending Instrument		Convergence related Operation(s)	
Borrower	COOPERATIVE REPUBLIC OF GUYANA		
<b>Environmental and Social S</b>	Safeguards		
Impacts Category	В	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating		Date of approval	
Safeguard Performance Rating - Rationale			

<b>Financial Data</b>										
			<b>Total Cost and Source</b>		Available Funds (US\$)					
Operations	Original IDB	<b>Current IDB</b>	<b>Local Counterpart</b>	Co-Financing / Country	<b>Total Original Cost</b>	<b>Current IDB</b>	Disb. Amount to Date	% Disbursed	<b>Undisbursed Amount</b>	
GY-G1007	83,300,000	83,300,000	0	0	83,300,000	83,300,000	-	0.00%	83,300,000	
Aggregated	83,300,000	83,300,000	0	0	83,300,000	83,300,000	-	0.00%	83,300,000	
Expense Categories by Loan Contract (cumulative values)										

No Data Available

Please note that inactive indicators and outputs are not displayed; totals in the actual cost table may not match the sum of the cost of the outputs displayed, due to the cost of inactive outputs.

1



#### **RESULTS MATRIX**

#### **General Development Objectives**

General Development Objectives Nbr. 1: General development objective: to support the diversification of Guyana's energy matrix towards the use of climate-resilient renewable energy sources in the electricity generation matrix

### Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		EOP 2027
1.0	Utility-scale solar PV generation in the electricity matrix	% Share of RE	0	2021	2026	Р	19
		capacity in the system				Α	-
Details							

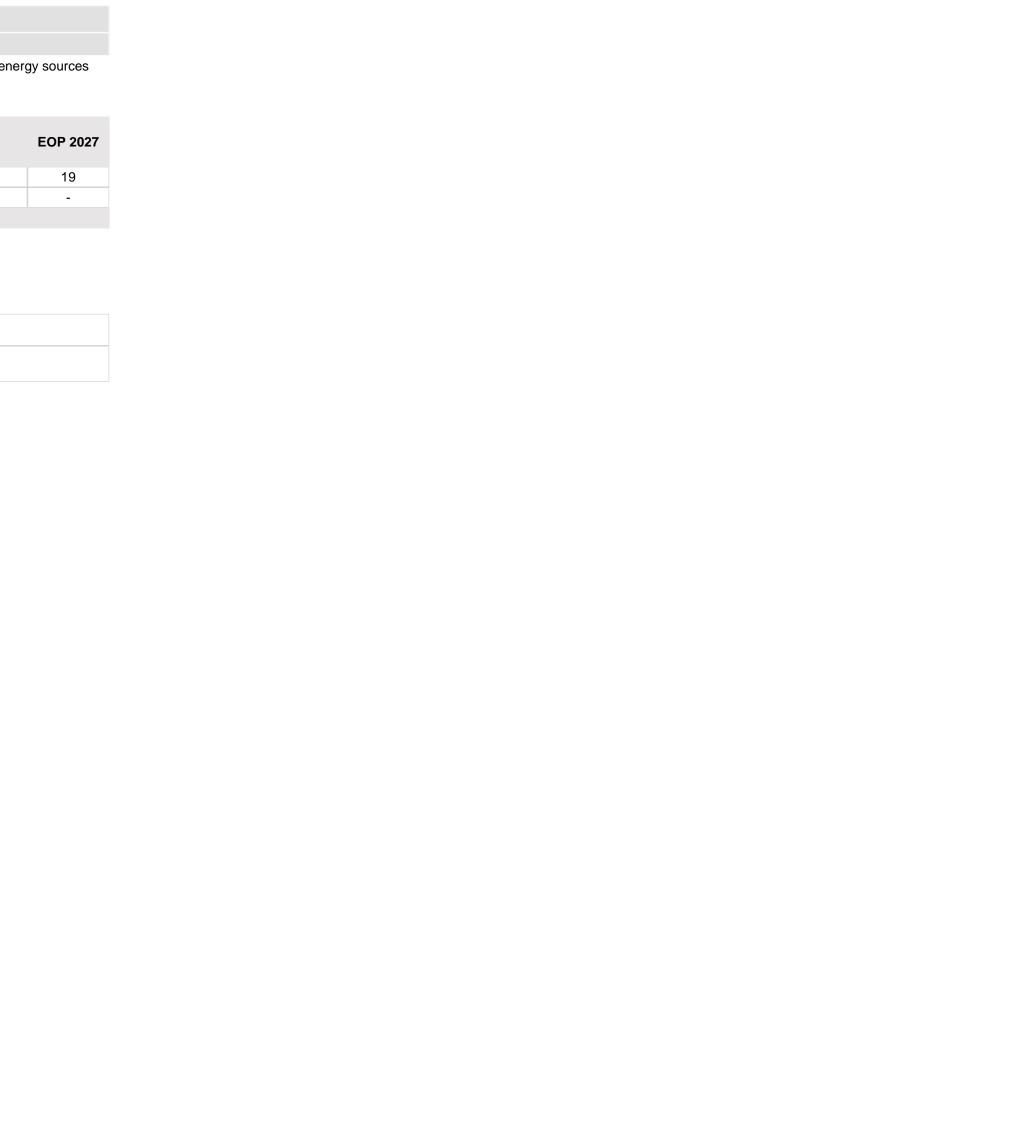
Means of Verification: Report from the Executing Agency

Observations: This refers to areas of influence of the program and utility owned systems. (DBIS system, Essequibo Coast Isolated System, and Linden).

The General Development Objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO): No

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

2



#### **RESULTS MATRIX**

#### **Specific Development Objectives**

Specific Development Objectives Nbr. 0: Avoid CO2 emissions with the development of solar PV generation plants

**Observation:** The Bartica system emission factor was used for Linden emission factors due to similarity.2 The end of project is the cumulative CO2 emissions avoided.

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	2024	2025	2026	EOP 2027
0.0	CO2 emissions avoided	Tons of CO2	0	2021	Р	-	-	-	37,695	37,582	75,277
					А	-	-	-	-	-	-
Detelle											

Details

Means of Verification: Report from the Executing Agency

**Observations:** The Bartica system emission factor was used for Linden emission factors due to similarity.2 The end of project is the cumulative CO2 emissions avoided.

**Evaluation Methodology: -**

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**Specific Development Objectives Nbr. 1:** Lower the cost of electricity generation

Observation: This is avoided average cost of the three systems. Compares the LCOE from solar versus Baseline.

	Indicator Unit of Measure Baseline Year				2022	2023	2024	2025	2026	<b>EOP 2027</b>	
1.0	Avoided cost of generation	US\$ Million	0	2021	Р	-	-	-	3.58	1.95	5.53
					А	-	-	-	-	-	-
D 4 11											

Details

Means of Verification: Report from the Executing Agency

Observations: This is avoided average cost of the three systems. Compares the LCOE from solar versus Baseline.

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

**Specific Development Objectives Nbr. 2:** Improve the operation and management of the isolated systems of Essequibo Coast and Linden, and develop local skills for services related to solar PV generation systems

Observation: Performance indicators such as System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)

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	Indicator	<b>Unit of Measure</b>	Baseline	Baseline Year		2022	2023	2024	2025	2026	EOP 2027
2.0	Electrical System performance indicators made available and in use for Linden	# Indicators	0	2021	Р	-	-	-	4	-	4
	and Essequibo				Α	-	-	-	-	-	-

Details

Means of Verification: Executing agency report

Observations: Performance indicators such as System Average Interruption Duration Index (SAIDI) and System Average Interruption Frequency Index (SAIFI)

**Evaluation Methodology: -**

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

	Indicator	Unit of Measure	Baseline	Baseline Year		2022	2023	2024	2025	2026	<b>EOP 2027</b>
2.3	Women employed in Solar PV	% of women employed	0	2021	Р	-	-	35	35	-	70
					А	-	-	-	-	-	-

**Details** 

Means of Verification: Executing agency report

Observations: Participants from the certification and apprenticeship program The indicator considers that women trained will start working the following year after finishing the program. Each program consists of 25 women trained.

**Evaluation Methodology: -**

 Pro-Gender
 Yes
 Pro-Ethnicity
 No
 CRF indicator

# **OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS**

# Component Nbr. 1 Component 1: Utility scale solar PV solutions in the matrix

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2027	2022	EOP 2027
	PV farms capacity Installed	MW	Р	-	33	-	72,450,000
1.01			P (a)	-	-	-	-
			А	-	-	-	-

# Component Nbr. 2 Component 2: Operation efficiency and reliability of the systems in the isolated systems

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2022	EOP 2027	2022	EOP 2027
	Program for women certified in solar PV installation implemented	# programs	Р	-	2	-	520,000
2.01			P (a)	-	-	-	-
			А	-	-	-	-
	Apprenticeship program designed and implemented for diversity and inclusion of people with disabilities	# Apprenticeship	Р	-	2	-	300,000.05
2.02			P (a)	-	1	-	-
			А	-	-	-	-
	Automated monitoring and control system installed	# systems	Р	-	2	-	2,500,000
2.03			P (a)	-	-	-	-
			А	-	-	-	-
	Substation upgraded with remote control system	# substations	Р	-	2	-	2,500,000
2.04			P (a)	-	-	-	-
			А	-	-	-	-
	Disaster Risk Management Plan finalized	# Plans	Р	-	1	-	30,000
2.05			P (a)	-	-	-	-
			А	-	-	-	-

Other Cost				
Other Cost				
0	Other costs (PEU management)	Р	121,236.23	3,400,000.01
		P (a)		0
		А		0
IC	DB Administrative Fee	Р		1,600,000
		P (a)		0
		А		0
Total Cost				
Т	Total Cost	Р	121,236.23	83,300,000.06
		P (a)	0	0
		А	0	0

# **CHANGES TO THE MATRIX**

No information available for this section

# **RISKS AND PLANNED RESPONSES**

Risk ID		Risk Status		Risk Taxonomy			
		Active		Technical Design			
	Response Actions						
1			Management Strategy	Status			
	1.0		-				
Risk ID		Risk Status		Risk Taxonomy			
		Active		Technical Design			
	Response Actions						
2			Management Strategy	Status			
	2.0		-				
Risk ID		Risk Status		Risk Taxonomy			
· ·		Active		Institutional Environment			
	Response Actions						
3	3.0		Management Strategy	Status			
			<u>-</u>				
Risk ID		Risk Status		Risk Taxonomy			
		Active		Systems			
		7 CLIVE		Systems			
	Response Actions						
4			Management Strategy	Status			
	4.0		-				
		1					
Dial. ID		Diek Ctetus		Diel Tayanamı			
Risk ID		Risk Status		Risk Taxonomy			
		Active		Systems			
	Pagnanca Actions						
5	Response Actions		Management Strategy	Status			
J	5.0			Status			
			-				

Risk ID		Risk Status	Risk Taxonomy					
		Active	Planning					
6	Response Actions		-					
6	6.0	Management Strategy -	Status					
	6.0	-						
Risk ID	Risk Status Risk Taxonomy							
KISK ID		Active	Systems					
		Active	Systems					
	Response Actions							
7		Management Strategy	Status					
	7.0	-						
Risk ID		Risk Status	Risk Taxonomy					
		Active	Environmental and Social Safeguards					
8	Response Actions		Chaban					
0	8.0	Management Strategy -	Status					
	8.0	-						
Risk ID		Risk Status	Risk Taxonomy					
NISK ID		Active	Environmental and Social Safeguards					
		Active	Livioninental and social suregulates					
	Response Actions							
9		Management Strategy	Status					
	9.0	-						
Risk ID		Risk Status	Risk Taxonomy					
		Active	Social Environment					
10	Response Actions	Management Strategy	Status					
	10.0	-	Status					
Risk ID		Risk Status	Risk Taxonomy					
		Active	Systems					
	Response Actions							
11	11.0	Management Strategy	Status					
		-						

Risk ID		Risk Status	Risk Taxonomy				
		Active	Human Resources				
	Response Actions						
12	12.0	Management Strategy	Status				
		-					
		-1.1.a	-11-				

Risk ID		Risk Status	Risk Taxonomy			
		Active	Human Resources			
	Response Actions					
13	13.0	Management Strategy	Status			
		-				

IMPLEMENTATION STATUS AND LEARNING

**Lesson Learned - Categories**