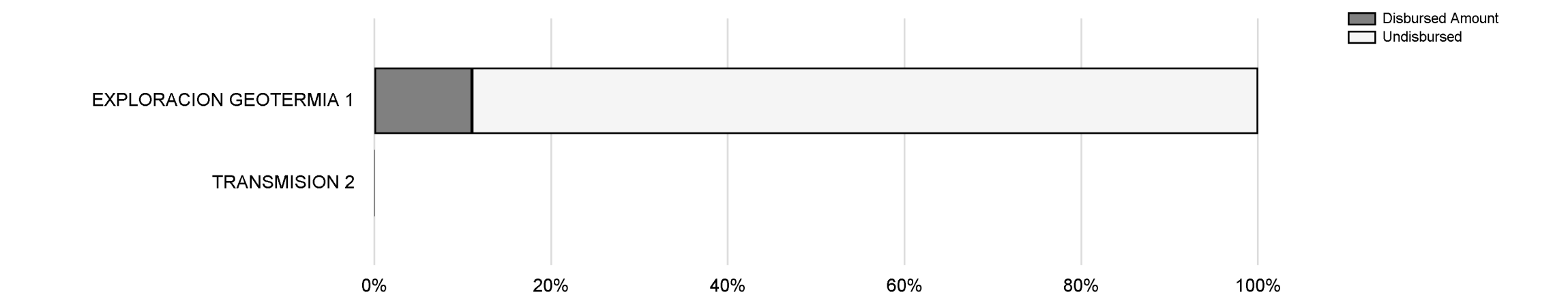


PMR Public Report

Operation Number	NI-G1006	Chief of Operations Validation Date	05/06/22
Year- PMR Cycle	Second period Jan-Dec 2021	Division Chief Validation Date	05/06/22
Last Update	05/06/22	Country Representative Validation Date	05/06/22
PMR Validation Stage	Validated by Representative		

Basic Data			
Operation Profile			
Operation Name	Geothermal Exploration Program and Improved Power Transmission in the framework of Nicaragua's Investment Plan - CTF Funding.	Loan Number	GRT/TC-15743-NI
Executing Agency	MINISTERIO DE ENERGIA Y MINAS	Sector/Subsector	ENERGY-NEW POWER DISTRIBUTION & TRANSMISSION PROJECTS
Team Leader	JACOME MONTENEGRO, CARLOS ALBERTO	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Investment Grants	Country	Nicaragua
Lending Instrument		Convergence related Operation(s)	NI-G1007, NI-L1094
Borrower			
Environmental and Social Safeguards			
Impacts Category	A	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	Partially Satisfactory	Date of approval	
Safeguard Performance Rating - Rationale	Al nivel general el Plan de Gestión Ambiental y Social se está implementando de manera satisfactoria. Sin embargo, hay una mora de entrega de evidencias y fallas en el proceso de supervisión de seguridad e higiene ocupacional que garantice el uso adecuado de los equipos de protección personal -EPP- por parte de los obreros.		

Financial Data									
	Total Cost and Source					Available Funds (US\$)			
Operations	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disbursed	Undisbursed Amount
NI-G1006	9,524,000	9,524,000	0	0	9,524,000	9,524,000	1,678,609	17.63%	7,845,391
NI-G1007	6,750,000	6,750,000	0	0	6,750,000	6,750,000	744,376	11.03%	6,005,624
NI-L1094	76,370,000	76,370,000	10,009,000	17,024,000	103,403,000	76,370,000	48,163,366.3	63.07%	28,206,633.7
Aggregated	92,644,000	92,644,000	10,009,000	17,024,000	119,677,000	92,644,000	50,586,351.3	54.60%	42,057,648.7
Expense Categories by Loan Contract (cumulative values)									



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.

RESULTS MATRIX
General Development Objectives

RESULTS MATRIX

Specific Development Objectives

Specific Development Objectives Nbr. 0: Desarrollo del potencial geotérmico de Nicaragua de forma ambiental y financieramente sostenible.

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2023
0.0	Potencial geotérmico para generación eléctrica explorado a nivel de factibilidad en el Campo Cosigüina	MW	0	2016	P	-	-	-	-	40	-	40
					A	-	-	-	-	-	-	-

Details

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2023
0.1	Concesiones de explotación geotérmica otorgadas	unidad	0	2016	P	-	-	-	-	1	-	1
					A	-	-	-	-	-	-	-

Details

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 1: Asegurar el suministro de energía eléctrica continua, confiable, accesible y costo efectiva en las zonas beneficiadas por la ampliación de la infraestructura eléctrica del programa

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2023
1.0	Energía no servida en las zonas de influencia del programa	GWh	1.18	2016	P	-	-	-	-	.08	-	.08
					A	2.59	.5	.33	-	.37	-	-

Details

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

Specific Development Objectives Nbr. 2: Optimizar la capacidad de carga de energía del Sistema de Interconexión Eléctrica de los Países de América Central (SIEPAC) en los tramos ubicados en Nicaragua

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year		2017	2018	2019	2020	2021	2022	EOP 2023
2.0	Máxima Capacidad de Transferencia Regional tramo Nicaragua-Honduras N-S aumentada	MW	120	2016	P	-	-	-	-	300	-	300
					A	180	180	140	-	200	-	-

Details

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	
------------	----	---------------	----	---------------	--

[illegible]

Details

Means of Verification:

Observations:

Evaluation Methodology: -

Pro-Gender	No	Pro-Ethnicity	No	CRF indicator	

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Componente 1. Desarrollo geotérmico

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2021	EOP 2023	2021	EOP 2023
1.01	Estudio de campo previo a la fase de factibilidad del campo Cosigüina	#de estudios	P	-	1	-	3,425,450
			P (a)	-	2	11,619,136	17,647,357
			A	-	1	4,713,163	5,345,394
1.02	Pozos exploratorios de diámetro comercial perforados	# de pozos	P	2	5	13,200,000	33,000,000
			P (a)	1	2	-	19,085,884
			A	-	-	-	-
1.03	Estudio de factibilidad para la explotación del campo Cosigüina	# de estudios	P	1	1	450,000	750,000
			P (a)	-	1	-	750,000
			A	-	-	-	-
1.04	Estudio de mitigación de riesgos de exploración geotérmica diseñado	# de estudios	P	1	1	300,000	500,000
			P (a)	-	1	-	500,000
			A	-	-	-	-
1.05	Estudios para el desarrollo del proyecto piloto de usos directo de geoterminia	# de estudios	P	-	-	-	-
			P (a)	3	3	55,000	55,000
			A	-	-	-	-

Component Nbr. 2 Componente 2. Mejoras en la infraestructura eléctrica de transmisión

				PHYSICAL PROGRESS		FINANCIAL PROGRESS	
	Output	Unit of Measure		2021	EOP 2023	2021	EOP 2023
2.01	Subestaciones Villa Nueva y El Sauce construidas y en operación	# de subestaciones	P	2	2	1,321,900	6,608,900
			P (a)	2	2	3,196,616.01	7,216,590.33
			A	2	2	2,037,396.15	6,057,369.77
2.02	Línea de transmisión en 138 kV El Sauce – Villanueva construida y en operación	km	P	38	38	1,532,600	7,662,600
			P (a)	41	41	5,503,230.46	7,359,186.16
			A	41	41	4,922,381.18	6,616,961.88
2.03	Subestación Sebaco ampliada y en operación	# de subestaciones	P	-	1	-	8,294,600
			P (a)	1	1	4,705,742.74	8,711,632.55
			A	1	1	1,186,957.89	5,450,495.16
2.04	Subestaciones San Benito, Catarina, Diriamba, Acahualinca y Ticuantepe II construidas y en operación	# de subestaciones	P	-	5	-	8,480,400
			P (a)	-	5	-	6,690,361.29
			A	-	5	-	7,655,358.1
2.05	Subestación Ticuantepe I construida y en operación	# de subestaciones	P	1	1	1,004,500	5,020,500
			P (a)	-	1	1,066,936.58	6,659,851.79
			A	-	-	632,309.36	647,148.25
2.06	Línea de transmisión conexa a la subestación Ticuantepe I construida	km	P	2	2	153,200	764,200
			P (a)	-	2	951,101	1,277,041.2
			A	-	-	-	-
2.07	Transformador móvil de 40 MVA adquirido	# de transformadores	P	-	1	-	1,000,000
			P (a)	1	1	734,070.83	972,834.15
			A	1	1	656,523.81	895,287.13
2.08	Linea de transmisión de 230 kV con capacidad de transmisión incrementada mediante el remplazo de conductores en los tramos Leon – Frontera Honduras y Amayo – Frontera Costa Rica, en operación.	km	P	-	97	-	7,394,600
			P (a)	-	97	303,075.51	3,501,623.52
			A	-	92.61	303,075.61	3,501,623.62
2.09	Linea de transmisión de 230 kV con capacidad de transmisión incrementada mediante levantamiento LIDAR y retesado de conductor, en operación.	km	P	213	213	836,000	4,180,000
			P (a)	-	213	2,000,000	11,201,730.79
			A	-	-	998,414.26	2,290,312.99

Other Cost				
	Ingeniería, Supervisión y Administración - C1	P	1,000,000	3,505,000
		P (a)	166,280	485,867.2
		A	97,310.2	195,386.2
	Gastos financieros - C1	P	737,400	1,474,400
		P (a)	55,000	1,474,399.84
		A	77,495.84	89,975.84
	Gastos imprevistos - C1	P	1,725,450	3,425,450
		P (a)		5,785,515
		A	0	0
	Ingeniería, Supervisión y Administración - C2	P	610,000	2,131,300
		P (a)	36,211.34	706,016.66
		A	12,228	676,016.66
	Gastos financieros - C2	P	1,062,700	2,124,700
		P (a)	595,437.2	1,539,767.9

	Gastos financieros - C2	A	145,293.57	145,293.57
	Gastos imprevistos - C2	P	1,860,000	3,660,000
		P (a)		442,158
		A	0	0
Total Cost				
	Total Cost	P	25,793,750	103,402,100
		P (a)	30,987,837.67	102,062,817.38
		A	15,782,548.87	39,566,623.17

CHANGES TO THE MATRIX					
Section	Name	Type of Change	Sub type	Modified By	Entered in System
Output	Estudio de campo previo a la fase de factibilidad del campo Cosigüina	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	4/29/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	SAMARR	3/7/2022
	Estudio de factibilidad para la explotación del campo Cosigüina	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	SAMARR	3/23/2022
	Línea de transmisión conexa a la subestación Ticuantepe I construida	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	4/29/2022
	Línea de transmisión de 230 kV con capacidad de transmisión incrementada mediante levantamiento LIDAR y retesado de conductor, en operación.	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	4/29/2022
	Línea de transmisión en 138 kV El Sauce – Villanueva construida y en operación	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	5/6/2022
	Pozos exploratorios de diámetro comercial perforados	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	SAMARR	3/7/2022
			Modify Physical EOP P(a) value - caused by a change in the Physical P(a).	SAMARR	3/7/2022
	Subestación Sebaco ampliada y en operación	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	4/29/2022
	Subestación Ticuantepe I construida y en operación	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	4/29/2022
	Subestaciones Villa Nueva y El Sauce construidas y en operación	Modify Output	Modify Financial EOP P(a) value - caused by a change in the Financial P(a).	CARLOSJA	5/6/2022

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy		
1	Active		Natural Environment		
	Response Actions				
	1.1	Management Strategy		Status	
		MITIGATE		ACTIVE	
	1.2	Management Strategy		Status	
		MITIGATE		ACTIVE	
	1.3	Management Strategy		Status	
		MITIGATE		ACTIVE	

Risk ID	Risk Status		Risk Taxonomy		
2	Active		Natural Environment		
	Response Actions				
	2.1	Management Strategy		Status	
		MITIGATE		ACTIVE	
	2.2	Management Strategy		Status	
		MITIGATE		ACTIVE	
	2.3	Management Strategy		Status	
		MITIGATE		ACTIVE	

Risk ID	Risk Status		Risk Taxonomy		
5	Active		Economic and Financial Environment		
	Response Actions				
	5.1	Management Strategy		Status	
		MITIGATE		COMPLETE	
	5.2	Management Strategy		Status	
		MITIGATE		ACTIVE	

Risk ID	Risk Status		Risk Taxonomy		
6	Active		Economic and Financial Environment		
	Response Actions				
	6.1	Management Strategy		Status	
		MITIGATE		COMPLETE	
	6.2	Management Strategy		Status	
		MITIGATE		ACTIVE	

Risk ID	Risk Status		Risk Taxonomy
9	Active		Organizational Structure
	Response Actions		
	9.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
10	Active		Organizational Structure
	Response Actions		
	10.1	Management Strategy	Status
		MITIGATE	ACTIVE

IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Project Design