

PMR Public Report

Operation Number	PR-L1156	Chief of Operations Validation Date	10/21/21
Year- PMR Cycle	First period Jan-Jun 2021	Division Chief Validation Date	
Last Update	09/30/21	Country Representative Validation Date	
PMR Validation Stage	Validated by Chief of Operations		

Basic Data

Operation Profile

Operation Name	Rehabilitation and Modernization Program for the Acaray Hydropower Plant	Loan Number	4690/OC-PR
Executing Agency	ADMINISTRACION NACIONAL DE ELECTRICIDAD (ANDE)	Sector/Subsector	ENERGY-ENERGY SECTOR REHABILITATION AND EFFICIENCY
Team Leader	AIELLO, ROBERTO GABRIEL	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Loan Operation	Country	Paraguay
Lending Instrument	Investment Loan	Convergence related Operation(s)	
Borrower	ADMINISTRACION NACIONAL DE ELECTRICIDAD (ANDE)		

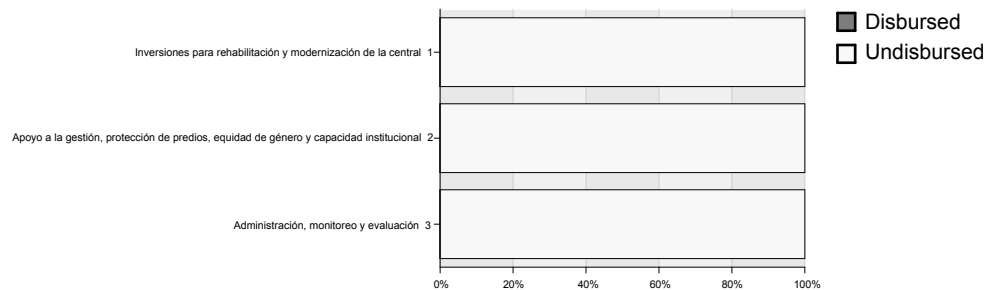
Environmental and Social Safeguards

Impacts Category	B	Was/Were the objective(s) of this operation reformulated?	NO
Safeguard Performance Rating	Partially Satisfactory	Date of approval	
Safeguard Performance Rating - Rationale	La ANDE no cuenta aún con el equipo de profesionales ambientales, sociales y en salud y seguridad ocupacional (SYSO) requeridos para la gestión del Programa.		

Financial Data

Item	Total Cost and Source					Available Funds (US\$)			
	Original IDB	Current IDB	Local Counterpart	Co-Financing / Country	Total Original Cost	Current IDB	Disb. Amount to Date	% Disb	Undisbursed Amount
PR-L1156	125,000,000	125,000,000	20,200,320	0	145,200,320	125,000,000	745,989	0.60%	124,254,011
Aggregated	125,000,000	125,000,000	20,200,320	0	145,200,320	125,000,000	745,989	0.60%	124,254,011

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.

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RESULTS MATRIX

General Development Objectives

General Development Objectives Nbr. 1: Contribuir a la modernización del sector eléctrico de Paraguay a través del financiamiento de inversiones de rehabilitación de infraestructura eléctrica de la Administración Nacional de Electricidad

Observation:

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
1.2	Energía Renovable Media Anual de Acaray	GWh/año	947.00	2017	2026	P	980.00
						A	

Details

Means of verification: Resumen Estadístico ANDE

Pro-Gender	No	Pro-Ethnicity	No
The General Development objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO)	No		

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
1.3	Emissiones totales de CO2 evitadas	Ton CO2/año	0.00	2017	2026	P	48,700.00
						A	

Details

Means of verification: Resumen Estadístico ANDE (+Factor de Emisiones)

Pro-Gender	No	Pro-Ethnicity	No
The General Development objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO)	No		

	Indicator	Unit of Measure	Baseline	Baseline Year	Expected Year of Achievement		Target
1.4	Exportaciones de energía ANDE	GWh/año	73.00	2017	2026	P	115.00
						A	

Details

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RESULTS MATRIX

General Development Objectives

Means of verification: Resumen Estadístico ANDE

Pro-Gender	No	Pro-Ethnicity	No
The General Development objective indicator target is expected to be observed by the operation's "Fully Justified" date in Convergence (CO)			

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RESULTS MATRIX

Specific Development Objectives

Specific Development Objectives Nbr. 0: Extensión de la vida útil de la Central Hidroeléctrica Acaray

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
0.0	Vida útil teórica de las Unidades 1 y 2, Casa de Máquinas 1	Años	0.00	2017	P	30.00	30.00
					A		
Details							
Means of verification: Evaluación final del Proyecto							
Observations: Considera el reemplazo de nuevos equipos del tren de potencia: turbina, generador y transformador							
Pro-Gender		No		Pro-Ethnicity		No	

Specific Development Objectives Nbr. 1: Mejorar en la disponibilidad y la confiabilidad de la Central Hidroeléctrica Acaray

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
1.0	Disponibilidad de las Unidades 1 y 2, Casa de Máquinas 1	%	55.00	2017	P	78.00	78.00
					A		
Details							
Means of verification: Informe Indicadores de desempeño Acaray							
Observations: Las intervenciones mismas del proyecto afectan la disponibilidad por lo que se espera que alcance el 96% después de al menos de un año de puesta en servicio de la última unidad							
Pro-Gender		No		Pro-Ethnicity		No	

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
1.1	Tasa de indisponibilidad forzada de las Unidades 1 y 2, Casa de Máquinas 1	Fallas/Año	22.00	2017	P	7.00	7.00
					A		
Details							
Means of verification: Informe Indicadores de desempeño Acaray							
Pro-Gender		No		Pro-Ethnicity		No	

Specific Development Objectives Nbr. 2: Incrementar la capacidad de generación de la Central Hidroeléctrica Acaray

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
2.0	Capacidad nominal de la Casa de Máquinas I	MW	94.00	2017	P	114.00	114.00
					A		

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Specific Development Objectives

Details							
Means of verification: Informe Indicadores de desempeño Acaray							
Pro-Gender		No		Pro-Ethnicity		No	
Indicator		Unit of Measure	Baseline	Baseline Year		2026	EOP 2026
2.1	Registro completo de visitantes a los predios	#	0.00	2021	P	1.00	1.00
					A		
Details							
Means of verification: Informe Indicadores de desempeño Acaray							
Pro-Gender		No		Pro-Ethnicity		No	

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Inversiones para rehabilitación y modernización de la central

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2021	EOP 2026	2021	EOP 2026
1.1	Diseño de ingeniería y supervisión desarrollado	#	P	0	1	379,500	12,650,000
			P(a)	0	1	379,500	12,650,000
			A	0	0	0	0
1.2	Sistemas hidro electromecánicos de las represas de Acaray e Yguazú reemplazados y modernizados	#	P	0	1	0	8,496,000
			P(a)	0	1	0	8,496,000
			A	0	0	0	0
1.3	Grúas y pórticos para las Centrales Acaray 1 y Acaray 2 y presas Acaray e Yguazú renovadas	#	P	0	7	0	4,130,000
			P(a)	0	7	0	4,130,000
			A	0	0	0	0
1.4	Sistema de generación de la central Acaray reemplazado	#	P	0	1	0	46,610,000
			P(a)	0	1	0	46,610,000
			A	0	0	0	0
1.5	Sistemas Eléctricos Media y Baja Tensión reemplazados	#	P	0	1	0	8,378,000
			P(a)	0	1	0	8,378,000
			A	0	0	0	0
1.6	Sistema Integral digital de adquisición y gestión de datos de la central	#	P	0	1	0	5,900,000
			P(a)	0	1	0	5,900,000
			A	0	0	0	0
1.7	Subestación de la Central Acaray existente rehabilitada	#	P	0	1	0	17,700,000
			P(a)	0	1	0	17,700,000
			A	0	0	0	0
1.8	Sistema de Seguridad de Presas implementado	#	P	0	1	0	3,300,000
			P(a)	0	1	0	3,300,000
			A	0	0	0	0
1.9	Infraestructura para ejecución de intervenciones construidas	#	P	0	1	0	3,300,000
			P(a)	0	1	0	3,300,000
			A	0	0	0	0
1.10	Edificios de la central Acaray rehabilitados	#	P	0	1	0	5,500,000
			P(a)	0	1	0	5,500,000
			A	0	0	0	0
1.11	Red hidrometeorológica de la cuenca del Río Acaray rehabilitada y ampliada	#	P	0	1	0	1,100,000
			P(a)	0	1	0	1,100,000
			A	0	0	0	0
1.12	Plan de gestión ambiental, salud y seguridad ocupacional Complejo Acaray – Yguazú implementado	#	P	0	1	0	2,750,000
			P(a)	0	1	0	2,750,000
			A	0	0	0	0

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 2 Apoyo a la gestión, protección de predios, equidad de género y capacidad institucional

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2021	EOP 2026	2021	EOP 2026
2.1	Obras civiles para protección de predios que incluye centro de visitantes construidos	#	P	0	1	0	2,695,000
			P(a)	0	1	0	2,695,000
			A	0	0	0	0
2.2	Sistema de gestión para la operación y el mantenimiento de la central implementado	#	P	0	1	0	3,300,000
			P(a)	0	1	0	3,300,000
			A	0	0	0	0
2.3	Estrategia de género diseñada e implementada en ANDE	Estrategia	P	0	1	0	770,000
			P(a)	0	1	0	770,000
			A	0	0	0	0
2.4	Talleres de capacitación al personal de ANDE desarrollados	#	P	0	3	0	330,000
			P(a)	0	3	0	330,000
			A	0	0	0	0
2.5	Plan piloto de sistema aislado híbrido en Puerto Esperanza construido	#	P	0	1	630,000	2,100,000
			P(a)	0	1	630,000	2,100,000
			A	0	0	0	0
2.6	Planes Piloto de sistema aislado híbrido en Alto Paraná construido	#	P	0	1	0	400,000
			P(a)	0	1	0	400,000
			A	0	0	0	0
2.7	Panel de expertos	#	P	0	1	0	715,000
			P(a)	0	1	0	715,000
			A	0	0	0	0

Other Cost

	Unidad de Administracion en funcionamiento	P			299,063	1,749,000
		P(a)			299,063	1,749,000
		A			0	0
	Evaluación final e intermedia	P			0	121,000
		P(a)			0	121,000
		A			0	0
	Auditoría externa	P			44,000	220,000
		P(a)			44,000	220,000
		A			0	0
	Contingencias e imprevistos	P			0	12,986,320
		P(a)			0	12,986,320
		A			0	0

Total Cost

	Total Cost	P			1,352,563	145,200,320
		P(a)			1,352,563	145,200,320
		A			0	0

CHANGES TO THE MATRIX

No information available for this section

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
1	Active		Planning
	Response actions		
	1.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
2	Active		Goods, and Services
	Response actions		
	2.1	Management Strategy	Status
		MITIGATE	ACTIVE
	2.2	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
3	Active		Environmental and Social Safeguards
	Response actions		
	3.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
4	Active		Environmental and Social Safeguards
	Response actions		
	4.1	Management Strategy	Status
		MITIGATE	ACTIVE

Risk ID	Risk Status		Risk Taxonomy
5	Active		Environmental and Social Safeguards
	Response actions		
	5.1	Management Strategy	Status
		MITIGATE	INACTIVE

RISKS AND PLANNED RESPONSES

Risk ID	Risk Status		Risk Taxonomy
Risk ID	Risk Status		Risk Taxonomy
6	Active		Internal Processes
	Response actions		
	6.1	Management Strategy	Status
		MITIGATE	ACTIVE
	6.2	Management Strategy	Status
		MITIGATE	ACTIVE
Risk ID	Risk Status		Risk Taxonomy
7	Active		Internal Processes
	Response actions		
	7.1	Management Strategy	Status
		MITIGATE	ACTIVE
Risk ID	Risk Status		Risk Taxonomy
8	Active		Governance Framework
	Response actions		
	8.1	Management Strategy	Status
		MITIGATE	ACTIVE

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IMPLEMENTATION STATUS AND LEARNING

Lesson Learned - Categories
Acquisitions and Procurement - Bidding Stage
Intra/Inter Coordination