

PMR Operational Report

Operation Number	BR-L1303	Chief of Operations Validation Date	04/04/17
Year- PMR Cycle	Second period Jan-Dec 2016	Division Chief Validation Date	04/12/17
Last Update	03/20/17	Country Representative Validation Date	04/12/17
PMR Validation Stage	Validated by Representative		

Basic Data

Operation Profile

Operation Name	CEEE Generation and Transmission Project	Loan Number	2813/OC-BR, BR-L1303
Executing Agency	CEEE-GT	Sector/Subsector	EN-D&T - ENERGY-NEW POWER DISTRIBUTION & TRANSMISSION PROJECTS
Team Leader	ALARCON RODRIGUEZ,ARTURO DANIEL	Overall Stage	Disbursing (From eligibility until all the Operations are closed)
Operation Type	Loan Operation	Country	BRAZIL
Lending Instrument	Investment Loan	Convergence related Operation(s)	
Borrower	Companhia Estadual de Distribucao de Energia Electrica		

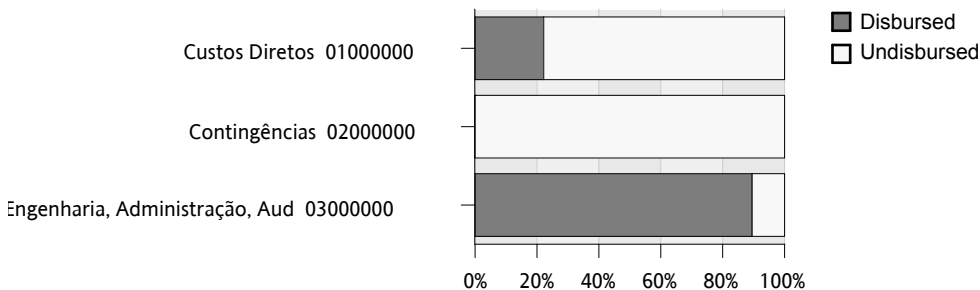
Environmental and Social Safeguards

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	Several noncompliances are being addressed by the Client under close supervision from ESG, see attached Aide Memoire for detailed information		

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
BR-L1303	88,655,996	88,655,996	59,103,957	0	147,759,953	88,655,996	31,419,178.85	35.44%	57,236,817.15
Aggregated	88,655,996	88,655,996	59,103,957	0	147,759,953	88,655,996	31,419,178.85	35.44%	57,236,817.15

Expense Categories by Loan Contract (cumulative values)



Please note that the Overall Stage represents the stage of the operation at the time of this report's publication, which might not necessarily match the stage of the operation during the PMR Cycle to which the report pertains. Please also 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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IMPACTS

Impact Nbr. 1: Redução na emissão anual de CO2

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2017	2018	EOP 2018
1.1	Emissão de CO2 pela PCH Bugres evitada	tCO2/ano	0.0	2010	P			14,900.00
					P(a)		6,500.00	
					A			

Details

Means of verification: CEEE-GT. Metodologia UNFCCC: ACM002 <http://cdm.unfccc.int/methodologies/PAmethodologies/approved>

Pro-Gender

No

Pro-Ethnicity

No

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OUTCOMES

Outcome Nbr. 1: Capacidade de geração da PCH Ijuizinho II ampliada

Observation: Se mide la energia generada anualmente por la central, una vez ampliada.

Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
1.1	Energia média generada pela PCH Bugres	GWh/ano	87.6	2015	P				70.00
					P(a)			118.26	118.26
					A				
Details									
Means of verification: Relatório anual CEEE-GT									
Pro-Gender		No	Pro-Ethnicity		No				

Outcome Nbr. 2: Disponibilidade das usinas aumentadas

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
2.1	Taxa equivalente de indisponibilidade forçada da UHE Itaúba - TEIFa	Percentual	2.59	2010	P				2.00
					P(a)			2.00	2.00
					A				
Details									
Means of verification: Calculado pelo ONS (Operador Nacional do Sistema) mensalmente.									
Observations: Meta para cada mês de 2016									
Pro-Gender		No	Pro-Ethnicity		No				

Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
2.2	Taxa equivalente de indisponibilidade forçada da UHE Passo Real - TEIfa	Percentual	2.56	2010	P				2.00
					P(a)			2.00	2.00
					A				
Details									
Means of verification: Calculado pelo ONS (Operador Nacional do Sistema) mensalmente.									
Observations: Meta para cada mês de 2016.									
Pro-Gender		No			Pro-Ethnicity		No		

Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
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OUTCOMES

2.3	Taxa equivalente de indisponibilidade programada da UHE Itaúba - TEIP	Percentual	6.0	2010	P				4.00
					P(a)			4.00	4.00
					A				

Details

Means of verification: Calculado pelo ONS (Operador Nacional do Sistema) mensalmente.

Observations: Meta para cada mês de 2016.

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
2.4	Taxa equivalente de indisponibilidade programada da UHE Passo Real - TEIP	Percentual	12.0	2010	P			6.00
					P(a)		6.00	6.00
					A			

Details

Means of verification: Calculado pelo ONS (Operador Nacional do Sistema) mensalmente.

Observations: Meta para cada mês de 2016.

Pro-Gender	No	Pro-Ethnicity	No
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Outcome Nbr. 3: Custos de operação e manutenção das usinas reduzidos

Observation:

Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
3.1	Custo anual de operação e manutenção da UHE Itaúba	R\$/MWh	3.49	2010	P			3.14
					P(a)		3.14	3.14
					A			

Details

Means of verification: Relatórios anuais da CEEE-GT

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
3.2	Custo anual de operação e manutenção da UHE Passo Real	R\$/MWh	5.97	2010	P			5.37
					P(a)		5.37	5.37
					A			

Details

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OUTCOMES

Means of verification: Relatórios anuais da CEEE-GT

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
3.2	Custo anual de operação e manutenção da UHE Capigui	R\$/MWh	73.46	2016	P			
					P(a)		51.61	
					A			

Details

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
3.3	Custo anual de operação e manutenção da UHE Guarita	R\$/MWh	35.98	2016	P			
					P(a)		27.63	
					A			

Details

Pro-Gender	No	Pro-Ethnicity	No
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Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
3.4	Custo anual de operação e manutenção da UHE Ernestina	R\$/MWh	24.17	2016	P			
					P(a)		24.17	
					A			

Details

Pro-Gender	No	Pro-Ethnicity	No
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Outcome Nbr. 4: Confiabilidade do sistema de transmissão aumentada

Observation:

Indicator	Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
4.1	Número de transformadores com sobrecarga nas subestações de alta e média tensão	Percentual	25.5	2010	P			17.00
					P(a)		13.50	17.00
					A			

Details

Means of verification: Relatório anual da CEEE-GT

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OUTCOMES

Pro-Gender		No	Pro-Ethnicity				No		
Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
4.2	Aumento do número de subestações com nível de tensão adequada	Percentual	80.0	2010	P				89.00
					P(a)			91.00	89.00
					A				
Details									
Means of verification: Relatório anual da CEEE-GT									
Pro-Gender		No	Pro-Ethnicity				No		

Outcome Nbr. 5: Desempenho econômico do projeto melhorado

Observation:

Indicator		Unit of Measure	Baseline	Baseline Year		2016	2017	2018	EOP 2018
5.1	Taxa interna de retorno econômico (TIRE)	Percentual	17.0	2010	P				12.00
					P(a)			12.00	12.00
					A				
Details									
Means of verification: A Taxa interna de retorno econômico (TIRE) será calculada na Avaliação Final do projeto.									
Observations: A meta é obter valor superior a 12%.									
Pro-Gender		No	Pro-Ethnicity		No				

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

Component Nbr. 1 Componente I. Investimentos em geração

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2016	EOP 2018	2016	EOP 2018
1.1	Nuevas unidades generadores instaladas (ampliación central Bugres)	MW	P		15		17,327,070
			P(a)	0	13	0	8,264,153
			A	0	0	0	0
1.2	Usinas Hidrelétricas modernizadas	Unidades	P		0		0
			P(a)		4	0	8,390,000
			A	0	0	0	0

Component Nbr. 2 Componente II. Investimentos em geração (Usinas)

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2016	EOP 2018	2016	EOP 2018
2.1	Unidade Geradora nº 4 da UHE Itaúba modernizada	Unidade Geradora	P		1		14,129,810
			P(a)	0	1		13,214,736.2
			A	0	1	26,575.89	13,214,736.2
2.2	Unidade Geradora nº 2 da UHE Passo Real modernizada	Unidade Geradora	P		1		18,457,890
			P(a)	0	1	1,049,443.88	18,747,917.26
			A	0	0	0	1,272,465

Component Nbr. 3 Componente III. Investimentos em Transmissão

	Output	Unit of Measure		PHYSICAL PROGRESS		FINANCIAL PROGRESS	
				2016	EOP 2018	2016	EOP 2018
3.1	Subestações adequadas	Unidade	P		5		22,281,990
			P(a)	1	9	5,133,609.02	27,455,177.37
			A	2	3	4,921,199.19	6,383,727.08
3.2	Subestações ampliadas	MVA	P		425		33,404,140
			P(a)	50	984	2,441,624.34	48,823,722.05
			A	50	375	7,189,701.36	26,089,525.55
3.3	Linhas de transmissão 138 kV ampliadas	Electricity transmission and distribution lines (km)	P		46.5		8,593,790
			P(a)	42	61.1	3,000,839.61	12,940,992.82
			A	42	46.5	3,654,795.13	7,830,309.81
3.4	Banco de capacitores 23 kV instalados	MVar	P		18		1,316,310
			P(a)	0	18	0	932,066.19
			A	0	18	0	919,472
3.5	Reator e Banco de Capacitor 230 kV instalados	MVar	P		60		5,033,930
			P(a)	30	90	82,920.38	6,937,792.3
			A	30	60	346,106.65	2,308,308.66

Other Cost

Auditoria Externa	P				223,000
	P(a)			46,394.35	222,998.72
	A			39,197.87	170,802.24
Avaliação intermediária e final	P				200,000
	P(a)			100,000	200,000
	A			28,135.03	28,135.03
Contingências	P				7,387,950
	P(a)			0	0
	A			0	0

RESULTS MATRIX

OUTPUTS: ANNUAL PHYSICAL AND FINANCIAL PROGRESS

	Engenharia e Administração	P				2,077,000
		P(a)			37,723.66	2,159,911.04
		A			0	2,122,184.38

Total Cost

	Total Cost	P				147,759,960
		P(a)			11,892,555.24	148,289,466.95
		A			16,205,711.12	60,339,665.95

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CHANGES TO THE MATRIX

Section	Name	Type of Change	Reasons	Entered in the System	Agreed with Executing Agency
Output	Linhas de transmissão 138 kV ampliadas	Modify Output	En el 2016 se cumplieron las metas físicas. Se ajustaron las metas físicas, de acuerdo al avance del ejecutor, y la planificación de las adquisiciones. Quedan pendientes solo dos líneas, una para el 2017 y otra para el 2018. La planificación de las líneas debe ser ajustada en relación a la entrada en operación de las subestaciones.	03/09/2017	01/25/2017