

PERFIL DE PROYECTO (PP)

BRASIL

I. DATOS BÁSICOS

Nombre del Proyecto:	Pró-Energía RS Distribución		
Número del Proyecto:	BR-L1284		
Equipo de Proyecto:	Sylvia Larrea (INE/ENE) y Natacha Marzolf (INE/ENE), Co-Jefes de Equipo; Jorge Mercado (INE/ENE); Jorge Ordoñez (INE/ENE); José Felix Filho (VPS/ESG); Teresa Maurea Faria (LEG/SGO); Marcos Texeira (PDP/CBR); y Monica Merlo (PDP/CBR); bajo la supervisión de Leandro Alves, Jefe de la División de Energía (INE/ENE) y José Luis Lupo (CSC/CBR).		
Prestatario:	CEEE-D con garantía del Gobierno de Brasil		
Organismo Ejecutor:	CEEE-D		
Plan Financiero:	BID (CO)	US\$119.3 millones	
	CEEE-D	<u>US\$79.5 millones</u>	
	Total	US\$198.8 millones	
Salvaguardas:	Políticas identificadas: B.5, B.6, B.7, B.11 y B.12		

Clasificación: Categoría “B”

II. JUSTIFICACIÓN GENERAL Y OBJETIVOS

- 2.1 El crecimiento de la demanda de energía eléctrica tiene correlación directa con los índices de crecimiento económico del país. La demanda de energía eléctrica en el área de concesión de la *Companhia Estadual de Distribuição de Energia Elétrica* (CEEE-D) que incluye la región metropolitana de *Porto Alegre* en el *Estado de Rio Grande do Sul* (RS), muestra un crecimiento promedio de aproximadamente 4,2% por año en los últimos años y las proyecciones de aumento de carga y demanda hechas por el *Operador Nacional del Sistema* (ONS) corrobora que dicha tendencia continuará en los próximos años.
- 2.2 [Confidencial].
- 2.3 La CEEE-D presenta bajos niveles de confiabilidad y alto nivel de pérdidas para la distribución de energía en su área de concesión como lo es demostrado por los indicadores operativos: (i) *Duração Equivalente de Interrupção por Consumidor* (DEC, duración equivalente de interrupción), que indica el número de horas que un consumidor está sin energía eléctrica en el año; (ii) *Frequência Equivalente de Interrupção* (FEC), que indica cuantas veces hubo interrupción en la unidad consumidora; y (iii) nivel de pérdidas.
- 2.4 [Confidencial].

- 2.5 Con base a lo anterior, el sistema de distribución de la CEEE-D requiere aumentar y mejorar su capacidad para cumplir con la demanda y con los niveles de confiabilidad y calidad exigidos por ANEEL. Es dentro de este contexto que surge el *Programa de Modernización y Expansión del Sistema de Distribución Eléctrica de la CEEE-D* o Pró-Energía Distribución (el Programa) que consistirá en la modernización y ampliación de las instalaciones existentes incluyendo líneas de distribución, transformadores y subestaciones.
- 2.6 [Confidencial].
- 2.7 Este Programa estará complementado con un programa de expansión, rehabilitación y modernización de la infraestructura de generación y transmisión de la compañía de generación y transmisión CEEE-GT, controlada por la misma holding que controla CEEE-D, y a ser financiado por el Banco a través de un préstamo sin garantía soberana hasta un monto máximo de US\$85.5 millones a la CEEE-GT. La decisión de ofrecer un préstamo sin garantía soberana a la CEEE-GT se justifica por la fortaleza financiera de la empresa y permite asignar de manera óptima limitados recursos públicos.
- 2.8 **La CEEE-D.** La CEEE-D es la concesionaria de servicios de distribución eléctrica en el área sur y sureste del Estado de RS, incluyendo la región metropolitana de *Porto Alegre, Litoral y Campanha Gaucha*. La CEEE-D opera en 72 municipalidades, cubriendo una superficie de 73.627-kilómetros cuadrados (km²), lo cual representa aproximadamente 32% del mercado del Estado de RS con 1,4 millones de clientes (aproximadamente 3,4 millones de personas beneficiadas) supliendo 6.563 Gigavatios hora (GWh) de energía.
- 2.9 La red de distribución de CEEE-D está compuesta por: (i) 52 subestaciones de 230/69 Kilovoltios (kV), 230 kV/13,8 kV, 69 kV/13,8 kV y 69 kV/23 kV; (ii) 50.400 de redes de distribución en áreas urbanas y rurales; (iii) 1.850-kilómetros (km) de líneas de transmisión; y (iv) 46.500 transformadores en 830.000 postes.
- 2.10 [Confidencial].
- 2.11 **Antecedentes.** La *Companhia Estadual de Energia Elétrica* (CEEE), creada en 1943, tiene sus orígenes en la *Comissão Estadual de Energia Elétrica* que siendo subordinada a la *Secretaría de Obras Públicas de RS* tenía como función la promoción y el aprovechamiento de los potenciales hidroeléctricos y las reservas carboníferas del estado. Sólo fue hasta el año de 1963 que oficialmente se creó la CEEE como una sociedad accionaria para el desarrollo, la construcción y explotación de centrales de producción eléctrica, incluyendo la transmisión y distribución en todo el estado.
- 2.12 Hasta 1997, la CEEE controló la generación, transmisión y distribución de energía eléctrica cuando fue reestructurada dado que el modelo del sector eléctrico de 1992 proponía, bajo el Plano Nacional de Desestatización, la privatización de las empresas del sector. Como resultado, dos tercios del área de distribución fueron privatizados y la CEEE mantuvo un tercio del área de distribución y las áreas de generación y transmisión.
- 2.13 En el 2004, el nuevo marco regulatorio del sector propuso un modelo donde se separó las actividades de generación, distribución y transmisión, eliminando la constitución y

operación de compañías verticalmente integradas. Dentro de este contexto, se aprueba la Ley No. 12.593 en el 2006 que autoriza la reestructuración societaria y patrimonial de la CEEE, cambiando su nombre a *Companhia Estadual de Geração e Transmissão de Energia Elétrica* (CEEE-GT) y creando una nueva compañía de distribución de energía eléctrica, la CEEE-D. Ambas empresas pasan a ser controladas por una holding llamada *Companhia Estadual de Energia Elétrica Participações* (CEEE-Par).

- 2.14 La CEEE-D es una empresa de economía mixta controlada por: (i) CEEE-Par con 65,92% cuyas acciones son detenidas por el Estado de RS; (ii) *Eletrobras* con 32,59%, y (iii) accionistas minoritarios 1,49%.

C. Objetivos y resultados esperados

- 2.15 El objetivo general del Programa es mejorar la calidad de vida de la población y garantizar el desarrollo sostenible del Estado de RS mediante inversiones en la expansión y modernización del sistema de distribución en el área de concesión de la CEEE-D que incluye el área metropolitana de *Porto Alegre*. El Programa busca garantizar la infraestructura eléctrica necesaria para apoyar el aumento de demanda la cual se espera tendrá una fuerte incremento durante la Copa del Mundo 2014, donde *Porto Alegre* será una de las ciudades sede.
- 2.16 El Programa tiene como objetivos específicos: (i) mejorar los indicadores de confiabilidad y calidad de prestación del servicio; (ii) reducir las pérdidas técnicas y comerciales; (iii) expandir y adecuar el sistema de distribución de alta y media tensión de CEEE-D de tal manera que pueda atenderse el crecimiento de la demanda; y (iv) modernizar la gestión de CEEE-D mediante un nuevo sistema corporativo de tecnología de la información o de gestión integrada Enterprise Resource Planning (ERP) que permita agilizar los procesos y sus respectivos controles.
- 2.17 [Confidencial].

III. ASPECTOS DE DISEÑO Y CONOCIMIENTO DEL SECTOR

- 3.1 El costo total del Programa es de US\$198,8 millones. Se estima que el financiamiento del BID será de US\$119,3 millones y de la CEEE-D de US\$79,5 millones por la CEEE-D. Se financiarán los siguientes componentes:
- 3.2 **Componente I.** Inversiones en alta tensión de distribución. Este componente realizará obras de infraestructura en el sistema de alta tensión de distribución de la CEEE-D (o sub-transmisión, a 138-kV y 69-kV): construcción de 14 nuevas subestaciones, ampliación o adecuación de 10 subestaciones, e instalación de 19 líneas para atender crecimiento de la demanda.
- 3.3 **Componente II.** Modernización de equipos en alta tensión de distribución. Reemplazo de disyuntores, transformadores de corriente, transformadores de potencial y relés, e

implementación de sistemas de telecomando y supervisión en 20 subestaciones para la mejora de confiabilidad y calidad del sistema.

- 3.4 **Componente III.** Inversiones en media tensión de distribución. Instalación de 910-km de red en la superficie y expansión de la red subterránea de *Porto Alegre* para atender el crecimiento de la demanda.
- 3.5 **Componente IV.** Actualización de control en media tensión de distribución. Instalación de reguladores, bancos de capacitores, llaves y relés para mejorar la confiabilidad y calidad de prestación del servicio.
- 3.6 **Componente V.** Modernización del sistema corporativo de gestión o ERP. Este componente llevará a hacer más ágiles y oportunos los procesos de gestión de CEEE-D integrando los flujos de información entre las diferentes áreas de la empresa (compras, ventas, finanzas, contabilidad, recursos humanos y otros) y lograr una adecuada supervisión y control de dichos procesos.
- 3.7 **Componente VI.** Ingeniería y administración. Este componente apoyará la adecuada ejecución del Programa mediante recursos para realizar la supervisión del Programa, incluyendo el monitoreo socio-ambiental, así como auditoría y evaluación.

IV. SALVAGUARDIAS Y ASPECTOS FIDUCIARIOS

- 4.1 Esta sección resume los aspectos ambientales, sociales, de salud y seguridad y la estrategia asociada con este Proyecto (el Anexo III presenta información más detallada de la “Estrategia Ambiental y Social”). Las obras contempladas en el Programa serán ejecutadas de manera dispersa en el área de concesión de CEEE-D e, individualmente, no serán de elevada magnitud. Los principales impactos negativos potenciales estarán asociados a la etapa de construcción y serán aquellos típicos de obras de esta naturaleza: (i) interferencia con la vegetación; (ii) emisiones de ruido y de polvo; (iii) residuos sólidos no manejados adecuadamente; (iv) posibles derrames de aceite; (v) interferencias con el día a día de las poblaciones locales debido a la circulación de vehículos de las obras; y (vi) riesgos de accidentes con los trabajadores. Estos impactos serán localizados y temporarios, y además serán mitigados con los procedimientos de manejo adoptados por CEEE-D. Podrán haber también posibles y limitados pasivos ambientales y sociales asociados a las operaciones y instalaciones actuales de CEEE-D. Por lo anterior y de acuerdo a la Política de Medio Ambiente y Cumplimiento de Salvaguardias (GN-2208-20 y OP-703) del BID, se propone que la presente operación sea catalogada como Categoría “B”.
- 4.2 El equipo propone ejecutar una debida diligencia ambiental y social para: (i) confirmar las medidas apropiadas de mitigación y monitoreo para controlar los impactos ambientales y sociales, de salud y seguridad asociados con el Programa; (ii) revisar las principales actividades de CEEE-D y sus instalaciones existentes relevantes para determinar posibles pasivos ambientales y sociales, de salud y de seguridad; y

(iii) confirmar el compromiso y la capacidad de CEEE-D de abordar estos temas, de acuerdo con las Políticas del Banco.

V. RECURSOS Y CRONOGRAMA

- 5.1 En el Anexo V se detalla el cronograma que establece los hitos necesarios que permitirán que el Borrador de la Propuesta de Préstamo sea concluido en Octubre del 2010 y presentado al Directorio Ejecutivo del Banco en enero del 2011 o más anteriormente si es posible. El mismo anexo especifica los costos de preparación de esta operación, los cuales ascienden a US\$123.370 incluyendo la ejecución de 3 misiones.

**Pró-Energía RS Distribución
(BR-L1284)**

**Anexo I
Resumen Matriz de Efectividad en el Desarrollo**

Para Uso Interno del Banco

SAFEGUARD POLICY FILTER REPORT

This Report provides guidance for project teams on safeguard policy triggers and should be attached as an annex to the PP or PCD (or equivalent) together with the Safeguard Screening Form, and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	IDB Sector	ENERGY-POWER DISTRIBUTION
	Type of Operation	Investment Loan
	Additional Operation Details	
	Investment Checklist	Infrastructure Power Transmission
	Team Leader	Larrea, Sylvia Virginia (SYLVIAL@iadb.org) and Marzolf, Natacha (NATACHAM@iadb.org)
	Project Title	Pró-Energía RS Distribution
	Project Number	BR-L1284
	Safeguard Specialist(s)	Felix-Filho, Jose Antonio (JOSEF@iadb.org)
	Assessment Date	2010-07-29
	Additional Comments	

SAFEGUARD POLICY FILTER RESULTS	Type of Operation	Loan Operation	
	Safeguard Policy Items Identified (Yes)	The Bank will make available to the public the relevant Project documents.	Disclosure of Information Policy (B.01)
		The operation is in compliance with environmental laws and regulations of the country where the operation is being implemented (including national obligations established under ratified Multilateral Environmental Agreements).	(B.02)
		The operation (including associated facilities) will be screened and classified according to their potential environmental impacts.	(B.03)

		An Environmental Assessment is required.	(B.05)
		Consultations with affected parties will be performed and considerations of their views will be taken into account.	(B.06)
		The Bank will monitor the executing agency/borrower's compliance with all safeguard requirements stipulated in the loan agreement and project operating or credit regulations.	(B.07)
		The operation has the potential to pollute the environment (e.g. air, soil, water, greenhouse gases...).	(B.11)
		The operation is already <u>under construction</u> by the Executing Agency or the Borrower.	(B.12)
	Potential Safeguard Policy Items(?)	No potential issues identified	
	Recommended Action:	Operation has triggered 1 or more Policy Directives; please refer to appropriate Directive(s). Complete Project Classification Tool. Submit Safeguard Policy Filter Report, PCD (or equivalent) and Safeguard Screening Form to ESR.	
	Additional Comments:		

ASSESSOR DETAILS	Name of person who completed screening:	Felix-Filho, Jose Antonio (JOSEF@iadb.org)
	Title:	
	Date:	2010-07-29

SAFEGUARD SCREENING FORM

This Report provides a summary of the project classification process and is consistent with Safeguard Screening Form requirements. The printed Report should be attached as an annex to the PP or PCD (or equivalent) and sent to ESR.

1. Save as a Word document. 2. Enter additional information in the spaces provided, where applicable. 3. Save new changes.

PROJECT DETAILS	IDB Sector	ENERGY-POWER DISTRIBUTION
	Type of Operation	Investment Loan
	Additional Operation Details	
	Country	BRAZIL
	Project Status	
	Investment Checklist	Infrastructure Power Transmission
	Team Leader	Larrea, Sylvia Virginia (SYLVIAL@iadb.org) and Marzolf, Natacha (NATACHAM@iadb.org)
	Project Title	Pró-Energía RS Distribution
	Project Number	BR-L1284
	Safeguard Specialist(s)	Felix-Filho, Jose Antonio (JOSEF@iadb.org)
	Assessment Date	2010-07-29
	Additional Comments	

PROJECT CLASSIFICATION SUMMARY	Project Category: B	Override Rating:	Override Justification:
			Comments:
	Conditions/ Recommendations	<ul style="list-style-type: none"> Category "B" operations require an environmental analysis (see Environment Policy Guideline: Directive B.5 for Environmental Analysis requirements). The Project Team must send to ESR the PP or PCD (or equivalent) containing the Environmental and Social Strategy (the requirements for an ESS are described in the Environment Policy Guideline: Directive B.3) as well as the Safeguard Policy Filter and Safeguard Screening Form Reports. These operations will normally require an environmental and/or social impact analysis, according to, and focusing on, the specific issues identified in the screening process, and an environmental and 	

		social management plan (ESMP). However, these operations should also establish safeguard, or monitoring requirements to address environmental and other risks (social, disaster, cultural, health and safety etc.) where necessary.
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SUMMARY OF IMPACTS/RISKS AND POTENTIAL SOLUTIONS	Identified Impacts/Risks	Potential Solutions
	Generation of solid waste (such as construction waste) is moderate in volume, does not include hazardous materials and follows standards recognized by multilateral development banks.	Solid Waste Management: The borrower should monitor and report on waste reduction, management and disposal and may also need to develop a Waste Management Plan (which could be included in the ESMP). Effort should be placed on reducing and re-cycling solid wastes. Specifically (if applicable) in the case that national legislations have no provisions for the disposal and destruction of hazardous materials, the applicable procedures established within the Rotterdam Convention, the Stockholm Convention, the Basel Convention, the WHO List on Banned Pesticides, and the Pollution Prevention and Abatement Handbook (PPAH), should be taken into consideration.
	Likely to have minor to moderate emission or discharges that would negatively affect ambient environmental conditions (potentially from soil disturbance, noise impact and dust).	Management of Ambient Environmental Conditions: The borrower should be required to prepare an action plan (and include it in the ESMP) that indicates how risks and impacts to ambient environmental conditions can be managed and mitigated consistent with relevant national requirements and international standards and guidelines such as the IFC Power Distribution Guidelines (as appropriate). The borrower should (a) consider a number of factors, including the finite assimilative capacity of the environment, existing and future land use, existing ambient conditions, the project's proximity to ecologically sensitive or protected areas, and the potential for cumulative impacts with uncertain and irreversible consequences; and (b) promote strategies that avoid or, where avoidance is not feasible, minimize or reduce the release of pollutants, including strategies that contribute to the improvement of ambient conditions when the project has the potential to constitute a significant source of emissions in an already degraded area. The plan should be subject to review by qualified independent experts. Depending on the financial product, this information should be referenced in appropriate legal documentation (covenants, conditions of disbursement, etc.).
	Project construction activities are likely to lead to localized and temporary impacts (such as dust, noise, traffic etc) that will affect local communities and workers but these are minor to moderate in nature.	Construction: The borrower should demonstrate how the construction impacts will be mitigated. Appropriate management plans and procedures should be incorporated into the ESMP. Review of implementation as well as reporting on the plan should be part of the legal documentation (covenants, conditions of disbursement, etc).

ASSESSOR DETAILS	Name of person who completed screening:	Felix-Filho, Jose Antonio (JOSEF@iadb.org)
	Title:	
	Date:	2010-07-29

**BRAZIL: MODERNIZATION AND EXPANSION PROGRAM
OF THE ELECTRICITY DISTRIBUTION SYSTEM OF THE**
"COMPANHIA ESTADUAL DE DISTRIBUIÇÃO DE ENERGIA ELÉTRICA (CEEE-D)"

ENVIRONMENTAL AND SOCIAL STRATEGY

A. Program and Company Overview

1. CEEE-D ("Company" or "Concessionaire") has its origin in 1943, has been restructured in 2006 and since then is the concessionaire of electricity distribution in the Southern and Southeastern Regions of the State of Rio Grande do Sul (see **Figure 1**), an area that includes the Metropolitan Region of Porto Alegre, the capital of the state. The Company operates in 72 municipalities, covering an area of approximately 74 thousand square kilometers, which represents 32 percent of the total market in the state, encompassing around 1.4 million clients (approx. 3.4 million people) and supplying about 6.6 gigawatt-hours of energy.
2. CEEE-D's distribution network is composed of: (i) 53 electric substations of 230/69 kilovolts ("kV"), 230/13.8 kV, 69/23 kV and 69/13.8 kV; (ii) around 50 thousand kilometers of lines in urban and rural distribution networks; (iii) approx. 2 thousand kilometers of 69 and 138 kV lines; and (iv) 46.5 thousand transformers in 830 thousand electric poles.
3. The Company has devised an investment program ("Program") with a view to improve quality of services and guarantee the electric distribution infrastructure needed to satisfy the increased demand expected in the foreseeable future. This Program aims to expand and modernize CEEE-D's electricity distribution network and business management support systems, allowing the Company to: (i) improve service reliability and quality indicators; (ii) reduce technical and commercial losses; (iii) expand and make adequate the medium and high-voltage component of the system to satisfy the growing demand; and (iv) modernize corporate management system by adopting new information technology tools and an integrated management system.
4. The investment program will result in overall gains in system efficiency through improvements in quality and reliability of the system and reduction of losses. The Program is consistent with IDB's Sustainable Energy and Climate Change Initiative ("SECCI"), reduction in the generation of greenhouse gas ("GHG") emissions and with the priorities established in the preparation of the IDB's Country Strategy with Brazil, which one of the goals is to promote a steady growth that is environmentally sustainable.
5. The total cost of the Program is estimated at US\$198.8 million. IDB's financing is estimated at US\$119.3 million and Company contribution at US\$79.5 million. The components to be financed are described in the following paragraphs.
6. *Component I - Investment in high-voltage distribution system infrastructure:* This component involves infrastructure works in the 69 and 138 kV system, including

construction of 14 new electric substations (“ES”), expansion or modernization of 10 ESs and installation of 19 new line segments.

7. *Component II – Modernization of high-voltage electric equipment:* Involves the replacement of relays, circuit breakers, switchgear and transformers, as well as implementation of telecommand and supervision systems in 20 ESs.
8. *Component III – Investment in medium voltage distribution system infrastructure:* Includes the installation of 910 kilometers of overhead power network and expansion of Porto Alegre’s underground network.
9. *Component IV – Updating control systems in medium voltage distribution network:* Involves the installation of regulators, capacitor banks, relays and other devices.
10. *Component V – Modernization of corporate management system:* Involves the implementation of new information technology tools and an integrated management system.
11. *Component VI – Engineering and Administration:* Involves the support to guarantee the adequate implementation of the Program, by devoting resources to perform appropriately the supervision activities, including those relate to environmental and social monitoring and supervision, as well as with auditing and evaluation, as required.
12. The works have already started in a few of the substations and distribution lines included in the Program, which is expected to be completed in 2014. Most of the works associated with the implementation of the Program will be carried out by subcontractors. These works will individually be of limited magnitude and dispersed in time and space throughout the concession area; therefore, the implementation of the Program will not require concentration of workers, as crews will usually be composed of a limited number of workers at different sites.
13. *Environmental and Social, and Health and Safety Management:* In terms of environmental, social, health and safety management tools, the Company has: (i) an Environmental Unit and a Health and Safety Unit in its organizational structure, both staffed with full-time specialists to coordinate all respective activities in relation to the Company as well as to the competent authorities; (ii) an environmental policy; and (iii) some specific procedures and standards to address environmental and social issues, as well as health and safety aspects.

B. Environmental and Social Compliance Status

14. According to state environmental regulations the new ESs and high-voltage (equal or above 69 kV) distribution lines require environmental licenses for installation and for operation, albeit through a simplified procedure that do not necessarily requires the preparation of an Environmental Impact Assessment Report (EIA). In the implementation of projects where removal of vegetation is expected, it is necessary to

obtain prior authorization through a vegetation-clearing permit. In addition, during operation, maintenance activities involving clearing and trimming of vegetation require prior authorization from the competent authority.

15. According to information provided by the Company, all the projects in the Program that already started and that required environmental licensing are in compliance with the state legislation and obtained the required licenses and authorizations. Relative to the planned projects that require environmental licensing, some of them have their licensing processes initiated and the remaining, which will be implemented later, will have their processes started in due time and on a timely basis.
16. An analysis of the Project made under the applicable directives of IDB's OP 703 Environment and Safeguards Compliance Policy have triggered the following: (B.5) An Environmental Assessment is going to be performed; (B.6) Consultations will be performed; (B.7) the Bank will supervise compliance during supervision; (B.11) Potential to cause air, soil or water contamination; (B.12) Part of the investment is already under construction by the Executing Agency or the Borrower.

C Potential Impacts and Risks and Control Measures

17. The majority of the works included in the Program will involve the installation of new overhead or underground electric energy distribution cables and other associated equipment in areas of consolidated urban and suburban use, in great part, through established rights-of-way, existing corridors, or areas with substantially completed infrastructure, or the installation of low, medium and high-voltage distribution lines in rural areas. Therefore, no significant environmental and social impacts are anticipated with the implementation of the Program, as the new and upgraded infrastructure does not involve large construction works and is not expected to require resettlement, or produce adverse impacts on indigenous communities or natural habitats.
18. The main potential negative environmental and social impacts associated with the construction of projects in the Program, particularly of the new high-voltage distribution lines and substations, will be those typical of works of this nature: (i) clearing of vegetation and associated impacts, if it is the case; (ii) dust and noise emissions; (iii) solid wastes not properly managed; (iv) potential oil spills; (v) interference in the day-to-day life of the local population in association with the increase in construction-related road traffic; and (vi) construction work-related accidents. However, these impacts will be limited in scale and temporary, and can be mitigated with the standard construction environmental and social, and health and safety management procedures established by the Company.
19. Concerning possible negative environmental and social impacts associated with work camps, sites and presence of workers, no significant impacts are expected, as the works will individually be of limited magnitude and dispersed in time and space throughout the concession area; therefore, the implementation of the Program will not require

concentration of workers, as crews will usually be composed of a limited number of workers at different sites.

20. Construction work involving underground energy distribution systems may sometimes cause traffic disruption, or reduced access to local residents, along the excavated trenches. Disruption of services can also be a possibility, in some cases involving installation of overhead cables. However, these impacts usually occur on a limited scale, are temporary, and can be mitigated with standard construction management procedures that are usually adopted by the Company. Potential health and safety risks will be associated with possible accidents involving worker contact with energized lines, fall from high places during overhead cable installation, or minor accidents involving falls and cave-ins during trenching and excavation. These impacts and risks can be prevented and/or mitigated by adopting basic precautions and standard procedures, as established in Company's health and safety procedures and plans.
21. Relative to new high-voltage distribution lines in rural areas, in some instances it is not possible to avoid interferences with areas of agricultural use; in these cases, considering the relatively narrow width of the right-of-way (around 15 to 20 m), typically an agreement is established with the property owner, and if cultured land is affected, an indemnity is provided to compensate for the restricted use of the affected narrow band of land corresponding to the right-of-way, or in other cases where agriculture patches presenting some types of permanent culture may be affected, the Company may opt for not suppressing the vegetation at that particular segment to preserve as much as possible the cultured land.
22. To avoid or minimize expropriation and right-of-way or land acquisition issues, the Company adopts the following measures: (i) use as much as possible existing rights-of-way ("ROW") to install the lines (*e.g.*, existing roads, ROWs of other existing lines, etc.); (ii) in situations where establishing the ROW or obtaining the land for the substations may be a potential issue, the Company performs a diagnostic to analyze the possibility of deviating the line alignment to a more favorable and less impacting position; also, in these situations, the Company adopts a pro-active attitude and establishes dialogs with owners and/or public representatives in the area, to assess their concerns and suggestions; (iii) the process for establishing the ROW as well as the purchase of land for the new substation usually involves amicable negotiations with owners and includes compensation for loss of arable areas and other improvements existing therein; legal expropriation proceedings are used only when unavoidable; and (iv) the competent environmental and other authorities have to validate the location (of line or substation) by issuing the respective license or authorization. Therefore, the risks associated with establishing the ROW or obtaining the land for the substations will be considerably reduced in this case. Nevertheless, it is recommended that during due diligence a review be made of the process of land acquisition in association with the Program to ascertain compliance with IDB policies.
23. No significant negative environmental, social, health and safety impacts and risks are expected in association with maintenance and operation of the facilities involved in the Program. In compliance with national regulations, the Company no longer acquires

equipment that contains PCBs, avoids the use of pesticides and adopts specific procedures for adequate removal and disposal of solid wastes generated at their facilities and buildings (e.g., used batteries, fluorescent lights, etc.). Furthermore, noise emitted by some substation equipment is typically perceived only at short distances from the source; thus, proper siting of these facilities and isolation of the source, if applicable, will adequately attenuate noise impacts. To reduce risks of accidents with power lines, the Company conducts periodical trimming of trees and suppression of vegetation in the right-of-way, and these activities are performed adopting appropriate procedures established by the Company, applicable also to contractors, and taking into account the safeguards included in the authorizations granted by the environmental authorities. Another possibility, particular in urban areas, is the risk of electric shock to members of the community by inadvertent or accidental contacts with the energized network (by negligence or misinformation about the risk); to prevent these situations the Company carries out various educational and safety awareness programs throughout the served communities.

24. Another type of potential negative environmental impact associated with electric energy networks located in rural areas is the possibility of electrocution of animals, particularly birds that enter in contact with the energized lines. The Company has experience in addressing this issue and installs bird-warning devices in cables of line segments that cross critical areas.
25. Relative to possible health effects associated with electromagnetic fields generated at high-voltage distribution lines, the current body of evidence from the international scientific community suggests that distribution lines operating at voltages such as those in the case of CEEE-D (up to 138 kV) do not present a human health hazard. Nevertheless, the Company adopts the technical standards and regulations established by the Regulatory Authority (National Electric Energy Agency, or *Agência Nacional de Energia Elétrica* – ANEEL), which are consistent with the international standards and based on precautionary principles.
26. *Existing Facilities and Operations:* Additionally, there may exist some potential environmental liabilities associated with CEEE-D's existing facilities and operations, which go beyond the Program that is being considered for financing by IDB. These potential risks are expected to be of limited magnitude and related to possible existence in the system of equipment containing PCBs, soil contamination at mechanical shops and substations and illegal settlement (encroachment) within the right-of-way of existing distribution lines.

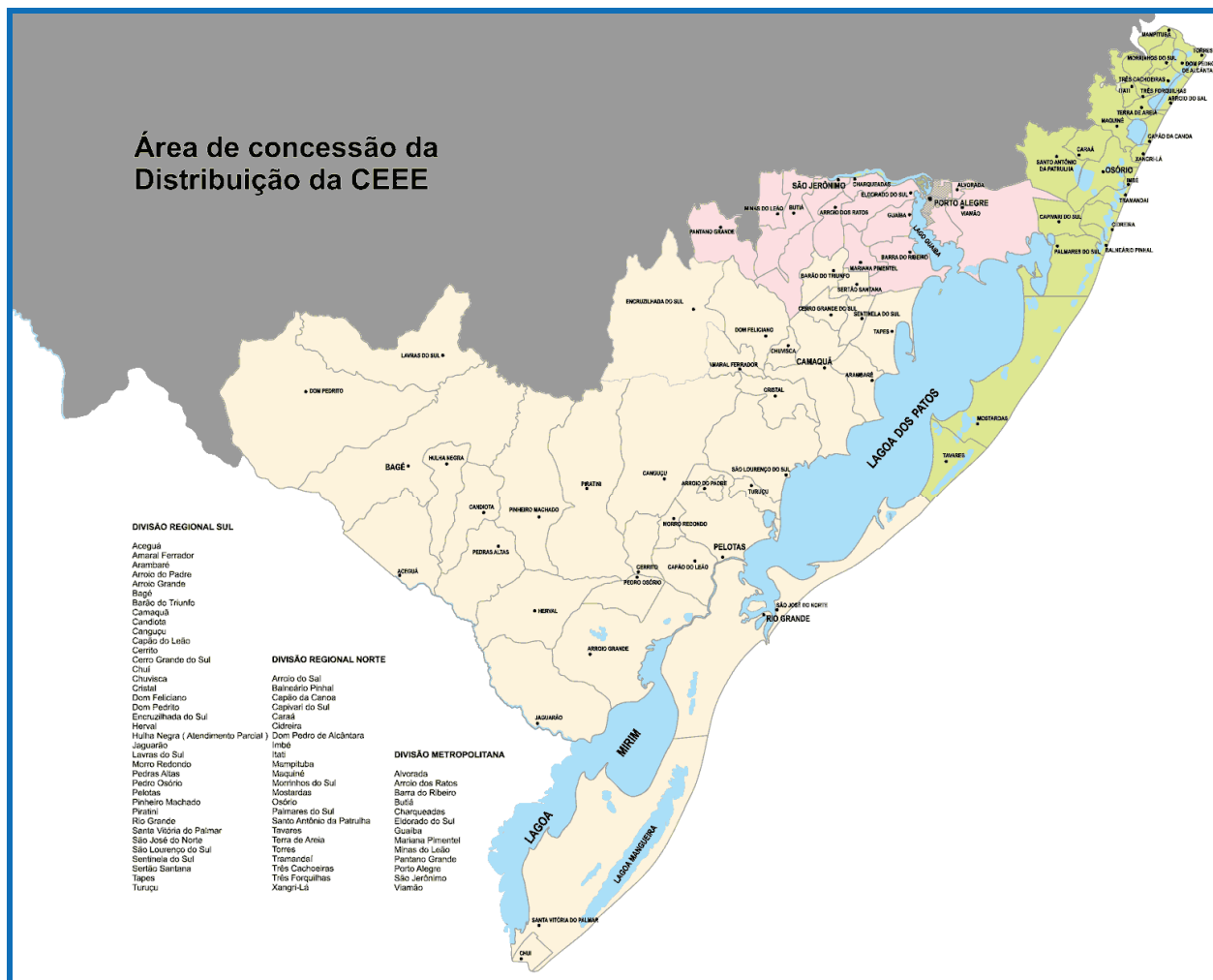
D. Environmental and Social Strategy

27. Taking into account the environmental and social aspects related to the Program and the requirements outlined in IDB's OP 703 Environment and Safeguards Compliance Policy, the Team proposes that the Program be classified as a Category B operation.

28. Although by national and state legislation an EIA is not required in the case of the Program, the Bank will require the Company to present an Environmental Analysis Report to address potential relevant environmental and social impacts, as well as the correspondent control measures (monitoring and mitigation) associated with the Program being considered for financing by the Bank. This report shall be disclosed to the public in accordance with IDB's Operational Policy OP-102 - Disclosure of Information.
29. The Project Team proposes to perform an environmental and social due diligence ("ESDD") in order to confirm that all Project impacts and risks have been, or will be properly and adequately evaluated and mitigated. The ESDD shall specifically address the following aspects:
- (i) Assessment of Project and Company existing operations and facilities compliance status with national, state and municipal environmental, social, health, safety and labor regulatory requirements (*e.g.*, laws, regulations, standards, permits, authorizations, applicable international treaties/conventions, etc.), project specific legal requirements, and any applicable IDB environmental and social policy or guideline.
 - (ii) Evaluation of the available environmental impact assessment reports related to the Program's projects, to assess the appropriateness of the identification and evaluation of relevant direct and indirect environmental and social impacts and risks, and the adequacy of the definition of mitigation and monitoring measures, in terms of their completeness, sufficiency of detail, implementation, cost, definition of responsibility, schedule, and quality control.
 - (iii) Evaluation of Project-related information disclosure and public consultation activities that have been performed, and the proposed future actions, to provide adequate ongoing information disclosure and public consultation with the local population.
 - (iv) Evaluation to assess if the proposed Project direct and indirect environmental, social, health and safety potential impacts and risks have been properly identified and evaluated, and if adequate control measures have been introduced.
 - (v) Review of the land acquisition process in association with the Program to ascertain compliance with IDB policies.
 - (vi) Assessment of Company's procedures to manage wastes resulting from the implementation of the Program, as well as to prevent and control oil spills.
 - (vii) Evaluation of potential Program impacts or risks on workers health and safety during construction and operation of new equipment, and, evaluation of Company's health and safety procedures, to ensure that adequate measures are developed to avoid or mitigate potential Program-specific health and safety issues.

- (viii) Assessment of Program and Company's commitment, capacity, and systems to adequately manage environmental and social, and health and safety matters and comply with applicable regulatory and IDB's environmental and social, and health and safety requirements.
- (ix) Review Company's main activities and relevant existing facilities to identify possible liabilities associated with environmental and social, and health and safety impacts and risks.
- (x) An evaluation to confirm that an acceptable Action Plan will be in place in order to correct or mitigate existing environmental, social, health and safety non-compliances and/or liabilities associated with the Company's existing facilities and operations, if deemed necessary.

Figure 1: CEEE-D Concession Area in the State of Rio Grande do Sul - Brazil



Anexo IV
Pró-Energía RS Distribución
(BR-L1284)
Índice de actividades y trabajo sectorial ejecutado y propuesto

Temas	Descripción	Fechas	Referencias y vínculos a archivos técnicos
Aspectos técnicos y económicos	Estudios para la licitación de la expansión de la transmisión -EPE	Junio 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292394
Aspectos de las inversiones, financieros y de adquisiciones	Programa de Expansión y Modernización del Sistema Eléctrico de la Región Metropolitana de Porto Alegre y la Área de Distribución de CEEE	Diciembre 2009	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35292456
Análisis de la situación actual	Análisis de la infraestructura de las ciudades candidatas a la Copa del Mundo FIFA Brasil 2014	2009	http://www.mundial-2014-brasil.com
Adquisiciones	Revisión del proceso de adquisiciones de bienes y servicios dentro de las políticas de adquisiciones del BID – Misión PDP/CBR	Agosto 2010	http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=35318818
Análisis capacidad financiera	Análisis de la capacidad financiera de la CEEE-D	Agosto 2010	
Análisis ambiental	Análisis de los aspectos ambientales y sociales del Programa	Agosto 2010	
Aspectos económicos	Revisión del análisis costo beneficio del Programa	Agosto 2010	
Aspectos técnicos de las inversiones	Análisis de los aspectos técnicos y eléctricos de las inversiones en la red de distribución de CEEE-D	Agosto 2010	
Aspectos ambientales y sociales	Misión Especial para Temas Ambientales y Sociales (incluyendo miembros de ESG)	Septiembre 2010	
Misiones	Misión de Análisis	Septiembre 2010	
	Misión de Negociación	Noviembre 2010	

**Pró-Energía RS Distribución
(BR-L1284)**

**Anexo V
Cronograma y Recursos de Preparación**

Para Uso Interno del Banco