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NICARAGUA

PROGRAM TO STRENGTHEN THE ELECTRICITY SECTOR IN NICARAGUA
SECOND LOAN

(NI-L1089)

LOAN PROPOSAL

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1. Policy Letter
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39667969
2. Means of Verification Matrix
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593141
3. Results Matrix
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593136

OPTIONAL

1. Economic Evaluation
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39596260
2. Monitoring and Evaluation Plan
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593119
3. Rates and Subsidies Adjustment Plan. Report by Consultant A. Zoratti
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593024
4. Proposed Improvements in Energy and Power Contracting Processes. Report by Consultant E. Afanador
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593035
5. Method for Evaluating the Operational Security of Nicaragua's National Interconnected System. Report by Consultant P. Corredor
   http://idbdocs.iadb.org/wsdocs/getDocument.aspx?DOCNUM=39593048
6. Technical Annex: Regional Integration Rationale for the Program
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ABBREVIATIONS

CO_2	Carbon dioxide
CRIE	Comisión Regional de Interconexión Eléctrica [Regional Electrical Interconnection Commission]
DISNORTE	Empresa Distribuidora de Electricidad del Norte [Electrical Distribution Company of the North]
DISSUR	Empresa Distribuidora de Electricidad del Sur [Electrical Distribution Company of the South]
EBITDA	Earnings before interest, taxes, depreciation, and amortization
ECLAC	Economic Commission for Latin America and the Caribbean
EIRR	Economic internal rate of return
ENATREL	Empresa Nacional de Transmisión Eléctrica [National Electrical Transmission Company]
ENEL	Empresa Nicaragüense de Electricidad [Nicaraguan Electricity Company]
GWh	Gigawatt hour
INE	Instituto Nicaragüense de Energía [Nicaraguan Energy Institute]
km	Kilometer
kWh	Kilowatt hour
LIBOR	London Interbank Offered Rate
MEM	Ministry of Energy and Mines
MHCP	Ministry of Finance and Public Credit
MW	Megawatt
MWh	Megawatt hour
PBP	Programmatic policy-based loan
PNESER	National Sustainable Electrification and Renewable Energy Program
SCF	Single Currency Facility
SIEPAC	Sistema de Interconexión Eléctrica de los Países de América Central [Central American Electrical Interconnection System]
SIN	Sistema Interconectado Nacional [National Interconnected System]
SNT	Sistema Nacional de Transmisión [National Transmission System]
VAT	Value-added tax

PROJECT SUMMARY

NICARAGUA
PROGRAM TO STRENGTHEN THE ELECTRICITY SECTOR IN NICARAGUA
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Financial Terms and Conditions					
Borrower: Republic of Nicaragua				**Ordinary Capital**	**Fund for Special Operations**
			Amortization period:	30 years	40 years
Executing agency: Ministry of Finance and Public Credit (MHCP)			Grace period:	5.5 years	40 years
			Disbursement period:	1 year	1 year
Source	**Amount (US$)**	**%**	Interest rate:	SCF-Fixed**	0.25%
IDB (Ordinary Capital)	39,000,000	60%	Inspection and supervision fee:	*	N/A
IDB (Fund for Special Operations)	26,000,000	40%	Credit fee:	*	N/A
Total	65,000,000	100%	Currency:	U.S. dollars	

Project at a Glance

Project objective/description: The general objective of the program is to support the Government of Nicaragua in consolidating a sector framework to guarantee the financial and operational sustainability of the sector. This is the second in a series of three programmatic policy-based loan (PBP) operations. The specific objectives are: (i) macroeconomic stability; (ii) guaranteeing the financial sustainability of the electricity sector; (iii) improving the transparency of sector management results; (iv) promoting a sustainable energy matrix, by encouraging renewable energy, private investment, and energy efficiency; and (v) promoting the regional integration of the electricity sector.

Special contractual clauses: Disbursement of this second loan under a PBP is contingent upon meeting, to the Bank's satisfaction, the policy conditions indicated in Annex II (Policy Matrix).

Exceptions to Bank policies: None.

Project qualifies as: SEQ [ ] PTI [ ] Sector [ ] Geographic [X] Headcount [ ]

(*) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

(**) The borrower will pay interest on the outstanding balance of this portion of the Ordinary Capital loan at a LIBOR-based rate. Once the outstanding balance reaches 25% of the net amount approved or US$3 million, whichever is greater, the base rate will be set on this balance.

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problems, and rationale

1.1 **Macroeconomic scenario.** In recent years, Nicaragua has been able to maintain a stable macroeconomic policy anchored by sustained growth, consolidation of the fiscal position, and moderate inflation. Following the global recession in 2008 and 2009, the country recorded average annual growth of 4.6% from 2010 to 2013, compared to 3.7% over the last 20 years. In 2014, the economy grew by 4.7%, driven by increased momentum in aggregate supply and demand despite the drought that affected the agricultural sector during the first half of the year. Fiscal policy continued to demonstrate prudent management, although the deficit has increased slightly. In 2011, the consolidated public sector recorded a surplus of 0.1% of gross domestic product (GDP), which reverted to a deficit of 2.2% of GDP at the close of 2014 due to investment programs, particularly in the energy and water sectors. Public debt continues on a downward trend at about 49.1% of GDP as of the close of 2014. The external sector has shown considerable improvement, particularly in 2014. The recovery in the U.S. and declining oil prices have driven economic activity, while the oil bill fell by 4.1% from 2013—a drop of nearly US$50 million.[1] This narrowed the current account deficit to 7.1% of GDP, compared to 11.3% in 2013. It should be noted that this operation represents nearly 24% of the gross financing requirements estimated for Nicaragua in 2015.

1.2 **Electricity sector.** Electricity sector institutions in Nicaragua include: (i) the Ministry of Energy and Mines (MEM), which is responsible for planning electricity sector development strategies; (ii) the Instituto Nicaragüense de Energía [Nicaraguan Energy Institute] (INE), the energy sector's regulatory and supervisory entity; (iii) the Centro Nacional de Despacho de Carga [National Load Dispatch Center] (CNDC), the operating entity responsible for administration of the electricity market and operation of the Sistema Interconectado Nacional [National Interconnected System] (SIN); and (iv) stakeholders participating in the activities of the electricity industry: generators, transmitter, and distributors.

1.3 Electricity generation in Nicaragua is 98.8% concentrated within the SIN. In 2014 net power generation in the SIN amounted to 3,999 gigawatt hours (GWh), 52.0% of which was generated through renewable sources (i.e., hydroelectric, geothermal, wind, and sugar cane bagasse) and the remainder was covered by nonrenewable thermal power (fuel oil and diesel). In 2014, the transmission system reported 2,226 kilometers (km) of national lines and 305.6 km of lines in the Sistema de Interconexión Eléctrica de los Países de América Central [Central

[1] Nicaragua is energy dependent on other countries in that it imports most of the hydrocarbons it consumes, 10.5 million barrels in 2013 valued at US$1.154 billion, which is equivalent to 23.1% of the country's total exports. In comparative terms, in Central America (including Nicaragua), hydrocarbon imports averaged 16.8% of total exports in 2013. See Economic Commission for Latin America and the Caribbean (ECLAC) (2014). Central America: Hydrocarbon Statistics, 2013.

American Electrical Interconnection System] (SIEPAC).[2] Nicaragua's cost to supply electricity is the highest in Central America.[3] As of June 2014, the average residential rate in Nicaragua (US¢23.33/kilowatt hour (kWh)) is the highest in the region, followed by Costa Rica (US¢17.91/kWh) and well above the average in the other five countries in the region (US¢14.13/kWh). This is primarily due to the heavy role that thermal generation plays in the generation matrix, the second highest level in the region, exceeded only by Honduras.

1.4 In 2005, the Government of Nicaragua introduced an offset mechanism[4] for distributors to finance rate deviations between the wholesale rate recognized in the rate schedule calculation and generation costs in the wholesale market. Mechanisms were also established for subsidies on the price of electricity to soften the effect of the sharp increase in the price of fossil fuels for end users,[5] in that 42.5% of Nicaraguan households are below the poverty line.[6] The offsets meant transfers from the Government of Nicaragua to DISNORTE-DISSUR on the order of US$198.6 million over the period 2010-2013,[7] equal to 9.7% of the value of the SIN's energy sales during that period. The most significant subsidy, the subsidy directed to residential consumers with consumption up to 150 kWh/month, amounted to US$66.55 million in 2014, equal to 11% of the value of the SIN's energy sales.

1.5 **Challenges in the electricity sector.** The Program to Strengthen the Electricity Sector in Nicaragua has been supporting Nicaraguan government actions to ensure the stability and sustainability of the electricity sector in Nicaragua and to overcome the following challenges:

1.6 **Vulnerability of electricity service costs based on the energy matrix.** During the period 2009-2014, the preponderance of generation based on petroleum derivatives fell as a percentage of Nicaragua's electricity generation. In 2014, electricity generated using fossil fuels represented 48.0% of the system's net generation, having fallen from a level of 72.4% in 2009. This was due to the incorporation of

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[2] In 2013, through the SIEPAC, Nicaragua imported 52.0 GWh and exported 16.2 GWh, equal to 1.8% of annual generation and still modest compared to the 3.8% average participation of the countries in the regional electricity market. The distribution system consists of the Empresa Distribuidora de Electricidad del Norte [Electrical Distribution Company of the North] (DISNORTE) and the Empresa Distribuidora de Electricidad del Sur [Electrical Distribution Company of the South] (DISSUR), while isolated areas are served by cooperatives and agencies responsible for distribution. The technical and nontechnical losses of the SIN fell from 28.8% to 22.8% during the period 2006-2013.

[3] ECLAC (2014). Electricity Subsector Statistical Database.

[4] Law 554. The Energy Stability Act. Published in Official Gazette 224 of 18 November 2005.

[5] See Optional Annex 3, Point 4, Development of the Electricity Sector's Financial Situation.

[6] World Bank. World Development Indicators.

[7] In 2014, the INE reports that there were no amounts to be paid for rate offsets.

266 MW of effective capacity in renewable energy in the SIN—an increase of 33% in the system's capacity.[8]

1.7 **High cost of electricity service based on system losses.** The Nicaraguan government has a strategy for reducing nontechnical losses in the distribution companies through normalization of irregular customers and direct actions based on antifraud regulations.[9] Since 2011, when losses of 24.1% were recorded, there has been a gradual reduction as reflected in the level of 23.2% reported in 2014, a step toward reaching the goal of 21.1% in 2016. However, the level of losses continues to be high in comparison with the average of 13.1% recorded by the four countries of the region[10] with the lowest level. This level of losses has an impact on the average cost of electricity in that only a portion of total costs are transferred to the end consumer, and the remaining portion represents an ongoing imbalance in the sector's finances. In 2014, the 10.1% of losses in excess of the regional average of 13.1% meant energy not sold for a value of US$82 million, equal to 4.0% of budgetary resources.

1.8 **Failure to consolidate the sector framework for private investment.** Bidding processes for generation have been postponed, making it impossible to have a competitive price signal for the energy traded in wholesale market contracts. The first programmatic loan achieved the objective of promoting discussion on this issue, including the preparation of a study to improve competition that can be used to lay the foundation for the regulatory proposal to be presented in this operation. The existence of specific regulations will offer legal advantages to the country and for private investment.

1.9 **Limited participation in the regional market.** Progress made in adapting national legislation to harmonize it with the regional electricity market[11] allows for estimating an increase in the country's participation in the energy trade in the future. However, Nicaragua's integration with the other Central American countries is still incipient as reflected in its volume of exports and imports, which totaled only 1.8% of net energy generated in the SIN in 2013. This means losing the opportunity to access energy in the regional market at competitive prices.

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[8] Under the same strategy of giving priority to renewable energy and private investment, provision is made for incorporating 342 MW during the period 2015-2019, which will have an impact on the diversification of the energy matrix and on generation costs. Despite this progress, the matrix continues to depend to a large extent on generation based on fuel oil and diesel, leaving the country quite vulnerable to variations in international fuel prices. In the past, high prices for derivatives have put great pressure on generation costs, with the resulting pressure to transfer those costs to end consumers in a country where per capita income is among the lowest in the region. This has been reflected in periods of higher average generation costs where the average price on the wholesale market in Nicaragua reached US$160/Megawatt-hour (MWh) in 2013, higher than the average of US$157/MWh for the region.

[9] The antifraud regulations used to establish penalties only for users with consumption above 300 kWh/month; penalties currently apply to the entire universe of users.

[10] Average for: Costa Rica, El Salvador, Guatemala, and Panama.

[11] Reflected in Optional Link 6.

1.10 **Transparency of results in sector management.** Transparency in the publication of results of electricity sector stakeholders is an essential condition for the sector's proper operation, providing clear signals for investment and allowing public and private companies participating in sector activities to be informed of the performance of other stakeholders, and thus able to adapt their operations in the best way possible. In this regard, since approval of the first loan, public companies[12] and private distributors have published their financial and management results approved by the Office of the General Comptroller of the Republic and the INE, respectively. Continuation of this practice can be used to build a key source of information for monitoring the health of the electricity market.

1.11 **High electricity subsidy.** In 2014, subsidies in the sector amounted to US$108.7 million, representing 13.8% of total billing for electricity and 5.4% of the country's budgetary resources. Currently, four types of subsidies with direct impact on the country's fiscal accounts can be identified. They are directed to: (i) residential customers who consume less than 150 kWh/month;[13] (ii) informal settlements;[14] (iii) retirees;[15] and (iv) exemption from value-added tax (VAT).[16] In 2015, as a result of the decline in oil prices, the Nicaraguan government approved a new rate schedule that reduces rates by 7% to 10%, while keeping the subsidies in effect. The cost of subsidies has continued on an upward trend due to the use of nonadjustable historic base rates, limited targeting of the main subsidies, and a lack of adjustment plans to ensure their financial sustainability.

1.12 The subsidy for residential consumers consuming less than 150 kWh/month comes from Law 554, the Energy Stability Act (2005), which established that residential consumers of electricity whose usage fell within a range of 0 to 150 kWh/month would have their rates frozen at June 2005 levels, a benefit that reaches 84.9% of residential users. At the end of 2014, there were 723,000 subsidized customers, amounting to US$66.55 million in subsidies. The subsidy for informal settlements comes from the protocol signed by the Nicaraguan government and the distributors, DISNORTE and DISSUR, which established a transfer covered by the government for consumption in informal settlements[17] in the two distributors' concession

[12] Empresa Nicaragüense de Electricidad [Nicaraguan Electricity Company] (ENEL) for generation and Empresa Nacional de Transmisión Eléctrica [National Electrical Transmission Company] (ENATREL) for transmission.

[13] The cost of the subsidy for residential customers with consumption up to 150 kWh/month went from US$38.4 million in 2011 to US$66.5 million in 2014.

[14] The cost of the subsidy for informal settlements went from US$6.0 million in 2011 to US$10.4 million in 2014.

[15] The cost of the retiree subsidy went from US$2.6 million in 2011 to US$3.9 million in 2014.

[16] The cost of the subsidy for exemption from the VAT was US$27.9 million in 2014.

[17] Informal settlements with irregular, low-quality, unsecure, and discontinuous service.

areas.[18] The subsidy for retirees is based on the application of Law 160 and Law 720. In 2014, it totaled US$3.9 million, with 15,815 customers accessing the subsidy, representing 62% of total retired customers. Exemption from VAT is based on Law 667 and Law 554, establishing that customers with consumption up to 300 kWh/month do not pay the tax and customers with consumption between 300 and 1,000 kWh/month pay 7%, with a tax rate established at 15%. In 2014, this exemption represented US$27.9 million not collected by the Treasury. External financing of the rate represented a compensation fund during the period 2010-2013, with a cumulative amount of US$198.5 million, which was used to cover the difference between the real price of energy and the rate applied to users.[19]

1.13 **Nicaraguan government strategy in the energy sector.** The strategic pillars defined by the "2012-2017 Action Plan for the Electricity and Mining Sector in Nicaragua"[20] are: (i) universal access to power; (ii) energy efficiency; and (iii) diversification of the energy matrix. The plan also establishes that energy policy is based on laws, decrees, and the National Human Development Plan, which has the following principal objectives: (i) to strengthen and increase the effectiveness of government performance in the energy sector; (ii) to guarantee the secure, reliable, and quality supply of energy for the country; and (iii) to promote environmentally sustainable development of the energy sector. The proposed operation focuses on supporting Nicaraguan government actions to achieve financial sustainability in the electricity sector.

1.14 **Country strategy with Nicaragua.** The Bank's 2012-2017 country strategy with Nicaragua (document GN-2683) defines the energy sector as one of the four priority sectors for intervention. IDB participation in the electricity sector seeks to help adapt the sector framework so as to ensure sector efficiency and financial and operational sustainability. It will also support actions to strengthen the sector framework vis-à-vis the regional electricity market. Subject to progress made in the sector framework, the IDB will consider interventions to reduce power losses, expand the coverage of electricity service, improve service reliability, and transform the energy matrix to increase the share of renewable sources of generation so that energy costs can be reduced.[21]

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[18] The objective of this subsidy is to cover for a specific period of time (60 months starting in July 2013) the cost to supply users in informal settlements, supporting the financial sustainability of the distribution companies. In July 2014, the share was reduced from 2.5% to 2.0% of the value of energy sold, which was reflected in a reduction in the subsidized monthly average, which fell from US$0.94 million in 2013 to US$0.87 million in 2014.

[19] In 2014, the rate applied to users was equal to and later slightly higher than the real price of energy, and thus external financing amounting to US$7.11 million could be repaid.

[20] Prepared by the Energy and Mining Policies and Planning Directorate of the Ministry of Energy and Mines, September 2012 (IDBDocs#38003668).

[21] The Bank's country strategy is consistent with the Nicaraguan government's strategy. This operation will support the financial sustainability of the sector, strengthening of the sector framework to stimulate private investment, sustainability of the energy matrix, and promotion of regional integration.

1.15 **Bank experience in the sector.** This operation continues the efforts made under the first programmatic "Program to Strengthen the Electricity Sector in Nicaragua" approved in 2013 (loan 3068/BL-NI). In addition,[22] the IDB has broad knowledge of Nicaragua's electricity sector. Under the Program to Support the Electricity Sector I, II, and III (loans 1933/BL-NI, 1933/BL-NI-1, and 1933/BL-NI-2), approved between 2007 and 2009, support is being provided for activities in renewable energy generation, expanded and improved transmission, and a pilot program to normalize service in settlements. In addition, the National Sustainable Electrification and Renewable Energy Program (PNESER), loans 2342/BL-NI, 2342/BL-NI-4, and 2342/BL-NI-5 approved between 2010 and 2012, is a multiyear program supported by various international financing and cooperation institutions.[23] It seeks to have a transformational effect on national electricity coverage.[24] In general terms, IDB experience and lessons learned in working with the electricity sector have allowed it to determine that in order to move toward a sustainable electricity sector more in-depth reforms will be needed in the financial management of the sector, transparency of information, the sustainability of the energy matrix, and regional integration.[25] The first loan in the programmatic series allowed the IDB to identify mechanisms to overcome the main challenges to meeting policy commitments. Constant and many-sided dialogue with the authorities made it possible to overcome the challenges of interagency coordination that arose. In addition, in-depth technical analysis in the diagnosis and design of proposed actions and policies facilitated their acceptance and implementation. In this second loan, multi-sided and constant dialogue with all stakeholders involved has been strengthened and there has been more in-depth technical analysis of the key issues.

1.16 **Results and progress made in the program's first loan.** The results reported in 2013 and 2014 show significant progress. The sector's financial sustainability has

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[22] Since 1973, when the IDB supported an initial renewable energy program. In 1998, through loan 1017/SF-NI, the IDB participated in the reforms of the Electricity Law that transformed the sector. Through the loan on National Transmission Investments for Integration with the SIEPAC Project (loan 1877/BL-NI), works were financed to strengthen Nicaragua's electrical transmission network so it could be adapted to the SIEPAC Central American electricity network and market.

[23] Financial and international cooperation organizations that join the IDB in cofinancing the PNESER: Korean Eximbank (KEXIM); Latin America Investment Facility (EU/LAIF); European Investment Bank (EIB); Central American Bank for Economic Integration (CABEI); Nordic Development Fund (NDF); Japan International Cooperation Agency (JICA); and the OPEC Fund for International Development (OFID).

[24] By significantly increasing the electricity service coverage rate, considering as well the scaling up of the use of renewable energies, promoting energy efficiency, and optimizing the technical and commercial management of isolated systems in Nicaragua.

[25] The implementation of a program with the characteristics of the PNESER made it possible to develop a working framework and efficient coordination both at the level of government agencies responsible for execution and the level of financing bodies. It has also shown the importance of supporting the sector within a comprehensive framework covering aspects of generation, transmission, and distribution infrastructure, as well as electricity sector regulatory and development tools that make it possible to achieve impact results for the sector. This framework benefits not only the execution of the program now in progress but has laid the foundation for proceeding with the preparation of future programs with similar characteristics.

achieved an equilibrium between the supply cost and the sale price to the end consumer, as a result of the periodic review and adjustment of rates—increases of 7.78% in 2013 and 2.38% in 2014—making it possible to ensure the planned approach for the second and third PBP operation in the subsidy adjustment phase, boost market competitiveness, and achieve operational security in planning the system expansion, as key elements of the program. Moreover, the evolution of the impact indicators makes it possible to infer that the targets for 2014 were met or may be met in most cases. Specifically, the impact indicators show: (i) the proportion of renewable energy in the SIN reaching 52.0% in 2014 (target of 49%); (ii) the EBITDA margin of the Empresa Nacional de Transmisión Eléctrica [National Electrical Transmission Company] (ENATREL) and the Empresa Nicaragüense de Electricidad [Nicaraguan Electricity Company] (ENEL), which recorded margins of 22.6% and -1.4%, respectively in 2014 (targets of 1.6% and 8.0%);[26] and (iii) the cash recovery index of DISNORTE and DISSUR, which reached 74.5% in 2014 (target of 75.9%). The specific targets of the components show equally satisfactory behavior. See the Results Matrix for more details.

1.17 **Program strategy.** The program is structured as a programmatic policy-based loan (PBP) consisting of three operations. The PBP structure was selected due to the flexibility it provides in achieving long-term objectives through the implementation of sequential short- and medium-term measures. The Program to Support the Electricity Sector in Nicaragua seeks to: (i) support the Government of Nicaragua with actions aimed at recovering financial sustainability in the Nicaraguan electricity sector; (ii) support technical and operational sustainability; (iii) establish mechanisms to improve the transparency of results in the management of the electricity sector; (iv) promote the use of renewable sources; (v) promote private participation and energy efficiency to achieve a sustainable energy matrix; and (vi) promote regional electrical integration, increasing the Nicaraguan electricity sector's share in the regional market. This second PBP operation focuses on continuing and deepening the support provided for actions undertaken by the Government of Nicaragua, including: actions required to recover financial sustainability at the distribution level, updating of rates in 2013, broad dissemination of subsidies and the companies' management and finance indicators by the INE, approval and dissemination of an expansion plan to promote renewable energies, and adoption of operating regulations for integration with the regional

[26] The EBITDA margin results shown by the public companies and the cash recovery index of the private distributors over the last three years were: (i) ENATREL 7.2% in 2012, 6.3% in 2013, and 22.6% in 2014. The margin in the final year is due to the combination of increased tolls and volume of energy transported, as well as a reduction in operating costs; (ii) ENEL -5.7% in 2012, 7.4% in 2013, and -1.4% in 2014. The margin in the final year is due to low income from generation due to low rainfall levels with a 20% reduction in energy generated by ENEL's hydroelectric power plants compared to the preceding year. This reduction in generation could not be offset by the 46% increase in the price of energy contracted from which ENEL benefited starting in 2014; and (iii) the private distributors showed a cash recovery index of 74.0% in 2012, 74.6% in 2013, and 74.5% in 2014. The cash recovery index is a combination of the loss rate and the collection rate. The cash recovery index in the final year is due to the combination of high losses in the distribution system and a positive collection rate.

market. In addition, this second PBP continues to support policy measures to produce structural changes in the sector and contribute to its long-term sustainability, including the proposal on adjusting the subsidies so as to target the neediest population segments, ongoing actions to modify the generation matrix and revise new generation contracting procedures in the wholesale market to promote private investment, regulation of distributed electrical generation, measures to increase the transparency of information, and measures to ensure compliance with rules and the efficient operation of the electricity sector. The IDB, through ongoing discussions and technical cooperation resources,[27] supports these actions.

1.18 The strategy of this second PBP consists of furthering reforms with policy measures to form the basis for the institutional, planning, and regulatory changes that the sector needs to ensure that: (i) an appropriate electricity policy is implemented; (ii) the planning process for expanding generation and transmission is strengthened; (iii) the process seeking more effective supervision of the electricity market continues; and (iv) the process of verifying improvement in both financial and operational indicators continues. IDB experience in executing PBP operations to support reforms in the energy sector, implement regulatory frameworks, or update existing instruments is reflected satisfactorily in operations such as those in Ecuador (EC-L1140), Suriname (SU-L1022), the series of four PBP operations in Peru (PE-L1121 et seq.), the series of three PBP operations in Guyana (GY-L1017 et seq.), and the series of two PBP operations in Barbados (BA-L1021/2),[28] as well as other operations.

1.19 **Consistency with the Ninth General Increase in the Resources of the Bank (GCI-9)**. The program will contribute to the lending priorities of the Ninth General Increase in the Resources of the Bank (document AB-2764) (GCI-9) of: (i) lending to small and vulnerable countries; (ii) climate change, renewable energy, and environmental sustainability initiatives through increased use of renewable energies; and (iii) regional cooperation and integration of infrastructure through support for regional electrical interconnection according to the classification set forth in documents GN-2650 and GN-2733—within the context of the criteria for: multinational targeting based on insertion of the national system within the regional system; additionality based on promotion of increased national participation in the regional electricity market; and subsidiarity based on support for harmonization of the national and regional regulatory frameworks. It will also contribute to the regional target of: (i) reducing CO_2 emissions and to the output indicator: international trade transactions financed; and (ii) energy generated from low carbon

[27] The IDB approved technical cooperation operation NI-T1185, Support for the Program to Strengthen the Energy Sector in Nicaragua, which is financing the additional studies needed that the Government of Nicaragua has committed to pursuing.

[28] The policy conditions for this policy-based loan were satisfactorily met, contributing to the attainment of the medium-term outcomes and the establishment of a sustainable energy matrix that will reduce dependence on fossil fuels, lower electricity costs, and decrease carbon dioxide emissions. See the project completion report for "Support for Sustainable Energy Framework for Barbados (SEFB) I & II."

emission sources as a percentage of total generation financed. The program is aligned with the Sector Strategy to Support Competitive Global and Regional Integration (document GN-2565-4) (Optional Link 6) and with the Strategy for Sustainable Infrastructure for Competitiveness and Inclusive Growth (document GN-2710-5) in its priority area of "Supporting the construction and maintenance of an environmentally and socially sustainable infrastructure to help increase the quality of life." Similarly, the program is aligned with the Public Utilities Policies OP-708 (document GN-2716-6) (Optional Link 7) with reference to the electricity subsector, supporting Nicaraguan government policy actions that contribute to the technical, operational, and financial sustainability of the sector, promoting policies to target subsidies, reduce losses in the distribution system; promote competition and private sector participation, and generally to contribute to the adequate supply of electricity, satisfy increasing demand, increase service quality, and promote access to electricity service.

B. Objective, components, and costs

1.20 **Objectives.** The general objective of the program is to support the Government of Nicaragua in consolidating a sector framework to ensure the financial and operational sustainability of the sector. This is the second operation in a series of programmatic policy-based loans, the specific objectives of which are: (i) macroeconomic sustainability; (ii) guaranteeing the financial sustainability of the electricity sector; (iii) improving the transparency of sector management results; (iv) promoting a sustainable energy matrix, by encouraging renewable energy, private investment, and energy efficiency; and (v) promoting the regional integration of the electricity sector.

1.21 **Component I. Macroeconomic stability.** The program will be developed in a stable macroeconomic context conducive to the achievement of its objectives and consistent with the Policy Letter. The objective of this component is to ensure a macroeconomic context consistent with the objectives of the program as established in the Policy Matrix.

1.22 **Component II**. **Financial sustainability of the electricity sector.** This component supports the financial institutional sustainability of the electricity sector by developing and implementing policies and/or actions aimed at adopting a set of measures for recovery of the sector's financial sustainability. This component of the second PBP operation seeks to expand and consolidate regulatory actions for the organization and stability of the sector to allow recovery of financial sustainability at the distribution level that were executed under the first PBP. Specifically, the actions required at the INE are: (i) continued use of the loss expansion factor according to the gradual scheme agreed upon,[29] which allows distributors to more completely transfer the real operating costs of distribution networks and gives them an incentive for reducing losses in the future; (ii) applying according to the agreed

[29] A continuous period of five years was established starting in 2013, during which a loss expansion factor of 1.16% will be recognized in the rate in the first year, which will be gradually reduced to 1.14%.

upon scheme[30] the gradual process of reducing the recognized percentage for distributors of the financial costs of customers who do not pay for services according to the agreed upon scheme, called the "subsidy for settlements"; (iii) settlement between the generators and the distributors regarding financial costs due to delay in payments to the generators during the period 2009-2013, plus current interest until effective payment of the debts generated during that period, by including such costs in the basis for calculating the rate at the distribution level; (iv) continued implementation of the antifraud provisions (Law 661, "Law for the distribution and responsible use of the public electricity utility") punishing energy theft and applicable to all customers, consumers, and users of electricity service; (v) execution by the distributors of a US$75 million investment plan over a period of five years to improve the quality and control of electrical supply, expand coverage, and help reduce losses; and (vi) ongoing periodic review of rates with the corresponding resolutions adjusting rates to the cost of supply, transmission, and distribution.[31] In addition, the MHCP must submit proposed measures on adjustments to electricity sector subsidies[32] to be implemented in the third PBP. The policy commitments established for the second PBP in this component (see Policy Matrix) have already been satisfactorily met. As triggers for the third PBP operation in Component II, the Government of Nicaragua would continue the implementation of regulatory actions on the organization and stability of the sector agreed upon for the first and second PBP operations, periodic updating of rates, and adoption of proposed measures for adjusting electricity sector subsidies, based on budgetary capacity and the country's economic conditions.

1.23 **Component III**. **Transparency of results in sector management.** This component will allow for increased transparency of results in sector management, establishing mechanisms to improve the visibility of results of public companies and concessionaires. This component of the second PBP operation seeks to continue institutional actions that have made it possible to boost transparency in the

[30] A renewed period of five consecutive years starting in 2013 was established for application of the "settlement subsidy." In the first year it will be 2.5% of the energy sold and valued at the average purchase price, falling to 2% over the next four years.

[31] During the period from July 2013 to January 2015, the INE issued six resolutions adjusting the rate for supply, transmission, and distribution costs.

[32] The benchmark proposal on adjusting the subsidies that the MHCP submitted to the Economic Cabinet adopts as a conceptual starting point targeted subsidies and gradual application of adjustments over five years, considering a moderate scenario and an alternate scenario as follows: (i) the subsidies base referring to historical rates is eliminated (the 2005 rate is currently used) and subsidies are determined as a percentage of the full rate in effect; (ii) the consumption segment equal to or less than 150 kWh/month currently subsidized at 52.8% of the electricity rate changes to a range of subsidies varying between 0% and 50%, depending on consumption and the scenario selected; (iii) the consumption segment equal to or less than 300 kWh/month currently subsidized at 100% in terms of the VAT changes to a range of subsidies varying between 0% and 100%, depending on consumption and the scenario selected; (iv) the retiree segment currently subsidized at 50% of the electricity rate changes to a range of subsidies varying between 10% and 25%, depending on the scenario selected; and (v) as a result, the total amount of subsidies may be reduced by 42.3% to 53.5%, depending on the scenario selected.

sector. Specifically, the sector's public companies, ENATREL and ENEL, must publish their annual financial statements audited and approved by the Office of the General Comptroller of the Republic (CGR) as of 2013, and the INE must continue publishing: (i) the financing terms for electricity rates after March 2014; (ii) the cost recovery index (combined rate), loss rate, and collection rate as supplied by DISNORTE and DISSUR; and (iii) wholesale cost deviations, which reflect the difference between the actual electricity purchase price and the price recognized in the rate for 2013 and 2014. The policy commitments established for the second PBP in this component (see Policy Matrix) have already been satisfactorily met. As triggers for the third PBP operation in Component III, the publication of the public companies' financial information and the distributors' management indicators will be more in-depth and expanded.

1.24 **Component IV. Sustainable energy matrix, promotion of renewable energies, private investment, and energy efficiency.** This component will support promotion of renewable sources, distributed generation, and private participation in the sector to achieve a sustainable energy matrix. This component of the second PBP operation seeks to continue institutional and regulatory reforms in the electricity sector so as to achieve the objective of promoting renewable energies, private investment, and energy efficiency. Private investment should be promoted through design, by the MEM, of lines of action to improve procedures for energy and power contracting on the wholesale market.[33] Renewable energy should be promoted through: (i) design by ENATREL-CNDC and subsequent implementation by the MEM and INE of an evaluation methodology on operational security, to periodically analyze the introduction of new renewable energy projects in the Indicative Expansion Plan; and (ii) development of proposed regulations, with the participation of those operating in the market, for distributed generation in the country. Energy efficiency should be promoted through: (a) the development of specific legislation for energy efficiency; and (b) the development of a National Energy Efficiency Program. The policy commitments established for the second PBP in this component (see Policy Matrix) have already been satisfactorily met. In this second loan, the trigger mechanism established in the policy matrix for the first loan on approval of legislation on distributed generation was transferred to the third programmatic loan in the series. This transfer was suggested because the MEM, in coordination with the INE and DISNORTE-DISSUR, has identified the need to revise and supplement the proposed regulations. As triggers for the third PBP operation in Component IV, improvements will be implemented in energy and power contracting procedures, the regulations on distribution generation will be approved, improvements will be made in planning generation expansion using renewable resources, and the program and the proposed Energy Efficiency Law will be approved. The change in policy action associated with distributed power

[33] In the context of the study supporting the Government of Nicaragua in revising energy and power contracting procedures on the wholesale market and proposing lines of action to improve competition and promote private investment, it was determined that it would not be necessary to amend the sector's legislation and only changes in standards and regulations would be made.

generation does not affect the objectives of this operation or of the programmatic series.

1.25 **Component V. Promoting regional integration of the electricity sector.** This component will promote regional electrical integration by increasing the participation of the national electricity sector in the regional electricity market. For the second PBP operation, this component seeks to move ahead with the process of harmonizing and adapting national regulations and standards to the regional regulatory framework. Specifically, adjustments must have been made to national regulations and standards that, as a result of the periodic evaluations performed by the Comisión Regional de Interconexión Eléctrica [Regional Electrical Interconnection Commission] (CRIE), prove to be necessary to maintain Nicaragua's adequate integration with regional regulation in the sector and guarantee that the SIEPAC line retains its transmission capacity for the regional system. The policy commitments established for the second PBP in this component (see Policy Matrix) have already been satisfactorily met.[34] As triggers for the third PBP operation in Component V, the Government of Nicaragua will implement the adjustments to national regulations and standards that may result from the periodic evaluations to be performed by the CRIE, to maintain Nicaragua's adequate integration with regional regulation in the sector and guarantee that the SIEPAC line retains its transmission capacity for the regional system.

C. Results framework with key indicators

1.26 **Expected results.** The Results Matrix describes the expected results and the indicators associated with the program, which evaluate progress made by the program through the implementation of the three PBP operations. In terms of impacts: (i) improvement in the financial and management indicators of ENATREL, ENEL, and DISNORTE-DISSUR; and (ii) renewable energy's share in the SIN's generation matrix. In terms of results: (i) improved electricity service quality; (ii) improved control of supply, normalization/formalization of customers; (iii) expansion of electricity coverage; (iv) reduction of total system losses; (v) publication of the financial statements of state companies in the sector; (vi) publication of the distributors' management indicators; (vii) additional renewable generation capacity in the SIN's generation matrix; (viii) reduced consumption of electrical power due to energy efficiency programs; and (ix) increased electricity exchange by Nicaragua in the regional electricity market. See Results Matrix for more details.

1.27 **Economic evaluation**. Given the multidimensional nature of the activities supported by the program, a cost-benefit analysis was done on each of its objectives. The approach to the economic evaluation of the program consists of estimating the economic benefits and costs of the identifiable and quantifiable

[34] In 2015, through Ministry Resolution 032-DGERR-05-2014, the MEM approved changes in the operating regulations and their technical and commercial annexes, to harmonize with the procedure for implementing regional contracts prioritizing supply and secure rights, as established by the CRIE.

results associated with the program. For Component II, which seeks the financial sustainability of the electricity sector, three specific actions were identified that will generate future benefits: (i) improved service quality; (ii) increased electrification; and (iii) reduced losses. For Component IV, the cost-benefit analysis is done on the change in the energy matrix. The results of the cost-benefit analysis were:

Summary of Cost-Benefit Analysis Results					
Action analyzed	**EIRR**	**Sensitivity analysis**			
		Variable	**EIRR**	**Variable**	**EIRR**
Improved service quality	12.4%	20% increase in unserved energy	5%	10% reduction in unserved energy	16.4%
Increased electricity coverage	52%	38% reduction in new customers' willingness to pay	8%	25% increase in per user connection costs	37%
Actions to reduce losses	-	Users less sensitive to price variations	17%	Users more sensitive to price variations	360%
Transformation of the current energy matrix through renewable energy sources	11%	10% increase in investment costs	10%	10% increase in long-term marginal cost	13%

II. FINANCIAL STRUCTURE AND PRINCIPAL RISKS

A. Financing instruments

2.1 The program is structured as a PBP with three operations, each of which is contingent upon the achievement of institutional and sectoral policy targets over the short and medium term, following the provisions of the guidelines for preparation and implementation of policy-based loans (document CS-3633-1). This second operation provides financing of US$65 million; the future programmatic operation in this series will be agreed upon based on programming discussions between the Government of Nicaragua and the Bank, the country's financing requirements, and progress made in sector reforms. The PBP structure offers flexibility for the design and implementation of the measures required to achieve the program's objectives. The contractual conditions precedent to disbursement of the single tranche corresponding to the second PBP are found in the Policy Matrix (Annex II), which also describes the triggers for proceeding to the third operation.

B. Environmental and social safeguard risks

2.2 **Environmental considerations.** In accordance with Directive B.13 of the Bank's Environment and Safeguards Compliance Policy (documents GN-2208-20 and OP-703) and because this is a sector policy-based loan, no environmental impact classification is required. The program includes sectoral policy and institutional strengthening activities and thus no adverse social or environmental impacts are expected as a result of the operation.

C. Other risks

2.3 **Implementation risks.** Given that there are various governmental agencies involved in executing the policy reforms, there could be a risk of a lack of coordination among them. This risk is mitigated by establishing the MHCP as the entity responsible for monitoring and coordination, for convening periodic evaluation and follow-up meetings to determine developments and results with a view to identifying progress made, and for any additional support that may be needed to meet the conditions, as well as for the activities established in the Monitoring and Evaluation Plan.

2.4 **Fiduciary considerations.** There is no fiduciary risk given the characteristics of the lending instrument adopted. The IDB supports the program through the operation, which will provide unrestricted funds and makes no provision for procurement. Bearing in mind the nature of the program, the policy conditions detailed in Annex II (Policy Matrix) are expected to be met before it is submitted for approval by the Bank's Board of Executive Directors. Once approved, it is expected that a single disbursement will be made for all operation funds within a short period of time, and for this reason no execution or fiduciary risks are anticipated.

2.5 **Political and macroeconomic risks.** As in any programmatic operation, there are always risks related to political changes and the permanence of the macroeconomic policies underlying the operation. These risks are mitigated by the commitment shown by the Nicaraguan authorities in the Policy Letter.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Program execution and management

3.1 **Beneficiary and executing agency.** The borrower will be the Republic of Nicaragua, which will act through the Ministry of Finance and Public Credit (MHCP)[35] as the executing agency. The Policy Matrix was agreed to with the electricity sector authorities of the Republic of Nicaragua (MHCP, MEM, INE, ENATREL, and ENEL). The MHCP will work together with competent entities to meet the conditions agreed to in that matrix.

B. Monitoring and evaluation arrangements

3.2 The IDB project team will be responsible for monitoring the program. The main indicators to be used for monitoring and evaluating this program are those presented in the Results Matrix.

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[35] The MHCP will be responsible, *inter alia*, for: (i) managing fulfillment of the policy actions, acting as the agency coordinating the participation of sector entities such as MEM, INE, ENATREL, and ENEL; (ii) preparing reports demonstrating that the conditions have been satisfactorily met and any other report the Bank may require for approving the disbursement; (iii) supporting the actions necessary to reach triggers for the program's third PBP; and (iv) once program disbursements are completed, compiling and preparing the necessary information and performance indicators so that the IDB and the Government of Nicaragua can monitor, measure, and evaluate program outcomes.

3.3 The borrower and the IDB have agreed to hold meetings to monitor and evaluate the Results Matrix, convened by the liaison office of the MHCP with the IDB on dates to be determined by mutual agreement. Before processing the third PBP, the project team will produce a progress report reviewing the evolution of the program indicators in order to identify progress made and support proposed changes that may be needed to achieve the program targets. In accordance with IDB policies, a project completion report will be prepared, with Bank financing, six months after the third PBP has been disbursed. The project completion report will evaluate the impact and outcomes obtained using the cost-benefit analysis methodology (according to the criteria of optional electronic link 1). The borrower will be responsible for cooperating with the IDB team and any consultants contracted by the Bank, in all matters related to the development of the monitoring and evaluation plan.

IV. POLICY LETTER

4.1 The IDB reached agreement with the Government of Nicaragua on the macroeconomic and sectorial policies that are included in the policy letter sent by the MHCP. The letter describes the main components of the Nicaraguan government's strategy for executing the program and reaffirms its commitment to carry out the activities agreed to with the IDB.

Development Effectiveness Matrix			
Summary			
I. Strategic Alignment			
1. IDB Strategic Development Objectives	Aligned		
Lending Program	-Lending to small and vulnerable countries -Lending to support climate change initiatives, renewable energy and environmental sustainability -Lending to support regional cooperation and integration		
Regional Development Goals	-Percent of households with electricity		
Bank Output Contribution (as defined in Results Framework of IDB-9)			
2. Country Strategy Development Objectives	Aligned		
Country Strategy Results Matrix	GN-2683	Strengthen the sector framework to ensure financial and operational sustainability and attract private investment.	
Country Program Results Matrix	GN-2805	The intervention is included in the 2015 Operational Program.	
Relevance of this project to country development challenges (If not aligned to country strategy or country program)			
II. Development Outcomes - Evaluability	Evaluable	Weight	Maximum Score
	8.6		10
3. Evidence-based Assessment & Solution	8.4	33.33%	10
3.1 Program Diagnosis	3.0		
3.2 Proposed Interventions or Solutions	2.4		
3.3 Results Matrix Quality	3.0		
4. Ex ante Economic Analysis	10.0	33.33%	10
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0		
4.2 Identified and Quantified Benefits	1.5		
4.3 Identified and Quantified Costs	1.5		
4.4 Reasonable Assumptions	1.5		
4.5 Sensitivity Analysis	1.5		
5. Monitoring and Evaluation	7.5	33.33%	10
5.1 Monitoring Mechanisms	2.5		
5.2 Evaluation Plan	5.0		
III. Risks & Mitigation Monitoring Matrix			
Overall risks rate = magnitude of risks*likelihood	Medium		
Identified risks have been rated for magnitude and likelihood	Yes		
Mitigation measures have been identified for major risks	Yes		
Mitigation measures have indicators for tracking their implementation	Yes		
Environmental & social risk classification	B.13		
IV. IDB´s Role - Additionality			
The project relies on the use of country systems			
Fiduciary (VPC/FMP Criteria)			
Non-Fiduciary	Yes	Strategic Planning National System.	
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:			
Gender Equality			
Labor			
Environment			
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project			
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan			

The project is Evaluable.

This second operation continues the efforts made under the First Programmatic "Strengthening Program for the Electricity Sector in Nicaragua," approved in 2013. The overall objective of the program is to support the government's effort in the consolidation of a sector framework that ensures its financial and operational sustainability. The specific objectives are: (i) maintain macroeconomic stability; (ii) ensure the financial sustainability of the electricity sector; (iii) improve the transparency of results in managing the sector; (iv) promote a sustainable energy matrix promoting renewable energy, private investment and energy efficiency; and (v) promote regional integration of the electricity sector.

The diagnosis presents, with empirical evidence, the problems of the electricity sector and the factors that contribute to these problems. The document specifies the challenges in ensuring the stability and sustainability of the electricity sector, among which are the high costs of electricity due to the energy matrix and system losses; the lack of consolidation of the sector framework for private investment; the low participation in the regional market, and electricity subsidies.

The results matrix has vertical logic and complements the policy matrix. Indicators are SMART. The project has a general economic analysis that updates the ex ante assessment performed in 2013. The analysis includes service quality improvement, expanding electricity coverage, reducing losses, incentives for renewable energy in the energy matrix and an energy efficiency program. The monitoring and evaluation plan includes an ex post cost-benefit analysis.

POLICY MATRIX

Objective:	To support the Government of Nicaragua in consolidating a sector framework to guarantee the financial, technical, and operational sustainability of the sector.

Objectives	Commitments First Programmatic Loan	Commitments Second Programmatic Loan	Commitments Third Programmatic Loan
I. General macroeconomic policy framework			
Stability of general macroeconomic policy framework.	1.1 Stable macroeconomic framework, conducive to achievement of program objectives and guidelines established in the sector Policy Letter.	2.1 Stable macroeconomic framework, conducive to achievement of program objectives and guidelines established in the sector Policy Letter.	3.1 Stable macroeconomic framework, conducive to achievement of program objectives.
II. Financial sustainability of the electricity sector			
Adopt a program of measures to recover the financial sustainability of the electricity sector.	1.2 Implement regulatory actions for the organization and stability of the sector, allowing for the recovery of financial sustainability at the distribution level. These actions are stipulated in Law 839 approved by the National Assembly, which includes: (1) Changing the loss expansion factor recognized in rates from 1.13 (currently) to 1.16 with a gradual reduction to 1.14 in five years, so as to facilitate the distributor's financial recovery and give it incentives for managing the reduction of losses in upcoming years. (2) Renewing the subsidy for settlements for five years. In the first year it will be 2.5% and in the next four years it will be 2% of the energy sold at the average purchase price. (3) Including in the basis for calculating the rate at the distribution level the financial costs of delayed payment to the generators in the period 2009-2013, and current interest until actual payment of debts incurred during that period.	2.2 Continue to implement regulatory actions for the organization and stability of the sector, allowing for the recovery of financial sustainability at the distribution level. These actions are stipulated in Law 839—"Law on reforms and additions to Law 272 "Electrical Industry Act," to Law 554 "Law on Energy Stability," and reforms to Law 661 "Law for the distribution and responsible use of the public electricity utility" and Law 641 "Penal Code"—approved by the National Assembly, which includes: (1) Implementing the change in the loss expansion factor recognized in rates from 1.16 to 1.15, in the context of continuing the process of adjustment from 1.13 (in effect in 2013) to 1.16 with a gradual reduction to 1.14 in five years, so as to facilitate the distributor's financial recovery and give it incentives for managing the reduction of losses in upcoming years. (2) Reducing the subsidy for settlements from 2.5% (in effect in 2013) to 2% of the energy sold at the average purchase price.	3.2 Confirmation that all measures set forth in Law 839 are being satisfactorily implemented.

Objectives	Commitments First Programmatic Loan	Commitments Second Programmatic Loan	Commitments Third Programmatic Loan
	(4) Extending the application of the antifraud regulations (Law 661 on the responsible use of energy) punishing energy theft to include all customers, consumers, and users of electrical service. (5) Agreeing with the distributors (DISNORTE-DISSUR) on the obligation to carry out an investment plan for US$75 million over a period of five years, in order to improve the quality and control of electrical supply, expand coverage, and help to reduce losses.	(3) Settlement between the generators and distributors (Electrical Distribution Company of the North (DISNORTE) and Electrical Distribution Company of the South (DISSUR)) regarding the financial costs of delayed payment to the generators in the period 2009-2013, and current interest to be included in the basis for calculating the rate at the distribution level until actual payment of the debts incurred during that period. (4) Continued application of the antifraud provisions contained in Law 661 "Law for the Distribution and Responsible Use of the Public Electricity Utility" punishing energy theft to include all customers, consumers, and users of electrical service. (5) Implementing the agreement with the distributors (DISNORTE and DISSUR), executing US$20 million from June 2013 to December 2014, in the context of the obligation to carry out an investment plan for US$75 million over a period of five years, in order to improve the quality and control of electrical supply, expand coverage, and help to reduce losses.	
	1.3 Update electricity sector rates, updating the recognized costs of supply (increase of 14.9%), transmission (increase of 7.18%), distribution (increase of 1.82%) for a rate adjustment to the average sale price of 7.78%, consistent with the Results Matrix of the Bank's country strategy with Nicaragua (document GN-2683).	2.3 The Nicaraguan Energy Institute (INE) performs periodic rate reviews and issues the corresponding resolutions on rate adjustments to the cost of supply, transmission, and distribution that, as a result, allow for: (i) an increase in 2014 of 2.38% in the average sale price to the consumer, equal to the indicative average sale price, thus ensuring that the price of energy offsets 100% of the costs of supply, transmission, and distribution; and (ii) a reduction of 8.47% in the average sale price to the consumer, in 2015, due to the reduction in oil prices, maintaining an energy price that offsets 100% of the costs of supply, transmission, and distribution.	3.3 The INE has performed periodic rate reviews and issued, as necessary, the corresponding resolutions on rate adjustments to update the cost of supply, transmission, and distribution.

Objectives	Commitments First Programmatic Loan	Commitments Second Programmatic Loan	Commitments Third Programmatic Loan
	1.4 Agree on guidelines and scope of the diagnostic and prepare a proposed adjustment plan for subsidies by the Government of Nicaragua, designed to target and measure subsidies, giving priority to assisting the most vulnerable groups.	2.4 MHCP submission to the Economic Cabinet of proposed measures adjusting electricity sector subsidies, providing implementation recommendations based on the country's budgetary capacity and the economic conditions for decision-making. The frame of reference for the proposal will include: (i) subsidies base with reference to historical rates is eliminated (2005 rate is currently used) and subsidies are determined as a percentage of the full rate in effect; (ii) consumption segment equal to or less than 150 kWh/month currently subsidized at 52.8% of the electricity rate becomes a range of subsidies varying between 0% and 50%, depending on consumption; (iii) the consumption segment equal to or less than 300 kWh/month currently subsidized at 100% in terms of the value-added tax (VAT), becomes a range of subsidies varying between 0% and 100%, depending on consumption; (iv) retiree segment currently subsidized at 50% of the electricity rate, becomes a range of subsidies varying between 10% and 25%; and (v) as a result, the total amount of subsidies may be reduced by 42.3% to 53.5%, depending on the scenario selected.	3.4 The Economic Cabinet has approved measures adjusting electricity sector subsidies.
III. Transparency of results in sector management			
Establish mechanisms to improve the transparency of results of public companies and concessionaires in the sector.	Continue to implement the mechanism ensuring the transparency of results of public companies and concessionaires in the electricity sector through: 1.5 INE's publication on its website of contracts it has signed for financing of electricity rates for the period from April 2013 to March 2014.	2.5 INE's publication on its website of information on financing the electricity rates effective after March 2014.	3.5 INE's publication of the financing terms for electricity rates effective after March 2015.
	1.6 ENATREL's publication on its website of its audited financial statements for 2012, which are pending approval from the Office of the General Comptroller of the Republic of Nicaragua (Comptroller's Office).	2.6 The Nicaraguan Electricity Company's (ENEL) publication on its website of its audited financial statements for 2013, with approval from the General Comptroller of the Republic. 2.7 The National Electrical Transmission Company's (ENATREL) publication on its website of its audited financial statements for 2013, with approval from the General Comptroller of the Republic of Nicaragua.	3.6 Each year ENEL and ENATREL publish on their respective websites their audited financial statements for years 2012 and thereafter, with approval from the General Comptroller of the Republic.

Objectives	Commitments First Programmatic Loan	Commitments Second Programmatic Loan	Commitments Third Programmatic Loan
		2.8 INE's publication of the cost recovery index (combined rate), loss rate, and collection rate as supplied by DISNORTE and DISSUR, up to 2014.	3.7 Each year the INE publishes the cash recovery index (combined index), the loss rate, and collection rate as supplied by DISNORTE and DISSUR.
	1.7 INE's publication of wholesale cost deviations—reflecting the difference between the actual price to purchase electricity and the price recognized in the rates—for the first half of 2013.	2.9 The INE has continued publication of wholesale cost deviations reflecting the difference between the actual electricity purchase price and the price recognized in the rates, for 2013 and 2014.	3.8 The INE has continued monthly publication of wholesale cost deviations.
IV. Sustainable energy matrix, promotion of renewable energy, private investment, and energy efficiency			
Promote the use of renewable sources, distributed generation, private participation in the electricity sector, and energy efficiency, to achieve a sustainable energy matrix.	1.8 Improve new generation contracting procedures, as a stimulus for private investment, agreeing on guidelines and scopes for revision of the legal framework for new generation contracting procedures in the wholesale market, all of which will make it possible to define proposed lines of action for improving competition in those procedures to include, *inter alia*, improved rules for bidding and direct contracting, as well as identification of obstacles to entering the market and proposed solutions, in order to obtain prices that allow for reducing the rate to the end consumer.	2.10 Ministry of Energy and Mines (MEM) submission to the Energy Cabinet of proposed actions to improve energy and power contracting procedures in the wholesale market to stimulate private investment. That proposal will include: (i) comprehensive planning of the system to construct an efficient electricity matrix; (ii) timely introduction of competitive procedures to ensure renewal of more costly and inefficient generation; (iii) definition of facilities for competition in renewable resources projects with higher investment risk; and (iv) introduction of conditions for participating in the regional electricity market.	3.9 Energy Cabinet has approved actions to improve energy and power contracting procedures in the wholesale market to stimulate private investment.
	1.9 Preparation, approval, and publication by the MEM of the 2013-2027 Indicative Generation Expansion Plan, to include generation projects based on renewable resources and incorporate National Interconnected System (SIN) quality criteria.	2.11 Preparation and approval by the National Load Dispatch Center, an entity of the National Electrical Transmission Company (ENATREL-CNDC), of an operational security methodology to periodically analyze the incorporation of new renewable energy projects in the Indicative Expansion Plan.	3.10 Development and approval by the MEM of the bi-annual revision of the Indicative Expansion Plan, to include generation projects based on renewable resources and incorporate the system's quality and operational security criteria.
	1.10 Improve the process of planning expansion of the system, establishing an optimization instrument for periodic updating of the Indicative Expansion Plan, which evaluates the effect of newly introduced generation based on renewable energy in the SIN, with the MEM preparing an operational security study for 2015.	2.12 The National Electrical Transmission Company (ENATREL-CNDC) determined that the operational security methodology mentioned in the previous condition is to be applied by the MEM and the INE starting in 2015 to prepare the Indicative Generation Expansion Plan.	3.11 ENATREL-CNDC has approved the evaluation based on the operational security study for 2015 in order to analyze the incorporation of new renewable energy projects in the Indicative Expansion Plan.

Objectives	Commitments First Programmatic Loan	Commitments Second Programmatic Loan	Commitments Third Programmatic Loan
	1.11 Establish the operational bases for distributed electrical generation, with the MEM developing proposed regulations for organization of distributed electrical generation to include, among other things: a minimum power level, an energy purchase and sale mechanism, and compensation mechanisms.	2.13 The MEM has established the scope for revision of the proposed regulations for distributed electrical generation in the country, in order to achieve regulations prepared with the participation of market agents at the generation, transmission, and distribution level. The scope will include: (i) power levels; (ii) energy purchase and sale mechanisms; and (iii) remuneration mechanisms.	3.12 The MEM has approved and put into effect regulations for distributed electrical generation in the country.
	1.12 Develop the legal and regulatory framework for energy efficiency that contains institutional and financial mechanisms to encourage energy efficiency.	2.14 MEM submission to the Energy Cabinet of a draft law on energy efficiency that will establish the legal and regulatory framework, containing institutional and financial mechanisms for promoting energy efficiency.	3.14 The Energy Cabinet has approved the draft law on energy efficiency, which has been forwarded as a bill to the National Assembly.
	1.13 Develop an energy efficiency policy, with the MEM drawing up proposed Energy Efficiency Policy Guidelines, to include expected objectives and targets, responsibilities, functions, and roles of relevant participants, and the necessary institutional and financial mechanisms.	2.15 MEM submission to the Energy Cabinet of a proposed national energy efficiency program containing, *inter alia*, energy efficiency objectives and targets, responsibilities, functions, and roles of relevant sector participants, together with the necessary institutional and financial mechanisms.	3.15 The Energy Cabinet has approved the national energy efficiency program.
V. Promoting regional integration of the electricity sector			
Promote regional electrical integration by increasing the participation of the national electricity sector in the regional electricity market.	1.14 Adopt operational regulations establishing operational rules for the SIN and the National Transmission System (SNT), trade-related rules for the wholesale electricity market, and the interfaces needed to harmonize national regulations with regional ones, all of which will make it possible to operate on a coordinated basis with the regulations of the regional electricity market. Those operating regulations must include: General standards; Technical operating standards; Commercial operating standards; and Technical and commercial annexes to the standards.	2.16 Adjustments made by MEM, INE, or the appropriate authority to national regulations and standards that, as a result of periodic evaluations performed by the Regional Electrical Interconnection Commission (CRIE), prove to be necessary for maintaining Nicaragua's appropriate integration with regional regulations for the sector and for ensuring that the Central American Electrical Interconnection System (SIEPAC) line retains its transmission capacity for the regional system. In 2015 the MEM will approve: amendments to the operating regulations and their technical and commercial annexes, to harmonize them with the implementation procedure established by the CRIE for implementing regional contracts with priority given to supply and secure rights.	3.16 Adjustments have been made to national regulations and standards that, as a result of periodic evaluations performed by the CRIE, prove to be necessary to maintain Nicaragua's appropriate integration with regional regulations for the sector and for ensuring that the SIEPAC line retains its transmission capacity for the regional system.

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/15

Nicaragua. Loan _____/BL-NI to the Republic of Nicaragua
Program to Strengthen the Electricity Sector in Nicaragua
Second Loan

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Nicaragua, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Program to Strengthen the Electricity Sector in Nicaragua – Second Loan. Such financing will be for the amount of up to US$39,000,000 from the resources of the Single Currency Facility of the Bank's Ordinary Capital, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ _____ 2015)

LEG/SGO/CID/IDBDOCS#39656376
NI-L1089

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/15

Nicaragua. Loan _____/BL-NI to the Republic of Nicaragua
Program to Strengthen the Electricity Sector in Nicaragua
Second Loan

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Nicaragua, as Borrower, for the purpose of granting it a financing to cooperate in the execution of the Program to Strengthen the Electricity Sector in Nicaragua – Second Loan. Such financing will be for the amount of up to US$26,000,000 from the resources of the Bank's Fund for Special Operations, corresponds to a parallel loan within the framework of the multilateral debt relief and concessional finance reform of the Bank, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ _____ 2015)

LEG/SGO/CID/IDBDOCS#39656377
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