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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATIONS

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN

TO

EMPRESA NACIONAL DE LUZ Y FUERZA

IN NICARAGUA

June 13, 1960

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATIONS OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A PROPOSED
LOAN TO EMPRESA NACIONAL DE LUZ Y FUERZA IN NICARAGUA

1. I submit the following report and recommendations on a proposed loan in an amount in various currencies equivalent to \$12.5 million to Empresa Nacional de Luz y Fuerza (Empresa) to help finance the foreign exchange cost of the Rio Tuma hydroelectric Project.

PART I - HISTORICAL

2. The Bank has made four loans for power development in Nicaragua; the first in 1953 of \$450,000 (82 NI) to the Government for a 3 MW diesel unit in the Empresa's existing power station in Managua; the second of \$7.1 million (121 NI) in 1955 to the Empresa for a 30 MW steam generating plant, transmission lines and distribution facilities in Managua; the third of \$400,000 (122 NI) in 1955 to the Instituto de Fomento Nacional for the expansion of distribution facilities in towns outside Managua; and the fourth of \$1.6 million in 1956 (154 NI) to supplement the foreign exchange provided by Loan No. 121 NI.

3. In the fall of 1957, after discussion with the Bank, the Empresa retained consultants to study a hydroelectric power project on Rio Tuma; the study, submitted in May 1958, recommended a 50 MW power plant and the Empresa requested Bank financing for the Project. Technical missions visited Nicaragua in February and November 1959 and found that, under certain conditions - the most important of them being an upward revision of rates and an improvement of the Empresa's management - the Project would be suitable for Bank financing. In November 1959 the rates were increased. Changes have been made in the Board and Management of the Empresa and some improvements have been made in its general organization.

4. Formal negotiations for a loan opened in Washington on April 4, 1960. The Borrower was represented by Mr. E. Delgado, President of the Board of Directors of the Empresa, assisted by Messrs. O. Salinas and A. Guerrero. Ambassador Dr. G. Sevilla Sacasa and Mr. R. Parrales Sanchez of the Nicaraguan Embassy in Washington represented the Government.

5. The proposed loan would increase the Bank's lending in Nicaragua from \$23.0 million to \$35.5 million. The Bank has already made the following loans in Nicaragua :

<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	<u>Amount</u> * <u>(\$ millions equiv.)</u>
1951	Banco Nacional de Nicaragua	Agricultural Development	\$ 1.19
1951	Republic of Nicaragua	Highway Construction	3.50
1951	Republic of Nicaragua	Construction of Grain Storage Facilities	0.54
1953	Republic of Nicaragua	Highway Construction	3.50
1953	Republic of Nicaragua	Electric Power Development	0.45
1955	Empresa Nacional de Luz y Fuerza	Electric Power Development	7.10
1955	Instituto de Fomento Nacional	Electric Power Development	0.40
1955	Instituto de Fomento Nacional	Agricultural Development	1.50
1956	Autoridad Portuaria de Corinto	Port Construction and Development	3.20
1956	Empresa Nacional de Luz y Fuerza	Electric Power Development (supplemental)	1.60
TOTAL			\$ 22.98
of which repaid			<u>7.59</u>
Total now outstanding			15.39 **
Amount sold		\$1.76	
of which repaid		<u>1.50</u>	<u>0.26</u>
Net amount held by Bank			<u><u>\$ 15.13</u></u>

* Net of cancellations

** Includes \$1.34 million undisbursed as of May 31, 1960

PART II - DESCRIPTION OF THE PROPOSED LOAN

6. The proposed loan would have the following characteristics:

<u>Borrower:</u>	Empresa Nacional de Luz y Fuerza, an autonomous entity of the Government.
<u>Guarantor:</u>	Republic of Nicaragua.
<u>Amount:</u>	The equivalent, in various currencies, of \$12.5 million.
<u>Purpose:</u>	To finance the foreign exchange cost of a 50 MW hydro plant; transmission facilities; improvements of the distribution system; new administration headquarters and miscellaneous equipment.
<u>Amortization:</u>	40 semi-annual instalments, beginning October 1, 1965 and ending April 1, 1985.
<u>Interest Rate:</u>	6% per annum.
<u>Commitment Charge:</u>	3/4 of 1% per annum.
<u>Payment Dates:</u>	April 1 and October 1.

PART III - LEGAL INSTRUMENTS AND AUTHORITY

7. Drafts of Loan and Guarantee Agreements are attached (No. 1 and No. 2).

8. These Agreements are substantially in the forms currently used by the Bank. Provisions of the Loan Agreement of special interest are:

(a) Section 5.02 (c), which provides for consultation between the Borrower and the Bank if any action with regard to the Empresa's electricity rates is proposed which would result in a change in the Empresa's level of revenues.

(b) Section 5.10 (and Section 3.07 of the Guarantee Agreement), which contains the usual rate covenants, would be supplemented by agreement on the part of the Borrower and Guarantor that surpluses should at least be sufficient to cover 35% of the total cost of the future planned expansion (in addition to the expansion envisaged in the Project) of the power facilities of the Empresa.

(c) Section 5.07, which provides that until the Project is completed the Empresa will not turn over any profits to the Guarantor or undertake any major expansion other than the Project, unless the Borrower has set aside funds (in addition to the Loan funds) sufficient to carry out the Project.

(d) Section 7.01, which provides as additional conditions of effectiveness that: (i) consultants and experts required under Section 5.01 (b) must have been employed; (ii) loans and advances received by the Empresa from the Guarantor in the past, amounting to equivalent of about \$3.5 million, must have been converted into an equity contribution to the Borrower's capital; (iii) the Guarantor must have taken appropriate legislative or other action to provide equity funds equivalent to \$658,000 to the Empresa for the fiscal year 1960-1961; and (iv) arrangements satisfactory to the Bank for provision of at least the equivalent of \$3.6 million of additional funds required for the Project must have been made.

(e) Section 6.02, which provides that a change in the Empresa's Charter without the Bank's consent and the loss of its right to obtain the additional funds required for the Project would constitute events of default.

9. Section 2.02 and 2.03 of the Guarantee Agreement would oblige the Government to provide funds (other than the Loan funds) as required for the project.

10. The Loan Agreement would be ratified by the Board of the Empresa and the Guarantee Agreement by the Asamblea Legislativa of Nicaragua.

PART IV - APPRAISAL OF THE PROPOSED LOAN

Justification of the Project

11. A detailed appraisal of the Project (TO 209 a) is attached (No. 3).

12. The Empresa Nacional de Luz y Fuerza now serves about 68% of the country's urban population. It sells energy at wholesale to a number of smaller municipalities which until recently relied on their own inadequate generating facilities, and it distributes energy at retail in Managua.

13. Over the 13 year period ending in 1959, the Empresa's power sales have increased at an average rate of about 16% compounded annually. An annual rate of increase of sales of about 10% is expected in coming years; to meet the demand a new source for power supply would be necessary by mid-1965. The proposed 50 MW hydro plant on the Tuma River has been found to be the most economic solution for this purpose.

14. The proposed hydro plant would meet the base load of the system after it is put in operation in 1965. The expected increase in peak demand in the following years would be met by the existing thermal plant. Existing high-cost diesel installations would be kept on a standby basis. By about 1969 the Empresa's capacity would need further expansion to meet growth of demand.

15. The Rio Tuma Project is based on the diversion of water from the Atlantic to the Pacific slope. The resulting head would be utilized by the proposed plant. The diverted water would then flow into the valley of the Rio Viejo, which with its tributaries could provide an ultimate estimated total generating capacity of more than 250 MW. In addition, the increased regulated flow of the Viejo River would open up the possibility of irrigating an area of about 30,000 hectares.

16. The cost of the Rio Tuma hydro plant of \$387 per installed kw is reasonable, particularly when account is taken of the fact that the regulating reservoir to be constructed for the proposed Project would also be utilized for later downstream expansion on the Viejo River.

17. Comparative studies of the proposed hydro plant and possible alternative thermal installations show that the higher investment required for the hydro plant is economically justified.

Organization and Procedure

18. The proposed hydro project is the first of its kind in Nicaragua, and will more than double the Empresa's generating capacity. To carry out such an expansion, and operate its facilities efficiently, the Empresa has agreed to strengthen its organization.

19. During the period of construction, the Empresa will employ an advisor to its Construction Manager. It will also employ management

consultants qualified in the field of public utility operations, who will provide key personnel and expert advice to the Empresa on its organization and procedures.

20. Works included in the Project will be constructed by contractors satisfactory to the Bank and the Borrower. Contracts for the procurement of goods will be awarded on the basis of international competitive bidding, except for minor civil works and purchases.

Arrangements for Financing

21. The total cost of the Project is estimated at the equivalent of \$20.8 million; of this amount \$14.5 million would be the foreign exchange component (including interest during construction) of which \$12.5 million would be covered by the proposed loan. The Empresa would provide the equivalent of about \$4.0 million, or about 20% of the total cost, from its earnings. The Government would make a contribution equivalent to \$658,000 in the fiscal year 1960-61. The remaining \$3.6 million equivalent would come from a loan of \$2.5 million to the Empresa from the U.S. Development Loan Fund and from further contributions by the Government.

Economic Position

22. An economic mission visited the country recently and an economic report is in preparation. Under the impulse of rising coffee prices and a marked expansion in cotton production, Nicaragua experienced a substantial rise in its export earnings between 1949 and 1955. Subsequently, as coffee and cotton prices declined, export earnings dropped moderately. In the past three or four years, the national income, at constant prices, has been growing at a rate close to 2% per annum.

23. On the fiscal side, a drop in public revenues over the past four years, while spending on economic development and social services continued to rise, resulted in budget deficits which, after the balances accumulated in the boom years were exhausted, ultimately led the Government, by 1959, into a net borrowing position with the National Bank. Final budget estimates for 1960-1961 are not yet available but the Government is aware of the need for conservative fiscal policies and has indicated its intention of restricting expenditures to a level which will be covered by current revenue and the proceeds of foreign grants and loans.

24. Overall bank credit policies have been conservative in the last three years; the money supply has remained stable. Net foreign exchange reserves, which fell from \$15 million at the end of 1955 to \$6.3 million at the end of 1956, recovered to \$8.3 million as at the end of 1959.

25. From the long-run standpoint, Nicaragua can be said to have reasonable prospects for development. There are still substantial land resources not yet fully utilized and there are opportunities for diversification of production in both agriculture and in industry. New investments, particularly in lines other than cotton, promise to augment export earnings in the future. At December 31, 1959, the external public debt of Nicaragua amounted to \$29.7 million, of which \$2.1 million were suppliers' credits. Debt service in 1960 is \$4.9 million, about 6.3% of estimated foreign exchange earnings. In 1966, the first full year of amortization of the

proposed loan, service on Nicaragua's existing external debt and the proposed loan would represent about 5.4% of 1960 foreign exchange earnings.

Prospects of Fulfillment of Obligations

(a) Borrower

26. The project has been planned and will be supervised by experienced consultants, and should be efficiently executed. With the aid of outside experts, and advice and assistance from qualified management consultants, Empresa's Management should be able to carry out the construction of the Project and operate the expanded power system. The market prospects for the power to be produced by the Project, the conversion of previous Government advances to equity, and the additional contributions to be made, together with the rate and other financial covenants contained in the Loan and Guarantee Agreements, afford assurances that the Empresa will have adequate resources to cover the costs of the project other than those to be met from the Loan, and to service the proposed loan.

(b) Guarantor

27. The service of the loan, together with Nicaragua's other foreign exchange obligations, should not impose an undue burden on the Nicaraguan economy. The Government has agreed to give assurances in the letter attached as No. 4 that it will continue its efforts to safeguard Nicaragua's capacity to carry external indebtedness by the selective use of foreign credits mainly for the financing of high priority projects on long terms.

PART V - COMPLIANCE WITH ARTICLES OF AGREEMENT

28. The report of the Committee provided for in Article III, Section 4, (iii) of the Articles of Agreement of the Bank is attached (No. 5).

29. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATIONS

30. I recommend that the Bank make a loan to the Empresa Nacional de Luz y Fuerza of Nicaragua with the guarantee of the Republic of Nicaragua in an amount, in various currencies, equivalent to \$12,500,000 with interest (including commission) at 6% per annum for a term of 25 years and on such terms as are specified in the attached draft Loan and Guarantee Agreements and that the Executive Directors adopt a Resolution to that effect in the form attached (No. 6).

Eugene R. Black

Washington, D.C.
June 13, 1960