INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION

OF THE

PRESIDENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN

TO

THE ELECTRICITY AUTHORITY OF CYPRUS

FOR A

FOURTH POWER PROJECT

June 1, 1972
CURRENCY EQUIVALENTS

US $1 = Cyprus £0.38

Cyprus £1 = US $2.61
1. I submit the following report and recommendation on a proposed loan to the Electricity Authority of Cyprus with the guarantee of the Republic of Cyprus for the equivalent of US$9 million to help finance a project for the expansion of the Moni generating station by the installation of a sixth 30 MW steam turbo-generator and associated transmission and distribution facilities. The loan would have a term of 20 years, including 3½ years of grace, with interest at 7¼ percent per annum.

PART I - THE ECONOMY

2. A report entitled "Current Economic Situation and Prospects of Cyprus" (Report No. EMA-41a, dated December 9, 1971) was circulated to the Executive Directors on December 17, 1971. Basic data on the economy of Cyprus are given in Annex II.

3. The population of Cyprus is predominantly of Greek extraction (81 percent) with the remainder largely of Turkish origin. The relations between the two communities deteriorated in the late 1950's and early 1960's and serious intercommunal disturbances occurred in 1963. Many Turkish Cypriots resettled in locations with predominantly Turkish population. These areas have their own administration and public services and are to a large extent self-governing. Since June 1963, there seems, however, to be general agreement that the political differences should be solved through negotiations, and representatives of both communities have met intermittently to discuss outstanding differences. The continued presence of United Nations troops helps to provide a safeguard against any accidental outbreak of violence, which neither community desires. Recently, differences between the Cypriot and the Greek Governments have introduced an additional element of uncertainty in the political situation.

The Second Five Year Plan 1967-71

4. The major objectives of Government economic policy are to achieve rapid economic growth and improvements in social services, while maintaining internal price stability and a viable balance of payments. These objectives were the basis of the Second Five Year Plan (1967-71), which has just been completed, and of the Third Plan (1972-76) which is in the final stages of preparation. During the past five years considerable progress towards these objectives has been made.
5. The rate of economic growth averaged about 8 percent per year in real terms during 1967-71, compared to just under 6 percent per year in the preceding five years. Sectoral output growth rates attained or exceeded the targets of the Second Plan, except in manufacturing which, because of delays in some important projects, increased at about 9 percent per year as against the plan target of 10 percent. Economic growth has been accompanied by structural change, with employment in agriculture declining in absolute as well as relative terms, and employment in industry and services increasing. The rapid growth reflected a high and rising rate of investment, a rapid increase in agricultural and industrial exports and a flexible fiscal and monetary policy which stimulated growth but also maintained a fair degree of domestic price stability.

6. To attain a viable balance of payments the Government strategy has been to reduce the dependence on exchange earnings from foreign military expenditures, by developing commodity exports and tourism. Exports of goods and services increased at an average annual rate of 12.5 percent during 1967-71 and foreign exchange receipts from tourism increased by 26 percent per year during the same period. Consequently, foreign military expenditures contributed only 27 percent of the total exchange receipts from goods and services in 1971 as compared to over 37 percent in 1966. However, because imports have increased more rapidly than exports, the trade gap has doubled during the Second Plan and there has been a deficit on the current account since 1968. However, foreign exchange reserves have been rising because capital inflows, mainly private capital, have been increasing.

7. The labor force has increased at an annual rate of about 1.5 percent during 1967-71, and unemployment has averaged only about one percent of the labor force. Shortages of labor have been felt largely in higher and middle grade technical personnel and particularly in the construction and hotel industries. With the tight labor market there have recently appeared stronger demands for significantly higher wages which could have inflationary consequences. A policy of keeping wage increases in line with productivity growth, while accepted in principle by all parties, has proved difficult to carry out.

8. There has been a significant improvement in social services. Health services have been strengthened and the number of schools and teachers have increased. Elementary education up to age 12 years is compulsory and free, and as of this year, the first three years of secondary schooling will also be free. An increasing proportion of those completing elementary education go on to secondary education (70 percent in 1966-67 and 84 percent in 1970-71) and participation in technical or scientific courses is rising.

Development Strategy in the Third Five Year Plan 1972-76

9. The draft Third Plan (1972-76) proposes to continue the strategy of the Second Plan. Rapid growth of agricultural and manufacturing production, with increased orientation to exports, and the expansion of tourism are to be the means of maintaining a sound balance of payments. The Plan envisages a GDP growth of about 7 percent per year with manufacturing output increasing at an average annual rate of about 11 percent and agriculture at about 7 percent. To reach these targets Cyprus' needs for external capital are expected to increase from about $18 million in 1972 to about $55 million in 1976. However, as during the Second Plan, gross domestic
savings are expected to finance about three-fourths of total fixed investment.

10. Although future progress could be influenced by the political uncertainties, a continuation of the present political situation would not preclude further rapid economic growth, as demonstrated by the record of the last few years. Shortages of capital, labor and water are major constraints on growth, and success in increasing the supplies of these factors and their efficient utilization will be an important determinant of economic growth in the long run. In the next five years, during the period of transition under the arrangements for the United Kingdom's joining the EEC, exports of Cyprus to the United Kingdom are unlikely to be seriously affected, but in the long run, the terms of association which Cyprus is able to negotiate with the EEC will have a profound influence on future growth.

**Major Sectors**

11. Agriculture is still the largest sector, accounting for about a fifth of GDP, over a third of employment, and more than half of commodity exports. Agricultural production, despite year-to-year fluctuations, has increased at about 8.5 percent per annum during 1966-71, reflecting gains in both crop and livestock production. The main factors underlying the rapid growth of production were increased exploitation of the water resources and the diversion of production to citrus fruit, potatoes, meat, milk and eggs. Government policy has been to maintain a balance between farm incomes and incomes in other occupations through investment, financial incentives and subsidies for the diversification of production. Government development expenditure on agriculture amounted to 35 percent of total Government development expenditure during 1967-71.

12. The two major constraints for future agricultural expansion are the scarcity of water and the fragmentation of holdings. The latter hinders the adoption of modern systems of farming and livestock production, and a law was passed in 1969 to encourage the consolidation of holdings. Land consolidation has begun in a number of villages but progress has been slow. Scarcity of water has become an increasing problem. Only about 11% of the cultivated area is irrigated but it produces about 60% of total agricultural production. Most of the irrigated area is supplied from ground water and the expansion of irrigation in the 1950's and 1960's has resulted in serious over-exploitation of the main aquifers through illegal drilling and extraction. Government policy is to develop surface water, conserve water resources, and replenish overpumped aquifers. The formulation of a master plan for the control, rational utilization and development of water resources has been undertaken and feasibility studies for specific projects are nearing completion.

13. Industrial output has increased rapidly and in 1971 accounted for about 12% of GDP and employment, and about 20% of exports. Industry in Cyprus is largely private. Government policy has limited itself to creating a favorable climate by providing incentives and direction through protection, tax allowances, and low rent in government-owned industrial estates. Food processing industries provide the major part of manufactured exports. Other light industries manufacturing consumer goods have been producing import substitutes (e.g. clothing and footwear) but are gradually looking to export markets as the small domestic market offers limited scope. The industrial sector is characterized by a large number of small, family-owned, and at times inefficient units. Productivity per worker has, however, increased by about 3-4% per year.
14. Manufacturing industry is regarded as a cornerstone of the policy of re-structuring the economy and reducing its dependence on foreign military bases and similar expenditure. Industrial development is expected to improve the balance of payments, to create employment, and to make possible the utilization of local raw materials and agricultural products. Fixed investment in manufacturing is expected to total about $160 million during the Third Plan. The growth of industrial output is expected to average about 11 percent per year during the next five years as compared to about 9 percent during 1967-71.

15. Government policy aims to modernize and rationalize small enterprises by encouraging the establishment of larger and more efficient units, capable of facing foreign competition at home and abroad. Greater export orientation of industry is stressed to overcome the limitation of the small domestic market. A system of export credits is being considered by the Government. Cooperation with foreign firms is also being encouraged. Two major constraints on the continued expansion of manufacturing are labor, particularly skilled labor, and finance. The domestic capital market is little developed, and few enterprises are in a position to raise capital abroad.

16. During 1967-71 the number of tourists increased rapidly and tourism receipts increased from C£3.6 million in 1966 to over C£11 million in 1971. The growth of the sector is sensitive to political developments in Cyprus and in neighboring areas. The number of tourists was much reduced in 1963-64 and in 1967, and the growth rate declined sharply in 1970 when there were local disturbances. In 1971 the growth of tourism was again very high. The Government regards the country's tourism potential as a major resource and is promoting its development by publicity abroad and by encouraging the construction of hotels and the training of personnel. There is scope for regional diversification of tourist traffic, about half of which now comes from the United Kingdom.

External Assistance

17. In the past few years private long-term capital, mainly direct investment, has accounted for nearly three-fourths of the capital inflow into Cyprus, with short-term commercial and suppliers credits constituting the bulk of the rest. Most of the private capital inflow has come from the United Kingdom. In addition to the Bank, which has provided the largest part of the public capital inflow, Cyprus has received loans from Germany, the United Kingdom and the United States. Private long term capital inflows are expected to continue to be the main source of external capital, with loans from international organizations and bilateral donors playing an important, though subsidiary, role.

18. The structure of the capital inflow is reflected in the relatively small external public debt which, at the end of December 1971, amounted to about $39 million (excluding undisbursed). Just over half of the debt was owed to the IBRD, about 24 percent to the United Kingdom and 14 percent to Germany. The debt service burden is low, the debt service ratio being about 2 percent; including private debt, this ratio would be in the order of 5 to 6 percent. In the light of its economic performance and low external debt burden, Cyprus is creditworthy for continued Bank lending.
19. The present total of Bank lending to Cyprus is $39.5 million equivalent (net of cancellations), of which $35.4 million was outstanding on April 30, 1972. Three loans totalling $22.6 million (net of cancellations) for power development were made to the Electricity Authority of Cyprus, one in each of the years 1963, 1967, and 1969. A loan of $11.5 million for a ports project was made in 1969. Two loans totalling $5.4 million were made in 1971 for sewerage projects in Nicosia and Famagusta. Performance under all these loans has been satisfactory, and there are no outstanding problems. Annex I contains a summary statement of Bank loans as of April 30, 1972, and notes on the execution of ongoing projects.

20. In concentrating its lending on the provision of infrastructure, the Bank has sought structural and institutional reform to relieve the constraints on further economic development. Through the power loans the Bank has assisted in the consolidation and expansion of the Electricity Authority. Improvement of port administration and operation through the creation of a National Ports Authority, now underway, is the objective of Bank lending in this sector, and the recent creation of sewerage boards was an important element of the two sewerage projects.

21. The Bank's major objective in Cyprus continues to be to support structural reform. Given the sectors covered by previous Bank operations and the size of the economy, the following are likely to be the remaining areas in which the Bank can expect to encourage reforms:

(a) to provide assistance to improve agriculture, in particular through more effective development and utilization of the limited water resources. This assistance might include projects such as the Paphos Irrigation Project, which is under preliminary consideration, and would be one of the largest irrigation projects in Cyprus;

(b) to help improve the availability of long-term finance for tourism and industry, through the expansion and strengthening of financial institutions; and

(c) to provide infrastructure upon which future economic development will depend, including the development of a balanced highway investment program in connection with a proposed loan for roads in FY 1973.

22. The Bank has one other loan under consideration for Cyprus in FY 1972. This is a proposed loan to the Cyprus Development Bank, Ltd. which has already been negotiated, and is expected to be submitted to the Executive Directors simultaneously with the loan proposed in this report. These two loans would bring the total of Bank lending to Cyprus this year to the relatively high level of US$ 12 million. However, only one loan of about US$ 4 million is envisaged for FY 1973 and the average annual lending over the next few years is not expected to exceed US$ 5 million. This is not an insignificant amount considering the small size of the economy and taking into account the difficulty Cyprus has in raising long-term finance for development from other sources.
23. As yet IFC has made no investments in Cyprus, although it has had project identification missions in December 1971 and March 1972. IFC is currently reviewing an expansion project by the Cyprus Cement Company (Limassol). Several hotel projects have been brought to IFC's attention, and these are being studied with the assistance of the Cyprus Development Bank.

PART III - THE ELECTRIC POWER SECTOR

24. Consumption of electric power has been increasing rapidly with the growth of industry and tourism, and with the improvement of the standard of living. Consumption increased at an average rate of 6.2 percent per year during 1961-1966. The Second Plan projected demand to increase at about 9.2 percent per year in 1967-71, but the actual growth has been about 14 percent per year. A successful rural electrification program has been carried out and the number of villages with electricity has increased from 96 in 1960 to 316 in 1966 and 512 in 1971. Because power consumption has increased more rapidly than expected, investment in generation and transmission during the Second Plan has been nearly C£10 million as compared to the Plan target of C£6 million. During the Third Plan, three additional generators of 30 MW are expected to be installed (including one which will go into operation this year), the transmission and distribution networks are to be strengthened, the program of electrification of rural areas continued and the quality of service rendered to the consumers improved. Total investment is planned to be C£15 million during 1972-1976.

25. Cyprus has no known deposits of fossil fuels and, being semi-arid, has no prospects of hydroelectric power production on a commercial scale. Only pumped-storage peaking plants can be envisaged for the future, in connection with some of the dams under construction or planned to relieve the island's pressing water needs. Nuclear power generation is not a practical alternative, on account of the small size of the system.

26. The expansion of the power sector will continue to be based on thermal generation using imported fuel for the foreseeable future. Until now the Electricity Authority of Cyprus (EAC) has been free to buy fuel oil in the open market, but a domestic oil refinery will soon start operating near Larnaca, with a fuel oil production capacity of 220-230,000 tons per year. The Authority will use about 210,000 tons of fuel oil in 1972, increasing to about 295,000 tons in 1976. The rest of the country now consumes about 50,000 tons. Hence, the refinery will not have sufficient capacity to supply all the country's needs. Starting in 1973 the Authority will be required to buy from the refinery all the fuel oil it can supply. The price expected to be paid to the refinery in 1973-76 averages only 7 percent above that for 1972 and does not significantly affect the Authority's operating results. It is expected the Authority will buy the balance of its fuel oil requirements in the open market.
27. For almost a decade the Bank has been assisting in the consolidation and expansion of the Cyprus power system in order to provide the infrastructure upon which future economic development will depend. In September 1970, EAC requested that the Bank assist in financing its 1972-1976 investment program. An appraisal mission visited Cyprus in January 1972 and negotiations were held in Washington in May. The Borrower's delegation was led by Mr. S. Anastasiades, Chief Engineer and General Manager; the Guarantor was represented by Mr. T. Theophilou of the Ministry of Finance.

The Borrower

28. EAC was created by law in 1952 "for the purpose of generating, supplying, promoting and encouraging the use of electricity". It is governed by a Board consisting of a Chairman, a Vice Chairman and five members, all of whom are appointed by the Council of Ministers to five-year terms. The Board appoints the chief executive officer of the Authority or general manager. The management of the Authority is competent and experienced.

The Bank Project

29. The project proposed for Bank financing is part of EAC's development program for 1972-76 and consists of:

(a) Expansion of the Moni generating station with the installation of a sixth 30 MW steam turbo-generator similar to the existing units financed with previous Bank loans; and

(b) About 45 percent of the Authority's transmission system and about one-fourth of its distribution investment through 1976.

30. A report entitled "Appraisal of the Fourth Power Project - Electricity Authority of Cyprus - Cyprus" (PU-93a, dated May 11, 1972) is being circulated separately to the Executive Directors. A Loan and Project Summary is attached as Annex III.

31. The total estimated cost of the project, including contingencies, is $11.9 million equivalent, of which $9.0 million represents the foreign exchange component. The proposed loan would cover the foreign exchange costs which account for 76 percent of the cost of the project. Of the Authority's total investment requirements during 1972-76, estimated at C£40 million, the Bank would finance 26 percent by means of the proposed Bank loan (21 percent) and the balance of Loan 649-CY (5 percent). The remainder would come from internal cash generation (65 percent), and customers' contributions (9 percent).
32. The Authority invited tenders in 1971 in accordance with the Bank's Procurement Guidelines, for a 30 MW unit to be financed entirely by the Authority and installed at Moni as unit No. 5 and, at the same time, for an option on a second 30 MW unit (Moni No. 6) to be exercised within six months of the contract award for the first unit. Since the Authority intends to exercise this option, part of the proceeds of the proposed Bank loan would be applied to the foreign exchange component of unit No. 6, including civil works, boiler, and turbo-generator.

33. The remaining works of the project will also be procured through international competitive bidding in accordance with the Bank's Guidelines. EAC is exempt from customs duties, and bids are evaluated on a c.i.f. basis. Except for the engagement of consultants, no contracts will be awarded nor will options be exercised for the components of the project before the loan is signed.

34. Disbursements will be for the foreign currency costs of imported equipment, materials, and services only. No retroactive financing is proposed. Disbursements are expected to be completed by mid-1976.

Financial Aspects

35. The Government has made five loans to EAC totalling £7.9 million, which were provided from the proceeds of public bond issues. Subsequently the Government decided to consider the proceeds of these issues as a form of equity contribution to EAC and while it pays full debt service on them, it charges only the interest to EAC. Under the first two Bank loans, the Government agreed not to ask for repayment during the life of the Bank loans. This provision will be repeated under the proposed loan and is a condition of effectiveness. EAC's financial situation has improved in the last few years and the Bank informed the Government and EAC at the time of the third loan that it would be prepared in principle to approve a schedule for repayment of the Government loans which would be consistent with the maintenance of a sound financial position by EAC.

36. The balance of EAC's equity (£6.7 million) consists of retained earnings. Long-term debt, other than the three Bank loans, consists of loans from the Government and Barclays Bank, and the outstanding balances of which, as of December 31, 1971 were £7,000. These loans were taken over from local authorities at the time their plants were transferred to EAC.

37. The Authority's financial position is satisfactory. Its major problem is its inability to gain access to the Turkish-Cypriot areas for the purpose of meter-reading. Therefore such consumption has not been billed nor have any collections been made since 1964. The annual revenue lost is estimated to be running currently at about £350,000, or 6.5 percent of annual billings. In spite of this, projections show that during the period 1972-76 earnings produce a return of over 9 percent on net fixed assets in operation, and internal cash generation would cover debt service more than twice.
38. The only significant difference between the past loans to the Authority and the proposed loan lies in the tariff covenant, which, under past loans, required that the operating ratio be no more than 68 percent on a three-year moving average. Although the Authority will not meet the terms of this covenant from 1972 onwards, its forecast financial performance is acceptable both in terms of its ability to finance the proposed expansion program and the return it will earn on its assets. Since a tariff increase is not required from the viewpoint of cash generation, the tariff covenant for EAC will be changed to conform to the standard covenant for electric power projects by expressing it in the form of a rate of return on net fixed assets in operation. EAC should have no difficulty in meeting the proposed rate of 9 percent.

39. The installation of a sixth 30 MW unit at Moni is the most economic way to meet the projected increase in power demand. The extensions to the transmission and distribution systems are required to supply new loans, to maintain adequate voltage levels after the expected load growth, and to provide a reasonable reliability of supply. That part of the Authority's 1972-76 investment program related to the installation of Moni units 5 and 6 and associated transmission and distribution system expansions will have an economic return of slightly over 10 percent.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

40. The draft Loan Agreement between the Bank and the Electricity Authority of Cyprus, the draft Guarantee Agreement between the Republic of Cyprus and the Bank, the Report of the Committee provided for in Article III Section 4 (iii) of the Articles of Agreement of the Bank and the text of a Resolution approving the proposed loan are being distributed to the Executive Directors separately. The draft Agreements conform to the normal pattern for loans for power projects.

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

PART VI - RECOMMENDATION

42. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

Attachments
June 1, 1972
THE STATUS OF BANK GROUP OPERATIONS IN CYPRUS

A. STATEMENT OF BANK LOANS
(as at April 30, 1972)

<table>
<thead>
<tr>
<th>Loan Number</th>
<th>Year</th>
<th>Borrower</th>
<th>Purpose</th>
<th>Amount (less cancellations)</th>
<th>Undisbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td>335</td>
<td>1963</td>
<td>Electricity Authority of Cyprus</td>
<td>Electric power</td>
<td>15.3</td>
<td>-</td>
</tr>
<tr>
<td>424</td>
<td>1967</td>
<td>Electricity Authority of Cyprus</td>
<td>Electric power</td>
<td>2.3</td>
<td>-</td>
</tr>
<tr>
<td>628</td>
<td>1969</td>
<td>Republic of Cyprus</td>
<td>Ports</td>
<td>11.5</td>
<td>9.4</td>
</tr>
<tr>
<td>649</td>
<td>1969</td>
<td>Electricity Authority of Cyprus</td>
<td>Electric power</td>
<td>5.0</td>
<td>1.2</td>
</tr>
<tr>
<td>729</td>
<td>1971</td>
<td>Sewage Board of Nicosia</td>
<td>Sewerage system</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>730</td>
<td>1971</td>
<td>Sewage Board of Famagusta</td>
<td>Sewerage and drainage system</td>
<td>1.9</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>39.5</td>
<td>16.0</td>
</tr>
<tr>
<td>of which has been repaid</td>
<td></td>
<td></td>
<td></td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>Total now outstanding</td>
<td></td>
<td></td>
<td></td>
<td>35.4</td>
<td></td>
</tr>
<tr>
<td>Amount sold</td>
<td></td>
<td></td>
<td></td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>of which has been repaid</td>
<td></td>
<td></td>
<td></td>
<td>2.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Total now held by Bank</td>
<td></td>
<td></td>
<td></td>
<td>35.1</td>
<td></td>
</tr>
<tr>
<td>Total undisbursed</td>
<td></td>
<td></td>
<td></td>
<td>16.0</td>
<td></td>
</tr>
</tbody>
</table>

B. PROJECTS IN EXECUTION

Performance under all Bank loans to Cyprus has been satisfactory.

Disbursements have been delayed in only one instance (the Ports Project), and this was due to a dispute between the contractor and the Government involving the contractor's claim to foreign currency payments in accord with his bid estimates without submission of evidence of actual foreign currency payments. We have been assured by the Government that this matter will be settled within the first half of 1972. Construction, however, has remained largely on schedule.
ANNEX II

COUNTRY DATA - CYRUS

Area: 9,251 sq. km.
Population (end of 1970): 640,000
Density (end of 1970): 69 per sq. km.
Rate of Growth (1961-70): 1.1 percent

Population Characteristics:
- Crude Birth Rate (per 1,000) 1969-71: 21.8
- Crude Death Rate (per 1,000) 1969-71: 6.7
- Infant Mortality (per 1,000 live births) 1969-71: 25.6

Nutrition:
- Per capita calorie intake 1970: 2,460
- Per capita protein intake (grammes) 1970: 77.6

Health:
- Population per physician 1970: 692
- Population per hospital bed 1970: 156
- Rate of Growth (1961-70): 65.0%
- Primary school enrolment 1970: 100.0%

GDP per capita: $886 (1971)

Gross National Product 1971:
- Value at market prices 608.2
- Gross Investment 137.3
- Gross National Savings 122.4
- Current Account Balance -11.9

Output, Labor Force and Productivity in 1970:
- Value Added $US million
- Labor Force Thousands
- Production per Worker $US

Public Finances in 1970/71:
- Current Receipts 309.0
- Current Expenditure 88.8
- Current Surplus/Deficit (-) 20.2
- Development Expenditure 30.7
- External Assistance (net) 1.7

Prices and Credit:
- Retail Price Index
- Bank Credit to Public Sector
- Bank Credit to Private Sector

Balance of Payments:
- Merchandise Exports
- Current Exchange Rate: US$1.00 = 0.38

*All conversions in the table are at C.F. = US$2.4, the rate of exchange prevailing till December 1971.

April 28, 1972
Europe, Middle East and North Africa Department
CYPRUS - FOURTH POWER PROJECT

LOAN AND PROJECT SUMMARY

Borrower: 
Electricity Authority of Cyprus

Guarantor: 
Republic of Cyprus

Amount: 
US$ 9 million, equivalent, in various currencies.

Terms: 
Amortization in 20 years, including a 3½-year period of grace, through semi-annual installments beginning December 1, 1975 and ending June 1, 1992. Interest rate, 7½ percent.

Project Description: 
Addition of the sixth 30 MW generating unit at Moni steam power plant and extensions to the transmission and distribution networks. The project is part of the Authority's 1972-76 expansion program.

Estimated Cost:

<table>
<thead>
<tr>
<th>Component</th>
<th>Local (US $ thousand)</th>
<th>Foreign (US $ thousand)</th>
<th>Total (US $ thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moni unit No. 6</td>
<td>703</td>
<td>4,221</td>
<td>4,924</td>
</tr>
<tr>
<td>132 &amp; 66 kV System Extensions</td>
<td>404</td>
<td>1,334</td>
<td>1,738</td>
</tr>
<tr>
<td>11 kV &amp; LV Network Extensions</td>
<td>1,428</td>
<td>2,116</td>
<td>3,544</td>
</tr>
<tr>
<td>Subtotal Direct Costs</td>
<td>2,535</td>
<td>7,671</td>
<td>10,206</td>
</tr>
<tr>
<td>Engineering and Supervision</td>
<td>190</td>
<td>339</td>
<td>529</td>
</tr>
<tr>
<td>Contingencies: Physical Price</td>
<td>52</td>
<td>143</td>
<td>195</td>
</tr>
<tr>
<td>Contingencies: Price</td>
<td>147</td>
<td>847</td>
<td>994</td>
</tr>
<tr>
<td>Total Project Cost</td>
<td>2,924</td>
<td>9,000</td>
<td>11,924</td>
</tr>
</tbody>
</table>
### Financing Plan:

<table>
<thead>
<tr>
<th></th>
<th>Local (US $ thousand)</th>
<th>Foreign</th>
<th>Total (US $ thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBRD Loan</td>
<td>-</td>
<td>9,000</td>
<td>9,000</td>
</tr>
<tr>
<td>Internally generated funds</td>
<td>2,924</td>
<td>-</td>
<td>2,924</td>
</tr>
<tr>
<td>Total</td>
<td>2,924</td>
<td>9,000</td>
<td>11,924</td>
</tr>
</tbody>
</table>

### Estimated Disbursements:

<table>
<thead>
<tr>
<th></th>
<th>FY 72/73</th>
<th>FY 73/74</th>
<th>FY 74/75</th>
<th>FY 75/76</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.5</td>
<td>2.0</td>
<td>5.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

### Procurement Arrangements:

International competitive bidding. No preferences. Part of the sixth unit to be procured exercising options contained in contracts for fifth unit, awarded in January, February and April 1972 with the Bank's approval.

### Consultants:

Engineering and construction supervision to be provided by Preece, Cardew and Rider (U.K.), principal consultants to the Authority. Foreign exchange cost to be financed by Bank.

### Rate of Return:

Economic return slightly above 10 percent.

### Appraisal Report:
