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REPORT AND RECOMMENDATION
OF THE
PRESIDENT
TO THE
EXECUTIVE DIRECTORS
ON A
PROPOSED LOAN
TO
THE REPUBLIC OF INDONESIA
FOR A
FOURTH POWER PROJECT

May 28, 1975

Currency Unit	=	Indonesian Rupiah (Rp.)
US$1.00	=	Rp 415
1 Rupiah	=	$0.0024
1 million Rupiah	=	$2,410

Fiscal Year

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INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN TO THE REPUBLIC OF INDONESIA FOR A FOURTH POWER PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Indonesia for the equivalent of US$41.0 million to help finance a Fourth Power Project. The loan would have a term of 25 years, including five years of grace, with interest at 8-1/2 percent per annum. The Government would relend the proceeds of the loan to PLN (the National Power Company) at the same rate of interest and for the same repayment period. However, the interest on the loan to PLN would be capitalized during the grace period and the Government would bear the foreign exchange risk.

PART I - THE ECONOMY

2. The latest economic report on Indonesia "Indonesia: Development Prospects and Needs" of April 15, 1975 (708-IND) described and analyzed the structure of production and incomes, the recent changes in the availability of resources, and the medium and longer-term outlook for the Indonesian economy. Country data are shown in Annex 1.

3. In 1969, at the start of Indonesia's First Five-Year Plan, the per capita income of the Indonesian population was probably no higher than half a century ago. A majority of the population lived below a minimum welfare standard, especially on Java. Most were dependent exclusively or primarily on agriculture, where farms were generally very small. Underemployment was widespread. While the inflation of the mid-1960s had been overcome, infrastructure was still in very poor condition.

4. The Government's efforts during the First Five-Year Plan period (April 1, 1969 - March 31, 1974) were successful in putting the economy on the road towards development. Most physical objectives were achieved or nearly so, and there was very substantial rehabilitation of run-down infrastructure and government enterprises in agriculture and manufacturing. Investments increased at a very fast rate, rising from 9 to 19 percent of GNP. While 57 percent of Government development expenditures were financed from abroad, the reliance on foreign financing was much smaller than the level rate of nearly 80 percent foreseen in the Plan. Real GDP increased at an annual rate of over 7 percent. GNP per capita in current prices reached about $120 in 1973. The Government instituted programs for the labor intensive rehabilitation of infrastructure and other programs which created substantial incomes and employment. In all, however, given the annual increase in the labor force of about one million, one cannot be confident that the employment situation improved during the First Plan period, and from available information it is difficult to judge whether a significant part of the poorest section of the population participated in the gains of development.

5. The Second Five-Year Plan (April 1, 1974 to March 31, 1979) builds on the achievements of the First Plan. While the First Plan dealt mainly with the urgent needs for stabilization under conditions of great scarcity of resources, progress has been such that the Second Plan can give much more weight to such problems as employment, equitable distribution, regional growth, and education. The Plan identifies a number of specific low-income target groups and, in general, adopts an employment-oriented development strategy. It aims at a continued growth in investments, needed both because capital intensity will tend to increase as the rehabilitation phase draws to an end, and because more socially-oriented investments will be made. Overall, the Plan expects GDP to grow at 7.5 percent per annum.

6. Over the decade 1961-71, Indonesia's population grew by 2.1 percent a year. However, as a result of changes in the age distribution and declining mortality, the current growth rate is estimated at 2.5 percent. Even under the most optimistic assumptions with regard to fertility decline, the growth rate would only come down gradually, and the population would nearly double by the end of the century. While Indonesia still has substantial unutilized land reserves in the outer islands, 1/ these are limited in relation to the expected population increase, and a further large increase in population pressures - already severe on the inner islands 2/ - must be expected. Since 1969, the Government has been operating and gradually extending a family planning program. The number of acceptors has been increasing rapidly. The Second Five-Year Plan foresees a continued vigorous and much more comprehensive attack on the population problem.

7. During the rest of the 'seventies', average annual additions to the labor force are estimated at 1.2 million, increasing to more than 1.4 million in the years 1980-85. In addition, substantial underemployment exists, and there is the risk that even relatively simple technological improvements may eliminate some existing employment. The Second Plan's projections show that employment growth would almost keep up with the growth in the labor force, but the employment thrust of the Plan needs to be further strengthened if an appreciable increase in real labor earnings - and a wider spread of the benefits of development - is to be attained.

8. A further acceleration in Indonesia's development efforts should be possible, given the recent favorable developments in its exports, and especially the large increase in the price of oil. Between 1972/73 3/ and

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1/ All islands except Java, Madura and Bali.

2/ Java, Madura and Bali.

3/ Indonesian fiscal year April 1, 1972 - March 31, 1973.

1975/76, the net oil contribution to the balance of payments as well as to the Government budget is expected to increase by roughly $2.5 billion, or $20 per capita. In nominal terms, this is equivalent to about 22 percent of the gross national income in 1972/73. In terms of real goods and services available to Indonesia, the gain is however much smaller. The main offsetting factor is the large increase in import prices over the three years. Taking this into account, only 30 percent of the original gain remains; in 1972/73 prices, the net gain is $6 per capita or $750 million for the economy as a whole, equivalent to 6.5 percent of the 1972/73 GNP.

9. In terms of the budget, part of the increase in oil revenues has been used to protect the domestic consumer and the economy against the sharp price rises in international markets through subsidies on major imported commodities (rice, fertilizer, wheat, sugar). The prices of these commodities have risen faster than those of imports in general. Net of current subsidies, the gains in the 1975/76 budget (as compared to 1972/73) amount to only about 4.5 percent of the current (non-oil) GNP. Of this amount, more than half ($700 million in current prices), is being channeled toward toward public investments. The remainder is being used for current expenditures and for payments due for the subsidies of the preceding year.

10. From September 1972 to March 1974, the Indonesian economy was under severe inflationary pressure, initially because of a bad harvest in the Fall of 1972, and subsequently as a result of the worldwide increase in commodity prices and the boom conditions in Indonesia itself. By early 1974, the annual rate of inflation had reached nearly 50 percent. The Government took a number of measures to remedy the situation in April 1974. At approximately the same time, international prices of most commodities started to fall. Since then, the annual rate of inflation in Indonesia has declined to about 15 percent and the Government has relaxed some of the earlier measures.

11. Recently, Indonesia's balance of payments and budgetary position have been affected by the inability of PERTAMINA - Indonesia's petroleum company - to meet all its financial obligations. During 1974/75 PERTAMINA, which had undertaken a large and diversified investment program for most of which it had not arranged medium- or long-term financing, faced serious liquidity problems. It began to withhold the legally obligatary pass-through to the Government of part of the revenues received from the foreign companies, as well as taxes due on its own net income. In addition, PERTAMINA failed to meet payments due on certain of its short-term foreign borrowings and some of its other obligations and it faced the prospect of large similar obligations coming due in 1975/76 which it was not likely to be able to meet. Decisive corrective action was taken early in March 1975. The Government resolved to assist PERTAMINA so as to enable it to meet the outstanding debt service obligations. Furthermore, in order to assure orderly and coordinated borrowing in the international market, PERTAMINA and all other state enterprises were instructed to refrain from independent borrowing abroad, and Bank Indonesia was made responsible for raising from international commercial sources the needed funds on their behalf. A systematic review of PERTAMINA's on-going investment projects and its investment

plans as well as contracts related thereto is currently underway with a view to alteration, reduction and other steps where necessary. The results are likely to have a favorable bearing on the pattern of investment in the years immediately ahead and to result in closer control of major investment activities undertaken by state enterprises. However, the withholding by PERTAMINA of part of the payments due on account of oil company profits to pay foreign obligations and the advance of funds by Bank Indonesia for payment of such obligations resulted in levels of foreign exchange reserves at the end of 1974/75 of less than $1 billion or about 2.5 months of imports. For 1975/76, the Government expects to receive all of the payments due from the operations of foreign oil companies and PERTAMINA which are made by and through PERTAMINA. It also expects a modest increase in foreign exchange reserves during that year, partly reflecting planned Bank Indonesia medium-term borrowing from private banks abroad designed in effect to refund PERTAMINA's short-term obligations.

12. Indonesia has a substantial potential for further productive investment, employment and income growth. In agriculture, a vigorous pursuit of on-going programs in irrigation, development of new varieties and technical services, provision of credit and current inputs, etc., promises to yield high returns. In addition, development of new areas of food or tree crops - partly in conjunction with a rapidly growing transmigration program - has high priority. If production, employment and incomes grow rapidly, demand for agricultural products - especially the high-value ones - will also accelerate, and there will be a need to improve marketing and transport facilities. The industrial potential is good, both for modern capital-intensive natural resource-based activities and for more labor-intensive, partly export-oriented industries. Industrial activity needs to be widely spread to enlarge rural family income; this has implications for the choice and location of future infrastructure projects. In addition, there is a serious backlog of economic infrastructure requirements in many areas, and a need to improve social infrastructure over wide areas of the country.

13. With the increase in resources which have become available since the Second Plan was prepared, the Government is now clearly set on a course of accelerated growth in investment, employment and incomes to realize Indonesia's potentials and improve the welfare of the broad masses of the people. With a determined effort to mobilize additional resources, and a judicious use of them - and assuming an international economy which is reasonably favorable to Indonesia - very significant progress can be made in this direction. One important element in this strategy will be to increase employment at such a rate that the labor market would tighten significantly. This in turn would create self-reinforcing tendencies, as incomes and demand rise throughout the economy. Thus, the wide spread of the gains of development is not only a prime objective, but also a vital tool in the overall strategy. Improvement in the labor market situation will depend critically on the direct creation of substantial new work opportunities by the Government in agriculture and in urban and rural public works.

14. The resources needed to implement an accelerated investment, employment and income growth strategy are substantial. Assuming only a modest overall increase in the capital intensity of the investment program, and an efficient use of resources, investments would have to double between 1975 and 1980 (for an annual growth rate of 15 percent). Investment would increase from 23 percent of non-oil national income in 1975 to 29 percent in 1980 which, in current prices, implies an increase from $3 billion in 1973 to $6.5 billion in 1975 and nearly $20 billion in 1980.

15. With regard to the foreign exchange requirements for such an investment program it appears that, assuming relatively favorable developments in the export sector (including oil), commitments of foreign funds to the extent of about $14 billion over the six-year period 1975-1980 will be necessary; for the first four years the necessary commitments are estimated at $2 billion per annum. In the interest of keeping the debt service reasonable, providing for the contingency of a lower oil income, and leaving room for future borrowing to sustain import growth in the 1980's when export prospects look less favorable, it will be necessary to borrow at least three-fourths of the foreign funds on concessional or semi-concessional terms. Under such a borrowing program, and assuming increased borrowing after 1980, the debt service ratio would reach 10 percent in 1980 and about 18 percent in the late 1980's. With more pessimistic assumptions about future prices and exports of oil, and only a partial adjustment of imports, the debt service ratio could rise to 15 percent in 1980 and 25 percent in the late 1980's. Even with a foreign borrowing of $14 billion over the next six years, the net transfer from abroad would drop from 6.6 percent of the non-oil national income in 1973 to 2.5 percent in 1975, 2 percent in 1980 and 1.5 percent in 1985. The Inter-Governmental Group for Indonesia (IGGI) met recently to consider Indonesia's long-term development needs and prospects and related foreign assistance requirements. The indications were that at least in 1975/76 the prospects that these requirements would be met were reasonably favorable.

16. Along with the foreign inflows estimated in the paragraph above the domestic savings rate would have to be raised from an estimated 21 percent of the non-oil national income in 1975 to over 27 percent in 1980 to achieve the proposed investment and growth targets. While this will be difficult, the Government appears committed to it. One important source of additional savings would be the gradual reduction of subsidies, which will become easier to achieve if prices of imported commodities continue to fall. It would also be desirable to increase some taxes for reasons of equity.

17. The Government will also have to take steps to strengthen its capacity to implement its expanding and complex development program, which involves large numbers of people over vast geographical areas. To achieve the objectives, the administrative apparatus and procedures of the Government may have to be adapted in important ways. In this context, it appears that the tendencies toward decentralization of decision making and delegation of responsibility need to be strengthened. Much attention needs to be given to staff requirements of Government agencies, and a massive training

effort mounted to ensure the availability of adequate staff to carry out the various programs. To the extent that these training and staffing efforts would take time, temporary use of additional expatriate expertise may have to be considered if the development objectives are to be attained.

PART II - BANK GROUP OPERATIONS IN INDONESIA

18. As indicated in Part I, Indonesia will continue to need substantial external financial and technical assistance to expand and improve infrastructure and to expand production capabilities and employment opportunities in agriculture, mining, forestry, manufacturing, construction and services. With the continued growth of the economy, the Government will also need to devote increasing attention to ensuring that the benefits of development are distributed widely. Programs to increase the productivity of smallholder farmers and to resettle farmers from Java on presently unutilized areas in the outer islands, the expansion of labor-intensive industry in Java, the development of new industrial activities in Java and the outer islands, family planning, water supply, education, health and other social programs will therefore have an important place in the development strategy during the period of the Second Plan. The work of both the Bank's headquarters and Resident Staff has been oriented toward these objectives.

19. As of April 30, 1975, Indonesia had received 37 IDA credits amounting to $561.8 million and six Bank loans amounting to $317.5 million. IFC investments total $58.4 million. Future lending to Indonesia is expected to be in the form of Bank loans and IFC investments. The Bank Group accounted for about 4.5 percent of Indonesia's total outstanding public debt at the end of 1974. By 1978 it is expected to account for less than 11 percent of total outstanding debt and less than 5 percent of Indonesia's annual debt service obligations. Annex II contains a summary statement of Bank loans, IDA credits and IFC investments as of April 30, 1975, and notes on the execution of ongoing projects.

20. In accordance with the priorities of Indonesia's Five-Year Plans, about one-third of Bank Group lending to date has been for agriculture. IDA has extended four credits to help rehabilitate Government agricultural estates, producing principally rubber, oil palm and tea, six to assist rehabilitation and expansion of irrigation systems servicing millions of smallholders on Java, two for fisheries and one each for improved seeds multiplication, beef cattle development, smallholder rubber development, sugar industry rehabilitation and smallholder tea development. Industry is of growing importance to the Indonesian economy and the Bank Group has assisted in six projects in this sector: two to expand PUSRI's fertilizer production capacity, two for BAPINDO and one for the Private Development Finance Company of Indonesia (PDFCI) to help these development finance companies expand their industrial lending and one for Indonesia's first industrial estate project. Other sectors to which loans and credits have

been extended are power, transportation, telecommunications, education, population, urban housing improvement and water supply. In addition, four credits have been made to assist the Government in preparing and formulating appropriate development programs and projects.

21. The first IDA credit to Indonesia was made in 1968, and almost half of all loans and credits have been made since June 1972. Bank lending to Indonesia began only in June 1974. The program has increased rapidly from a relatively small base, and consequently the undisbursed portion of loans and credits is substantial. Moreover, several credits have financed projects planned for execution over extended periods. Many, in addition, have been associated with institutional reforms involving, inter alia, the creation and reorganization of program and project authorities, drafting of new charters and the enactment of new legislation, all of which has taken time. Thus, a number of projects have experienced delays in the initial stages of implementation, and some are inherently slow disbursing. However, the performance of most project agencies has improved continuously as organizational improvements have begun to take effect and Indonesian staff have become more experienced in project execution. Despite the improved administrative capabilities, most development projects, including those financed by the Bank Group, have been adversely affected by cumbersome budgetary, procurement and customs clearance procedures. The Indonesian authorities recognize the need to streamline procedures and are considering steps necessary to accomplish this. As a first step, the Government has requested and we have arranged for assistance under the Fourth Technical Assistance Credit (Credit 451-IND) to establish an effective control system in the National Develoment Planning Board (BAPPENAS) to monitor the progress of development projects. Additional measures to improve project administration are now under consideration by the Government.

22. The future Bank lending program is intended to continue to support the Government's efforts to speed up economic growth and to ensure that the benefits of development are distributed widely. Specifically, it will give high priority to agriculture, concentrating on broad programs of support to increase production of rice and other crops on the inner islands and to expand resettlement and agricultural production on the less populated outer islands. Emphasis will also be given to socially-oriented projects in the fields of population and nutrition, education and urban development. The Bank program will also continue to provide support for the Government in developing the additional industrial capacity and infrastructure which are essential to economic growth. Projects for natural resource surveying and mapping, transmigration and rural development, education, marine transport and highways have been appraised and are expected to be ready for presentation in the first half of FY1976.

PART III - THE POWER SECTOR

Background

23. Historically, the power sector in Indonesia has been very weak, and the lack of an adequate power supply has constrained economic growth. Prior to Independence in 1949, the very limited electric power facilities were operated by privately-owned companies mainly for lighting purposes in major cities. In the mid-1950's, the Government nationalized these companies giving responsiblity for power to the Ministry of Public Works and Power. Due to new and inexperienced management, inadequate financial planning and control, and a shortage of foreign exchange for procurement of spare parts, the Government was unable to prevent serious deterioration of plant and equipment or to undertake any significant expansion of capacity. As a result, the Government could not satisfy the rapidly accelerating demand for residential and industrial power, and this led to substantial, high-cost, private investment in "captive" generating facilities.

24. During the period of the First Five-Year Development Plan the Government concentrated its efforts in the power sector principally on rehabilitating existing facilities together with modest establishment of new facilities. During this period, public generating capacity increased by about 40 percent, but the increase in demand for power far exceeded increases in capacity. The present publicly installed capacity of 7 watts per capita and the electricity consumption of 17 kwh per capita are among the lowest in the world. The Second Five-Year Plan therefore provides for a very substantial increase in generation capacity and in related transmission and distribution facilities.

PLN

25. In 1965, Perusahaan Listrik Negara (PLN) was created as the national electricity authority under the direct control of the Ministry of Public Works and Electric Power. PLN had little autonomy and was almost totally dependent on Government budgetary allocations, partly out of foreign aid, to meet its financial requirements. Responsibility for planning and implementing new construction continued to rest with the Ministry of Public Works. At the time of the first Bank Group involvement in the power sector in 1969, PLN suffered from extreme organizational and financial weakness. The division of responsiblity between the Government and PLN was not clearly defined, financial records were chaotic and the company was suffering serious financial losses. To help improve this situation, the Bank Group helped finance (under IDA Credits 155 and 334-IND) a comprehensive management consultant effort for which the French firm, SOFRELEC, was selected with Peat, Marvick and Mitchell as sub-contractors for accounting. After a two-year period, SOFRELEC was able to help PLN to reconstruct its records, assess physical facilities, verify and settle outstanding consumer accounts, recommend an appropriate tariff structure, prepare a functional organizational plan and initiate standard procedures for accounting,

inventory control and consumer administration. Many of these recommendations are now being implemented. However, further efforts are necessary to improve system planning, construction management and personnel administration. The proposed project provides for personnel training and management assistance in these and other important areas to help PLN implement SOFRELEC recommendations.

26. SOFRELEC also helped to prepare a new charter for PLN, which was put into effect in 1972. The new charter gives PLN sole authority except as it may delegate to generate, transmit and distribute power and to construct, own and operate power facilities in accordance with sound commercial practices. While the improved charter gives PLN greater authority, the Ministry of Public Works and Power maintains broad control over PLN's external borrowing, investment program and personnel policies. This situation reflects a conscious Government policy of retaining close supervision over important sectors of the economy and the public enterprises which operate therein. The management board consists of a President-Director and four directors responsible, respectively, for planning, construction, operations and administration (including finance). The President-Director reports to the Minister of Public Works and Power and the Directors report in their respective fields to the President-Director. PLN has a total staff of 21,160. However, there are an insufficient number of highly trained staff and substantial upgrading of skills is necessary. A large program of overseas fellowships and in-country training is included in the proposed project to improve the level of staff competence.

27. With the improvement in financial records, it was clear at the time of the appraisal of the Third Power Project (Credit 399-IND) in late 1972 that PLN's financial position was even weaker than had been previously realized. To solve this problem, PLN in agreement with the Bank prepared a financial recovery plan, which was incorporated as a central element of the Third Power Project. The plan covers all aspects of PLN's operations and is designed to improve PLN's management capabilities and financial situation so that it can by 1978/79 cover, through sales revenues, all operating costs, including adequate provision for depreciation and bad debts, as well as taxes. Thereafter, PLN would cover through sales revenues all operating costs and make a reasonable contribution toward new capital investments (Section 4.03(a) Project Agreement). Indications are that the interim target of 80 percent revenue/cost coverage has been attained in 1974/75. A progress report on the Recovery Plan was submitted to the Executive Directors of the Bank on July 16, 1974 (IDA/Sec M74-230). During 1975/76, PLN, under its recovery plan, will concentrate on improving the performance of the construction department by streamlining procurement, contract management and budgeting procedures. Attention will also be given to strengthening PLN's on-going training program and introducing a comprehensive insurance system. PLN will continue to implement its recovery plan under the proposed project (Schedule 2, Part B of the Loan Agreement and Section 2.04, Project Agreement).

Present Facilities and Expected Growth

28. During the First Five-Year Plan period, electricity sales in West Java increased at an average annual rate of more than 16 percent. This growth would have been even higher if PLN had been able to expand its capacity more rapidly. A recently-completed study by its consultant, Chas. T. Main, indicates that PLN would have to increase its supply capacity at an annual rate of 32 percent in West Java to satisfy the potential demand by 1982. At present, PLN has a supply capability of about 325 MW in West Java. As of November 1974, PLN had additional applications pending in West Java for 330 MVA for 1975 and 210 MVA for 1976. To meet this demand alone would require a tripling of generating capacity in two years. Due to PLN's inability to satisfy rapidly expanding demand for power, private captive plant now accounts for between 40-60 percent of total installed capacity (public plus captive). To cope with the rapidly growing power demand, PLN has begun installing gas turbines as a stop-gap measure until the first base-load unit at Muara Karang is commissioned in late 1977. In order to help create a sound basis for further power development on Java, Credit 399 provided funds for a system development study which will establish power sector investment priorities. Consultants (Preece Cardew, and Rider) have been selected, and the study was begun in November 1974.

29. The appraisal report estimates that PLN will be able to increase sales at an average annual rate of about 14 percent during the period of the Second Five-Year Plan and at 25-30 percent thereafter. To achieve this rate of growth, PLN will need to invest an estimated $2.8 billion between now and 1983 to provide about 3,000 MW of generation capacity and related transmission and distribution facilities. It will also need to continue to devote major efforts to improving its organizational efficiency. But even with organization improvements and relaxation of financial constraints, it is unlikely that PLN can fully satisfy the growing demand for power during the coming decade.

Bank Participation in the Power Sector

30. After a review in 1969 of deficiencies in the power sector in Indonesia, IDA provided two Credits in 1969 and 1972 (Nos. 165 and 334-IND), totaling $55 million, which focused on the rehabilitation and expansion of distribution facilities in the Jakarta area. Despite delays due to cumbersome construction management and procurement procedures and an increase in the foreign exchange costs of the program, substantial progress has been made in alleviating institutional bottlenecks and in completing these projects. A third IDA Credit (No. 399-IND) in 1973 provided $46 million to assist with the development of the first two 100 MW units of the Muara Karang power station near Jakarta. Due mainly to international inflation, but also as a result of some changes in project scope, the total estimated cost of the project has increased by $54 million or more than 100 percent including a $30 million increase in foreign exchange costs above the appraisal report estimate; the Government will finance all the additional cost. Agreement has been reached

with PLN on a revised list of items to be financed under Credit 399; under these arrangements, IDA would not contribute to financing minor equipment or the general construction contract(s) for Units 1 and 2. The proposed project as well as future Bank projects now under preparation would further assist PLN in increasing generation capacity at Muara Karang and other sites and in continuing the expansion of its transmission and distribution network in West Java.

PART IV - THE PROJECT

Background

31. The proposed project is one of a series identified by the Bank Group as high priority investments needed to increase power generation, transmission, and distribution within the Jakarta-West Java region of Indonesia. A Bank mission appraised the proposed project in December 1974. Negotiations were held in April 1975. The leader of the Government's negotiating team was Mr. Ely Soengkono, Secretary General, Ministry of Public Works and Power. Appraisal Report (No. 766-IND) on the proposed project is being circulated to the Executive Directors separately. A loan and project summary is contained in Annex III of this report.

Project Description

32. The proposed project would provide for the expansion of the Muara Karang thermal power station near Jakarta by the addition of a third non-reheat, oil-fired generating unit of 100 MW capacity. When commissioned in 1979, this unit will increase the total installed capacity available to the West Java and Jakarta area to about 900 MW. The project also includes the engineering design of a fourth unit at Muara Karang of 200 MW capacity and for a study of a new site for a thermal power station in West Java to be commissioned early in the 1980's. To strengthen PLN's staff capabilities the project includes the construction, equipment, and advisors for three technical training centers; an overseas fellowship program for supervisory personnel; and six management advisors to serve for a two-year period after the present SOFRELEC team concludes its work in mid-1976. As under Credit 399, the next stages of PLN's financial recovery plan are incorporated in the project.

Cost Estimates and Financing Plan

33. The estimated total financial cost of the project is $69.5 million, including interest during construction on the proposed Bank loan. The estimated foreign exchange component amounts to $50.4 million. The cost estimates for equipment and construction were prepared by Black & Veatch International (BVI) of the USA, the consulting firm retained

by PLN for engineering design of the first two units at Muara Karang. Cost estimates for major items of equipment are based on the bid prices for units 1 and 2 which included an option for unit 3. The cost estimates provide for a physical contingency of five percent for equipment and 10 percent for construction, which is reasonable because the project design is well advanced. Price contingencies averaging about eight percent have been estimated for major equipment items on the basis of escalation provisions included in the bid proposals. Appropriate price contingencies have been included for small items of equipment and civil works to take into account estimated levels of domestic and international inflation. The overall price contingencies amount to about 21 percent of project costs including allowances for physical contingencies.

34. The proposed Bank loan of $41.0 million would provide 59 percent of the total financing required for the project. The proposed loan would finance the foreign exchange requirements of the project, except interest during construction and the training center equipment, which would be financed by PLN.

35. The Bank loan would be made to the Government for a term of 25 years, including five years of grace. Unlike under previous power projects in Indonesia, where the proceeds of IDA credits were made available by the Government to PLN in the form of equity, the proceeds of the proposed Bank loan would be relent to PLN under a subsidiary loan agreement acceptable to the Bank; conclusion of this agreement is a condition of effectiveness of the proposed Bank loan. The subsidiary loan would be on the same repayment terms and interest rate as the Bank loan. However, interest would be capitalized during the grace period; the Government would bear the foreign exchange risk. The Government's contribution to project costs not financed by the proposed Bank loan is expected to be made available to PLN in the form of equity. The decision to pass on the proceeds of the Bank loan as a loan rather than equity was based on PLN's improved financial position and resulting capacity to service debt in the future.

Procurement and Disbursement

36. Bids for the supply of major equipment for the first two generation units at Muara Karang included option offers for the third unit, which remain valid until November 1975. PLN intends to accept these options, since the prices are reasonable and this would allow the third unit to be completed at least six months sooner than would otherwise be possible. Additional advantages can be expected through equipment standardization and simplified engineering and construction work. This is acceptable to the Bank. Other items of equipment would be procured on the basis of new tenders, in accordance with Bank Guidelines on international competitive bidding; for purposes of bid comparison, qualified local manufacturers would receive a margin of preference of 15 percent or the level of customs duties, whichever is less. In the interest

of economic and expeditious project implementation, the general construction contract(s) would be tendered for all three units together, and in accordance with Bank Guidelines. A margin of preference for local contractors has not been provided because the general construction is basically a supply and erection contract with substantial foreign cost involved and beyond the capability of local contractors. However, local contractors would, in all probability, be associated with the work as sub-contractors.

37. The Bank loan would be disbursed for 100 percent of the foreign exchange costs of supply contracts for imported equipment and materials and 95 percent of the ex-factory price of such items contracted locally; 100 percent of the foreign exchange cost of consultant services and training fellowships; and 30 percent of the cost of the general construction contracts up to $12.4 million. By disbursing 30 percent for the general construction contract, an amount equivalent to the foreign exchange component for unit 3, the Bank will be closely associated with the construction of all three units.

PLN's Future Financial Position

38. As indicated in paragraph 27, PLN has made satisfactory progress in meeting the interim targets set out in its financial recovery plan, and present indications are that it will reach its target of covering operating costs through sales revenues by 1978/79. In 1973, PLN increased its tariff level by 40 percent. Current charges have been further increased to reflect the higher fuel costs established in April of this year. The need for future tariff increases will depend on the rate at which PLN is able to improve its operational efficiency. This matter will be kept under close and continuing review to ensure that PLN increases its tariffs as necessary to meet the targets set out in its recovery plan and at the same time increases its efficiency.

39. In order to guard against PLN incurring an excessive debt burden, a covenant requiring Bank concurrence for borrowing whenever the maximum future annual debt service would not be covered by the most recent actual annual net revenues was agreed during negotiations (Section 4.05 of the Project Agreement).

40. In the past, unpaid bills posed a serious problem for PLN. Government agencies were particularly slow in paying their electricity bills. The IDA Credit Agreement for Credit 334-IND contained a covenant requiring Government agencies to pay their debts promptly and they have. A similar covenant requiring payment when due is incorporated in the Loan Agreement for the proposed project (Section 3.03). Accounts receivable for non-government customers have been reduced to an acceptable level of about three months billing; a covenant to maintain this position has been included in the proposed Project Agreement (Section 4.06).

Project Benefits

41. At present, industrial expansion is seriously constrained by the lack of an adequate power supply and improvements in the public power sector are essential if the Indonesian economy is to grow as anticipated by more than 7 percent annually in the next five years. The most efficient immediate means of increasing the installed capacity in West Java is the expansion of the Muara Karang thermal power station in Jakarta. To make maximum use of the site it is necessary to proceed quickly with the installation of a third 100 MW unit and the engineering design of two larger 200 MW units to complete the station. This procedure will ensure the largest increase in generating capacity in the shortest possible time and at the least cost. The rate of return based on costs and revenues estimated to be in effect at the time of project commissioning is expected to be 19 percent for unit 3 and 17 percent for all three units combined. The higher return for unit 3 alone is the result of certain investments in facilities common to the entire Muara Karang Plant having been included in the cost of the first two units. The project conforms with environmental control standards recommended by the U.S. Environmental Protection Agency, and no major ecological problems are expected.

42. The proposed project would continue the close association of the Bank with the efforts being taken to strengthen PLN. Both the Government and PLN, itself, recognize the problems of continuing institutional weakness and are, with the assistance of consultants, taking steps to increase PLN's management efficiency, financial viability, and staff productivity.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

43. The draft Loan Agreement between the Bank and the Republic of Indonesia, the draft Project Agreement between the Bank and Perusahaan Unum Listrik Negara, Supplemental Letters to the Agreements, 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 draft resolution approving the proposed loan are being distributed to the Executive Directors separately.

49. Features of the Agreements of special interest are referred to in paragraphs 27, 39 and 40 of this report.

50. I am satisfied that the proposed loan would comply with the Articles of Agremeent of the Bank.

PART VI - RECOMMENDATION

51. I recommend that the Executive Directors approve the proposed Loan.

Robert S. McNamara
President

Washington, D.C.
May 28, 1975

COUNTRY DATA - INDONESIA

AREA	POPULATION	DENSITY
1,904,639 km2	121.63 million (mid-1972)	.. Per km2 of arable land

SOCIAL INDICATORS

	Indonesia 1960	Indonesia 1970	Reference Countries Bangladesh 1970	India 1970	Philippines* 1970
GNP PER CAPITA US$ (ATLAS BASIS) /1	..	90 /a	70 /a	110 /a	220 /a
DEMOGRAPHIC					
Crude birth rate (per thousand)	..	48 /b,c	44 /c	38 /c,d	45 /b,c
Crude death rate (per thousand)	21	19 /b,c	21 /c	16 /c,d	12 /b,c
Infant mortality rate (per thousand live births)	125 /d	..	140 /c	120-140 /c,d	80
Life expectancy at birth (years)	48	48	48 /f	50	58
Gross reproduction rate /2	2.8 /g	3.2 /b	3.1	2.9	3.3
Population growth rate /3	2.0	2.0 /h	2.6 /h	2.3 /h	3.0 /h
Population growth rate - urban	..	5 /i	..	4 /j	4 /k
Age structure (percent)					
0-14	42 /l	45 /c	45 /c,m	42	43
15-64	55 /l	53 /c	52 /c,m	55	53
65 and over	3 /l	2 /c	3 /c,m	3	4
Age dependency ratio /4	0.8 /l	0.9 /d	0.9	0.8	0.9
Economic dependency ratio /4	1.4 /l	1.5 /d	1.6 /an	1.2	1.5
Urban population as percent of total	15 /l,l	17 /i	..	20 /j	32 /k
Family planning: No. of acceptors cumulative (thous.)	..	175	..	..	409
No. of users (% of married women)	..	..	..	..	8
EMPLOYMENT					
Total labor force (thousands)	34,600 /l	40,100 /d	22,300	221,000 /d,n	13,200 /d
Percentage employed in agriculture	68 /l	62 /d	71	71 /c,d	56 /d
Percentage unemployed	5 /l	2	..	..	7 /d
INCOME DISTRIBUTION					
Percent of national income received by highest 5%	..	..	17 /o,p	25 /p,q	25 /c,p
Percent of national income received by highest 20%	..	..	42 /o,p	53 /p,q	54 /c,p
Percent of national income received by lowest 20%	..	..	9 /o,p	5 /p,q	4 /c,p
Percent of national income received by lowest 40%	..	..	20 /o,p	13 /p,q	12 /c,p
DISTRIBUTION OF LAND OWNERSHIP					
% owned by top 10% of owners	..	..	34 /q,an	..	..
% owned by smallest 10% of owners	..	..	1 /q,an	..	..
HEALTH AND NUTRITION					
Population per physician	35,000 /r	27,650	7,600 /s,t	4,800	9,100 /u
Population per nursing person	..	8,010	72,030 /s,t	5,110	5,390 /u
Population per hospital bed	1,410 /r	1,720	8,120 /u,v	1,620 /t,w	850 /t,w
Per capita calorie supply as % of requirements /5	82 /c,x	82 /c	80 /y	90	82
Per capita protein supply, total (grams per day) /6	43 /c,x	43 /c	..	53	45
Of which, animal and pulse	15 /c,x	14 /c	..	16 /z	22 /t
Death rate 1-4 years /7	..	..	..	..	7 /i
EDUCATION					
Adjusted /8 primary school enrollment ratio	60 /aa	71	50 /z,ab	79 /ac	112 /ac,ad
Adjusted /8 secondary school enrollment ratio	6 /aa	12	15 /z,ae	26 /ac	45 /v
Years of schooling provided, first and second level	12	12	10 /af	12	10
Vocational enrollment as % of sec. school enrollment	20 /aa	28	..	6 /ag	10 /ad,ah
Adult literacy rate %	39 /aj	56 /d,ai	..	36 /c,d,ak	72 /ai
HOUSING					
Average No. of persons per room (urban)	1.7 /l	..	..	2.8 /o	..
Percent of occupied units without piped water	..	..	..	..	66 /ad,aap
Access to electricity (as % of total population)	..	..	..	..	23 /ai,ap
Percent of rural population connected to electricity	..	..	..	..	6 /ad,ap
CONSUMPTION					
Radio receivers per 1000 population	7	114	6	23 /a	46 /a
Passenger cars per 1000 population	1	2 /a	1 /a	1 /a	8 /a
Electric power consumption (kwh p.c.)	19	23 /a	12 /a	108 /a	255 /a
Newsprint consumption p.c. kg per year	0.2	0.2 /a	0.2 /a	0.4 /a	1.7 /a,al

Notes: Figures refer either to the latest periods or to the latest years. Latest periods refer in principle to the years 1956-60 or 1966-70; the latest years in principle to 1960 and 1970.

/1 The Per Capita GNP estimate is at market prices for years other than 1960, calculated by the same conversion technique as the 1972 World Bank Atlas.

/2 Average number of daughters per woman of reproductive age.

/3 Population growth rates are for the decades ending in 1960 and 1970.

/4 Ratio of population under 15 and 65 and over to population of ages 15-64 for age dependency ratio and to labor force of ages 15-64 for economic dependency ratio.

/5 FAO reference standards represent physiological requirements for normal activity and health, taking account of environmental temperature, body weights, and distribution by age and sex of national populations.

/6 Protein standards (requirements) for all countries as established by USDA Economic Research Service provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein. These standards are somewhat lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.

/7 Some studies have suggested that crude death rates of children ages 1 through 4 may be used as a first approximation index of malnutrition.

/8 Percentage enrolled of corresponding population of school age as defined for each country.

/a 1972; /b 1965-70; /c Estimate; /d 1971; /e 1962; /f Projections, 1973; /g 1951-56; /h 1960-72; /i Municipalities, regency capitals and other places with urban characteristics; /j For the definition of urban, see UN Demographic Yearbook 1972, page 154; /k For the definition of urban, see UN Demographic Yearbook 1972, page 155; /l 1961; /m 1972-73; /n AID estimate of labor force in age group 15-59; IBRD report gives a figure of 180.4 million based on the 1971 population census. The difference is due to changes in the definition of a worker. In the 1971 census persons were classified only on the basis of their main activities; this led to the exclusion of several categories, such as housewives; /o 1966-67; /p Households; /q 1967-68; /r 1964; /s Number on the register, not all working in the country; /t 1969; /u Government only; /v 1968; /w Including rural hospitals; /x 1961-63; /y 1969-71; /z 1969-70; /aa Not including West Irian; /ab Approximate enrollment as percentage of population in six to ten age group; /ac Estimate which includes overage students; /ad 1967; /ae Approximate enrollment as percentage of population in 11-15 age group; /af Up to end of second level; /ag 1965; /ah Public education; /ai 15 years and over; /aj Definition not available; /ak Population of ten years and over based on one percent sample data of 1971; /al Imports only; /am Ratio of population under 15 and 65 and over to total labor force; /an Graphical interpolation; /ao Inside or outside; /ap Percent of dwellings.

* The Philippines has been selected as an objective country for its geographical similarity and because of its apparent more advanced stage of economic development.

ECONOMIC INDICATORS

GROSS NATIONAL PRODUCT IN 1973 / ANNUAL RATE OF GROWTH (%, constant prices)

	US$ Mln.	%	1960 -65	1965 -70	1973
GNP at Market Prices	15369	100.0	1.9	4.9	8.0
Gross Domestic Investment	2911	18.9	3.3	11.5	17.0
Gross National Saving	2083	13.6	5.8	5.1	20.8
Current Account Balance	828	5.4	-	.	.
Exports of Goods, NFS	2957	19.2	1.5	7.8	24.8
Imports of Goods, NFS	3170	20.6	0.2	10.9	21.4

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1971 1/

	Value Added		Labor Force 2/		V. A. Per Worker	
	US$ Mln.	%	Mln.	%	US $	%
Agriculture	4243	43.6	30.5	69.0	139	63
Industry	1877	19.3	3.0	6.8	626	285
Services	3609	37.1	8.3	18.8	435	198
Unallocated	-	-	2.4	5.4	.	.
Total/Average	9729	100.0	44.2	100.0	220	100.0

GOVERNMENT FINANCE

	General Government (Mln.)		General Government % of GDP		Central Government (Rp Bln.)	Central Government % of GDP	
	197		197	196 -7	1973/74	1973	1972
Current Receipts					977	14.8	12.9
Current Expenditure					704	10.7	9.8
Current Surplus					273	4.1	3.1
Capital Expenditures					474	7.2	6.4
External Assistance (net)					208	3.1	3.3

MONEY, CREDIT and PRICES

	1969	1970	1971	1972	1973	1974
		(Billion Rp outstanding end period)				
Money and Quasi Money	230	315	432	690	987	1455
Bank credit to Public Sector	60	57	129	57	37	2
Bank Credit to Private Sector	172	306	451	599	897	1125
		(Percentages or Index Numbers)				
Money and Quasi Money as % of GDP	8.5	9.4	11.4	15.2	14.9	. .
General Price Index (Sept. 1966=100)	545	612	638	680	891	1253
Annual percentage changes in:						
General Price Index	17.7	12.3	4.2	6.6	31.0	40.6
Bank credit to Public Sector	33.3	- 5.0	126.3	- 55.8	- 35.1	- 94.6
Bank credit to Private Sector	91.1	77.9	47.4	32.8	49.8	25.4

NOTE: All conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

1/ Conversion at an exchange rate of Rp. 390 = US $1.

2/ Total labor force; unemployed are allocated to sector of their normal occupation. "Unallocated" consists mainly of unemployed workers seeking their first job.

.. not available
. not applicable

TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS

	1972	1973	1974 Pre-Est.
	(Millions US $)		
Exports of Goods, NFS	1757	2957	6842
Imports of Goods, NFS	1875	3170	5832
Resource Gap (deficit = -)	-118	-213	1010
Interest Payments (net)	- 46	- 72)	
Workers' Remittances	-	-)	-1236
Other Factor Payments (net)	-318	-543)	
Net Transfers	-364	-615	-1236
Balance on Current Account	-482	-828	- 226
Direct Foreign Investment	258	290	454
Net MLT Borrowing			
Disbursements	447	624	..
Amortization	- 70	-138	..
Subtotal	337	486	635
Capital Grants	..	..	..
Other Capital (net)	181	208)	-176
Other items n.e.i	98	169)	
Increase in Reserves (+)	432	325	687
Gross Reserves (end year)	574	806	1470
Net Reserves (end year)	458	783	1470
Fuel and Related Materials			
Imports	4	5	..
of which: Petroleum	2	2	..
Exports	877	1348	4688
of which: Petroleum	877	1348	4688

RATE OF EXCHANGE

Through July 1971	Since August 1971
US $ 1.00 = Rp 375	US $ 1.00 = Rp 415
Rp 1.00 = US $ 0.0027	Rp 1.00 = US $ 0.0024

MERCHANDISE EXPORTS (AVERAGE 1972-74)

	US $ Mln	%
Oil	2304	59.7
Rubber	362	9.4
Timber	520	13.5
Tin	98	2.5
Coffee	84	2.2
All other commodities	493	12.7
Total	3861	100.0

EXTERNAL DEBT, DECEMBER 31, 1974

	US $ Mln
Public Debt, incl. guaranteed	5409 *
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

DEBT SERVICE RATIO for 1973 1/

	%
Public Debt, incl. guaranteed	7.8
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

IBRD/IDA LENDING, (April 30, 1975) (Million US$)

	IBRD	IDA
Outstanding & Disbursed	3.1	229.7
Undisbursed	314.4	332.1
Outstanding incl. Undisbursed	317.5	561.8

1/ Ratio of debt service to exports of goods and non-factor services, with oil exports net of factor payments and imports of the oil sector.

* Preliminary estimate

. . not available

. not applicable

May 28, 1975.

THE STATUS OF BANK GROUP OPERATIONS IN INDONESIA

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of April 30, 1975)

Loan/ Credit Number	Fiscal Year	Purpose	US$ Million Amount (less cancellations) Bank	IDA	Undisbursed
127	1969	Irrigation Rehabilitation		5.0	0.1
154	1969	Highway		28.0	0.8
155	1969	Agricultural Estates		16.0	0.5
165	1970	Electricity Distribution		15.0	0.2
193	1970	PUSRI Fertilizer		35.0	1.6
194	1970	Second Agricultural Estates		17.0	4.9
195	1970	Second Irrigation Rehabilitation		18.5	5.3
210	1971	Telecommunications Expansion		12.8	2.8
211	1971	Fisheries		3.5	1.9
219	1971	Education		4.6	2.3
220	1971	Third Irrigation Rehabilitation		14.5	3.6
246	1971	Seeds		7.5	4.2
259	1971	Tea		15.0	5.9
260	1971	Second Highway		34.0	13.5
275	1972	Third Technical Assistance		4.0	1.6
288	1972	Second Education		6.3	5.8
289	1972	Fourth Irrigation Rehabilitation		12.5	4.7
300	1972	Population		13.2	9.6
310	1972	Development Finance Co. (BAPINDO I)		10.0	3.1
318	1972	Inter-Island Fleet Rehabilitation		8.5	5.7
319	1972	Fourth Agricultural Estates		11.0	7.7
334	1972	Second Electricity Distribution		40.0	30.5
355	1973	Beef Cattle Development		3.6	3.1
358	1973	North Sumatra Smallholder Development		5.0	4.1
387	1973	Third Education		13.5	13.5
388	1973	Third Highway		14.0	10.6
399	1973	West Java Thermal Power		46.0	45.3
400	1973	Smallholder and Private Estate Tea		7.8	7.5
405	1973	Sugar Industry Rehabilitation		50.0	48.7
428	1974	Pulo Gadung Industrial Estate		16.5	16.2
436	1974	Private Development Finance Co. (PDFCI)		10.0	10.0
451	1974	Fourth Technical Assistance		5.0	4.7
479	1974	Bali Tourism		16.0	15.8
480	1974	Fisheries Credit		6.5	6.5
514	1974	Jatiluhur Irrigation Extension		30.0	29.8
1005	1974	Railway	48.0		48.0
1040	1975	Jakarta Urban Development	25.0		22.1
1049 a/	1975	Five Cities Water Supply	14.5		14.5
1054	1975	Development Finance CO. (BAPINDO II)	50.0		49.8
1089	1975	Second Fertilizer Expansion PUSRI III)	115.0		115.0
1100 a/	1975	Sixth Irrigation	65.0		65.0
			317.5	561.8	646.5

a/ Not yet effective

A. STATEMENT OF BANK LOANS AND IDA CREDITS (as of April 30, 1975)

			US$ Million Amount (less cancellations) Bank	IDA	Undisbursed
Total			317.5	561.8	646.5
Total now outstanding			317.5	561.8	646.5
Amount sold	0.05				
of which has been repaid	0.0	0.05			
Total now held by Bank and IDA (Prior to exchange adjustment)			317.45	561.8	
Total undisbursed			314.4	332.1	646.5

STATEMENT OF IFC INVESTMENTS (as of April 30, 1975)

Fiscal Year	Obligor	Type of Business	US$ Million Loan	Equity	Total
1971	P.T. Semen Cibinong	Cement	10.6	2.5	13.1
1971	P.T. Unitex	Textiles	2.5	0.8	3.3
1971	P.T. Primatexco Indonesia.	Textiles	2.0	0.5	2.5
1971	P.T. Kabel Indonesia	Cables	2.8	0.4	3.2
1972	P.T. Daralon Textile Manuf.Corp.	Textiles	4.5	1.5	6.0
1973	P.T. Jakarta Int. Hotel	Tourism	11.0	-	11.0
1973	P.T. Semen Cibinong	Cement	5.4	0.7	6.1
1974	P.T. Primatexco Indonesia.	Textiles	2.0	0.3	2.3
1974	P.T. Monsanto Pan Electronics	Electronic pdts.	0.9	-	0.9
1974	P.T. PDFCI	Devlp. Fin. Co.	-	0.5	0.5
1974	Kamaltex	Textiles	2.4	0.6	3.0
1974	Semen Cibinong	Cement	5.0	1.5	6.5
		Total	49.1	9.3	58.4
		Less Sold or repaid and cancelled	19.6	1.4	20.9
		Total now held	29.5	7.9	37.5
		Undisbursed (including participant's portion)	6.4	1.6	8.0

PROJECTS IN EXECUTION 1/

Cr. No. 127 Irrigation Rehabilitation: US$5 Million Credit of September 6, 1968; Closing Date: December 31, 1975

All the equipment supplied under the credit is being well utilized and disbursements are 98 percent of appraisal timetable. Completion of the project is expected to be delayed in order to complete much needed additional drainage work, the financing of which was not provided for under the credit. These additional costs will be met by the Government. The revised economic rate of return on the project, which was calculated at 50 percent at appraisal, is now expected to be about 25 percent. The closing date has been postponed to December 31, 1975.

Cr. No. 154 Highway: US$28 Million Credit of June 20, 1969; Closing Date: December 31, 1975

Rehabilitation work was substantially completed prior to the original closing date. However, it was necessary to postpone the closing date by one year to December 31, 1975 to complete procurement of a small amount of equipment and materials.

Cr. No. 155 Agricultural Estates: US$16 Million Credit of June 20, 1969; Closing Date: December 31, 1975

With recent improvements in management and much higher international prices the financial situtation of the estate groups is improving. The field and factory standards have now been raised to a good technical level and the management has been advised to concentrate on cost control in order to prepare for the time when produce prices are less attractive than they are today. The combined efforts of the management, consultants and IDA supervision missions are yielding good results.

Cr. No. 165 Electricity Distribution: US$15 Million Credit of October 29, 1969; Closing Date: June 30, 1975

See comment for Credit No. 334. The closing date has been postponed by 18 months to June 30, 1975.

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered, and the action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Cr. No. 193 PUSRI Fertilizer: US$35 Million Credit of June 15, 1970 (as amended May 1973); Closing Date: December 31, 1975

The urea plant has successfully passed its performance test and is operating at close to rated capacity. The gas gathering and transmission system is also completed and sufficient gas is being delivered to the plant. Disbursements are expected to be completed by the closing date of December 31, 1975.

Cr. No. 194 Second Agricultural Estates: US$17 Million Credit of June 15, 1970; Closing Date: June 30, 1975

After initial delays, there have been considerable improvements in management and these, combined with high prices for palm oil and rubber, have resulted in a much stronger financial position, particularly for the oil palm group (PNP VI). On the rubber group (PNP IV) more effort is necessary to improve fertilizer application and tapping methods. With the rapid expansion of investment on both estate groups, there is a need to employ expertise in financial planning and management, which are now the main constraints on efficient development.

Cr. No. 195 Second Irrigation Rehabilitation: US$18.5 Million Credit of June 15, 1970; Closing Date: November 30, 1976

Problems of quality and progress of construction still exist, but the consultants are tackling these vigorously, and the situation is improving, although not sufficiently to make up for earlier delays. Costs are likely to double the overall appraisal estimate, due to inflation, but the Government will provide any additional funds required. Completion of disbursements will be about two years behind the original schedule. The economic rate of return is however still more than 20%.

Cr. No. 210 Telecommunications Expansion: US$12.8 Million Credit of July 13, 1970; CLosing Date: December 31, 1975

Contracts for all equipment have been awarded. The closing date has been postponed by 18 months due to delays in delivery of goods. The Government has increased the tariffs to achieve the required rate of return and a new charter for PERUMTEL has also been published.

Cr. No. 211 Fisheries: US$3.5 Million Credit of July 13, 1970; Closing Date: June 30, 1976

The project supplies funds for the construction of 30 fully equipped skipjack boats and technical assistance. It is about 24 months behind the original schedule due to delays in engaging the consultants and in executing the contracts for the shore facilities. No further delay is anticipated. There have been very substantial project cost

increases (from $4.3 million to $8.5 million). Because of the greatly increased skipjack prices, however, the project is still expected to be financially viable.

Cr. No. 219 Education: US$4.6 Million Credit of November 6, 1970
Closing Date: December 31, 1976

Project implementation is satisfactory. Civil works for the five Technical Training Centers (TTCs) have been completed. All furniture deliveries and installation have also been completed. About 90% of the equipment has been purchased and about 60% delivered and installed. Three TTCs commenced operation in April 1975 and the remaining two, will commence in June 1975. All will operate at full capacity by January 1976 when the new academic year begins. Over 500 technical teachers have completed or are about to complete their training. Technical assistance financed by the U.K. for the project is also satisfactory. Disbursement has improved considerably. Revised total project cost is now about 40% above appraisal estimate. The Government will finance the cost overrun. The project is expected to be completed ahead of schedule.

Cr. No. 220 Third Irrigation Rehabilitation: US$14.5 Million Credit of November 6, 1970; Closing Date: December 31, 1975

Construction remains about two to three years behind schedule partly because of problems with preparation of contract documents and subsequently due to inflation. These have now been mostly overcome. While no further delays are expected, it is unlikely that the time lost could be regained. There has been a considerable increase in overall project costs, which is being met by the Government. The economic rate of return for the project is still over 21 percent.

Cr. No. 246 Seeds: US$7.5 Million Credit of May 14, 1971;
Closing Date: September 30, 1977

Project implementation is behind schedule due to initial delays in organization, management, procurement and provision of budgetary funds. The latest supervision mission has reported that development of the seed farm is hampered by the slow execution of a contract to develop irrigation infrastructure and the seed processing plant. The contract for irrigation infrastructure has been renegotiated. The establishment of rice-seed research facilities at the project site is behind schedule due to difficulties in recruiting the necessary technical assistance and delays in providing the required facilities and the equipment. The contract for research technical assistance has now been signed and with the reorganization of the Government's research program, this component of the project is expected to proceed rapidly. The seeds certification service is performing well and development of the Klaten Seed District is progressing satisfactorily. This project is being kept under frequent supervision.

Cr. No. 259 Tea: US$15 Million Credit of June 14, 1971; Closing Date: June 30, 1978

Agricultural achievements to date have far exceeded appraisal expectations necessitating construction and rehabilitation of 3 additional factories. Project completion estimated for December 1977 can probably be advanced by up to one year. Rising costs are creating pressure on fund availabilities and the main challenge for the two PTP's will be to decrease working capital requirements, reduce overhead and indirect costs and improve labor productivity.

Cr. No. 260 Second Highway: US$35 Million Credit of June 24, 1971; Closing Date: September 30, 1975

All construction work is now satisfactorily under way. However, the delay caused initially by slow progress in mobilizing contractors, difficulties in equipment delivery, heavy rains and land slides will result in the project being completed about one year behind schedule. Design standards for the road sections have been slightly lowered and some savings will therefore be achieved. These and other savings are expected to offset construction cost increases.

Cr. No. 275 Third Technical Assistance: US$4.0 Million Credit of December 29, 1971; Closing Date: December 31, 1975

Progress on this project is satisfactory. The closing date has been postponed to complete disbursements for ongoing studies.

Cr. No. 288 Second Education: US$6.3 Million Credit of March 9, 1972; Closing Date: December 31, 1976

Working drawings and furniture and equipment lists for all project institutions have been completed. Physical facilities will be completed and all project institutions will begin operations by the end of 1976. The government has agreed to provide additional funds to meet the cost overruns due to inflation. Postponement of the closing date by about one year is likely to be necessary.

Cr. No. 289 Fourth Irrigation Rehabilitation: US$12.5 Million Credit of March 9, 1972; Closing Date: June 30, 1977

Civil works and equipment purchase for the main project, Pekalen-Sampean, are proceeding but completion of civil works will be about two years behind schedule. Due to inflation, project costs are likely to be substantially higher than appraisal estimates. Consultants for the various studies are at work with their counterparts. Groundwater investigations have been delayed due to procurement difficulties. The rehabilitation and storage feasibility studies are on schedule. Disbursements are also on schedule.

Cr. No. 300 Population: US$13.2 Million Credit of April 20, 1972; Closing Date: June 30, 1978

Although progress is being made under this project, implementation continues to be hampered by management weaknesses. Lack of clear administrative direction has resulted in overall delays in securing budgetary funds and problems of program coordination. Procurement contracts for vehicles and other equipment have been awarded and UNICEF is assisting in the procurement of materials and supplies necessary for various population control programs. The civil works component is behind schedule, but is now proceeding more rapidly as the capacity of the implementing agency gradually improves. The field worker program has expanded more rapidly than expected when the project was appraised. This project is being supervised closely.

Cr. No. 310 Development Finance Co. (BAPINDO I): US$10 Million Credit of June 7, 1972; Closing Date: December 31, 1976

This credit is fully committed. Disbursements are expected to rise rapidly.

Cr. No. 318 Inter-Island Fleet Rehabilitation: US$8.5 Million Credit of June 28, 1972; Closing Date: September 30, 1976

Progress on this project is satisfactory and disbursements are expected to rise.

Cr. No. 319 Fourth Agricultural Estates: US$11 Million Credit of June 28, 1972; Closing Date: June 30, 1981

The physical progress of the project is ahead of the appraisal schedule and the financial position of the estate group is satisfactory.

Cr. No. 334 Second Electricity Distribution: US$40 Million Credit of September 29, 1972; Closing Date: December 31, 1976

The Jakarta distribution program financed from Credits 165-IND and 334-IND (together $55 million) has encountered substantial foreign cost increases ($7.0 million) and implementation delays due to procurement problems and cumbersome management procedures. Many of these difficulties have been resolved, but it is unlikely that the project can be completed before mid-1978, two years behind the original schedule.

Cr. No. 355 Beef Cattle Development: US$3.6 Million Credit of January 31, 1973; Closing Date: March 31, 1980

Progress on this project for development of beef cattle production in the outer islands has suffered from serious delays caused largely by problems in securing Government funds and in clearance of documents by Indonesian Government departments and consequent lack of essential equipment. Land acquisition and procurement of cattle are proving more

difficult than expected, and there has been a substantial increase in total project costs. The means of improving project performance are currently being discussed with the Government.

Cr. No. 358 North Sumatra Smallholder Development: US$5 Million Credit of February 14, 1973; Closing Date: December 31, 1981

This project has suffered from severe financial and organizational difficulties due primarily to the lack of experience of project management, the remote location of the project and inadequate Central Government support. The Resident Staff has been following the project closely. The rubber replanting program is behind schedule, but with progress now being made it may be possible to accelerate the program in accordance with appraisal estimates. Government has taken a number of steps to overcome the problems and accelerate project implementation. Project progress will continue to be closely monitored.

Cr. No. 387 Third Education: US$13.5 Million Credit of June 1, 1973; Closing Date: December 31, 1981

Project implementation is proceeding on schedule, except for a 10-month delay in equipment procurement which has now been overcome. Manuscript testing of the first set of texts has been completed. About 34 million textbooks are scheduled to be printed in August, 1975. Distribution of textbooks to all primary schools is now being planned and will necessitate the use of a number of government agencies. Staff in the provinces have been trained in the use of the textbooks and training courses have commenced for teachers. Lack of travel funds in the provinces has impeded teacher training, but it is expected that this difficulty will be overcome as the project management, which is effective, becomes more familiar with government procedures. Project costs are now estimated at $56 million, 44% above the original estimate because of increased costs of paper and teacher training. The Government is expected to meet all cost increases.

Cr. No. 388 Third Highways: US$14 Million Credit of June 1, 1973; Closing Date: June 30, 1977

Construction bidding and consultant selection have been proceeding on schedule. Some cost increases, due to inflation, are expected.

Cr. No. 399 West Java Thermal Power: US$46 Million Credit of June 22, 1973; Closing Date: June 30, 1978

Bids received in November 1974 for the first two 100 mw units at Muara Karang were about 65 percent higher than estimated at the time of appraisal. This, together with construction cost increases, has resulted in an increase in the total project cost of more than 100 percent. The Government will finance the additional cost. PLN has satisfactorily met the first year targets in its financial recovery plan provided for under the terms of the credit agreement.

Cr. No. 400 Smallholder and Private Estate Tea: US$7.8 Million Credit of June 22, 1973; Closing Date: March 31, 1982

The project nurseries are well managed and where rehabilitation has taken place results are encouraging. Technical questions related to loan applications by farmers have been resolved and BRI is expected to proceed with extending credits to tea growers. The contract of the financial advisor to BRI has been extended for another year. Progress on this project is satisfactory.

Cr. No. 405 Sugar Industry Rehabilitation: US$50 Million Credit of June 26, 1973; Closing Date: June 30, 1979

Bids for equipment required for first phase major rehabilitation have been received; a substantial cost overrun is expected, which the Government has agreed to finance. Some organizational problems are now being resolved and disbursements are expected to rise.

Cr. No. 428 Pulo Gadung Industrial Estate: US$16.5 Million Credit of Septmber 14, 1973; Closing Date: December 31, 1978

Despite recent increase in construction costs, the project remains financially viable because revenues from the sale of plots has risen proportionately. Construction has fallen behind schedule due to land acquisition problems, but developed land is being occupied as fast as it is made available. While there is still a backlog of applications for industrial plots, the rate of new applications has fallen off during recent months and the estate is intensifying its promotional efforts.

Cr. No. 436 Private Development Finance Company of Indonesia (PDFCI): US$10 Million Credit of November 2, 1973; Closing Date: December 31, 1978

After a long start-up period and difficulties in finding and recruiting qualified local staff, PDFCI has now reached the operating stage. Its commitments are rising at a satisfactory rate.

Cr. No. 451 Fourth Technical Assistance: US$5 Million Credit of January 2, 1974; Closing Date: December 31, 1976

Progress under the project is satisfactory.

Cr. No. 479 Bali Tourism: US$16.0 Million Credit of June 4, 1974; Closing Date: August 31, 1979

Progress under this project is slightly behind schedule due to the lack of experience of the implementing agency and difficulties in coordination with other Government organizations. This situation has steadily improved as local staff have gained experience and project advisors have taken up their positions. Final design of the infrastructure and hotel training school is underway. Preliminary lease negotiations with potential hotel investors are expected to begin in mid-May.

Cr. No. 480 Fisheries Credit: US$6.5 Million Credit of June 4, 1974; Closing Date: June 30, 1979

This credit became effective on January 8, 1975 and is progressing satisfactorily.

Cr. No. 514 Jatiluhur Irrigation Extension: US$30.0 Million Credit of October 3, 1974; Closing Date: December 31, 1980

This credit became effective on January 10, 1975 and the work will commence soon.

Loan No. 1005 Railway: US$48.0 Million Loan of June 4, 1974; Closing Date: December 31, 1978

Procurement of material and equipment was delayed due to poor procurement organization and inadequate budget allocations for 1974/75; however, this situation has improved since PJKA retained the services of an international procurement agency. Due largely to a lack of spare parts an increasing number of locomotives have dropped out of service, causing a decline in freight traffic. To attain financial viability as agreed in the Loan Documents, PJKA needs to increase revenues by at least 10%. Therefore, in May 1975 freight tariffs were substantially increased. A draft of the detailed recovery program for FY1975, due to the Bank in September 1974, has not been received.

Loan No. 1040 Jakarta Urban Development: US$25.0 Million Loan of September 27, 1974; Closing Date: December 31, 1977

The first year of the two-year Kampung Improvement Program has been satisfactorily completed. The second year's activities are well underway with first year savings being applied to increase the water supply beyond originally planned levels. The newly formed National Urban Development Corporation is currently seeking consultants both to assist in the development of their operations and to prepare urban projects in other cities. Full responsibility for supervision of consultants designing the Klender Site and Service scheme has been transferred to NUDC so as to ensure preparation of a design with standards appropriate to the low-income target population.

Loan No. 1049 Five Cities Water Supply: US$14.5 Million Loan of October 31, 1974; Closing Date: June 30, 1980

This loan became effective May 21, 1975.

Loan No. 1054 Development Finance Co. (BAPINDO II): US$50 Million Loan of November 30, 1974; Closing Date: December 31, 1976

This loan became effective January 14, 1975 and is proceeding satisfactorily.

Loan No. 1089 Second Fertilizer Expansion: US$115 Million Loan of February 28, 1975; Closing Date: August 31, 1978

This loan became effective on April 29, 1975.

Loan No. 1100 Sixth Irrigation Project: US$65 Million Loan of April 1, 1975; Closing Date: June 30, 1982

This loan is expected to become effective by the end of June 1975.

FOURTH POWER PROJECT LOAN AND PROJECT SUMMARY

Borrower: Republic of Indonesia.

Beneficiary: Perusahaan Umum Listrik Negara (PLN).

Amount: US$41 million equivalent in various currencies.

Terms: 25 years including five years of grace at 8-1/2 percent.

Relending Terms: Same terms as above with interest being capitalized during the grace period.

Project Description: The proposed project consists of:

(a) Construction of the third 100 MW, non-reheat, oil fired thermal generating unit at the Muara Karang plant in Jakarta;

(b) Physical investigation of a proposed site in West Java for the next thermal power plant, as well as engineering services for the fourth unit of 200 MW at Muara Karang; and

(c) Advisory services, training, and fellowships.

Project Costs: The table below summarizes the costs of the project.

	Local	Foreign	Total	% of Total	% of Foreign Exchange
	(US$ Million)				
Muara Karang Unit No. 3					
Site Development	3.5	---	3.5	5	
General Construction	4.2	8.7	12.9	19	67
Equipment and Materials	.1	18.7	18.8	27	99
Engineering	.3	3.6	3.9	6	92
Capital Cost	8.1	31.0	39.1	56	79
Physical Contingencies	.8	2.0	2.8	4	71
Price Contingencies	3.5	5.4	8.9	13	61
Sub-Total	12.4	38.4	50.8	73	76
Site Investigation	.3	.7	1.0	1	70
Training and Advisory Services	6.4	3.3	9.7	14	34
Sub-Total	19.1	42.4	61.5	88	69
Interest during Construction	---	8.0	8.0	12	100
Total Project Cost	19.1	50.4	69.5	100	73

Financing Plan: The proposed loan of US$41 million would finance the foreign exchange cost of the project exclusive of interest during construction and equipment for the training centers, or about 59 percent of the total cost. The remaining 41 percent of the project cost would be provided by GOI.

Estimated Disbursements:

Bank FY	1976	1977	1978	1979	1980
	(US$ Million)				
Annual	1.5	8.9	20.4	8.2	2.0
Cumulative	1.5	10.4	30.8	39.0	41.0

Procurement: Major equipment items would be procured on the basis of options quoted by bidders for the first two units at Muara Karang. Tenders for these bids were issued under terms of IDA Credit No. 399-IND in accordance with Bank Group Guidelines. Smaller items would also be procured after international competitive bidding in accordance with the Guidelines. A 15 percent margin of preference or the level of actual customs duties, whichever is less, would be accorded to qualified local manufacturers. The general construction contract for the units 1-3 would be tendered on the basis of international competitive bidding.

Consultants: PLN has retained engineering consultants Black & Veatch International (BVI) for the project and for the design of the fourth generating unit at Muara Karang. Consultants have yet to be selected for the study of a proposed site for a new thermal power station in West Java.

Economic Rate of Return: The economic rate of return for Unit 3 at Muara Karang is 19 percent. For all three units it is 17 percent because some facilities common to all three units were included in the costs for the first two units.

Appraisal Report: Report No. 766-IND, dated May 20, 1975. East Asia and Pacific Projects Department

INDONESIA

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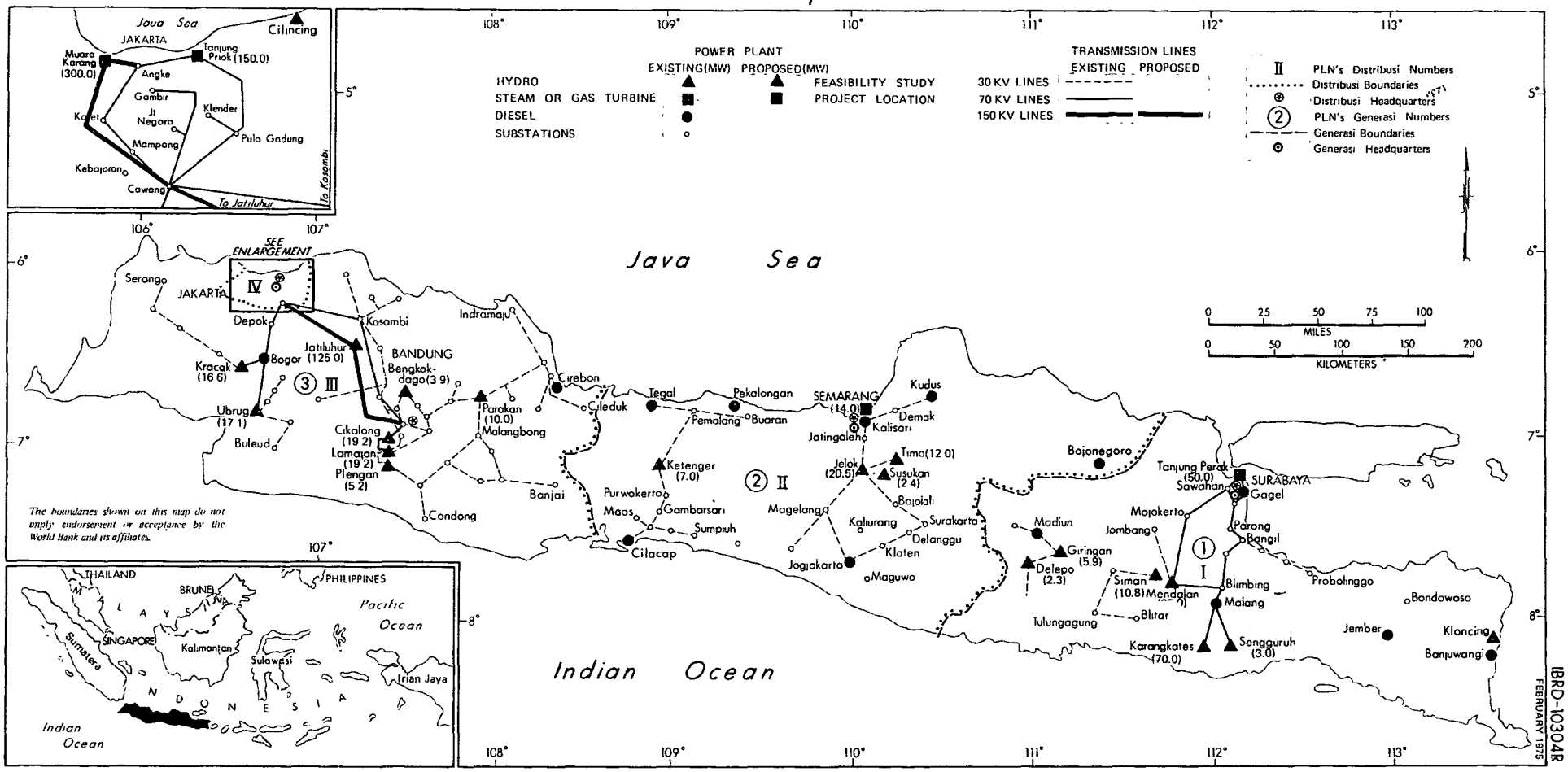

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