

# PLN: CRITICAL ISSUES FOR URGENT DECISION

## AND THE IMPACT ON THE INDONESIAN ECONOMY

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# 1 Summary

1. This White Paper makes recommendations to ensure that Indonesia has the sufficient and reliable electricity infrastructure it needs to support renewed economic growth. PLN has a plan to deliver this, but critical supporting actions now needed from Government of Indonesia and Ministry of Finance.
2. Indonesia needs investment in its electricity sector to underpin economy recovery and growth.
  - Adequate electricity, effectively delivered, underpins activity in all sectors of the economy
  - Indonesia has, in the short term, in aggregate, sufficient generation capacity to meet demand. However, even today numerous regional areas are experiencing frequent and regular power shortages. Now that the economy is beginning to grow again, significant electricity demand growth is expected (electricity demand growth is a multiple of GDP)
  - Based on forecast GDP growth of 4-6%, forecast electricity demand on the Java-Bali grid will be 9.1% on average, or 41% compounded over 2000-2003.
  - The forecast is therefore for power shortages in the medium term, unless investment is made soon. This shortage is impending, and foreseeable.
3. Failure to respond to this need will (a) threaten Indonesia's economic recovery and growth and (b) cause social hardship
4. To provide Indonesia with the electricity it needs, two things are required:
  - investment in transmission infrastructure in order to better utilize the existing generation capacity
  - more generation capacity coming on stream from 2002 onwards
5. Even though PLN will no longer be the monopoly electricity utility, its financial health is still vital:
  - Investment in transmission will in reality be implemented by PLN itself – there is no feasible alternative, or immediate plans for private sector participation in transmission
  - Investment in generation, at least on the Java/Bali grid, will in reality need to be privately financed – for the GOI/PLN to fund this would place too great a burden on Indonesia's limited capital resources. The amount is also too great to be financed by further soft loans from, for example, the World Bank.
6. The pre-conditions of achieving this investment plan and ensuring that economy reaps the benefits are:
  - improved operational efficiency at PLN (PLN is underway with this)

- establishment of robust financial basis for PLN going forward
  - increasing PLN's credibility in the eyes of the investor/lender communities
  - creating an environment for increased private investments in generation
7. PLN is itself implementing plans to achieve those of the pre-conditions which are within its control:
- operational efficiency program to improve generation and distribution efficiency
  - restructuring of its current monopoly into competitive business units to create improved commerciality
  - renegotiation of PPAs on equitable basis, as a basis for future growth
8. But there are other issues outside PLN's control - directly or indirectly – above all, the depreciation of Rupiah. This has led to a number of things which threaten PLN's ability to deliver the electricity supply needed to fuel economic recovery and growth:
- inadequacy of current tariff levels
    - tariffs prior to crisis were already insufficient to fund the required growth in the electricity sector
    - depreciation of the Rupiah has worsened this situation, as much of the required future capital costs of electricity sector are in foreign currencies, therefore the current tariff is even more insufficient.
  - unaffordability of the US\$-priced gas purchased from Pertamina
  - unaffordability of the US\$-priced power purchase agreements with IPPs
  - if PLN revalues its assets to the Rupiah equivalent of the true values of its assets would cause a windfall tax burden
  - Above all, growing millstone of unserviceable two-step loans
9. PLN is addressing the areas it can, but critical supporting actions are now needed from GOI and MOF:
- gradual tariff increase to USD7 cents per kWh by 2005
  - if this is not possible, revenue support with effect from January 2001
  - reduction in gas price to USD1.5 MMBTU
  - exemption from possible windfall tax liability resulting from any revaluation of PLN's assets and constructive consideration of the impact of PPN on PLN.
  - reorganization of the capital structure to reduce debt burden and to ensure that PLN has a healthy balance sheet
  - Details of all these points in given in this White Paper and Annexes
10. As regards the capital structure:

- PLN's current debt structure is inconsistent with the GOI's objective of PLN as a commercially driven SOE – the current debt creates unsupportable strains on its balance sheet and its income statement
  - PLN is currently servicing its debts to state-owned banks and to third parties (bonds)
  - However PLN's current debt to GOI is problematic at this time, and is not being serviced.
  - Importantly, there would be no cashflow disadvantage to GOI in reorganizing PLN's capital structure.
    - currently GOI/MOF receives no cash from PLN as debt service
    - restructuring would enable PLN to begin paying interest and possibly even principal to GOI
  - If action not taken now the problem will continue to increase.
  - PLN is expected to have negative net assets as at 31 December 2000)
11. The need for capital restructuring is independent of the way in which PLN and the wider electricity sector is restructured. Action is needed now.
12. If the proposal in this White Paper is implemented, Indonesia will benefit from a virtuous circle:
- a financially healthy PLN will be able to invest to meet growing electricity needs,
  - the private sector will be further encouraged to invest private capital in the electricity sector,
  - economic growth will be facilitated, therefore further funds will be available for investment in the electricity sector.
13. If it is not implemented, Indonesia will enter a vicious circle:
- PLN's financial burden will rise seriously,
  - a bankrupt PLN will not be able to invest, and will default on its non-Government debt,
  - the private sector will be reluctant to invest in the power sector
  - hence capacity will not increase to match rising electricity demand, and the Indonesian economy will suffer
  - The GOI's proposed power sector reforms will not be able to be implemented successfully.

## 2 Background and Objectives

It has long been recognized that one of the key building blocks of a healthy economy is sufficient and reliable electricity infrastructure. Numerous Government of Indonesia economic development plans and ADB/World Bank reports (regarding Indonesia and many other developing nations) have recognized this.

This White Paper makes recommendations to ensure that Indonesia has the sufficient and reliable electricity infrastructure it needs to support renewed economic growth. PLN has a plan to deliver this, but critical supporting actions now needed from Government of Indonesia and Ministry of Finance.

PLN is currently on the verge of bankruptcy. The financial statements as at 30 June 2000 show net assets of Rupiah 1.9 trillion, compared to Rupiah 30 trillion before the economic crisis. This 94% decrease is due to large losses between 1998 and 2000. PLN's balance sheet has been further weakened by the burden of the two step-loans from the Government of Indonesia. Without reorganization of its capital structure PLN could have negative net assets at 31 December 2000.

After experiencing declining electricity consumption in 1988, Indonesia's electricity consumption increased at the rate of 9.3 % in 1999 and further increased 12.1 % in the first quarter 2000. Electricity consumption is expected to increase in the coming years. As a consequence, an increasing number of areas will experience critical power shortages, including widespread power shortages in the main population centers on the Java-Bali grid by 2003.

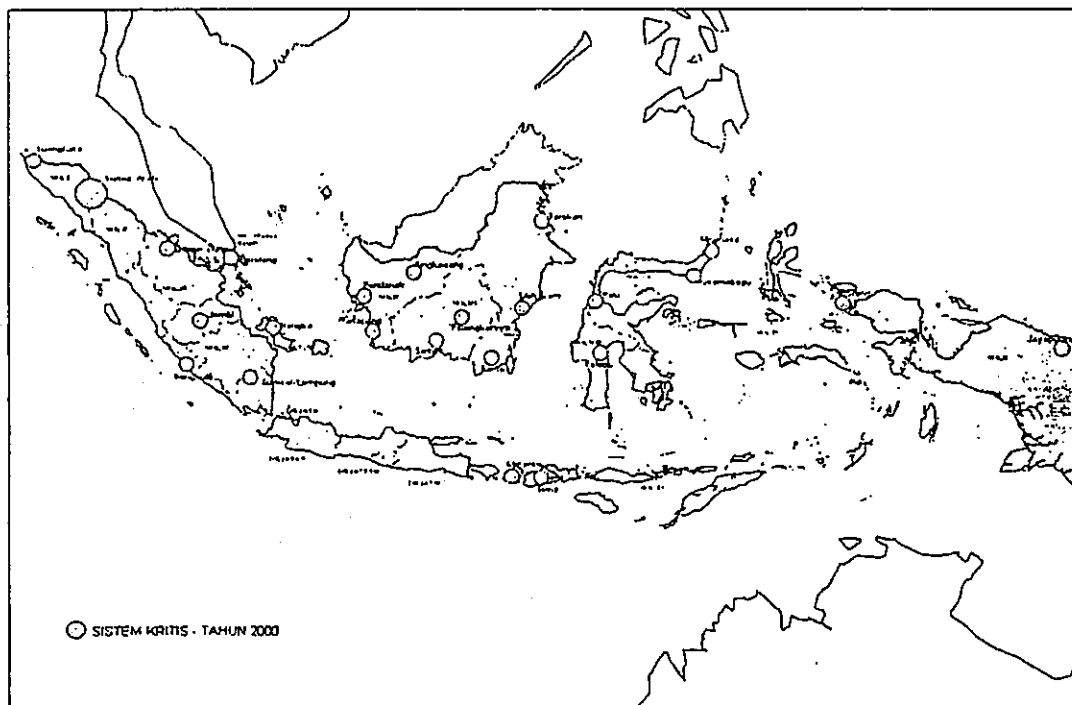
PLN is embracing reform of the overall electricity sector, and also has a number of programs underway to ensure that its own activities are conducted with maximum efficiency. PLN has a clear vision of the generation, transmission and distribution infrastructure needed for national economic development, and a clear understanding of the level of financial investment needed in order to put this infrastructure in place over the medium and long-term.

PLN has plans in place to deliver a reliable electricity sector, and is taking steps to ensure that everything within PLN's control that can be done to achieve this objective, is done. But these are some critical issues over which PLN itself has no direct control, and on which action by the Government of Indonesia is required urgently. This White Paper highlights these recommended actions.

### 3 Current Situation

#### 3.1 Generation System

As a consequence of the delay in the completion of generation and transmission projects due to limited rupiah funding, cancellation of several funding programs for generation projects and a drought in new investment, several regions outside Java-Bali, namely Luengbata Banda Aceh, North Sumatra-Aceh, Barclang Batam, Dumai-Duri, Bangka, Bengkulu, Jambi, South Sumatra-Lampung, Pontianak, Singkawang, Ketapang, Barito, Balikpapan-Samarinda, Tarakan, Sampit, Palangkaraya, Minahasa, Kotamubagu, Palu, Palopo, Sorong, Jayapura, Mataram, and Bima, have faced shortages in power supply and some of them have even experienced regular blackouts.



The short-term operational solution to overcome this is renting equipment where possible, while the medium-term solution is through additional investment.

With demand growth of 1,000 MW per annum on the Java-Bali system, PLN's installed capacity of 16,116 MW, plus 12,700 MW of Independent Power Producer capacity, will insufficient to meet peak demand by as early as 2001.

To ensure the continued reliability of power supply in Java-Bali in the coming years (up to the year 2005), additional generation of 5,000 MW, totalling USD 5 billion of investment, is required.

In addition, investment of USD 2 billion is needed outside Java-Bali in regional areas to rectify the existing areas of critical power shortage, plus to accommodate further demand growth.

### 3.2 Transmission System

As a consequence of postponed funding for transmission projects of 500kV in South Java, and the 150kV transmission system, available electricity generating capacity in East Java cannot be optimally distributed to West Java.

Postponement of funding for transmission projects outside Java has caused delay in project completion, resulting in generation shortages in regions which were intended to receive power through the 150kV network.

### 3.3 Sales of Electricity

After low growth in 1998 (1.5%), electricity demand increased 9.3% in 1999, and 12.1% in the first half of 2000 compared to the same period in 1999. This increasing growth is triggered by the increasing demand from the industrial sector of 12.1% (43.2% of load) and 13.6% from the household sector (38.7% of load).

This shows that despite the fact that the Indonesian economy has still not yet fully recovered, cheap electricity tariffs have driven high electricity demand growth.

### 3.4 Base Electricity Tariff

Average tariff increased to Rp 300 per kWh, in line with the Base Electricity Tariff effective from April 2000. This tariff is still much lower than the cost of production, so for every kWh sold, customers get a direct subsidy from PLN. Ironically, the poorest 44% of Indonesian population, who do not have access to electricity, do not get anything from PLN nor Government.



To bridge the gap, the electricity tariff needs to increase, ideally to a tariff which reflects the economic value of electricity in each location.

The high cost of production is a direct consequence of the depreciation of the Rupiah against the USD. The portion of production cost in USD is about 60% allocated for the purchase of natural gas, electricity from independent power producers, geothermal, spare parts, maintenance and debt servicing. PLN's ability to pay the USD cost drops in proportion to the depreciation of the Rupiah since all PLN revenue is in Rupiah.

A Periodic Electricity Tariff increase program was effective from 1994-1998 to maintain the 1994 Base Electricity Tariff constant in real terms. The tariff adjustment was made automatically every quarter based on the changes in foreign exchange rate (Rp against USD), inflation rate, fuel price and price of electricity purchased from independent power producer.

The financial crisis has caused the Periodic Electricity Tariff increase to be suspended due to the sudden high increase in tariff. The impact of Rupiah depreciation is, therefore, borne entirely by PLN.

### **3.5 Independent Power Producer**

In the beginning of 1990s the government invited private sector participation to invest in the power system.

As the result, until the end of 1997, PLN has signed Power Purchase Agreements and Energy Sales Contracts with 27 Independent Power Producers (IPP).

The main problems in the contracts with the IPPs are (1) the depreciation of Rupiah against USD which caused a high Rupiah price of electricity, which has to be paid in USD; (2) unbalanced risk sharing in the contract.

PPA renegotiation has developed and involves several international financial institutions and governments from the country of each investor, such as OPIC, MIGA and US EXIM from USA, Hermes from Germany, JBIC and MITI from Japan, ERG from Switzerland, multinational banking consortiums and the holders of bonds issued by IPPs.

The renegotiation of the PPAs with IPPs is not being conducted by PLN by itself, rather it is under direct supervision from PLN Restructuring and Rehabilitation Team (Presidential Decree Number 166/1999 no. 133 /2000).

### 3.6 Purchase of Natural Gas

With an original intention to reduce production costs, particularly fuel costs, PLN has converted to gas firing some of its generation plant. This strategy was successful in decreasing the fuel utilization portion from 34% in 1995 to 18% in 1999.

However, the high price of gas due to the increasing USD against the Rupiah, has caused PLN's production costs to increase significantly.

PLN is bound by the natural gas purchase contract from BP Amoco and Kodeco PLTU/PLTGU Gresik power plant at the price of USD 2,53/MMBTU and with BP Amoco for PLTU/PLTGU Muara Karang power plant and PLTU Tanjung Priok power plant at the price USD 2,45/ MMBTU, with the following terms and conditions (i) minimum off-take which means that if PLN cannot meet the minimum usage quantity, minimum payment will have to be paid, (ii) Standby Letters of Credit (SBLC) USD 250 million each to secure the payment.

For comparison : the price of natural gas sold to PT. PUSRI is USD 1,1 / MMBTU and to PT. Krakatau Steel is USD 1,5 / MMBTU

Setting the natural gas price which is competitive to the fuel price, i.e. about US\$ 1.5/MMBTU will increase the use of natural gas and therefore will reduce the government burden in subsidizing fuel.

### 3.7 Debts

Unavoidably, the majority of power sector equipment is imported, and is funded with government offshore loans. The Department of Finance has subordinated these loans to PLN under agreements called SLAs (Subsidiary Loan Agreements) which thus far amount to 100 SLAs totaling Rp 47,23 trillion.

Amongst the loans, the ones that need special attention are 27 SLAs in foreign exchange, the value of which at 30 June 2000 is equivalent USD 1.7 billion and 8 SLAs in Rupiah with irrational loan interest formula which resulted in 180% interest for the period of 1998-2000. Those two categories of SLA have worsened PLN's financial condition.

This condition is made even worse by the penalty imposed for the expensive loans referred to above. PLN has made a number of proposals to the Minister of Finance since 24 December 1998 to restructure the loans, but has not received any response.

The short term consequence is that PLN is faced with a liquidity problem, and has not serviced principal, interest or penalties on the SLAs since 1 January 1998. The delinquent position as of 30 June 2000 is Rp 25.54 trillion.

### **3.8 Asset Revaluation**

Asset value in the balance sheet and depreciation cost in the income statement are calculated based on acquisition cost. The high (70%) imported component of PLN's assets has caused PLN's asset value in the balance sheet to be understated compared to the market value.

The too-low depreciation cost has caused PLN to be unable to do asset replacement (renewal). In the long run, installed capacity will decrease. This condition warrants asset revaluation.

### **3.9 Funding**

A national electricity crisis will occur if investment is not made now. The need for fund for investment has become urgent, while PLN's financial condition makes it impossible for it to fund the investment itself, or to borrow to fund it.

The non-bankable financial condition of PLN has caused the investment to be stalled.

## 4 Vision for the Future

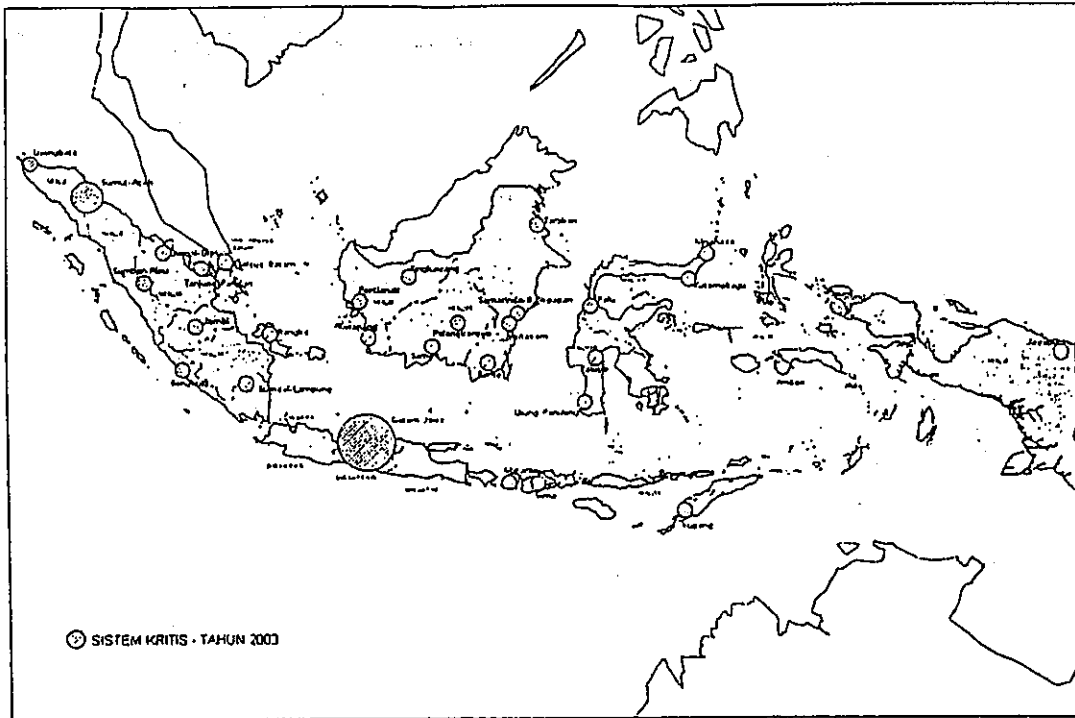
### 4.1 Future Scenario

Now that the economy is beginning to grow again, electricity demand will also grow. Importantly, this growth will be a multiple of GDP growth. As two examples:

- 1) In response to the economic crisis, electricity demand fell 1.5% during 1998. However, as the economy began to adjust and recover, electricity demand growth on the Java/Bali grid was 12.1% even though GDP growth was still low.
- 2) Before the economic crisis, growth in electricity demand was up to 2.5 times GDP growth.

Based on the existing electricity generation and transmission infrastructure, critical power shortages will increase steadily, particularly from 2002 onwards.

By 2004, using forecast GDP growth of 6% and forecast electricity demand growth of 10% as stated in PLN's planning forecasts already submitted to the Ministry of Mines and Energy, the number of critical areas will have increased from 24 to the entire system, including regional areas and also affecting the main population and industrial centers in Java-Bali.



Physical completion of electricity generation and transmission projects requires lead times of 3-5 years. Therefore, in order to avoid the situation forecast above for 2004, investment needs to be committed now. In order for PLN to be able to focus on delivering in particular the required transmission infrastructure, and the required generation capacity in regional areas, crucial supporting decisions are required from the Government of Indonesia. Failure to be proactive in decision making will lead to social and economic hardship in Java/Bali, but especially in regional areas, in as little as two years.

The situation on Java-Bali requires investment by PLN in transmission, and resolution of the IPP situation. Based on forecast GDP growth of 4-6%, forecast electricity demand on the Java-Bali grid will be 9.1% on average, or 41% compounded over 2000-2003. This means that peak demand will by 2003 already have equaled PLN's total installed electricity generation capacity of 15,712 MW.

This situation will necessitate PLN despatching existing installed IPPs at high load factors, which in turn requires investment by PLN in transmission infrastructure, resolution of the PPA renegotiation, and funding for PLN in order to make payments under these PPAs. Unless this occurs, the power shortages occurring now in regional areas, described above, will also spread by 2003 to the main population and industrial areas which comprise the Java-Bali grid.

Looking beyond 2003, Indonesia's capital resources are limited, and the required investment in electricity infrastructure is great. The involvement of the private sector in the funding and development to bridge this gap will be focused on generation capacity on the Java-Bali grid, and near large population and industrial centers outside of the Java-Bali grid. The funding and development of transmission infrastructure, and generation capacity in regional areas, will continue to require public sector involvement and investment through PLN.

So PLN's role in the improvement of the electricity infrastructure will be two-fold:

- Direct implementation of investment in transmission infrastructure and in generation capacity in regional areas.
- Facilitation of investment by the private sector in new generation capacity.

PLN has a clear vision and the plans in place to deliver its share of this investment. Even after private sector investment, the investment by PLN required to fund PLN's portion will amount to Rp. 67.8 trillion over the 2001-2005 period.

## 4.2 Plans to install the necessary electricity infrastructure

PLN is taking action on these matters which are within its control. Specific initiatives to achieve this vision include:

### 4.2.1 Operational efficiency improvements,

PLN operational efficiency is an integral part of PLN Corporate & Financial Restructuring activities. The results from the Efficiency Audit initiated by the Ministry of Finance gave an impetus to its effective implementation since January 2000.

As of August 2000, the total cumulative net gains for PLN operational efficiency accounted for approximately Rp 401 billion. The target net gains for operating expenditures for the year 2000 is Rp 600 billion, exceeding the future of Rp 260 billion proposed by the Efficiency Audit based on those activities that are controllable by PLN.

PLN's Efficiency Drive program (EDP) consists of the following activities designed specifically for generation, transmission, distribution, and supporting services:

**Generation:** operational efficiency activities that are controllable by PLN such as heat rate reduction, increase in energy availability factor, maintenance cost reduction and economic order quantity of inventory have been implemented for both generation subsidiaries in Java-Bali PJB1 and PJB2 and two generation centers outside of Java-Bali Sumbagut and Sumbagsel. As of August 2000, a net cumulative efficiency gain of around Rp 315 billion has been achieved.

Negotiations are underway to untangle those constraints that are uncontrollable by PLN accounting for close to 78% of PLN total operating costs such as pricing and quality of fuel that PLN has to purchase from Pertamina and Bukit Asam.

**Transmission [P3B]:** maintenance cost reduction, de-bottlenecking and optimal utilization of its fiber optic assets are efficiency drive activities that have generated a net cumulative efficiency gain of around Rp 3 billion. The fiber optic assets have been spun-off into a separate subsidiary that has a huge potential of income generation.

**Distribution:** technical and non-technical loss efficiency activities have been implemented for all four-distribution centers in Java-Bali and the wilayahs outside of Java-Bali. The net cumulative efficiency gain accounted for Rp 83 billion. Account receivable collection speed-up and economic order quantity inventory are efficiency activities that are being tested for full implementation in the third quarter of the year 2000.

**Support Services:** Finance, Human Resources and Information System efficiency activities are underway. For Finance, cost accounting and managerial accounting systems are being developed to improve financial information. For Human Resources, incentive programs such as social recognition, cash rewards, promotion and management contracting are implemented. For Information System, beside the managerial reports required by the government, internal managerial reports are being developed base on cost accounting data.

#### 4.2.2 Corporate Restructuring

PLN is currently undertaking a major restructuring initiative aimed at the implementation of the optimum industry structure. This involves the unbundling of PLN into several separate new entities and ensuring that these new entities are viable and sustainable in the future. This new industry structure will also require establishing a new single buyer market together with the necessary commercial rules and regulations to ensure that there is true competition and market driven efficiencies, and will also path the way for further industry deregulation and further private sector participation.

### 4.3 PLN's Participation in PPA renegotiations

PLN's renegotiating the long term purchase contract with IPPs under supervision of the PLN Rehabilitation and Restructuring Team (Keppres No. 136/2000).

PLN plans to complete renegotiation of the seven PPAs. So far it has reached interim agreement with 4 of the IPPs concerned. Its target is to reduce the overall payment burdens under the PPAs by a substantial amount.



## **5 Major Issues and Constraints**

Without doubt the main issues and constraints to achieving a vision of a healthy and viable PLN, to support Indonesia's future economic growth and the prosperity of the Indonesian people hinges on the following:

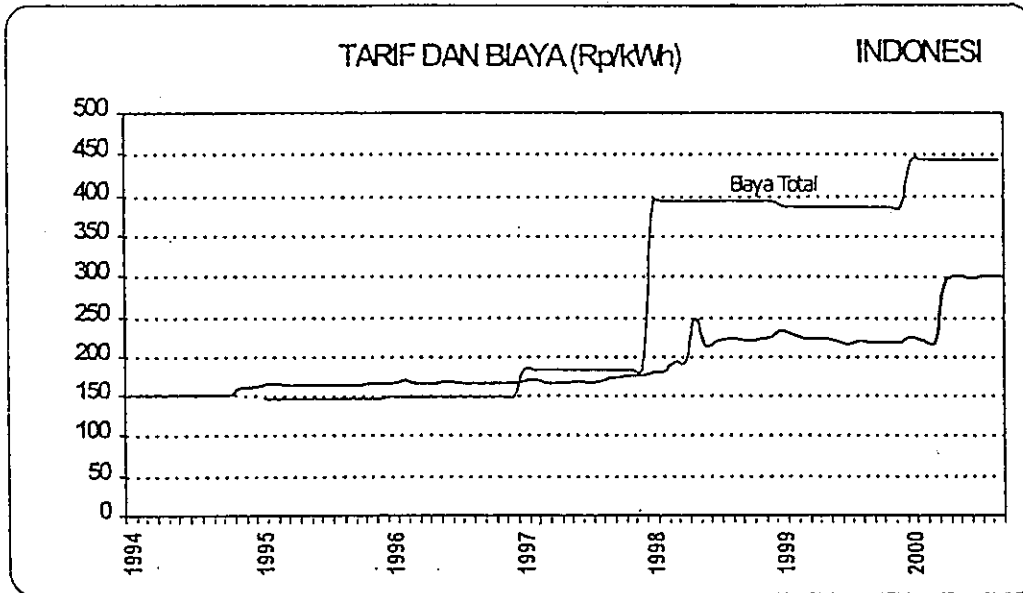
### **5.1 Current Situation is a Result of Currency Devaluation**

Currency devaluation is the single largest constraint to PLN's viability. PLN itself cannot be expected to absorb the full impact of the fall of the Rupiah on its foreign currency operating costs and loan repayment commitments. The major issues here pertain to a growing debt burden and servicing costs, fuel and power purchase prices, which have a flow-on effect on investor confidence and the level of tariffs needed.

### **5.2 Tariffs Need to be Increased for Economic Viability**

Since 1998, electricity tariff levels have increased only slightly, while the costs of production have increased dramatically in Rupiah terms.

Costs of production have increased in Rupiah terms due to many of the underlying costs ultimately reflecting dollar costs, (not just payments to IPPs but also payments to Pertamina for gas, major maintenance and replacement parts for PLN's existing generation and transmission assets). Future investment will also ultimately reflect the Rupiah cost of what are essentially dollar denominated costs, as a large portion of the technology for transmission, and particularly generation, must be sourced internationally.



Whilst PLN is currently cashflow positive, this is only because it is currently making payments to IPPs at a rate of USD 1 = Rp2,450, is not servicing its debts to Government, and most importantly because, whilst it continues to implement infrastructure development projects committed prior to the crisis, PLN has not made any new capital investments in transmission or generation infrastructure since 1997.

In order to avoid the critical power shortage situation in regional areas and on Jawa-Bali as described above, Indonesia needs PLN to begin making investment in generation in regional areas and in transmission.

Therefore, PLN will move from a cashflow positive situation to a cashflow negative situation, as shown in the table below:

PT. PLN (Persero) Consolidated Income Statement (Projected) if no Tariff increase								
	Billions of Rupiah	Year	2000	2001	2002	2003	2004	2005
Revenue			21,839	24,760	26,598	29,376	32,471	35,906
less expenses								
Fuel and lubricating oil			10,464	9,755	11,010	11,976	15,052	19,423
Power purchase			9,116	12,838	13,018	17,127	17,341	17,356
Other operating expenses			5,122	5,676	6,317	7,005	7,969	8,765
Depreciation and other items			3,259	3,767	4,157	4,759	5,352	5,942
Interest			11,511	1,872	1,552	1,640	1,426	1,259
Net Income before Corporate Tax			(17,633)	(9,148)	(9,456)	(13,131)	(14,669)	(16,839)
Net income (US\$ billions)			(2.52)	(1.31)	(1.35)	(1.88)	(2.10)	(2.41)

Source: No tariff increase, IPP as PPA, debt as is, exchange rate Rp 2,450

This negative cashflow requires PLN to having funding to pay for these capital investments, and PLN's only source of revenue is tariffs.

PLN cannot implement any investment plans unless this fundamental mismatch between revenues and costs is resolved. It therefore recommends that tariffs should be increased according to the schedule below in order to reach a target average tariff level of 490 Rupiah/kWh (US 7 cents/kWh).

### **5.3 If Tariffs Cannot be Increased Due to Socio-economic Reasons, PLN needs Revenue Support from Government**

PLN appreciates that the economic crisis has placed a burden on the people, and that there are questions of affordability of increased electricity tariffs. Therefore PLN understands the need for the increasing of the electricity tariff to be implemented gradually over a period of years.

However, without increased tariffs, PLN has no other source of funds with which to fund the required electricity infrastructure, being generation in regional areas, and transmission infrastructure. Therefore, if critical power shortages are to be avoided, PLN needs revenue support from the Government of Indonesia. This is proposed to be in the form of the Social Electricity-Economic Development Fund (SEDF).

PLN requests the Government of Indonesia to implement the SEDF, in order for it to be operational from January 2001.

### **5.4 IPP Situation Needs Resolution**

In addition to PLN's development of transmission infrastructure, and of generation capacity in regional areas, the master plan is for the development of further generation capacity on Jawa-Bali to be conducted by the private sector (at investment costs and tariff prices that can be afforded).

In order for private participation in generation capacity development to be possible, a conducive investment environment needs to be created. In particular, no future private sector development can be expected unless a mutually satisfactory resolution has been reached to the existing IPP situation.

In order for PLN to achieve finalization of the PPA renegotiations, PLN needs from the Government of Indonesia approval of the terms of these PPA renegotiations, plus funding from the Government of Indonesia in order to make full payment at the renegotiated PPA tariffs.

## 5.5 PLN's Balance Sheet Needs Reorganizing

In addition to the above long-term issues which need immediate action from the Government of Indonesia, there are a number of short-term issues which also need immediate action.

PLN has an unsustainable debt burden. As at 30 June 2000, PLN's debt position is as follows:

- Rp 47.23 trillion to the Government of Indonesia under two-step loans, of which Rp 25.96 trillion is principal, Rp 12.77 trillion is accrued interest and Rp 8.52 trillion is accrued penalties.
- Rp 426 million to state-owned banks
- Rp 2.2 trillion to holders of PLN-issued bonds

This current debt burden is inconsistent with the Government of Indonesia's vision of PLN as a commercially driven state owned enterprise, as the current debt creates an unsupportable drain on PLN's balance sheet and income statement.

PLN is currently servicing its debts to state-owned banks and to bondholders, and will continue to do so. However, PLN has not been servicing its debts to the Government of Indonesia since December 1998, and it will continue to be difficult to make payments on PLN's debts given PLN's current situation.

The capital structure therefore needs to be reorganized urgently. PLN's balance sheet has shown a decrease in net assets from Rp 30 trillion before the economic crisis, to just Rp 1.9 trillion as at 30 June 2000. Unless action is taken, PLN will have negative net assets (forecast negative Rp 6 trillion) as at 31 December 2000, and therefore will be bankrupt.

PROFORMA BALANCE SHEETS	
	Rp 1000
DESCRIPTION	Dec 31, 2000
ASSETS	74.564.175.833
FIXED ASSETS	56.619.059.091
Gross Fixed Assets	71.918.455.630
Accumulated Depreciation	(15.299.396.539)
CONSTRUCTION IN PROGRESS	11.281.433.211
OTHER ASSETS	1.110.042.428
SINKING FUND	-

<b>INVESTMENTS IN SHARES OF STOCK</b>	29.574.232
<b>CURRENT ASSETS</b>	5.524.066.871
Cash	2.484.468.997
Receivable	1.679.701.442
Inventory - Fuel and Lubricant	428.703.000
Inventory - Maintenance Materials	514.654.999
Other Current Assets	416.538.432
<b>EQUITY AND LIABILITIES</b>	74.564.175.833
<b>EQUITY</b>	(6.054.501.167)
Authorized Capital	63.000.000.000
Unpaid Capital	(45.674.200.000)
Issued and fully Paid Capital	17.325.800.000
Government Equity (Project Aid)	12.168.565.394
Government Equity (DIP & Pemda)	5.500.439.893
Retained Earnings	(20.079.320.586)
Profit/Loss current year	(20.969.985.869)
<b>DEFERRED REVENUE</b>	3.137.100.185
<b>LONG-TERM LIABILITIES</b>	27.473.974.038
Debt Due (Net)	19.646.172.545
Bond	600.000.000
Customers security deposits	1.905.655.711
Deferred Tax Liabilities	1.813.847.275
Others	3.508.298.507
<b>CURRENT LIABILITIES</b>	50.007.602.777
Dividend and Semesta Dev Funds	105.318.012
Accrued Expenses	26.509.836.323
Current Maturity of Longterm Debt	6.671.195.208
Tax Payable	27.795.212
Trade Payables	16.499.482.280
Others Payables	193.975.742

This could trigger a technical default on PLN's bonds and lead to a general collapse in lender confidence. This would have a serious and lasting effect on PLN's ability to raise debt to invest in transmission infrastructure and on its credibility in the eyes of potential investors in, and lenders to, privately financed generation capacity.

PLN proposes that the Government agree to a reorganization of PLN's balance sheet, including a rescheduling of PLN's 100 existing loans to the Government of Indonesia.

Also needing action is the anomalous situation of PLN paying interest rates of as much as 180% per annum on some of its debts to the Government of Indonesia, and PLN paying penalty interest to the Government even though these loans between the Government and the Paris Club and London Club have been rescheduled without penalty.

## **5.6 Taxation Anomalies are Aggravating the Situation**

### **5.6.1 Asset Revaluation**

PLN is faced with the impending need to revalue its assets to take account of the depreciation of the Rupiah. This will be a purely accounting revaluation which will not reflect any increase in the revenue-generating capacity of the assets. It will nevertheless register as a profit in the income statement, which could trigger a tax liability of as much as Rp 20 trillion. PLN does not have the cash to pay this windfall tax liability; and, even if it did, this cash should be applied to the funding of investment. PLN therefore recommends that it should be exempted from any windfall tax liability resulting from this artificial gain in its income statement.

Above all, PLN's capital structure needs to be reorganized in order to remove the unsustainable debt burden which is threatening PLN's ability to avoid critical power shortages.

### **5.6.2 Impact of PPN on Tariffs, Fuel Purchase and PPA Prices**

The proposed PPN (Value Added Tax) of 10%, to be introduced in 2001, will place additional pressure on PLN's already dire financial position. If PPN is applied to electricity, then customers will pay an additional 10%, further increasing the burden on the people of the tariff increases which are needed as described in Section 5.2.

The PPN will also have a significant impact on fuel prices and PPA power prices, if included in the scheme, which will further increase PLN's costs for fuel and power by 10% with a secondary effect on tariffs.

## **5.7 Payments to Pertamina**

One of the ways the Government can assist PLN to deliver the necessary electricity infrastructure is to reduce the burden of the high price of gas purchases from Pertamina. PLN proposes that the Government reduce the price of natural

gas paid to Pertamina to USD 1.5 MMBTU effective October 2000 (currently USD 2.53 MMBTU, which is very expensive).

## 6 Outcomes and Consequences

### 6.1 Virtuous circle (Desired outcome)

If the Government implements the actions recommended in this White Paper then Indonesia will benefit from a virtuous circle:

- PLN's balance sheet, income statement and cashflow will be strengthened
- This will enable PLN to implement new investment in transmission infrastructure directly itself; and to facilitate investment in new generation capacity by the private sector
- The new investment will enable PLN to meet the rising demand for electricity flowing from and leading to, economic growth
- PLN's revenues and cashflows will increase, further strengthening its ability to invest directly and to encourage investment by the private sector.

### 6.2 Vicious circle (As is scenario)

But if the Government does not implement the recommended actions there will be a decline into a vicious spiral:

- PLN will have negative net assets as at 31 December 2000, triggering a technical default on its third party bonds and a general collapse in financial confidence in PLN
- PLN will be unable to make payments to IPPs at the renegotiated tariffs, which will further discourage future private sector participation in generation capacity development.
- PLN will neither be able to invest in transmission infrastructure, nor be a credible counter-party for potential private investors in new generation capacity
- The absence of investment will result in increasing critical power shortages. This will act as a brake on economic growth and cause further social hardship



- The decline in economic growth will reduce PLN's revenues and cashflows which will further weaken PLN's financial position and its capacity to invest directly itself and to facilitate investment by the private sector

### 6.3 Government actions

The decisions and actions of Government, which are needed urgently, will have an impact on whether the future is one of increasing critical power shortages and a bankrupt PLN, or a healthy PLN and a healthily electricity sector.

So, the options facing the Government are stark and immediate. The hard deadline is end of PLN's financial year on 31 December 2000. If the proposed réorganization of the capital structure has not been implemented by then, the descent into the vicious downwards spiral set out above will be inevitable. And, once begun, it will be increasingly difficult to reverse. But if the Government implements the proposed capital reorganization, and takes the other recommended actions, it will initiate the virtuous circle of financial health, investment and economic growth.

In light of the issues discussed in this White Paper, PLN is asking the Government to make an immediate decision on the recommendations below:

#### 1. Reorganization of Capital Structure

Agreement to PLN's proposals for rescheduling of the two-tier loans and other structural changes required to ensure that PLN has a healthy balance sheet by 31 December 2000 at a latest, and maintain this position subsequently.

#### 2. PPA Renegotiation with IPPs

Approval of the terms of the PPA renegotiations, plus funding in order to make full payment at the renegotiated PPA tariffs

#### 3. Electricity Tariff Increase

Graduated tariff increase to reflect the economic value of the electricity sold, increasing to USD 7 cent per kWh by 2005.

#### 4. Revenue Support in the Form of Social Electricity Development Fund

If tariff increases as proposed above point is not feasible, GOI needs to provide revenue support to PLN in the form of Social Electricity Development Fund (SEDF) with effect from 1 January 2001.

5. Gas Purchase from Pertamina

To reduce the price paid to Pertamina on natural gas to USD 1.5/MMBTU effective October 2000.

6. Taxation issues

- (a) Exemption from any tax liability arising from any artificial profits in its income statement caused by an asset revaluation to take account of the Rupiah devaluation.
- (b) Constructive consideration of the impact of PPN on PLN's financial position.