IMPACT OF PRIVATE POWER GENERATION ON ECONOMY OF WAPDA

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1. INTRODUCTION

1.1 A lot has already been published on private power thermal and hydel policies through newspapers, journal, magazines and seminars but unfortunately most of the articles published so far have not worked out the monetary impact on WAPDA economy in real terms to indicate whether it will be sustainable or not. It's of little use to discuss pros and cons of a policy until and unless its real financial impact picture is depicted. Whether right or wrong, 4500 MW of power will be inducted in WAPDA system by June 1998 under the private power policy. 1292 MW of power from HUBCO and 131 MW of power from Kohinoor Power are already on the BUS. Kot Addu power station, one of the largest power plant based on latest combine cycle technology with a generating capacity of 1488 MW has also been privatized. WAPDA has already tasted their financial impact on its development projects. There is a hue and cry for WAPDA being a defaulter to contractors payment, oil and gas bills and last but not the least borrowing from banks to make payment of salaries to its employees. Prime Minister of Pakistan in his national broadcast has labelled WAPDA a "White Elephant" and told that organisations like WAPDA, which are inflicting loss of billions of rupees a year to the nation due to mismanagement and inefficiencies, will no more be tolerated. WAPDA absorbed all sorts of allegations without any clarifications or repercussions. It may not be out of place to mention that WAPDA has been a profit earning organisation since its creation and had played a vital role in the development of the country. The entire nation boosted of its achievements. What suddenly happened over the last one year, which plagued Wapda's economy, still needs to be investigated. Calling it simply a mismanagement of financial disciplines or inefficiency of the organisation without detail analysis is not justified.

1.2 I have made some efforts in this direction to calculate the overall effect of privatisation and induction of private power generation on WAPDA economy and possible remedial measures to minimise its impact.

2. PRIVATE POWER AGREEMENT - 6.5 CENT POLICY

According to PPA's the average cost per unit at 60% load factor has been worked out as 6.5 cents per KWH at the bus bars. The energy charge amounts to about 2.2 cents while the capacity charge is 4.3 cents at 60% load factor. In addition

WAPDA has to bear increase in price of fuel, labour charges, and currency fluctuations which will be directly passed on to WAPDA.

2.2 It may be interesting to note that furnace oil price has increased from Rs.2800 per ton to more than Rs. 6000 per ton since the announcement of energy policy which alone translates an increase of 1.3 cents/KWH in the tariff. Adding other factors mentioned above the average cost per unit is 8.0 cents at 60% plant factor and more than 10 cents at 30% load factor at the generation bus.

3. FINANCIAL IMPACT DUE TO PRIVATISATION OF KOT ADDU POWER HOUSE

3.1 Following is the summary of actual payments made from July, 96 to Feb, 97 to HUBCO and KEPCO.

Payments by WAPDA to HUBCO & KEPCO from July 1996 to June 1997

	HUBCO	KEPCO
Total Payment (Rs. Billion)	21.618	13.601
Total units received in (Billion)	5.885	4.872
Cost per unit Rs	3.67 (9.1 cents)	2.80 (7 cents)

It may be observed that actual cost paid by WAPDA at generation bus of HUBCO is higher than 8 cents per unit. This is due to reduced plant factor than specified which WAPDA is unable to maintain during high water season.

3.2 FINANCIAL IMPACT DUE TO PRIVATISATION OF KEPCO FOR THE YEAR 1997-98 AND SUBSEQUENT YEARS

3.2.1 Based on the above data financial impact on WAPDA has been worked out for HUBCO & KEPCO. To work out the financial impact, difference of cost per unit of KEPCO and Kot Addu if not privatized has been calculated and then multiplied by number of units generated.

3.2.2 The estimated cost of generation per unit to WAPDA at Kot Addu Power House if not privatized is based on present fuel prices of KEPCO and rest of the costs are based on the actual WAPDA figures for the year 1995-96.

	Tariff at 65% plant factor R s/KWH	Tariff at 32% plant factor Rs/KWH
Interest Charge	0.311	0.636
Depreciation	0.137	0.278
Est Charge + O&M	0.027	0.054
Fuel Cost	1.320	1.320
Total	1.795	2.28

3.3 FINANCIAL IMPACT DUE TO PRIVATISATION OF KEPCO FOR THE YEAR 1997-98 AND SUBSEQUENT YEARS

For the year 1997-98, the loss to WAPDA has been worked assuming a plant factor of 65%.

i)	Total number of units to be generated at 65% L.F. during the year	=	7.26 billion
ii)	Cost per unit by KEPCO at 65% L.F. (6.1C + 1.35C = 7.45C)	=	Rs. 3.10
iii)	Average cost at KEPCO bus if not privatized at 65% plant factor (From Table-1)	=	Rs. 1.795
iv)	Difference of cost per unit (ii) - (iii)	=	Rs. 1.30
v)	Total difference of cost of generation between KEPCO & WAPDA (I) X (IV)	=	Rs. 7.26 billion X 1.30
		=	Rs. 9.438 billion
vi)	Less Dividend to be paid to WAPDA by KEPCO	=	Rs. 2,350 billion
vii)	NET LOSS TO WAPDA	=	Rs. 7.088 BILLION US$ 170 MILLION

The loss to WAPDA will further increase if WAPDA fails to maintain a plant factor of 65% as per PPA.

Following interesting observations are made from the above calculations.

AS SALE OF 26% SHARE, AN AMOUNT OF 185 MILLION U.S. DOLLARS OUT PROCEED OF US$ 216 MILLION WAS RECEIVED BY GOP ONLY ONCE, WHILE WAPDA WILL CONTINUE TO BEAR A LOSS OF US$ 170 MILLION EVERY YEAR. IN FACT PRIVATIZATION AMOUNTS TO BORROWING A LOAN AT MORE THAN 95% RATE OF INTEREST WHICH MAY LEAD TO TOTAL BANKRUPTCY INSTEAD OF SUPPORTING ECONOMY OF GOP. SOME VESTED INTERESTS ARE ISSUING CONFLICTING SCENARIOS DEVIATING THE FOCUS AND ADDING CONFUSION OVER THE REAL ISSUE.

3.4 The bid prices quoted by KEPCO for Kot Addu plant was US$ 1583 million. Initially 26% shares were sold for US$ 215 million followed by sale of another 10% shares for US$ 76 million, thus total purchase price of 36% shares by KEPCO amounts to US$ 291 million. 36% of total bid price of US$ 1583 comes out to US$ 570 against which US$ 291 are paid by KEPCO. HERE AGAIN INVESTOR IS OBLIGED TO GET BIG SHARES AGAINST SMALL INVESTMENT. AS PER DEAL THE COST OF DEBT SERVICES OF ABOUT

$756 MILLION WILL BE PAID THROUGH TARIFF. IMAGINE THE DIFFERENCE IT WOULD MAKE, HAD GOVT. SOLD OUT KOT ADDU FOR QUOTED PRICE OF US$ 1.583 BILLION RETAINING ALL LONG TERM LIABILITIES WITH IT. IN ADDITION THE PURCHASER GOT THE BENEFIT OF IMMEDIATE RETURN ON THEIR INVESTMENT AND SAVED INTEREST TO BE PAID DURING CONSTRUCTION PERIOD WHICH WORKS OUT TO BE MORE THAN THE TOTAL SALE PROCEED OF 36% SHARES. TO FURTHER CLARIFY THE POSITION LET US WORK BACK COST PER UNIT IN CASE OF FULL PRIVATIZATION OF THE UNIT. THE QUOTED SALE PRICE OF US$ 1583 COULD HAVE FETCHED AN INTEREST OF US$ 280 MILLION CRS. 11.2 BILLION OF 18% PER ANNUM). UNDER THE PRESENT TERMS WAPDA IS REQUIRED TO PAY AN AMOUNT OF RS. 22.4 BILLION FOR THE PURCHASE OF 7.26 BILLION UNITS. NET COST OF WAPDA IN REAL TERMS WOULD HAVE BEEN TOTAL COST PAID MINUS INTEREST i.e. (22.4-11.2=11.2 BILLION) ONLY. ON THIS BASIS THE COST PER UNIT WORKS OUT TO RS. 1.55 UNIT WHICH IS HALF THE COST OF PRESENT PURCHASE. GOVT WOULD HAVE BEEN RICH ENOUGH AND MUCH BETTER OFF FOR BALANCE OF PAYMENTS. THE VERY PURPOSE OF PRIVATIZATION IS DEFEATED UNDER THIS SCENARIO.

4. FINANCIAL IMPACT ON WAPDA DUE TO PRIVATE POWER GENERATION

4.1 Loss to' WAPDA due to private power generation has been calculated by comparing average sale cost of WAPDA with private power generation at the consumer end. To work out cost at consumer end 24% of the transmission / distribution losses have been added in addition to operational and maintenance cost of 52 paisas per unit based on the actual expenditure for the year 95-96. It may be added that to absorb additional private power generation WAPDA has to expand transmission and dist. net work which works out to Rs. 0.45 paisas per unit and is based on the PC-I cost of 5th STG for the year 1996-2000.

4.2 The estimated private power generation tariff and loss to WAPDA per unit at different plant factors is given under Table-2 below:-.

TABLE-2 ESTIMATED PRIVATE POWER GENERATION TARIFF AND LOSS TO WAPDA PER UNIT AT DIFFERENT PLANT FACTOR

		Tariff at 70% Plant Factor	Tariff at 60% Plant Factor	Tariff at 40% Plant Factor	Tariff at 30% Plant Factor
i)	Capacity charge cent/KWH	3.68	4.30	6.45	8.60
ii)	Direct pass on charge cent/KWH	1.50	1.50	1.50	1.50
iii)	Energy charge cent/KWH	2.20	2.20	2.20	2.20
iv)	Total cost in US cents at Generation Bus	7.38	8.0	10.15	12.30

v)	Cost in Rs. per KWH @ of Rs. 41/US$ at Bus Bars	3.03	3.28	4.16	5.04
vi)	Line Losses @ 24% in Rs / unit	0.72	0.79	1.00	1.21
vii)	Operational / maintenance and distribution expansion cost of WAPDA per unit sold in Rs. based on 96 97 data.	0.52	0.52	0.52	0.52
viii)	T&G system expansion cost per KWH to absorb additional power based on PC-I for 1994-2000.	0.45	0.45	0.45	0.45
ix)	TOTAL COST TO WAPDA AT CONSUMER END IN RS./KWH	4.72	5.04	6.13	7.22
x)	WAPDA average Sale cost/unit	2.56	2.56	2.56	2.56
xi)	LOSS TO WAPDA PER UNIT RS./KWH	2.16	2.48	3.57	4.66

It may be observed that with improvement of power plant factor the per unit cost and consequent loss to WAPDA per KWH sold is reduced.

4.2 LOSS TO WAPDA DURING 1997-98 AND SUBSEQUENT YEARS BY HUBCO

i) Total number of units to be generated at 60% plant factor. = 7.2 billion

ii) Number of units available at consumer end = 7.2x0.76=5.472 billion

iii) Difference of cost per unit at 60% P.F (From Table 2) = Rs. 2.48

iv) TOTAL LOSS TO WAPDA BY HUBCO FOR THE YEAR 1997-98 (7.20X0.76X2.48) = RS. 13.57 BILLION

4.3 LOSS TO WAPDA BY OTHER PRIVATE POWER GENERATIONS

Total installed capacity = 2905 MW

Total firm capacity = 2635 MW

i) Total number of units to be generated at 60% plant factors = 13.8 billion

ii) Units available at consumer end = 10.488 billions

iii) Diff. of cost per unit at 60% P.F (From Table 2) = Rs. 2.48

iv) TOTAL LOSS TO WAPDA BY OTHER POWER GENERATION UNITS. = Rs. 26.00 BILLION

4.5 SUMMARY OF FINANCIAL IMPACT

The total number of units to be generated and loss to WAPDA has been summarised under Table-4 below:

TABLE-4 SUMMARY OF UNITS GENERATED AND LOSS IN BILLIONS AT SPECIFIED PLANT FACTOR

	1997-98		1998-99	
	Unit BLN	Loss Rs. BLN	Unit BLN	Loss Rs. BLN
KEPCO	7.25	7.08	7.25	7.08
HUBCO (60% LF)	7.20	13.57	7.20	13.57
Others (60% LF)	5.00	12.40	13.80	26.00
TOTAL LOSS	19.45	33.05	28.25	46.65

Note: The loss for the year 1996-97 is based on actual payments while loss for subsequent years is calculated at plant factors as per contract.

IT MAY BE OBSERVED THAT WAPDA WILL SUFFER LOSS OF Rs. 33.05 BLN DURING THE YEAR 1997-98 WHICH WILL SHOOT UP TO Rs. 46.65 BILLIONS DURING 1998-99 AT SPECIFIED PLANT FACTORS. IN CASE OF DEVALUATION OF RUPEE, THE LOSS WILL PROPORTIONATELY INCREASE. IMAGINE HOW WAPDA WILL SURVIVE AGAINST SUCH A COLOSSAL LOSS. WAPDA ECONOMY MAY COLLAPSE ALONG WITH HUNDREDS OF OTHER INSTITUTIONS VIZ CONSULTANTS, MANUFACTURERS, CONTRACTORS AND INDENTORS ETC. UNTIL POWER TARIFF IS INCREASED BY 46%, TO NEUTRALIZE EFFECTS OF PRIVATIZATION. SUCH AN INCREASE IN TARIFF WILL PROVE DISASTROUS TO GOP ECONOMY. COST OF PRODUCTION WILL INCREASE RESULTING IN REDUCTION OF EXPORTS AND HIGHER RATE OF INFLATION AND A FORCED CYCLE OF CURRENCY DEVALUATION. IT MAY BE CLARIFIED THAT WAPDA EARNED A NET PROFIT OF MORE THAN 10 BILLIONS DURING 1995-96. TO ATTRIBUTE 'THIS LOSS TO WAPDA MISMANAGEMENT IS TOTALLY UNJUSTIFIED.

5 EFFECT OF PLANT FACTOR IMPROVEMENT ON LOSS TO WAPDA

5.1 As shown in Table 2 the cost of generation is reduced with improvement of plant factor. However this is not true for calculating overall loss to WAPDA as loss is dependent on multiple result of difference of cost/KWH and No. of unit sold. With improvement of plant factor the cost per unit is reduced while number of units sold is increased. To further clarify this point, refer to Table - 2 wherein loss to WAPDA at 70% and 30% plant factor is calculated as Rs. 2.16 and Rs. 4.66 per unit respectively. At 70% and 30% plant factors 70 and 30 units will be generated thus causing total loss to WAPDA of Rs. 151.0 (70x2.17) and Rs. 139.8 (30x4.66) respectively, which shows an increasing

trend of loss with improvement of power factor. The overall loss to WAPDA remains unchanged if reference cost of private power generation is taken as Rs. 1.50 per unit. The loss to WAPDA increases with improvement in plant factor if reference cost is below Rs. 1.50/KWH and vice versa. So the general concept that loss to WAPDA will decrease with improvement in plant factor is totally deceptive. According to my calculation loss to WAPDA will increase with improvement of plant factor of private power generation.

5.2 A reference recently received, initiated by Embassy of Pakistan in Washington to sell power to India to improve financial position of WAPDA is also based on improvement of plant factor. The idea to sell excess power is not beneficial for the reasons stated above and should be abandoned unless cost of sale of power is about Rs. 4/KWH i.e. about 10 cents per unit which will neither be acceptable nor viable for India.

6. TARIFF ADJUSTMENT

6.1 To calculate percentage increase in Tariff rate to equalise the above stated loss, first of all expected sale of units and retail revenue has been worked out assuming an increase in energy sale at the rate of 6% per annum and average sale rate of Rs. 2.25 per unit. The table below indicates overall profit and loss, loss/gain per unit and loss as percentage of revenue collected for the years 1995-96 to 98-99.

TABLE 5 CALCULATION OF LOSS AS PERCENTAGE OF REVENUE AND LOSS PER UNIT AT SPECIFIED PLANT FACTORS

		1997-98	1998-99
i)	Units to be sold in billions.	41.48	43.97
ii)	Revenue to be generated at average sale rate of Rs. 2.25 unit Rs. Billion.	106.18	112.56
iii)	Loss Rs. Billion.	33.05	46.65
iv)	LOSS PER UNITS RS. AT SPECIFIED PLANT FACTOR	0.80	1.06
v)	Loss as percentage of revenue	31.12%	41.5%

6.2 To absorb above stated losses due to induction of private power generation, tariff has to be adjusted otherwise entire burden of WAPDA will ultimately be shifted to GOP in terms of non payments of debts service, service charges, oil and gas bills and stoppage of all development works.

6.3 There is sufficient margin for negotiation under private power agreements as the present tariff is based on over pricing and the pay back period of their investment is only 4 to 5 years. The actual cost of generation at Kot Addu if

not privatized including all cost would have been Rs. 1.80 per unit against Rs. 3.10 of KEPCO at 65% plant factor. The energy charge remains the same while capacity charge has been increased to many folds. Under 6.5 cent policy the energy charge is 2.2 cents per unit while capacity charge works out to 4.3 cents per unit. So all efforts should be made to renegotiate capacity charges. I would recommend a maximum capacity charge at 30% of plant factor instead of 60% as per PPA for the next three years during high water season only, retaining 60% plant factor for rest of the year. This would provide relief of 2.15 cents per unit i.e. 88 paisas per unit for the six months with an average of 44 paisas per unit over the year for private power generation. The overall impact with respect to total sales will be 22 paisas per unit for the year 1997-98 and 28 paisas per unit for the next years. Calculations for plant factor of private power generation for the year 1998-99 are enclosed at Annex - III.

6.4 GOP has unreasonably increased furnace oil prices from Rs.2800 per ton to more than Rs.6000 per ton over the past two years which has resulted in direct pass on charge of 1.33 cents/unit. The furnace oil price should have been increased proportionate to currency devaluation which works out to Rs. 4000 per ton. Govt should be persuaded to reduce cost of furnace oil required for power generation only. This would provide a relief of 0.8 cents per unit i.e. paisas 32 per unit of furnace oil generation. The overall impact with respect to total sales would be 20 paisas / KWH.

6.5 Still there is another slot of payment of royalty to NWFP against Tarbela power generation where some rebate could be sought. Reduction in 50% payment for the next three years would provide relief of paisas 7 per unit. The basis of NFC award for hydel policy seems to be a huge burden on the tariff and needs to be reviewed by GOP.

6.6 I also suggest that political agencies should purchase power from WAPDA at bulk for supply to FATA & PATA and Govt. to make difference of payment to provide relief to WAPDA. As GOP will impose some restriction, consumption will be reduced. An adjustment of Rs. 2 BLN is assumed to be reasonable which translates into 5 paisas / KWH.

6.7 The remaining imbalance in per unit cost may be adjusted by increase in tariff which works out to 18% increase in tariff rate for year 1997-98 and 12.5% for year 1998-99 provided adjustments under various sectors as suggested above are achieved at the same time. Calculations of possible plant factors for private power generation over the year are enclosed at Annex-III.

ADJUSTMENT OF TARIFF WITH REFERENCE TO SPECIFIED PLANT FACTORS

		1997-98	1998-99
i)	Per unit increase due to privatisation / private power induction in Rs.	0.80	1.06
ii)	Adjustment through capacity charge.	0.22	0.28

iii)	Adjustment through reduction in furnace oil price.	0.20	0.20
iv)	Adjustment through NWFP royalty	0.07	0.07
v)	Adjustment through recovery of FATA / PATA energy	0.05	0.05
vi)	Adjustment through tariff increase. Rs.	0.26	0.46
vii)	Recommended %age increase in tariff to neutralise effect of privatization	18 %	18%(10% net over 97-98 tariff)

Note:

i) Tariff increase for 1998-99 has been worked out taking into account tariff increase of 1997-98 (i.e 18%)

ii) It may be observed that increase recommended in tariff is very reasonable.

iii) In case Govt. fails to achieve targets of tariff adjustment in the specified areas, corresponding increase in tariff is recommended to be made.

7. SUMMARY AND CONCLUSIONS

7.1 WAPDA will suffer a loss of Rs. 33.05 Bln, during the year 1997-98 which will shoot upto Rs. 46.65 Bln. next year at the specified plant factor, as per contract due to induction of private power generation. An increase of 42% in tariff is inevitable to neutralize its effects. To reduce burden on consumers, the adjustments in tariff are divided among various sectors. The adjustments recommended are negotiations of Power Purchase Agreement (PPA) to reduce fixed charge, reduction in furnace oil price which has unreasonably been increased over the past 2 years, 50% reduction in royalty paid to NWFP for Tarbela power generation and withdrawal of concession to FATA, PATA and Azad Kashmir. The remaining balance is recommended to be adjusted through increase in tariff as detailed in clause 6 of the paper.

7.2 AS A SALE OF 26% SHARE OF KOT ADDU POWER HOUSE AN AMOUNT OF US$ 185 MILLION WAS RECEIVED AGAINST THE QUOTED PRICE OF US$ 1583 MILLION WHILE WAPDA WILL BE SUBJECTED TO LOSS A US$ 170 MILLION ANNUALLY. IN FACT, PARTIAL PRIVATIZATION OF KOT ADDU POWER HOUSE AMOUNTS TO BORROWING A LOAN AT MORE THAN 95% RATE OF INTEREST. THE GOP WOULD HAVE BEEN MUCH BETTER OFF HAD KOT ADDU POWER HOUSE SOLD OUT FOR QUOTED PRICE OF US$ 1583 MILLION RETAINING ALL LONG TERMS LIABILITIES WITH GOP. THE VERY PURPOSE OF PRIVATIZATION IS DEFEATED UNDER THIS SCENARIO.

7.3 GOP IS INTERESTED TO PRIVATIZE WAPDA ASSETS TO IMPROVE ITS BALANCE OF PAYMENT. TO OVERCOME THIS PROBLEM I WOULD RECOMMEND TOTAL SALE OF 100% SHARES OF KOT ADDU POWER

HOUSE TO KEPCO UNDER REVISED TERMS AND CONDITIONS INSTEAD OF PRIVATISING OTHER WAPDA OWNED POWER HOUSES WHICH CAN STILL FETCH ADDITIONAL 1289 MILLION DOLLARS AS EARLIER DISCUSSED UNDER CLAUSE 3.4. ALL LONG TERM LOANS SHOULD BE RETAINED BY GOP. TOTAL PRIVATIZATION OF POWER HOUSES OTHER THAN MENTIONED UNDER CLAUSE 5.8 ABOVE MAY BE CARRIED OUT. GOVT. IS THEREFORE ADVISED TO REVISE PRIVATISATION POLICY TO SELL UNITS AT 100% OF THEIR BIDDING COST INSTEAD OF 26% SHARES RETAINING ALL LONG TERMS LIABILITIES WITH GOP. IN CASE OF VERY LARGE UNITS WHERE THERE IS A FEAR OF LOW BIDS DUE TO HUGE INVESTMENTS INVOLVED, UNITS BE DIVIDED AND SOLD OUT SEPARATELY. IN ADDITION UNDER THE PREQUALIFICATION CRITERIA, PROSPECTIVE PAKISTANI BIDDERS BE ENCOURAGED TO PARTICIPATE IN THE INDIVIDUAL CAPACITY OR AS A CONSORTIA WITH FOREIGN BIDDERS, TO ENCOURAGE LOCAL PARTICIPATION PREQUALIFICATION CRITERIA NEEDS TO BE REVIEWED.

7.4 TO SAVE WAPDA, FROM FUTURE DISASTER, POWER HOUSES OWNED BY WAPDA WHICH ARE PRODUCING ENERGY AT LOW COST SUCH AS GUDDU SHOULD UNDER NO CIRCUMSTANCES BE PRIVATIZED. TO INCREASE EFFICIENCY AND IMPROVE MANAGEMENT THEY MAY BE CORPORATIZED. IN ADDITION RETENTION OF THESE UNITS WITH WAPDA OR AS A CORPORATE UNIT IS ESSENTIAL TO ABSORB LOAD VARIATION TO KEEP GENERATION COST OF PRIVATE POWER TO MINIMUM.

7.5 No doubt the cost of generation per KWH is reduced with improvement of plant factor but this is not true for calculating overall loss to WAPDA as loss is a multiple result of difference of cost of WAPDA and private power generation per KWH and number of units sold. The total loss increases with improvement of plant factor for private power generation. It is, therefore, recommended that WAPDA should continue to generate power from their own economical plants and balance should only be purchased from private power irrespective of plant factor.

7.6 Some vested interests are shifting responsibility for loss on to WAPDA due its mismanagement and theft of energy. Out of 24% line losses, 11% losses are in high voltage transmission lines and auxiliaries while rest of 13% is attributed to distribution, out of which hardly 5% loss could be the possibility of theft. Taking Rs. 80 billion as total sale. 5% theft works out to Rs. 4 billion which can not compensate loss of Rs. 54 billion due to privatization. WAPDA is being blamed for overstaffing. Total operation and maintenance cost of distribution and transmission network works out to 25 paisas (0.6 cents) per unit sold. No private organization can reduce it further as it is at its lowest ebb compared to any international power organization of similar size and capacity.

7.7 Govt. pressure on Wapda to improve financial position by reduction in losses, admin. and operating expenses are long term reflective measures requiring years of hectic efforts, will have little impact on improvement of economy

today compared to colossal loss caused by defective privatization policy. Wapda over the past few years have concentrated all efforts to reduce losses, improve recoveries in addition to certain other economy measures, which if successful may result in savings of 2 to 4 billion rupees against the colossal has of Rs. 54 billion by 1998-99. Wapda Authority is requested to divert GOP attention to more crucial issues of privatisation and adjustment in tariff as discussed above.

7.8 To improve efficiency of Wapda the process of corporatization into small units be expedited. It is also essential to access profits and losses of each unit.

7.9 To save WAPDA from further losses, all those thermal power contracts which have not achieved the financial close or have not made sizeable made investments in Pakistan be cancelled.

7.10 The Thermal and Hydel energy policies be reviewed on top priority and should be based on international competitive basis.

7.11 Power generation for which indigenous fuels are available in Pakistan should be given priority to save foreign exchange.

8 CONCLUDING REMARKS

8.1 To our little satisfaction the Presidents written statement submitted in the Supreme Court gives the back ground and after effects of much trumpeted power policy and modus operandi of reshuffling of whole institutions and deals in awarding contracts for personal benefits. The President said that projects whose total cost would be several billions of dollars were permitted without any justification and for in excess of Pakistan priorities and ability to pay. I cannot understand why privatisation became touch stone of economic policies of all developing nations in the last one decade. Whether privatisation actually benefited states, is a question still to be answered. The privatisation of value added industries such as cement factories, ghee mills, banks is understandable, but not of essential services and utilities. The situation and state of art of developing nations is totally different from the developed nations. The same rules cannot be applied with equal success in both cases. Even not all western countries have allowed their public utilities to be owned privately nor do they intend to do so in the future. Pakistan did not have to rush where the established economic conditions are feared to be deteriorating. Their seems to be no logic in handing over the entire telecommunication system to foreign control or disposing off oil wells, gas field and energy resources to foreign investors knowing the inability of local stock exchange for participation due to their limitations and then buying back their outputs from them at a much higher cost. THE WAY THE PRIVATISATION IS BEING IMPLEMENTED, IS NOT ONLY NONTRANSPARENT BUT ALSO NONBENEFITING TO COUNTRY PARTICULARLY SELLING OF 26% SHARES AND THEN BUYING BACK PRODUCTS AT DOUBLE THE COST IS TO ACCOMMODATE THE INVESTOR TO BUY REST OF SHARES FROM HUGE SAVINGS OR TAKE OUT HUGE PROFITS IN FOREIGN CURRENCY TO THEIR HOMELAND.

THERE IS NO HARM IN CREATING ADDITIONAL FACILITIES UNDER PRIVATE SECTOR FOR A HEALTHY COMPETITION. BY THE TIME PAKISTAN SELLS OFF ITS WORTH VALUE ASSETS TO FOREIGN INVESTORS, PAKISTAN NET WEALTH WILL BE REDUCED TO A RAPIDLY DEPLETING BANK ACCOUNT AND AN INCREASED CONTROL OF FOREIGN CAPITAL ON THE COUNTRY'S ECONOMY.

8.2 Let us request GOP to support our viewpoint to revive WAPDA economy. Let us all promise today to workhard and honestly forgetting the past. Let us share the burden of privatization equally and act wisely in future to make Pakistan "Asian Tiger".

PAKISTAN PAINDABAD

Annex I to III are reproduced below:-

Annex-I

COMPONENT WISE BREAK UP OF O&M COST PER KWH FOR TRANSMISSION AND DIST. OF WAPDA SYSTEM
(1996)

Description	Transmission	Distribution	Total
Direct Apportioned Cost	6042.13	13368.05	59172.43
Cost Charged to GMF(P) Exchange Fluctuations	512.20	14.82	1141.15
Interest Charged to GMF(P)	0.00	0.00	0.00
Total	6554.32	13382.87	60313.58
Cost / KWH Generated (Paisa)	13.41	27.39	40.60
Cost / KWH Sold (Paisa)	17.75	36.24	53.99

	Cost pr unit sold
Units sold (From July, 1996 to Jan 1997)	22065941256
Revenue (Rs.)	49843642222
Cost per unit sold (Rs.)	2.25

T&G NETWORK EXPANSE COST PER UNIT TO ABSORB ADDITIONAL POWER
(PC-1 for the year 1996-2000)

Total Project Cost (M. Rs.)	27257
Total MVA to be Added	10450
Cost Per MVA to be Added (M. Rs.)	2.6
Cost per KWH added (Rs.) at consumer and	0.44

Annex-II

EFFECT OF PLANT FACTOR IMPROVEMENT ON LOSS/GAIN TO WAPDA

i)	Plant factor %	30	40	60	70	100	
ii)	Proportionate unit generated	30	40	60	70	100	
iii)	Cost of private power generation Rs.	5.04	4.16	3.28	3.03	2.575	
iv)	Total cost of private generation	151	166	195	212	257	
v)	Taking reference cost of generation @ Rs. 1.50 per unit	45	60	90	105	150	
vi)	Loss to WAPDA at reference cost of generation iv) - v)	106	106	105	107	107	(Static trend)
vii)	Taking reference cost of generation @ Rs. 1/KWH	30	40	60	70	100	
viii)	Loss to WAPDA at reference cost of Rs.1/KWH iv) - vii)	121	126	135	142	157	(Increasing trend)
ix)	Gain to WAPDA at reference cost of Rs. 2/KWH	91	86	75	72	57	(Decreasing trend)
x)	Loss to WAPDA per unit Rs. / KWH (from Table 2)	4.97	3.88	2.79	2.47		
xi)	Total loss to WAPDA (I) x (x)	149	155	167	173		(Increasing trend)

Annex-III

ESTIMATED ENERGY PATTERN (MKWH) 1998-99

CALCULATION OF PLANT FACTOR FOR PRIVATE POWER GENERATION 1998-99

Description	March 98	April	May	June	July	August	September	October	November	December	January 99	February
System Demand	4154.144	4445.557	4897.959	4774.594	5607.045	5398.535	5238.337	4436.344	4116.228	4550.818	4672.484	3953.838
Hydel Generation	1158.871	1270.332	1333.436	2041.328	2658.689	3245.49	3329.417	2971.71	2340.525	1537.039	1321.394	702.706
Net Units required from thermal generation (1-2)	2995.273	3175.225	3564.523	2733.266	2948.356	2153.04	1908.91968	1464.6336	1775.7027	3013.7792	3351.08986	3251.1323
Wapda Economical Therma power plant generation (Guddu, Kotri, Lakhra coal, Jamshoro, Faisalabad)	1041.90	1008.29	1041.90	672.19	694.60	694.60	672.19	694.60	672.19	1041.90	1041.90	941.07
Balance Units purchased through private generation	1511.635	1720.592	1515.719	934.735	1116.704	928.391	1038.458	927.103	1386.348	1787.690	2499.144	1653.466
Total private generation capacity (HUBCO, KAPCO & all other IPPs)	2880.612	3131.340	3144.732	3411.084	3411.084	3488.376	3488.376	3488.376	3599.688	3599.688	3599.688	3599.688
Plant factor (monthwise)	52.47618	54.94747	48.19867	27.40287	32.73751	26.6138	29.769096	26.577496	38.5130045	49.6623596	69.4266836	45.933592
Average (Plant Factor)	41.8549											