

HOW TO EASE WAPDA'S FINANCIAL POSITION AND IMPROVE GOVERNANCE

By
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1. FINANCIAL IMPACT OF IPPS ON WAPDA

In my last paper read at IEP Forum in May, 1997 on the subject. "Impact of private power generation on economy of WAPDA" gave a detailed account of losses which Wapda may have to bear. Paper covered the possible remedies to overcome the financial burden, which even today stands true. GOP has partially implemented the recommendations that too under pressure of IMF, providing some relief to Wapda. Had GOP followed recommendations made in the paper in full, Wapda financial situation would have been much better today. In this paper I will once again repeat Wapda financial position and its compensation through certain measures to balance the budget. Before proceeding further for corrective measures it is essential to estimate loss to Wapda. First of all let us glance at Wapda financial position before and after induction of IPP's.

1.2 WAPDA PERFORMANCE AT A GLANCE

Financial Year Ending	30.6.94	30.6.95	30.6.96	30.6.97
No. of total Employees	132,554	136,00	135,500	135,300
No. of Consumers (in Millions)	8.6	9.0	9.5	9.9
Total O&M, T&D, Admn & General Expenses (Rs. Millions)	7,270	8,948	10,061	11,500
Total T&D Cost (as %age of sales)	15.9%	15.46%	12.95%	12.8%,
Total Electricity Sale (Rs. Millions)	45,701	57,861	77,656	90,000
Total Operating Expenditure (Rs. Millions)	31,935	37,891	47,100	109,960
Total Operating Profit (Rs. Millions)	+13,766	+19,970	+30,556	-19,960
Percentage Power Losses	24.2%	24.0%	24.4%	24.3%

- 1.3 Wapda was a profit earning organization till 1996-97 as may be observed from the above table. The operating profit was gradually increasing from 13 billion to 30 billion during the years 1994 to 1996. During the years 1996-97 KEPCO was privatized and HUBCO started production. Wapda has to purchase energy from KEPCO at the rate of Rs. 3.22/KWH and from HUBCO at an average cost of Rs. 4.67/KWH against the average sale price of Rs. 2.25/KWH which resulted in total loss of Rs. 19 billion during the year 1996-97. The loss was estimated to increase to Rs. 38 billion and Rs. 51 billion during the years 1997-98 and 1998-99 respectively due to induction of more IPP's based on the sale rate of year 1996-97 i.e. Rs. 2.25/KWH.

2. CALCULATION OF FINANCIAL LOSS

- 2.1 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. It may be added that to absorb additional private power generation WAPDA has to expand transmission and distribution network 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.
- 2.2 The estimated private power generation tariff and loss to WAPDA per unit at different plant factors is given under Table-I below:-

Table-I 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 charges 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 charges 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@Rs.50/US\$ at Bus Bars	3.69	4.00	5.07	5.15
vi)	Line Losses@24% in Rs/unit	0.88	0.96	1.23	1.47
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	5.54	5.93	7.30	7.51
x)	WAPDA Average Sale Cost/Unit During 98-99	3.19	3.19	3.19	3.19
xi)	Loss to WAPDA per Unit Rs/KWH	2.35	2.74	4.11	4.32
xii)	Loss to WAPDA per unit Rs./KWH had there been no devaluation of currency over the past 2 years i.e. Rs.40/US\$	1.22	1.54	2.63	3.70

2.3 Based on loss per unit as worked out in Table-I, the operational loss at various plant factor of IPPs is estimated as under:-

TABLE-II EFFECT OF PLANT FACTORS ON COST

	40% Plant Factor	60% Plant Factor	70% Plant Factor
i. Total unit to be generated by all IPPs including HUBCO in GKWH	14	21	24.5
ii. Units available at customer end	10.6	16	18.6
iii. Loss per unit at average sale rate of Rs.3.19	4.11	2.74	2.35
iv. Total difference in cost in Billion (i.e. budget deficit)	43.5	39.52	43.71

2.4 As indicated in Table I above, cost of generation per KWH is reduced with improvement of plant factor but this is not inversely proportional for calculating overall loss to WAPDA as loss is multiple result of difference of cost of WAPDA and private power generation per KWH and number of units sold. In my opinion increase in sale is not the answer to compensate loss due to induction of IPPs as is clear from Table-II above, although with improvement of power factor there is a nominal increase in revenue collection.

- 2.5 The loss to Wapda due to induction of IPP's as worked out under clause 2.3 above, is not depicting the true financial picture of Power Wing, Wapda. To work out estimated cost/unit at consumer end (for the year 1999-2000), we have to take into account generation cost including Hydel, Thermal and private powers, operation & maintenance cost of distribution and transmission system, interest to debt services and development cost i.e. PSDP.

Generation Type	No. of Units GWH	Average cost per Unit	Total Cost Rs. Million
i. Hydel cost, WAPDA	22,000	0.17	3,740
ii. Hydel Surcharge (GOP)	—	—	7,000
iii. Thermal WAPDA	12,000	2.30	27,600
iv. Private Powers	16,000	4.20	69,200
Total:	50,000		107,540
v. Operation & Maintenance cost of Dist. & Trans. System and T&G (based on 96-97 plus 30% increase)			30,000
vi. Interest on debt services			22,000
vii. PSDP for 1999-2000 (Local currency)			12,000
Total cost (Rs. Million)			171,540
viii. Total units available at consumer end (less line losses of 24%)			38,000 GWH
ix. Cost per unit at consumer end			Rs.4.50
x. Average sale price per unit			Rs. 3.17
xi. Additional increase required to balance budget per unit			Rs.1.43
xii. Estimated budget deficit (item viii X item 1.43)			Rs. 54 billion

- 2.6 It may be observed that average cost/KWH at consumer end works out to Rs. 4.50 to make Wapda a self sustainable and a developing organization, the purpose for which it was created. Under political pressures, our financial experts play with the figures to balance the budget every year by imposing cuts on PSDP and Administrative expenses, sale of core and non core assets,

borrowing money from the banks etc. which have adverse effects on our economy in the long run. If we are sincere to Wapda and the country, we must work in realistic terms.

2.7 GOP has been haggling over the past two years without any outcome to improve Wapda financial position; A brief on the steps taken is as under:-

- i. GOP has allowed WAPDA to raise average tariff from Rs. 2.25 to Rs. 3.19 over the past two years but this gain has been nullified by devaluation of local currency by the same amount as all capacity payments to IPP's are to be made in US\$.
- ii. GOP failed to resolve issues and reduce tariff with 1PP's although several committees were constituted due to lack of proper handling and knowledge.
- iii. Notices to terminate IPP's contracts to nine companies on basis of fraudulence were issued which were later withdrawn due to lack of any Proof or evidence against them thus putting GOP in more embarrassing position in the international market.
- iv. There is a general misconception that restructuring will improve financial health of Wapda. There is no doubt that commercialization followed by privatization will improve efficiency and service to consumers but at much higher cost, as under privatization policy. GOP has to ensure a reasonable return to the prospective investors.
- v. To arrest leakage, improve recoveries and reduce losses GOP has inducted 35000 army personnels in Wapda. Although there is appreciation from many quarters, but it is too early to access the achievements. According to a rough estimate a saving of not more than Rs. 5 billion/annum is expected by the army clean up operation.

2.8 Are the above actions taken so far enough to cover up the loss of Rs. 40 to Rs. 50 billions a year? If answer is NO, GOP must think of other remedial measures which are sustainable. Wapda economy is already deteriorating from bad to worse effecting hundreds of other institutions viz. contractors, indentors, manufacturers, gas and oil supply companies etc., thus putting the economy of entire country at stake.

3. REMEDIAL MEASURES TO REDUCE FINANCIAL LOSS

3.1 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.

3.2 GOP has unreasonably increased furnace price from Rs. 2600/- per ton to Rs. 5500/- per ton over the past two years. The price in the international market has been drastically reduced. Taking currency devaluation into account, the price of furnace should not be more than Rs. 3500/- per ton which will provide

a relief of 0.8 cents per unit i.e. paisas 40/unit of furnace oil generation. The overall impact with respect to total sales would be 20 paisas/unit. GOP MUST be strongly persuaded to reduce furnace oil price for all powder producers.

- 3.3 Political agencies should purchase power from WAPDA at bulk for supply to FATA & PATA areas or Govt. to make difference of payment if flat rate is to be applied to provide relief to WAPDA. An adjustment of Billion is assumed to be reasonable, which translates into 15 paisas/KWH.
- 3.4 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,
- 3.5 Domestic and Industrial tariff needs to be further rationalized which would improve economy and generate more revenue in the long run. Wapda may consider to retain the same tariff for the first 150 units being the life time tariff for the low paid consumers while the tariff from 150 units upwards should be based on actual cost to Wapda which at present works out to Rs. 4.60/unit. This will provide great incentive for more use of energy above 600 units. Similarly higher slabs of industrial tariff needs to be reconsidered providing incentives for more use of energy.
- 3.6 All efforts should be made to install meters at flat rate tubewells on war footing which will sufficiently generate additional revenue for Wapda.
- 3.7 Hectic efforts should be made to check all meters having been in service for more than 10 years. Slow and defective meters be replaced on 1st priority.
- 3.8 There is sufficient margin for negotiation under private power agreements as the present tariff is based on over pricing and the payback period of their investment is only 4 to 5 years. 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 40% of plant factor instead of 60% as per PPA for the next three ye*. This would provide relief of 1.4 cents per unit i.e. 70 paisas per unit produced by IPPs. The overall impact with respect to total sales will be about 35 paisas per unit for the year 1999-2000.
- 3.9 GOP is interested to privatize Wapda assets to improve its balance of payment. To overcome this problem I would recommend sale of additional shares of Kot Addu Power House in the stock market or to KEPCO under revised terms and conditions instead of privatizing other Wapda owned power house. All long term loans should be retained by GOP. Govt. is advised to revise privatization policy to sell units at 51% of their bidding cost instead of 26% shares retaining all long terms liabilities with GOP.
- 3.10 To save Wapda from future disaster, power houses owned by Wapda which are producing energy at low .cost should under no .circumstances be privatized. To increase efficiency and improve management they have already

been corporatized and followed by commercialization. In addition retention of these units with Wapda as a corporate unit is essential to absorb load - variation to keep generation cost of private power to minimum. These power houses may be considered for privatization at a later stage, once the economy of Wapda utilities is stabilized and: load is developed to fully utilize power generation.

3.11 SALE OF POWER TO INDIA

The feasibility for sale of power to India is meager due to technical and higher cost of generation. However, efforts should be made to sell excess power to India which is estimated to be in range of 300 to. 1000 MW over the next two to three years at cost of generation plus transmission which is estimated to be about 7 cents/unit.

4. MANAGEMENT AND GOOD GOVERNANCE

4.1 SYSTEM PROBLEMS

4.1.1 The frequent changes of Wapda top management over the past three years has over shadowed its future and created frustration among its employees with no destination in sight. All Measures taken by the Government of Pakistan to improve Wapda management and. financial position has utterly failed during the last few years. GOP has no faith' in its professionals without looking deep into cause of failure to manage the affairs properly which in my opinion is perhaps too much interference by the bureaucrats and politicians in the management. Professionals have never been given a chance to work independently and show their competence: to manage technical institutions. They are either headed by bureaucrats or army personnels. Every organization has its own system of working which is usually different from the others. Administrators inducted from outside are in fact aliens to the new system and are quite ignorant about its operational, technical know-how. To cover up their deficiencies they pose as masters of everything and try to subdue the professionals which in fact is major cause of failure of all the professional institutions \$n Pakistan. They try to impose short term policies which trickles down from the Govt. to improve situation as a temporary measures and show up out puts to GOP which are not sustainable in the long run. We, as a nation are in habit of imposing decisions on the others, right or wrong without team work and support of back up data. We have hundreds of such examples wrong policies imposed by outside agencies. Induction of IPP is one of the examples for which entire nation is suffering today. Had the GOP worked out its financial impact on overall economy of the country, we could have averted today's financial crunch, poor credibility of Pakistan among foreign investors and damage to our economy putting this country at the bottom of World's financial ranking.

4.2. SETTLEMENT OF IPPs DISPUTES.

4.2.1 Previous Govt. made a blunder by signing IPP contracts at a exorbitant rates which are not affordable by the nation. GOP and Wapda has been muddling

through during the last two years with its policies and objectives, remaining hazy, undefined and unclear to settle issues of IPPs which are of the major cause of Wapda Financial Crises. Previous Govt. Mistake is being politically exploited rather than resolving the issues. Two wrongs never make a right, and specially in this case, consequences will be disastrous. Enthusiastic Pakistanis talk of jahad against IPP's by cancellation of contracts and have declared it a war between Kufar and Islam. The wrongest signal Pakistan Government can send abroad is to dishonour contracts negotiated by earlier government without finding any solid evidences of corruption. All business deals are based on trust. There may be some lapses in departmental procedures which is an internal matter of Govt. If leaders and bureaucrats allowed them windfall profits by agreeing to one deals supported by sovereign guarantees, wrong power policies of GOP, businessmen can hardly be blamed unless fraudulent charges are proved against them. Contracts are contracts, no matter who signs them. Although power purchase agreement have clearly defined procedures, for resolving all disputes, but in my humble opinion best way to resolve these issues is to negotiate with individual IPPs across the table in a cordial and friendly atmosphere to reduce the crippling tariff rather than going to courts and litigations. Still it will be much wiser to softly nudge power producers towards an amicable settlement unless there is a sound proof of fraudulence against them.

4.3 INDUCTION OF ARMY

- 4.3.1 In utter despair GOP recently inducted 35,000 army personnel in Wapda to bring reforms and improve its financial position which are mainly aimed at correct billing, effective recoveries, reduce theft and improve losses. On these particular... scores, army has done its job well. They have received appreciation from all quarters. GOP cannot afford to retain army to do this job for Wapda over a long period. The question arises whether Wapda will be able to maintain same level of efficiency after army is withdrawn? What measures and changes are to be adopted in the system to maintain the improvements made during the period? If we fail to bring cultural changes or alternate effective working system then old environment will soon spring back into action and all achievements made by army would be back to square one. We must think over the timing for withdrawal of army and induction of parallel, effective system to keep the upgradation and improvement sustainable. It will not be out of place to mention here that those who once supported army induction in Wapda are now talking for its early withdrawal. We should not once again make another mistake by withdrawing army in a hurry without accomplishing all the missions assigned to them. We should not repeat the history of Pakistan Steel where one of my class. fellow Lt. General Qamar Zaman has „launched major operation to effectively improve the situation which was later withdrawn as it did not suit the political interests.

4.4 RESTRUCTURING OF WAPDA

- 4.4.1 The GOP is implementing program for the restructuring of Pakistan Power Sector in the light of the strategic plan approved by the Cabinet Committee Privatization in July 1992. According to the strategic plan, the program

involves the corporatization and commercialization of existing facilities into operating subsidiaries of WAPDA.

- 4.4.2 The unified Power Wing of WAPDA has been restructured into following 12 public limited companies under the Company Ordinance 1984 with the Corporate Law Authority GOP.

Distribution Companies	8 Nos.
Generation Companies	3 Nos.
NTDC	1 No.
PEPCO	1 No.

- 4.4.3 The Electric Supply Agreement, Business Transfer Agreement and Operation Development Agreement were signed by WAPDA with the Chief Executives of all the distribution companies on 29/30 June, 1998 and all the eight distribution companies are functioning independently through their respective Board of Directors since July 1, 1998. As a result, Chief Executives in the Distribution Companies of the rank of in service Brigs. have been appointed.
- 4.4.4 All Thermal Power Units of WAPDA have been converted into three Corporatized companies namely Jamshoro Power Company Limited (GENCO-1), Central Power Generation Company Limited (GENCO-2) and Northern Power Generation Company Limited (GENCO-3)
- 4.4.5 A National Transmission and Despatch Company (NTDC) responsible for operation of Transmission and Grid System Network of 500kV and 220kV voltage level was incorporated on 06-11-1998. The agreement have also been signed for all agencies & NTDC and have started functioning as independent units from 1st of March, 1999.
- 4.4.6 Originally PEPCO was to be created as WAPDA Holding Company, but as per present scenario, PEPCO will be a Management Company. PEPCO as a Management Company has since been incorporated with the Corporate Law Authority. Consultants have prepared draft Memorandum of Agreement for PEPCO to manage and oversee the restructuring in more productive manner. The Executive Directors have also been appointed to undertake their assignment who have already joined with 411 time bound tasks.

4.5 MAJOR ISSUES TO EXPEDITE COMMERCIALIZATION

- 4.5.1 The major issues which need to be looked into to expedite the process of commercialization of the distribution companies are as under:-
- Finalization of Transfer Pricing from GENCO to. NTDC and NTDC to DISCOs and to develop mechanism to make all 12 entities commercially viable.
 - Issuance of licence by NEPRA.
 - Issuance of notifications for exemption of income tax, wealth tax, CTV

ate. by the Federal Government/CBR and stamp duties, registration fee and other levies by all provincial governments.

- iv. Consent of creditors for transfer of assets and liabilities to the new companies.
- v. Determination of Pension Liability for staff to be transferred to the corporatized entities.
- vi. Restructuring of corporatized entities and induction of revised policies and procedures to operate them on pattern of commercial lines.
- vii. Viable decision of technical boundaries NTDC & DISCOs.

5. PRIVATIZATION OF WAPDA

5.1 Management Contracts for DISCOs

- 5.1.1 There is no doubt that State run enterprises including Wapda are suffering from mis-management and financial indiscipline. The purpose of privatization is to address the critical issues so as to reduce burden on national exchequer. The sudden privatization of the national assets will result in very low sale proceeds which means selling off our national assets to foreign multi-nationals at a throwaway prices. It is suggested that Wapda distribution utilities after corporatisation should be given to the prospective investors on management contract for a period of 2 to 3 years. During the management contract the revenue returns to Wapda should not worsen. The company may get its profits through increase in efficiency .and reduction in losses. Once the area boards are stabilized and declared as profit earning organization during this interim period, privatization of area boards may be carried out which will fetch realistic sale proceeds. In other words, the government should make efforts to improve efficiency of the public utility companies by privatizing their management preferably to Pakistani experts and professionals who may be allowed to bring foreign associates where necessary.

In my humble opinion it may not be viable to privatize distribution units (DISCO's) directly unless they are Made profitable units, through proper tariff adjustments; theft control and reduction of line losses.

5.2 Privatization of Ghazi Brotha Project

- 5.2.1 Due to shortage of local currency Ghazi Brotha Project has fallen behind its schedule. As I understand there is a shortfall of Rs. 16 billion required over the next three years. On request of GOP Asian Development Bank offered a loan package of US\$ 350 million to cover up resources gap to timely implement the GBHP with the condition that it will be first commercialized followed by privatization. In view of excess power already available in the country, Wapda can afford delay in commissioning of GBHP and this project should be completed by GOP from its own resources.

5.3 Privatization of FESCO

5.3.1 Privatization of Area Electricity Board Faisalabad was assigned to WC, USA as a consultant which is a subsidiary of the World Bank. FESCO was scheduled to be privatized by December 1996 by latest under orders of President of Pakistan. In the absence of proper transfer pricing tariff, IFC designed a complicated Accrued Distribution Formula to the benefit of perspective buyers, repercussions of which were difficult to understand. In simple words, New Company would have paid Wapda for electricity as difference between Revenue from sale of energy under Wapda Tariff after deducted its own operational expenses and huge profits @ 24.5% of its investments. On scrutiny of financial model it was revealed that as a sale proceed of 26% shares, GOP will receive an amount of Rs. 2.5 Billion only once, while Wapda was burdened to support new Co. by almost the same amount every year. In fact privatization of FESCO would have costed Wapda borrowing loan at 100% rate of interest. We must avoid such a situation in future. WAPDA ultimately succeeded to defer privatization of FESCO under 'ADF' Formula until proper transfer pricing was determined and approved by NEPRA.

5.4 General Remarks

- 5.4.1 Privatization of essential public utilities such as communication, power, oil and gas Companies is not an economic but a political issue raised by IMF, World Bank and other donor agencies. Due to limited resources of developing countries, foreign multinational companies get a good chance for their investments to buy assets, resources, utilities, c & gas fields at throw away prices particularly under privatization policy for sale of 26% shares with *I management under patronage of donor agencies. J purpose is to control world economy through strategy' of giving loans to developing countries. The IMF backed by USA and tightly .knit world Jewish community is able to dominate the policies internationally as well as economic control. of the countries under its debt cover by imposing conditionalities.
- 5.4.2 We have to be wise; enough to protect ourselves against interest of Zit ;t imperialist powers and examine thoroughly conditionalities imposed by donor agencies before accepting their offers.