



National Electric Power Regulatory Authority
ISLAMIC REPUBLIC OF PAKISTAN

OPF Building, G-5/2, Islamabad
Ph:9220902 — Fax: 9210215
E-Mail: office@nepra.sdmpk.umdpc.org

Registrar

No.NEPRA-03/WAPDA-98/247

24th April, 1999

Ch. Irshad Ahmad
Secretary
Ministry of Law and Justice
Islamabad

Subject:- **WAPDA PETITION; NEPRA 03/WAPDA-98**
Intimation of Final Determination of Tariff
Pursuant to Section 31(4) of the Regulation of Generation,
Transmission and Distribution of Electric Power Act, (XL of 1997)

Pursuant to para 7(ii) of the determination dated 27-03-99, please find enclosed the Final Determination of the Authority in connection with WAPDA Petition No. NEPRA-03/WAPDA-98, Revised on 18-03-99 and Second revised on 25-03-99.

2. The determination is being intimated to the Federal Government for the purposes of notification of the approved tariff in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), and rule 16(11) of the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rules, 1998.
3. Please note that only the Annex to the determination schedule needs to be notified in the official gazette.
4. The Petitioner had also requested for amendment to the terms and conditions of the Schedule of Tariff, we have accepted the requested changes indicated in paragraph No. 62. A complete book of terms and conditions incorporating the approved changes will be sent within 10 days for notification in the official gazette.

(FARYAD H. MAJID)
REGISTRAR



Copy to:

1. Mr. Ashfaq Mahmood, Special Secretary Finance
2. Syed Shahid Husain, Secretary M/o Water and Power
3. Mr. Khalid Jawed, Secretary Finance

NATIONAL ELECTRIC POWER REGULATORY AUTHORITY

24th April, 1999

**WAPDA TARIFF PETITION
NEPRA-03/WAPDA-98**

**FINAL TARIFF DETERMINATION ON
WAPDA TARIFF PETITION NO:NEPRA-03/98/WAPDA-98**

The Water and Power Development Authority

Petitioner

1. Pak China Fertilizer Limited
2. Farmers Associates of Pakistan
3. Senior Citizens Foundation of Pakistan
4. All Pakistan Textile Mills Association
5. Mohammad Hussain & Sons (Pvt) Limited
6. Islamabad Citizens Committee
7. Caustic Soda Manufacturers Association
8. Ittehad Chemicals Limited
9. Education for All Society
10. Association of Builders and Developers
11. Roomi Cotton Factory
12. Pakistan Cotton Ginners' Association
13. Consumer Rights Commission of Pakistan
14. Sindh Chamber of Agriculture

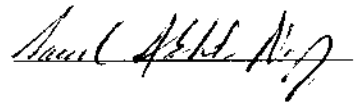
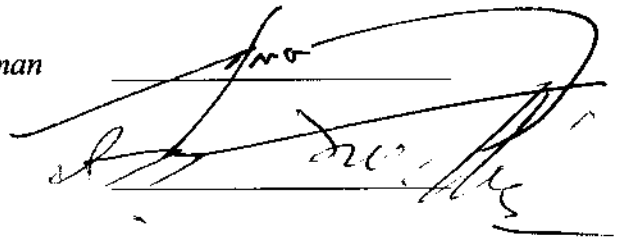
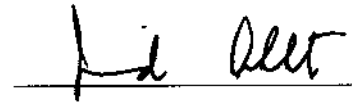
Interveners

Javid Akhter, Chairman

Sardar Mohammad Sharif Khan, TSt., Vice Chairman

Fakhruddin Mallick, Member (Finance)

M. Saeed Akhtar Niazi, Member (Technical)



CONTENTS LIST

1. Determination
2. Annex – Rate Schedule under the second revised petition
3. Intimation of approved tariff to the Federal Government pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (XL of 1997)

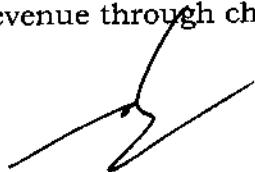
Record of Proceedings (not included)

FINAL DETERMINATION

1. Pursuant to paragraph 7 (ii) of the Determination of 27.3.99 in respect of the WAPDA Petition No. NEPRA-03/WAPDA-98 ("Determination"), the Hearing was continued to allow an opportunity for Interveners to present their views on the difference in rates between the Revised Petition and the Second Revised Petition. The determinations made hereinafter are to be read together with the Determination.

2. As the Schedule of Tariff containing the components of the customer class wise rate ("Schedule of Tariff") were not supplied by the Petitioner while submitting the Revised Petition, the Interveners were not aware of this schedule at the time of close of proceedings prior to the Determination. Therefore evidence was allowed to be presented in respect of the Schedule of Tariff.

3. Four more Interveners were allowed to become a party to the proceedings prior to the reopened Hearing thus making a total of 14 Interveners as parties to the proceedings. The views presented by the Interveners and points raised by NEPRA experts related to the following issues:
 - i) The Petitioner had stated during the earlier proceedings to cover the Deficit (Cash terms) of Rs.10.2 billion through non-tariff measures. However, in the Second Revised Petition the Petitioner has proposed to meet Rs.5.2 billion of the deficit from additional revenue through change in rates.



ii) The Petitioner has proposed an increase in the Minimum Charges in effect prior to the Original Petition in the following categories:

- a) Residential (single phase, three phase)
- b) Commercial (single phase, three phase)
- c) Industrial (B-1)

iii) The Petitioner has proposed an increase in the Fixed Charges in effect prior to the Original Petition in the following categories:

- a) Industrial B-2, B-3, B-4
- b) Bulk Supply
- c) Agricultural

PARTIAL RECOVERY OF CASH DEFICIT THROUGH TARIFF MEASURES

4. The Petitioner was cross examined by NEPRA case officer and experts on the issue why the Rs.5.2 billion cash deficit could also not be met through non-tariff measures such as deferring liabilities or decreasing the receivables. The explanation given by the Petitioner was that the staggering of liabilities beyond the Test Year as envisaged in the Revised Petition was not possible as this would have resulted in breach of certain covenants in the loan agreements made with donor agencies. We had held in our Determination that this was not a ground to be raised at this stage, and had left this matter for further consideration. During the re-opened proceedings, the existence and impact of these loan covenants was highlighted by the Petitioner, which has not been challenged by any Intervener. These covenants relate to limits of a minimum

self-financing ratio of 40% and debt service coverage of 1.5. Even though the international lending organizations have agreed to relax these ratios, these ratios would not have been realised if the rates in the Revised Petition were enforced.

5. The Petitioner stated that in order to be able to meet the covenants and to avoid recovering the entire cash deficit through increase in rates, a compromise was made in the Second Revised Petition to cover the gap partially (Rs.5.2 billion) through tariff adjustment. The balance of the deficit is proposed to be met through rollover of the debt service liabilities to the Government. The Petitioner also emphasized that if these financing ratios are not achieved, not only would the Petitioner be in breach of its loan agreements it would also be very difficult to ensure continued availability of the loans.

6. The increase in rates is being justified partially on the grounds of the contractual limitations of the Petitioner. Furthermore, the continued financial viability of the utility is contingent on the regular and adequate availability of loans from the lenders for the Petitioner's ongoing operational requirements and capacity expansion of its delivery systems. We agree that the current agreements with the donors make it binding on the Petitioner to maintain the aforesaid financing ratios and it would be imprudent for the Petitioner to put its financial viability at stake by failing to abide with the covenants, apart from the potential consequences of the exercise of the lenders' remedies in case of default.



7. The covenants pertaining to the maintenance of pre-determined financing ratios by a borrowing utility are mainly inserted to ensure a certain level of financial viability of the utility. Such covenants are, however, also used to enable the lender to cause the borrower to modify its operational and governance patterns. These objectives fall within the realm of regulation. The existence of financial covenants is understandable from the lenders' point of view in the absence of a regulatory authority. Now that NEPRA is in place, these covenants are a serious hindrance in making an objective analysis of the real cash requirements of the Petitioner. We believe that the insertion of such clauses where a utility is compelled to put burden on its customers or not allow a relief to its customers simply because it has to follow a certain financing ratio is tantamount to regulating the utility. We recommend to the Government to take up these matters with the lending agencies. Some of these lenders were instrumental in the establishment of NEPRA. It would be in consonance with their principled stand of independent regulation if these covenants are reconsidered by them, and leave the regulatory responsibility to NEPRA.

8. It is pertinent to note that, in the Second Revised Petition, there is no significant increase in the rates of all individual customer classes (except Public lighting, Residential colonies attached with industries, Bulk supply tariff C-1b, C-2C and traction) as compared to the rates in effect prior to the submission of the Original Petition (hereinafter referred to as the "Previous Rates"). Table-1 shows the comparison of rates in the Second Revised Petition with the Previous Rates at column 6 and column 3.

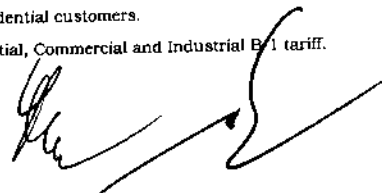
TABLE-1
Customer Class-wise Rate Comparison

1	2	3	4	4a	5	5a	6	6a
Customer Class	Units sold 18.03.99 Revised	Previous Tariff 09.03.98 to 26.03.99 Ps/Kwh	Proposed Tariff 21.12.98 Original Petition Ps/Kwh	%age Incr./ Decre. wrt Previous Tariff	Proposed Tariff 18.03.99 Revised Ps/Kwh	%age Incr./ Decre. wrt Current Tariff	Proposed Tariff 25.03.99 2 nd Rev. Ps/Kwh	%age Incr./ Decre. wrt Current Tariff
RESIDENTIAL	18,597							
a) Flat Rate Fata (*)	2448	35.00	39.00	11.43	35.00	0.00	35.00	0.00
01-50 (upto 50 units)	561	140.00	156.00	11.43	140.00	0.00	140.00	0.00
01-100	6325	172.0	192.0	11.63	160.0	(6.98)	172.0	0.00
101 - 300	6061	261.0	291.0	11.49	251.0	(3.83)	262.0	0.38
301 - 1000	2090	507.0	565.0	11.44	460.0	(9.27)	490.0	(3.35)
1001 - 4000	558	645.0	719.0	11.47	565.0	(12.40)	630.0	(2.33)
Above 4000	554	680.0	758.0	11.47	600.0	(11.76)	680.0	0.00
COMMERCIAL	2,203							
01 - 100	390	668.0	738.0	10.48	668.0	0.00	668.0	0.00
Above 100	1813	717.0	793.0	10.60	660.0	(7.95)	705.0	(1.67)
INDUSTRIAL	12,319							
B-1 400 Volts Upto 40 KW	3060	466.0	515.0	10.52	450.0	(3.43)	460.0	(1.29)
B-2 400 Volts 41 - 500 Kw	3479	516.0	570.0	10.47	430.0	(16.67)	458.0	(11.24)
B-3 11/33 Kv	4493	402.0	444.0	10.45	340.0	(15.42)	366.0	(8.96)
B-4 66/132 Kv	1287	389.0	430.0	10.54	320.0	(17.74)	355.0	(8.74)
Bulk	2,821							
C1a) Licensees & Non Licensees	8	426.0	471.0	10.56	426.0	0.00	426.0	0.00
C1b) Others	736	459.0	507.0	10.46	459.0	0.00	475.0	3.49
C2 a) Licensees & Non Licensees	768	397.0	439.0	10.58	397.0	0.00	397.0	0.00
b) POF	32	462.0	511.0	10.61	462.0	0.00	462.0	0.00
c) Others	1043	448.0	495.0	10.49	448.0	0.00	465.0	3.79
d) AJ & K	0	324.0	358.0	10.49	324.0	0.00	324.0	0.00
C-3 66/132 Kv	234	441.0	488.0	10.66	441.0	0.00	441.0	0.00
Tubewells	4,749							
a) SCARPS	1069	390.0	434.0	11.28	390.0	0.00	390.0	0.00
b) PUNJAB & SIND I) Flat Rate	1542	207.0						
ii) Metered	965	427.0	476.0	11.48	350.0	(18.03)	350.0	(18.03)
C) NWFP & Balch I) Flat Rate	593	199.0						
ii) Metered	580	355.0	396.0	11.55	291.0	(18.03)	291.0	(18.03)
Public Lighting	163	589.0	656.0	11.38	589.0	0.00	700.0	18.85
Tariff II	55	484.0	538.0	11.16	484.0	0.00	500.0	3.31
Traction	14	384.0	428.0	11.46	384.0	0.00	400.0	4.17
Cogen	1	500.0	500.0	0.00	500.0	0.00	500.0	0.00
Average Tariff		318.0	353.0		331.0		348.0	
Grand Total	40,922	(**)						

*Rates based on Rs. 636 per connection per month as 35 paise per KWH.
**Estimated in March, 98 when last Tariff was notified.

[Note]

- Time of Day Tariff has been introduced. Using this tariff and a judicious re arrangement of load, industries can reduce their bill even further.
- Rates in Column 2 adjusted as per new units slabs proposed for Residential customers.
- The effect of minimum charges is not included in the rates of Residential, Commercial and Industrial B1 tariff.



9. Table 1 indicates that even though the individual customer class rates have not been increased, the expected average revenue of the Petitioner would increase on account of the expected increase in consumption by the industrial customers.
10. Amongst the Interveners, except for the Farmers Associates of Pakistan, none raised any serious objection to the rates stated in the Second Revised Petition, even though they indicated a preference for the rates stated in the Revised Petition. The objections of the Interveners were mainly directed at the increase proposed in the Minimum Charges and the Fixed Charges.
11. The Farmers Associates of Pakistan further elaborated upon the potential drastic consequences of the proposed rates. We quite agree with the apparent force of their submissions. It may be noted, however, that their objections were not directed specifically at the difference in the rates between the Revised Petition and the Second Revised Petition, but were of a general nature and mainly against the abolition of Flat Rate. These objections have been dealt with in detail in the Determination. We reiterate the observations and directions made in this regard in the Determination.
12. The cross-examination of the Petitioner by the financial experts of NEPRA suggests that a portion of the cash deficit may be met by the Petitioner through adjustments in the expected projections for the Test Year and through adoption of various measures other than the increase in tariff. Scrutiny of the financial

data indicates the possibility of reducing the cash deficit through the adoption of such measures. However, the measures proposed are executory in nature, depend on their acceptability to the financial markets and lenders and require implementation over a period of time. Furthermore, the expectation of additional cash availability has to be viewed in the background of the potential uncertainty and the level of confidence in the projections of expected increase in sales of industrial customers made by the Petitioner.

13. Although the reduction in rates in the Second Revised Petition in comparison with the Previous Rates is less than the reduction indicated in the Revised Petition, it is aimed at correcting the distortions of the rates with respect to average rates for most of the customer classes, particularly the industrial class. The Interveners have indicated that though the rates proposed in the Revised Petition were preferable, the rates in the Second Revised Petition were acceptable in the sense that they were still equal to, if not lower than, the Previous Rates.

14. For the foregoing reasons, we accept the Petitioner's case in submitting the Second Revised Petition and partial recovery of the cash deficit (Rs. 5.2 billion) through tariff increase. The unit rates indicated in the Second Revised Petition as amended in this determination are approved with effect from the date of Determination. Any amounts over billed due to the application of the Determination shall be refunded by credits in subsequent bills. As explained in para 12 we are of the view that the Petitioner may have a cash surplus at the end of the Test Year as a result of the realisation of the estimated sale

projections and the implementation of the suggested financial adjustment measures. We hold that the benefit of such cash surplus must be passed on to the consumers. As pointed out in the Determination as well as this Final Determination the Agriculture Tariff is still at a critical level, particularly with respect to competition with Diesel Generation, such customers deserve preference while passing on any benefits to the consumers.

MINIMUM CHARGES

15. The Petitioner had indicated an increase in Minimum Charges in the Revised Petition (and has maintained the same increase in the Second Revised Petition) in the categories set out in Table - 2.

TABLE -2

Sr. No.	Category/ Customer Class	Rates Prior to 27.3.99 (Previous Rates)	Rates as per Second Revised Petition
i)	Residential Single Phase	Rs.30.00 per month with respect to energy	Rs.60.00 per month with respect to total bill
ii)	Residential 3 Phase Customers	Rs.50.00 per month with respect to energy charges + Rs. 20 per KW for loads in excess of 10 KW	Rs. 150.00 per month with respect to total bill + Rs. 25 per KW for loads in excess of 5 KW
iii)	Commercial Single Phase	Rs. 90.00 per month	Rs.200.00 per month
iv)	Commercial 3 Phase	Rs. 150+(Rs. 30/KW for load in excess of 10KW) (per month)	Rs. 500+(Rs.50/KW for load in excess of 5KW) (per month)
v)	Industrial Customers B-1	Rs.70 per Kw for first 20 KW of load and Rs. 90/KW for next 20 KW. (per month)	Rs. 100 per KW for first 20 KW and Rs. 150/KW for next 20 KW. (per month)

16. As already noted earlier, the Schedule of Tariffs setting out the Minimum and Fixed Charges was not provided with the Revised Petition. No evidence on these matters was considered at the time the Revised Petition was accepted. As such, these changes were allowed to be raised as issues in the re-opened proceedings. Each of the above categories is discussed in detail as under:

Residential Single Phase

17. Although there is no increase in Supply Charges rates proposed in the Second Revised Petition as compared to the Previous Rates, the increase in Minimum Charges in the Second Revised Petition will subject the life line customer (consuming less than 50 Kwh in a month) to a higher rate than what was applicable prior to the date of Determination. The calculations are set out in Table - 3.

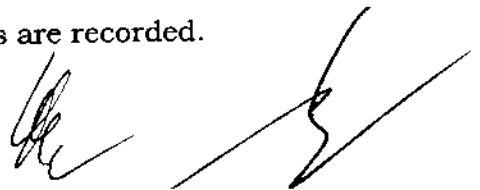
TABLE - 3
Single Phase

Monthly Consumption (Kwh)	Rate without minimum charges (Paisa/Kwh)		Rates with minimum charges (Paisa/Kwh)	
	Previous Tariff	2 nd Revised Petition	Previous Tariff	2 nd Revised Petition
10	140	140	410	600
20	140	140	245	300
30	140	140	190	200
40	140	140	163	150
50	140	140	146	140

18. The proposed change would mean that the really poor customer deserving lifeline rates who consumes less than 50 units per month is made to pay a rate in the range of paisas 600 per/Kwh to paisas 150 per Kwh (depending on how much his consumption is less than 50 units). This defeats the objective of

allowing a life line rate to the really deserving residential customers. In fact the low consumption single phase customers even at the 20 units per month consumption level are made to pay a rate much higher than the average residential customer rates of paisa 247/Kwh (calculated in the Second Revised Petition). The structure of Minimum Charges in the Previous Rates also contains this distortion although to a lower extent as compared to the Second Revised Petition.

19. The increase in revenue (due to the difference in rates occurring on account of application of Minimum Charges) has not been included by the Petitioner in the sales revenue. Therefore disallowing the increase in Minimum Charges for the 0-50 units slab consumption level of single phase customers would not affect the cash deficit.
20. During the cross-examination the Petitioner was asked to provide the justification for increasing the minimum charges and thereby denying the residential customer the benefit of no increase in the average rate/kwh. The only argument provided by the Petitioner was that such a low consumption of 10 units is not possible and if consumption of less than 30 units is recorded it would mean that either the recording has been manipulated or the meter has become defective and lesser than actual units are recorded.



21. The Petitioner while replying to a question himself stated that the average consumption of such a class would be 30 units. At another point the Petitioner confirmed that the meters of residential customers are being read properly and consumption recorded correctly with the assistance of the Army.
22. We believe that the Petitioner has a basic responsibility of maintaining a proper and correct recording/metering mechanism. The Petitioner's inability to maintain and ensure correct and un-tampered recording of power supplied can not be made a basis for penalizing a life line customer for low consumption during a particular month due to less use or absence from his home. The argument of the Petitioner in this context does not hold.
23. Under the Previous Rates the minimum charges were applicable in respect of the Energy Charges and in the proposed increase the Minimum Charges are applicable to the total bill. We believe that the application of Minimum Charges to the total bill is more rational. Therefore, we uphold that the Minimum Charges should be applied to the total bill at a level which will not increase the total bill of the residential customer of the consumption slabs of 20 to 50 units. A level of Minimum Charges at Rs.45 per month on the total bill will result in nearly the same total bills for the lifeline customer consuming between 20 to 50 units per month. The comparison of resulting rates with the Minimum Charges set at Rs. 45 on total bill for single phase customers is given in Table - 4.



TABLE - 4

Monthly Consumption (Kwh)	Previous Tariff (Paisa/Kwh)	Proposed Final Tariff (Paisa/Kwh)
10	410	450
20	245	225
30	190	150
40	163	140
50	146	140

24. We therefore fix the Minimum Charges for the single phase residential customers at Rs.45 per month for the total bill.

Residential 3 Phase

25. The Minimum Charges at the Previous Rates were Rs. 50/- per month with reference to Energy Charges whereas in the Revised and the Second Revised Petitions the Minimum Charges proposed are Rs. 150/- per month with respect to the total bill.
26. An analysis of the rate with Minimum Charges for various slabs of 3 phase residential customers is set out in Table - 5.

TABLE - 5

Monthly Consumption (Kwh)	With Application of Minimum Charges	
	Previous Rates (Paisa/Kwh)	2nd Revised Petition Rates (Paisa/Kwh)
20	355	750
30	263	500
40	217	375
50	192	300
75	171	200
100	173	172



27. The resulting rates for low consumption customers thus range from 355 Paisa/Kwh to 171 Paisa/Kwh as per previous Rates and from 750 Paisa/Kwh to 200 Paisa/Kwh as per the Second Revised Petition rates, depending upon how much the consumption is lower than 100 units. The structure in effect means that lower consumption customers or absentee customers are made to pay a tariff much higher than the average residential rate of Paisa 247/Kwh (as per rates/revenue expected in the Second Revised Petition).
28. Considering the affordability of 3 phase customers and a low probability of their consumption being less than 50 units per month we tend to agree that a certain level of Minimum Charges should be applicable to cover the operational service charges and as a proxy for fixed charges at the lower consumption level and loads less than 5.0 KW. The Petitioner has categorically stated in its letter dated March 18, 1999 (submitting the proposal for rationalization of tariff) that there is no increase in tariff for domestic consumers with consumption upto 300 units/month.
29. Since the facility of a low rate for the first 1 to 50 units available in the previous rates is now being denied to residential customers whose consumption exceeds 50 units, the 3 phase customers having a consumption between 50 to 100 units should not be taxed further through increase of Minimum Charges. A level of Rs. 100 as Minimum Charges on the total bill would result in nearly the same total bill as in the previous rates for consumption between 50 to 100 units as shown in Table 6.

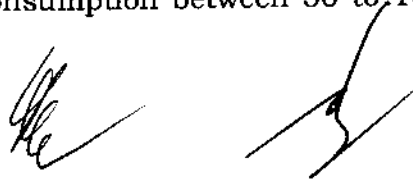


TABLE - 6

Monthly Consumption (Kwh)	With Application of Minimum Charges	
	Previous Rates Paisa/Kwh	Proposed Final Tariff Paisa/Kwh
50	192	200
75	171	172
100	173	172

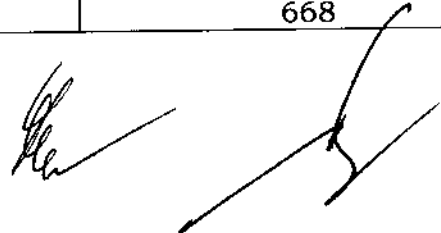
30. The increase in Minimum Charges as a proxy for fixed charges from Rs 20/KW to Rs 25/KW for residential customers having loads beyond 5Kw is considered reasonable to allow for recovery of part of the capacity charges through fixed charges. We hold that new rates for minimum charges for 3 phase customers should be fixed at Rs.100 per month and Rs.25 per KW for load in excess of 5KW.

31. Commercial (Single Phase)

The Minimum Charges at the Previous Rates were Rs. 90 per month whereas in the Second Revised Petition the Minimum Charges proposed are Rs. 200 per month. An analysis of the rates with Minimum Charges for various slabs of single phase commercial tariff is given in Table 7.

TABLE - 7

Monthly Consumption (Kwh)	Previous Rates Paisa/Kwh	2 nd Revised Petition Rates Paisa/Kwh
10	1420	2000
20	925	1000
30	760	668



32. Beyond 30 units level the total charges exceed the Minimum Charges therefore the higher slabs are not affected by the Minimum Charges. The overall rate for commercial tariff for first 100 units is already very high and is cross-subsidizing the residential class. Single phase commercial customers are generally low income shop keepers particularly in the rural areas where a shop in some cases consists of one bulb usage in mud built rooms or shacks. The consumption for such users can range between 10 to 30 units and subjecting these low income commercial customers to a rate of Rs 20 per Kwh for 10 units and Rs 10 per Kwh for 20 units will be unfair.

33. The low consumption single phase commercial customer is already paying a unit charge of Rs.6.68 per Kwh for the first 100 units which is almost double the average tariff. It is unfair to subject him to further increase in the shape of increase in the Minimum Charges. We hold that the Minimum Charges for single phase commercial customers should not be increased and should be applied on the total bill at a level which would result in nearly the same bill as before, as shown in Table - 8.

TABLE - 8

Monthly Consumption Kwh	With Application of Minimum Charges	
	Previous Rates Paisa/Kwh	Proposed Final Rates Paisa/Kwh
10	1420	1500
20	925	750
30	760	667

34. We therefore fix the minimum charges for single phase Commercial Customers as Rs. 150 per month.

Commercial Tariff (Three Phase)

35. The Minimum Charges at the Previous Rates were Rs. 150 per month based on Energy Charges and Rs. 30/KW for load in excess of 10 KW whereas in the Second Revised Petition the Minimum Charges proposed are Rs. 500 per month and Rs. 50/KW for load in excess of 5 KW. The analysis for various slabs is set out in Table - 9.

TABLE - 9

Monthly Consumption (Kwh)	Previous Rates Paisa/Kwh	Second Revised Petition Paisa/Kwh
20	1255	2500
30	980	1667
50	760	1000
75	668	668

36. The consumption for 3 phase commercial customers whether urban or rural is expected to be more than 50 Kwh/month. Therefore, the effect of Minimum Charges is only applicable to absentee customers where the rates upto 50 units in a month range from Rs. 25 to Rs 10 /Kwh.
37. The 3 phase commercial customers are already paying much higher (almost double) than the average rates. Putting further burden on these customers in the shape of increase in Minimum Charges would result in further increase of rates to the absentee customer.
38. We therefore hold that the level of Minimum Charges applied on the total bill should be such that there is no significant increase to the customers at the lower consumption level. As shown in the Table-10 a minimum of Rs.300 per

month plus Rs.30 per KW for load in excess of 10KW (based on total bill of the customer) will result in nearly the same per Kwh rates.

TABLE-10

Monthly Consumption (Kwh)	With Application of Minimum Charges	
	Previous Rates Paisa/Kwh	Final Rates Paisa/Kwh
20	1255	1500
30	980	1000
50	760	668
75	668	668

39. We therefore fix the minimum charges for 3 phase Commercial customers as Rs.300 per month plus Rs. 30 per KW for Loads above 10KW based on total bill of the customer.

Minimum Charges for Industrial Customers (B-1 category)

40. The Minimum Charges in the Previous Rates and the Second Revised Petition for B-1 Industrial customers are stated in Table-11.

TABLE - 11

S. No	Category	Minimum Charges (Rs./Kwh)	Energy Charges (Ps/Kwh)	Average Base Charges (Ps/Kwh)	FAS (Ps/Kwh)	Additional Surcharge (Ps/Kwh)	Hydel-Surcharge (Ps/Kwh)	Total Tariff (Ps/Kwh)
1	B-1 Previous Rates	Rs. 70 per Kw for 1 st 20 Kw and Rs. 90 per Kw for load between 21 to 40 Kw	119	119	75	252	20.18	466
2	B-1 2 nd Revised Petition Rates	Rs. 100 per Kw for first 20 Kw and Rs 150/Kw for load between 21 to 40 Kw	119	119	75	246	20.18	460

41. The Minimum Charges in this case are equivalent to a consumption of about 20 units per KW/per month, that is, the Minimum Charges will affect a customer if his consumption falls below 20 units/KW/Month (below 112 units per month for 7.5 HP motor and below 224 units per month for a 15 HP motor). Thus the minimum charges will affect the bill of absentee customers only.
42. The increase in Minimum Charges is not going to make any significant impact either on the revenue of the Petitioner or the consumption pattern of the customer. The additional revenue accruing out of absentee consumers has not been considered in the revenue estimates of the Petitioner, therefore, disallowing increase in the Minimum Charges would not have any effect on the revenue of the Petitioner. The decrease in overall tariff rate for this class of Industrial customer is only 1.3% as compared to reduction of 11.2%, 9.0% and 8.7% in B-2, B-3 and B-4 industrial customers respectively. No cogent justification has been provided by the petitioner for the proposed increase in Minimum Charges. We therefore hold that the rate of Minimum Charges for B-1 customer should be maintained as per Previous Rates that is Rs.70 per KW per month for first 20 KW and Rs. 90 per KW per month for Loads between 21 to 40 KW.

FIXED CHARGES

Industrial Customers, B-2

43. Fixed Charges for Industrial B-2 customers according to Previous Rates and the Second Revised Petition are indicated in Table -12.



TABLE - 12

	Previous Rates	Second Revised Petition Rates
(i) Fixed Charges	151 Rs./Kw/month	300 Rs/Kw/month
(ii) Fixed Charges converted to Energy charges	85 paisas/Kwh (at 27% Load Factor)	137 paisas/Kwh (at 33% Load Factor)
(iii) Total Energy Charges	516 (paisas/Kwh)	458 (paisas/Kwh)
Percentage contribution of Fixed Charges to total tariff.	16.5%	29.9%

44. The Petitioner has based his calculations of the revised tariff on 33% Load Factor as compared to 27% Load Factor for the Previous Rates.
45. The actual Load Factor for B-2 Customer for the past six months of 7/98 to 12/98 comes to 22.1%. Thus the 33% Load Factor assumption is not realistic. The Petitioner when asked to justify this point during the hearing could not give a convincing reply. The Petitioner's calculations for incentive sale also indicate a Load Factor of 26.5%. Thus the 33% Load Factor assumption is not realistic. Therefore, it will be reasonable to compare the Previous and the proposed rates at the same Load Factor of 27%. With such a comparison (27% Load Factor for both cases), the total proposed rate for the Second Revised Petition comes to 490 paisas/Kwh thereby meaning a reduction of 5% only.
46. With the increase of Fixed Charges any further reduction of Load Factor towards the actual (past 6 months) will result in further narrowing of the reduction and at 22% the rate would exceed the level of the Previous Rates. It is for this reason that the Interveners representing B-2 customers requested for an option to be charged at the Previous Rates. We, therefore, believe that increase in Fixed Charged would give a negative perception to the B-2



customers to act in a direction opposite to the increase in sales expected by the Petitioner. This situation may even compel the B-2 customer to think about shifting to self-generation.

47. The proposal for increase in Fixed Charges is therefore not in consonance with the strategy of the Petitioner to attract those customers which have shifted to self-generation. Though the present level of Fixed Charges appears to be less than the expected marginal capacity cost, we are of the opinion that the proposed increase is uncalled for. It may be increased in future through transition towards the actual cost of service after a thorough study is made. We are also of the opinion that an increase of Fixed Charges to Rs.200/KW/month would result in an acceptable rate to the customer after maintaining the 5% decrease in over all rates. This will be a cautious step towards moving towards a cost of service based fixed charges. We therefore hold that the rates for B-2 industrial customer class should be Paisa 490/Kwh on an overall basis including the Fixed Charges at Rs.200/Kw/month with the following break up:

Fixed Charges	=	Rs. 200/KW/month
Energy Charges	=	Paisa 68/Kwh
Average Tariff	=	Paisa 170/Kwh
F.A.S	=	Paisa 75/Kwh
Surcharge (10.4%)	=	Paisa 25/Kwh
Additional Surcharge	=	Paisa 220/Kwh

48. We are also of the opinion that the Time of Day metering is an appropriate and effective manner of charging the capacity cost of service to Industrial customers according to their contribution to peak demand. Time Of Day metering for B-2 customers has been requested by Interveners "Pakistan Cotton Ginners Association and Roomi Cotton Factory" (both represented by Khawaja Muhammad Azam) while presenting their case during the Hearing on



17.04.1999. We therefore hold that the B-2 industrial customers be given the option of Time Of Day tariff.

49. Since a cost of service study has not been carried out by the Petitioner, the rates of Time Of Day metering for B-2 customers are being fixed on the same pattern as that of B-3 customers, separated into peak and off peak charges. The basis of the calculation made by extrapolating the pattern of B-3 customer rates is indicated below:

B-2 TOD TARIFF - CALCULATED ON THE BASIS OF B-3 TOD TARIFF

Tariff Category	Fixed Charges (Rs./Kw)	Energy Charges (Ps/Kwh)		FAS (Ps/Kwh)	Additional Surcharge (Ps/Kwh)	
		Off. Peak	Peak		Off. Peak	Peak
B-3	290	67	67	75	144	144
B-3 (TOD)	290	53	135	75	103	169
%age Difference	-	-21	101	-	-28	17
B-2	200	68	68	75	220	220
B-2(TOD)	200	58	136	75	205	276
%age Difference		-15	100	-	-7	25

50. We therefore fix the rates for TOD tariff for B2 customers as follows:

Optional TOD metering for B-2 customers (Load 41 to 500 KW at 400 volts)


Fixed Charges	= Rs. 200 per KW per month
Energy Charges Off peak hours	= Paisa 58/Kwh
Energy Charges Peak hours	= Paisa 136/Kwh
Fuel Adjustment Surcharge	= Paisa 75/Kwh
Additional Surcharge Off peak hours	= Paisa 205/Kwh
Additional Surcharge Peak hours	= Paisa 276/Kwh

Seasonal Tariff

51. During the proceedings the Intervener Pakistan Cotton Ginners' Association, & Roomi Cotton Ginning Factory requested for being allowed the option to convert from a seasonal tariff to a regular tariff and vice-versa.

We are of the opinion that in view of the surplus capacity available at peak the logic of applying a mandatory seasonal tariff for a particular class of industry needs to be re-considered.

52. We therefore direct the petitioner to study the case and submit the justification for applying the seasonal tariff. Since the time of day metering is being made optional for B-2 customer we do not see any reason why there should be any bar on the customer having an option to choose between a seasonal and regular tariff. We therefore hold that the B-2 seasonal customer be allowed the option of choosing and changing his tariff between seasonal and regular tariff. The option however would be allowed to be exercised at the time of obtaining the connection and subsequently allowed to be changed at the beginning of the season. A B-2 consumer having exercised an option at the time of obtaining a connection or having opted and changed his tariff at the beginning of the season will not be allowed to change his tariff within a period of one year; that is an option exercised for a change of tariff from seasonal to regular or vice-versa will remain in force for at least one year.



B-3, B-4 and Bulk Supply Customers

53. The comparison of Fixed Charges with Previous Rates and Second Revised Petition as shown in the following table indicates 100% increase in Fixed Charges.

COMPARISON OF EXISTING AND APPROVED TARIFF OF INDUSTRIAL B2, B3, B4 AND BULK SUPPLY CUSTOMERS

TABLE-13

Category	Load Factor (%)	Fixed Charges (Rs/KW/month)	Energy Charges (Ps/Kwh)	Average Base Tariff (Ps/Kwh)	F.A.S (Ps/Kwh)	Addl. Surcharge (Ps/Kwh)	10.4% Hydel Surcharge (Ps/Kwh)	Total Tariff (Ps/Kwh)	% Contribution of Fixed Charges in overall rates
INDUSTRIAL									
B-3, 11/33 kV (Previous)	67	145	67.00	96.60	75.00	213.00	17.85	402	
B-3, 11/33 kV (2 nd Rev. Pet.)	67	290	67.00	126.20	75.00	144.00	20.92	366	16%
B-4, 66/132 kV (Previous)	61	140	62.00	93.40	75.00	203.00	17.52	389	18%
B-4, 66/132 kV.(2 nd Rev. Pet.)	60	280	62.00	126.00	75.00	133.00	20.90	355	
BULK									
C-1 400 Volts (b) Others (Pre.)		110	68.00	98.10	75.00	268.00	18.01	459	13%
(b) Others (2 nd Rev. Pet.)		220	68.00	128.20	75.00	251.00	21.13	475	
C-2, 11/33 kV. (c) Others (Pre.)		108	65.00	92.90	75.00	263.00	17.46	448	
(c) Others (2 nd Rev. Pet.)		216	65.00	120.80	75.00	248.00	20.36	465	12%
C-3, 66/132/220 kV. (Pre.)		107	63.00	91.70	75.00	257.00	17.34	441	13%
C-3, 66/132/220 kV (2 nd Rev. Petition).		214	63.00	120.40	75.00	224.00	20.32	441	

54. Time of day metering has been made mandatory after a certain transition period in the above class of customers. The percentage contribution of rates due to Fixed Charges for Industry B3, B4 and Bulk is very small (12 - 13 % for Bulk and 16 - 18% for B-3, B4) and the load factors are quite high for these classes (60- 67% for B3, B4 and 50 to 53% for Bulk supply). Since the overall rate has been decreased substantially for B3,B4 Industry and are almost the same for Bulk supply the increase in Fixed changes does not adversely effect the overall rates of these customers classes at the average of the customer class load factor.

55. Also the present Fixed Charges are much below the marginal capacity cost (corrected for coincidence to peak) and need to be moved towards the costs of service level. The Intervener APTMA and Steel Manufacturers association representing a significant portion of the Industrial customers have (although expressing preference for the Revised petition) agreed to accept the rates of the second revised petition. We therefore hold to allow the increase in Fixed Charges as proposed in the second revised petition along with the proposed overall rates for the customer classes: Industrial (B3 & B4) and Bulk (C1, C2and C3).

Agriculture Customers

56. The comparison of Fixed Charges with respect to Previous Rates and Second Revised petition is shown in the following Table-14.



TABLE-14

Agriculture	Previous Rates	Rates in Second Revised Petition
Punjab and Sind		
Fixed Charges Rs/Kw/Month	41	150
Load Factor	11%	17%
Conversion of Fixed Charges to Energy Charges (Paisa/Kwh)	56	133
Total Tariff	427	350
Contribution of Fixed Charges to total Tariff	13%	37%
NWFP & Baluchistan		
Fixed Charges Rs./KW/Month	36	132
Load Factor	16 %	20 %
Conversion of Fixed Charges to Energy Charges Paisa/Kwh	33	100
Total Tariff	355	291
Contribution of Fixed Charges to total tariff.	10%	34%

57. Although the total Agriculture Tariff has been reduced by 18% in the Second Revised Petition as compared to the Previous Rates but the percentage contribution of Fixed Charges for Punjab & Sind has been increased from 13% to 37% and for NWFP and Balochistan from 10 to 34%.



58. The Fixed Charges level according to the Previous Rates were although quite low but increasing it 3.6 times abruptly in the Second Revised Petition will deny the benefit of reduction in overall rates to the low holding farmers who use low Horse power motors with low load factor.
59. The Agriculture tariff is already at a critical level with respect to competition with Diesel Generation. The perception of the Agriculture customer that the reduction in overall rates has been vitiated by the increase in Fixed Charges may lead to a shift towards Diesel Generation.
60. Since a major step towards improvement of the Agriculture tariff (with respect to shift to cost of service tariff) has already been taken by eliminating Flat rate, any substantial increase in Fixed Charges is not required immediately and can be left to a later stage. A proper cost of service study would reveal as to what should be the appropriate level of Fixed Charges. For the present it is suggested that the Fixed Charges should be increased to a level of Rs. 82/Kw/Month for Punjab and Sind and Rs. 72/Kw/Month for NWFP and Balochistan so that a gradual transition to the ultimate cost of service rates is achieved, keeping the total rate as the same. We therefore hold that the rates for the agriculture customers would be as:

TABLE-15

	Punjab and Sind	NWFP and Balochistan
Fixed Charges: Rs. per KW per month	82	72
Energy charges Paisa /Kwh	49	34
Average base tariff Paisa/Kwh	115	84
Fuel Adjustment Surcharge Paisa/Kwh	75	75
Additional Surcharge Paisa/Kwh	140	115
Surcharge Paisa/Kwh	20	17
Total Paisa/Kwh	350	291

TERMS AND CONDITIONS OF THE SCHEDULE OF TARIFFS

61. The Petitioner has proposed certain changes in the terms and conditions of the Schedule of Tariff. The comparison of the proposed changes with the existing conditions and the justification for the proposed changes as submitted by the Petitioner are indicated at Table 16 (Page 28 to 31).
62. The proposed changes have been considered. The changes suggested at Serial Numbers 6, 8, 12, 14, 21, 22, 23, 24 and 25 of Table-16 are of an explanatory nature and do not have any impact on the bills of the customer, therefore these changes are accepted and incorporated as amended terms and conditions. The proposed changes to the remaining conditions mentioned at Serial Numbers 1, 2,3, 4, 5, 7, 9, 10, 11, 13, 15, 16, 17, 18, 19, 20, 26, 27 and 28 of Table-16 are not approved on account of the following reasons:
- a) Adequate and convincing justification has not been provided
 - b) The impact of the change on the customers bill has not been assessed
 - c) The impact of the change on revenue of the Petitioner has not been assessed.

The amended terms and conditions incorporating the allowed changes will be issued within 10 days of this Final Determination.



DETAILS OF AMENDEMENTS PROPOSED BY WAPDA IN SCHEDULE OF TARIFFS

S. No	Tariff Category	Description Head	Existing clause	Amended Clause	Justification/Remarks
1	All tariffs	Special condition of supply	No4:-Fuel adjustment Surcharge(FAS). The consumer governed by this tariff shall be charged each month. Fuel Adjustment Surcharge worked out on the basis of the following clause "A Fuel Adjustment Surcharge will be added to each Kwh sold during the billing month to recover fuel cost excepting those exempted from Fuel Adjustment Surcharge"	Fuel Adjustment Surcharge (FAS) is a charge meant for recovery of fuel costs, partially or wholly incurred during the financial year.	Existing definition of FAS is not appropriate. Its revised version is suggested to be inserted under the Head of "Definitions".
2.	All tariffs	Definitions	Nil	Surcharge is a charge meant for realization, in part or full of the amounts payable to provinces as net profit on hydel generation	This important component of Schedule of Tariff has not been defined as yet.
3.	All tariffs	Definitions	Nil	"Additional Surcharge" is a charge meant to cover the cost components not covered by "supply charges" and "SURCHARGE".	-do-
4.	A-1, A-2	Definitions	"General Supply" for the application of this tariff, means a supply for lamps, fans and other single phase appliances such as heaters, cookers, radiators, air-conditioners, refrigerators and domestic tube-wells, etc. The rate and capacity of any motor used in such appliances shall however, not exceed 4 kilowatts. In premises having a corrected load exceeding 4 kilowatts, supply may be given at 400 volts (3-Phase) to allow a balanced distribution of load on the three phases.	"General Supply" for the application of this tariff, means a supply for single phase/three phase appliances inclusive of both general and motive Loads.	The words "three-phase" have been added to allow charging of such appliances at the same tariff instead of industrial tariff. presently charged to three-phase appliances.
5	Tariff A-1	Definitions	Nil	"Charitable Institution" for the purpose of application of this tariff, is an institution which works for the general welfare of the public. Such institutions include schools, dispensaries, orphan houses, burial places, hospitals, which run on private donations and Government grants. The guiding principle for an institution to be declared as charitable is that the fee charged by such an institution is less than or equal to the fee charged by Government institutions of the similar nature and that the institution is run on no profit basis. Chief Executive of Electric Supply/Electric Power Company will be the competent authority to decide whether an institution is charitable and thus eligible to the application of Tariff A-1	There is ambiguity regarding which institutions should be treated as charitable. This needs to be elaborated.
6	Tariff A-1 & A-2	Minimum monthly charges	There shall be minimum monthly charges at the following rates per point of supply (i.e per metering point) in respect of Energy Charges under this tariff, even if no energy is consumed during the month	<u>Under this Tariff</u> , there shall be minimum monthly charges at the followings rates per point of supply, even if no energy is consumed during the month	Presently, a consumer has to pay FAS SURCHARGE and Additional Surcharge in addition to the minimum charges, if he consumes a small quantum of energy. By this practice the first slab in domestic tariff is virtually wiped out. To facilitate the customers in the initial slab it is proposed that minimum charges be compared with all WAPDA charges and not energy charges alone.

S. No	Tariff Category	Description Head	Existing clause	Amended Clause	Justification/Remarks
7	Tariff A-1	Special Conditions of Supply	No.1 Supply to 3-phase, 400 volts compressors and pump motors of the air conditioning equipment installed in centrally air-conditioned premises and other 3 phase, 400 volts apparatus of domestic utility eg. Tube wells etc shall be governed by the appropriate industrial tariff. However the supply of three phase 400 volts compressors and pumps motors of the air-conditioning equipments installed in the centrally air-conditioned mosques, shall be governed by the general supply tariff A-1 instead of appropriate industrial tariff.	Proposed to be deleted	There should be only one tariff for one consumer. Two tariffs for separate type of load give rise to mal-practices and manipulation on the part of consumers also resulting in theft of energy in many cases.
8.	Tariff A-2	Particulars	For supply to all government and semi government offices and institutions, commercial offices and commercial establishments such as Shops, Hotels, Restaurants, Private Hospitals, Clinics, dispensaries places of Entertainment, like cinemas , theaters and clubs; rest houses and government lodges, private educational institutions, office of lawyers, solicitors , law associates and consultants etc.	For supply to all government and semi government offices and institutions, commercial offices and commercial establishments such as Shops, Hotels, Restaurants, <u>Petrol pumps, service stations, compressed natural gas filling stations,</u> Private Hospitals, Clinics, dispensaries places of Entertainment, like cinemas , theaters and clubs; rest houses and government lodges, private educational institutions,; office of lawyers, solicitors , law associates and consultants etc.	These are also commercial establishments and should be charged under tariff A-2
9	Tariff A-2	Special Conditions of Supply	No.1 Supply to 3 phase, 400 volts compressors and pump of the air-conditioning equipments installed in centrally air-conditioned premises and other 3 phase, 400 volts apparatus of general utility e.g tub wells etc. shall be governed by the appropriate industrial tariff.	Proposed to be deleted	There should be only one tariff for one consumer. Two tariff for separate type of load give rise to mal-practices and manipulation on the part of consumers also resulting in theft of energy in many cases.
10	Tariff-2	Special Conditions of Supply	No.2 Supply to motors operating projectors and sound apparatus in cinemas shall be charged at appropriate industrial tariffs.	Proposed to be deleted.	Cinemas are purely commercial establishment and should not be charged at industrial tariffs which are well below the commercial tariff
11	Tariff B-1,B-2, and B-3,B-4	Definitions	Nil	An "Industry" means a bonafide undertaking or establishment engaged in the manufacturing/processing of goods.	Presently, there is no definition of bonafide industrial consumers in Schedule of tariff.
12	Tariff B-1,B-2, and B-3	Special Conditions of Supply	Nil	<u>An industrial consumer, presently governed by this tariff shall have the option to switch over to seasonal tariff-F provided his connection is seasonal in nature as defined under tariff-F, and he undertakes to abide by the terms and conditions of tariff-F and pays the difference of security deposit rates previously deposited under this tariff and those applicable to tariff-F at the time of acceptance of option for seasonal tariff. Seasonal tariff will be applicable from the date of commencement of the season, as specified by the customers at the time of submitting the option for Tariff-F. Tariff-F consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.</u>	Presently there is no provision for allowing the industrial consumers to switch over to seasonal tariff. This may be allowed.
13	Tariff B-1,B-2, and B-3,B-4	Definition Clause 2	Sanctioned load means the load in kilo watts as applied for by the consumers and sanctioned by the Authority.	Sanctioned Load means the total load in kilo watts (i.e. motive load as well as general load) as applied for by the consumer and sanctioned by the Authority.	This elaboration would simplify the tariff.

S. No	Tariff Category	Description Head	Existing clause	Amended Clause	Justification/Remarks
14	B-2,B-3,and B-4	Definitions Clause-9	"Power Factor "means the ratio expressed as a percentage of the kilowatts hours to the kilovolts amperes hours consumed during the month	"Power Factor" means the ratio expressed as a percentage of the kilowatts hours to the kilovolt ampere hours consumed during the month. <u>In case of those connections where KVAH meters do not exist and KVARH meters are installed, Power Factor shall be the ratio of Kwh to square root of sum of square of Kwh and KVARH, i.e.</u> $PF = \frac{KWH}{KVAH} = \frac{KWH}{\sqrt{(KWH)^2 + (KVARH)^2}}$	This elaboration would simplify the Tariff.
15	C-1	Title	Tariff C-1: Bulk supply at 400 volts to	Tariff C-1: Bulk supply at 400 volts (for loads above 20 kilowatt and upto and including 500 Kilowatt) to.....	Presently, there is no load limit in bulk tariff which is giving rise to various mal-practices. We may prescribe the load limits as in case of industrial tariffs B-2, B-3 and B-4 with the exception of C-1 where lower load limit has been fixed at 20 Kw keeping in view the connections of Cantonments, MES, etc
16	C-2	Title	C-2: Bulk Supply at 11/33 Kv to	Tariff C-2 Bulk supply at 11/33 KV (for loads upto and including 5000 kilowatt) to.....	-Do-
17	C-3	Title	Tariff C-3 : Bulk Supply at 66/132/ 220 KV to	Tariff C-3 : Bulk Supply at 66/132/220 KV (for all loads) to	-Do-
18	C-1(b), C-2(c), C-3	Definitions	Other consumers having their own distribution facilities, i.e own H.T/L.T lines and distribution transformers etc. for the purpose of further distribution within their respective jurisdiction.	Other consumers e.g. Railways, MES, PAF, Cantonment Boards and other Government and Semi-Government institutions having their own distribution facilities within their respective jurisdiction.	Present definition has broadened the scope of bulk supply tariff too much and may result into misuse by the private consumers. Hence the need for re-introduction of the definitions which was in vogue before 1994.
19	C-1(b), C-2(c), C-3	Special Conditions of Supply	The Fixed Charges under this tariff shall be recovered on the basis of monthly maximum demand.	Fixed Charges under this tariff shall be recovered on the basis of "Billing Demand" which, for the purpose of this tariff, means higher of the following 1. Actual Maximum Demand Recorded during the month. 2. 25% of the total sanctioned load	There is a tendency on the part of various government organizations to get the load sanctioned in excess of their requirements whereas their actual utilization is much less. After this amendment they will get only that much load sanctioned which means their actual requirements.
20	C-1(b), C-2(c), C-3	Minimum Monthly Charges	Nil	Fixed Charges provided above will also represent the minimum monthly charges under this tariff even if no energy is consumed.	Due to introduction of Billing Demand in bulk tariff, this clause is also essential.
21	D-1	Definitions clause -1	"Flat Rate Tariff" means a tariff for <u>unmetered</u> supply to Private Agricultural Tubewells, based on sanctioned load in Horse Power or capacity of motor installed.	Flat Rate Tariff means a tariff for supply to Private Agricultural Tubewells, based on sanctioned load in Horse Power or capacity of motor installed.	Under this provision of tariff, meters have to be installed at agricultural tube wells governed by this tariff. Therefore it is not appropriate to call it "unmetered supply"
22	E-1	Definitions clause -1	Temporary General Supply means a supply given to <u>any person for only light and fan purposes</u> on special occasions viz, ceremonial, religious gatherings, festivals, fairs, marriages and other civil or military functions <u>for a period ordinarily not exceeding</u> period of 3 months. This also includes supply <u>for similar purposes</u> to touring cinemas and to persons engaged in constructions works.	Temporary General Supply means a supply given to persons <u>temporarily</u> on special occasions such as ceremonial, religious gatherings, festivals, fairs, marriages and other civil or military functions. This also includes supply to touring cinemas and persons engaged in construction works <u>for all kinds of loads inclusive of single phase, 3 phase motive loads. Normally temporary connections shall be allowed for a period of 3 months, however this can be extended on three months basis by the load sanctioning authority subject to clearance of outstanding dues.</u>	Presently, there is certain ambiguity in the application of temporary tariffs which needs to be elaborated.

S. No	Tariff Category	Description Head	Existing clause	Amended Clause	Justification/Remarks
23	F-2	Special Conditions of Supply Clause -2	The supply under this tariff shall not be available to any industrial supply consumer <u>for lights and fans purposes or for resale.</u>	The supply under this tariff shall not be available to any industrial supply consumer for resale.	The condition of separate circuit for lights and fans purposes in industrial premises has already been abolished from the industrial tariff.
24	F	Particulars	The charges for seasonal industrial supply shall be 125%(One hundred and twenty five per cent) of the supply charges for a corresponding regular industrial supply <u>except that the fixed charges per Kilowatt per month under this tariff shall be recovered only for the period a seasonal industry actually runs subject to minimum period of six consecutive months during any twelve consecutive months. The condition for recovery of fixed charges for a minimum period of six months shall not however, apply to seasonal industries which are connected to the Authority's Supply System for the first time during the course of a season.</u>	The charges for seasonal industrial supply shall be 125% (one hundred and twenty five per cent) of the supply charges for a corresponding regular industrial supply.	Here, we are defining supply charges only. The remaining portion is proposed to be incorporated as Clause-1 of Special Conditions of Supply.
25	F	Special Conditions of Supply	Nil	<u>Fixed Charges per kilo watt per month under this tariff levied at the rate of 125% of normal rates, shall be recovered only for the period seasonal industry actually runs subject to minimum period of six consecutive months during any twelve consecutive months. The condition for recovery of Fixed Charges for a minimum period of six months shall not, however, apply to the seasonal industries which are connected to the Authority's Supply System for the first time during the course of a season. Tariff-F consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.</u>	Presently, this clause is included under the Head Particulars, associated with the definition of supply charges. Now, it is proposed to be separated from the definition of supply charges and inserted in special conditions of supply as clause-1. Accordingly, ordering of existing clauses shall be revised from No. 1, 2 and 3 to No. 2, 3 and 4.
26	J	Title	Co-generation consumers and small power producers supplied at 11KV and above (independent feeder) for sale and buy back by WAPDA.	Co-generation consumers supplied at 11KV and above (independent feeder) for sale and buy back by WAPDA.	The applicability of tariff is proposed to be restricted to the co-generation consumers only and small power producers who generate their power for own requirements are proposed to be excluded from the purview of this tariff.
27	J	Definitions clause-1	Co-generators/small power producers are those industrial or bulk supply consumes who have their own power generating plants to meet with their demand instead of drawing power from WAPDA supply system and need supply from WAPDA only in case of emergency or during the routine maintenance of their generators. Co-generators/ small power producers will sell their surplus power to WAPDA in accordance with the "Special Conditions for Purchase of Power by WAPDA"	Co-generators or those industrial consumers who have their own power generating plants to meet with their demand instead of drawing power from WAPDA supply system and also sell surplus power to WAPDA and need supply from WAPDA only in case of emergency or during the routine maintenance of their generators. During the off season period of co-generators, power supply to them shall be governed by the appropriate industrial tariff.	-do-
28	J	Special Conditions of Supply	The consumers under this tariff should be required to deposit the entire capital cost of system installed for supply of power from WAPDA System as covered under Tariffs B-3 & B-4 for industrial tariff and C-2 and C-3 for bulk supply, if not already recovered. The recovery of cost if not already made shall be realized on replacement cost basis.	The consumers under this tariff shall be required to deposit entire capital cost of system installed for supply of power from WAPDA System as covered under tariff B-3 & B-4 if not already recovered. The recovery of cost if not already made shall be realized on replacement cost basis.	The bulk consumers have been excluded from Co-generation Tariff

MARKETING STRATEGY

63. In the Determination (para-19) we had held that there was no reason for not acknowledging the underlying strategy of the Petitioner in the reduction of industrial tariffs. In this context the increase in revenues from the industrial customers class due to a decrease in their rates was considered the basic foundation of the premise and therefore an essential condition for achieving the increase in revenue. During the Hearing it was pointed out to the Petitioner by the Interveners as well as NEPRA experts that the extent of reduction in Industrial rates is much less in the Second Revised Petition as compared to the Revised Petition whereas the sale projections for the industrial customer class in the Second Revised Petition has been maintained at the same level as in the Revised Petition.
64. The Petitioner reconfirmed his expectation of the same level of increase in industrial sales even with the lesser reduction in rates in the Second Revised Petition. The need and importance of an effective marketing strategy to convince the Industrial customers of their comparative advantage in the rates of Second Revised Petition over the cost of their self generation can not be over emphasized. Failure to convince the industrial customers to adopt the less reduced rates in favour of self generation will not only create a shortfall in the expected revenues of the Petitioner but also result in non utilization of the surplus peak load availability to the customer.

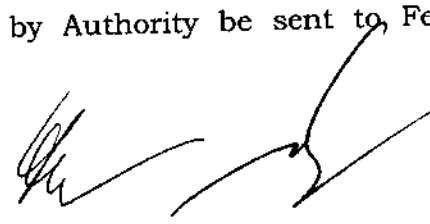


65. We therefore reiterate and re-emphasize the importance of an efficacious marketing strategy to be adopted by the Petitioner immediately. The implementation of the Time of Day tariff (TOD) metering will help in achieving the projected increase in sales if appropriate and timely information of the benefits of TOD tariff is conveyed to the industrial customer. In view of the advantages of TOD metering both to the utility as well to the customer the TOD tariff has already been made mandatory for B-3, B-4, C-2 & C-3 customers. TOD tariff has now been made optional for B-2 customers.

66. The following schedule for implementation of TOD metering is therefore directed.

- (i) Provision of TOD meters to 70% B-3 and B-4 Industrial customers (Already directed in Determination) 30th June 1999
- (ii) Provision of TOD meters all (100%) of B-3 and B-4 customers (Already directed in Determination) 30th September 1999
- (iii) Submission of rates of TOD metering regarding C-2 and C-3, Bulk Supply Customers to NEPRA for approval. 31st May, 1999
- (iv) Provision of TOD metering to all C-2 and C-3 Bulk Supply Customers 31st March, 2000

67. The tariff set out as the Annex to this Final Determination be sent to the Federal Government for notification under Section 31(4) of the Act. The complete Terms and Conditions approved by Authority be sent to Federal Government for notification by 6th May 1999.



SCHEDULE OF ELECTRICITY TARIFFS

TARIFF CATEGORY/PARTICULARS	FIXED CHARGES	ENERGY CHARGES	F.A.S.	ADDITIONAL SURCHARGE
	Rs/KW/M	Ps/KWH	Ps/KWH	Ps/KWH
BULK SUPPLY TARIFFS				
C-1(a) 400 Volts	-	83	75	252
C-1(b) 400 Volts	220	68	75	251
C-2(a) 11-33 KV	-	69	75	238
For Government of AJ&K	-	69	75	165
C-2(b) POF WAH	-	95	75	274
C-2(c) 11-33 KV	216	65	75	248
C-3 66-132-220 KV	214	63	75	224

AGRICULTURE TARIFF-D

1-SCARP	-	85	75	213
2-(i) PUNJAB AND SINDH	82	49	75	140
2-(ii) NWFP & BALUCHISTAN	72	34	75	115

FLAT RATE TARIFF D-1

	FIXED CHARGES	ADDITIONAL SURCHARGE
	RS/HP/MONTH	RS/HP/MONTH
1) Punjab & Sindh	147	373
2) NWFP & Baluchistan and Dist of Mianwali and Bahawalpur in Punjab & Tharparkar in Sindh	122	316

Note: All Flat Rate Agricultural Tariff-D1 to be converted to Tariff-D by 30-06-1999.

TEMPORARY SUPPLY TARIFFS

	FIXED CHARGES	ENERGY CHARGES	F.A.S.	ADDITIONAL SURCHARGE
	Rs/KW/M	Ps/KWH	Ps/KWH	Ps/KWH
E-1(i) Domestic Supply	-	170	75	299
E-1(ii) Commercial Supply	-	319	75	446

For the above two categories, the minimum bill of the consumers shall be Rs. 46/- per day subject to a minimum of Rs. 200/- for the entire period of supply, even if no energy is consumed.

E-2(i) Industrial Supply	-	174	75	303
E-2(ii) (a) Bulk Supply to Licensees/ non-licensees (at 400 V)	-	135	75	315
E-2(ii) (b) Bulk Supply to Licensees/ non-licensees (at 11 KV)	-	123	75	303
E-2(iii) Bulk Supply to other consumers	-	144	75	323

SEASONAL INDUSTRIAL SUPPLY TARIFF- F

	SUPPLY CHARGES	ADDITIONAL SURCHARGE
	125% of the "supply charges" of relevant industrial supply tariff	125% of the Addl. Surch. of the relevant industrial supply tariff

Note: Tariff- F consumers will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.

In all electricity tariffs, "SURCHARGE" at the rate of 10.4% of "Supply Charges" is also leviable. "Supply Charges" include Fixed Charges, F.A.S. and Low Power Factor Penalty.

SCHEDULE OF ELECTRICITY TARIFFS

TARIFF CATEGORY/PARTICULARS	FIXED	ENERGY	F.A.S.	ADDITIONAL
	CHARGES	CHARGES		SURCHARGE
	Rs/KW/M	Ps/Kwh	Ps/Kwh	Ps/Kwh

RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES (TARIFF-H)

1- Consumers having their own transformer	104	75	302
2- Consumers not having their own transformer	105	75	304

TARIFF-I FOR RAILWAY TRACTION

61	75	250
----	----	-----

TARIFF-J FOR CO-GENERATION CONSUMERS

1- SALE OF POWER BY WAPDA	133	75	270
2- PURCHASE OF POWER BY WAPDA			
a) During December to July	103	-	-
b) During August to November	78	-	-

PUBLIC LIGHTING TARIFF-G

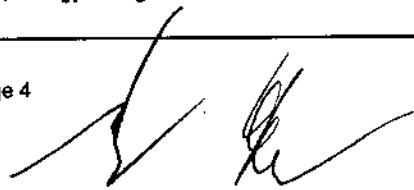
1- UNIT CHARGES

i) For Provincial Governments affording exemption to WAPDA from payment of Octroi & Property tax	As per General Supply Tariff A-1		
ii) For consumers other than those falling in the category Tariff G-1(i)	152	75	449

2- FIXED LINE CHARGES PER MONTH PER MILE

i) Where the entire capital cost in laying Street Lighting supply line which is exclusively meant for Street Lighting is borne by the Authority	Rs. 253
ii) Where the entire capital cost in laying Street Lighting supply line which is exclusively meant for Street Lighting is borne by the consumers	Rs. 23
iii) Where the entire capital cost in laying Street Lighting supply line over the existing distribution system is borne by the Authority	Rs. 158
iv) Where the entire capital cost in laying Street Lighting supply line over the existing distribution system is borne by the consumer	Rs. 33
v) For Street Lighting supply through underground cables	Rates to be negotiated

Note: In all electricity tariffs, the "SURCHARGE" at the rate of 10.4% of "Supply Charges" is also leviable. "Supply Charges" include Fixed Charges, Energy Charges, F.A.S. and Low Power Factor penalty.



Annex

Schedule of Tariffs to be published in the Official Gazette

Final Tariff Determination dated 24th April, 1999

WAPDA PETITION NEPRA 03/WAPDA-98

S.R.O. _____ ----- In exercise of the powers conferred on the Federal Government pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997), the Federal Government hereby notifies the following tariff in respect of the provision of Electric Power services by the Water and Power Development Authority. The rates set out herein shall take effect as of 27th March, 1999 and shall continue to be effective until notified otherwise.

