



**National Electric Power Regulatory Authority**  
Islamic Republic of Pakistan

Registrar

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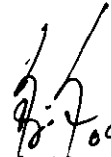
No. NEPRA/TRF-35/IESCO-2005/1389-91  
March 9, 2007

Subject: **Determination of Tariff in respect of Petition filed on May 06, 2005  
by Islamabad Electric Supply Company Ltd. (IESCO)  
(Case No. NEPRA/TRF-35/IESCO-2005)**

Dear Sir,

This is with reference to the subject case. A Final Order in the matter has already been communicated to Federal Government vide letter no. NEPRA/TRF-35/IESCO-2005/1022-24 dated 23.02.2007 for notification in the official Gazette. Attached please find NEPRA's detailed determination (26 pages) along with Annexes thereto (26 pages).

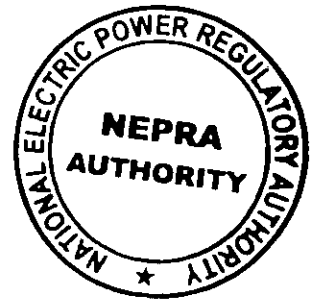
**DA/As above.**

  
04.03.07.  
( Mahjoob Ahmad Mirza )

The Secretary,  
Cabinet Division,  
Government of Pakistan  
Cabinet Secretariat,  
Islamabad

CC:

1. Secretary, Ministry of Water & Power, Islamabad.
2. Secretary, Ministry of Finance, Islamabad.



**NATIONAL ELECTRIC POWER REGULATORY AUTHORITY**  
**NEPRA**

March 9, 2007  
Case No. NEPRA/TRF-35/IESCO-2005

**DETERMINATION OF THE AUTHORITY**  
**w.r.t ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)**

**Petitioner**

Islamabad Electric Supply Company (IESCO), Street 40, Sector G-7/4,  
Islamabad.

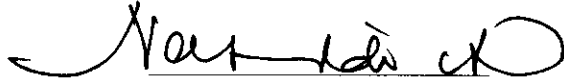
**Intervenor**

All Pakistan Textile Mills Association, APTMA House, 44-A, Lalazar,  
Maulvi Tamizuddin Khan Road, Karachi.

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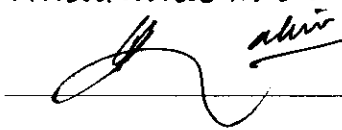
**Authority**

Nasiruddin Ahmed  
Member

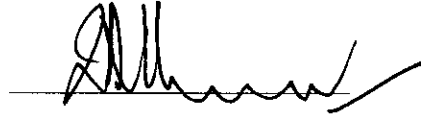


Abdul Rahim Khan  
Member

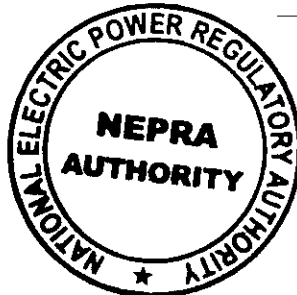
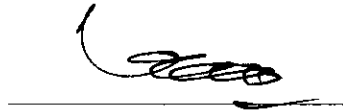
Additional note attached.  
*ahir*



Zafar Ali Khan  
Member




Saeed uz Zafar  
Chairman



Additional Note of Member Abdul Rahim Khan in the matter of determination of tariff for IESCO Case No.NEPA/TRF-35/IESCO-2005

- (i) Minimum monthly charge in case of single phase supply metering for Residential consumers should not be increased from Rs.45 to RS.75 as this will erode the lower tariff targeted to life-line consumers consuming up to 50 units in a month.
- (ii) Fixed charge rate in case of Time of Use based tariff should be applied to maximum demand recorded during Peak hours only and not to Off Peak period.
- (iii) In order to prevent further aggravation of economic distortion, the existing inter class cross subsidization has to be gradually reduced and eliminated over a reasonable period. Therefore only the rates of consumer class which are being cross subsidized (excluding life line rates) should be increased for matching Revenue Requirement with accrual. The tariff of Industrial and Agriculture consumers should not be raised more than the prevailing rates as this is expected to have an adverse economic impact on Manufacturing and Agriculture production respectively.
- (iv) Adjustment of sale rate relating to Return on assets due to variation in Regulatory asset base should not be applied in the case of a Non Multi Year tariff such as in the instant case.



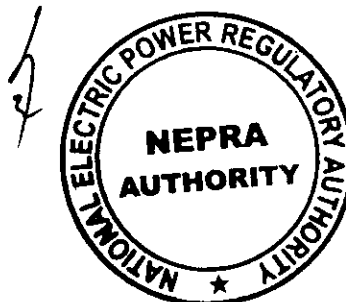
  
(Abdul Rahim Khan)  
Member  
9K March 2007

**BACKGROUND**

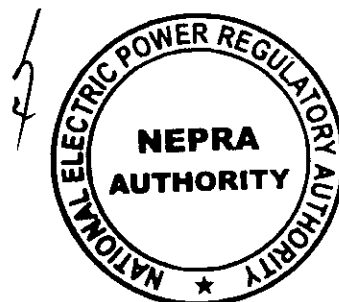
1. Islamabad Electric Supply Company Limited (IESCO) a public limited company was granted Distribution License No. 01/DL/2001 on November 02, 2001 by the National Electric Power Regulatory Authority (the "Authority") to engage in distribution of electric power in its service territory as set out in the Distribution License for a term of 25 years. IESCO has been organized to take over all the properties, rights, assets, obligations and liabilities within the area of its operation as set out in the Distribution License under the terms and conditions stipulated therein. In accordance with the terms of its license, IESCO filed a tariff petition with NEPRA under Tariff Standards and Procedure Rules 1998 for the determination of its tariff as an independent distribution company consequent to the unbundling of WAPDA.
2. The Authority admitted the petition on May 30, 2005 for consideration. Salient features of the petition were advertised in the newspapers on June 09, 2005 to seek the views and comments of all interested persons and stakeholders in the tariff-setting process. Persons desirous of seeking a more active participation were invited to become parties to the proceedings as interveners. In addition individual invitations were sent to the Federal and Provincial Government functionaries, Chambers of Commerce, Industries and Agriculture, Representatives of Professional bodies and Experts in the fields for soliciting their views on the petition. In response thereof, one request for leave to intervene was received which was accepted by the Authority. A public hearing was conducted on July 04, 2005 at Islamabad in which an opportunity was given to all the parties and interested persons to be heard in person.

**SUBMISSIONS OF IESCO**

3. IESCO in its tariff petition sets out the tariff methodology and requests for a level of required revenues and timetable for readjustment of consumer-end tariffs to achieve a cost reflective design. It has requested a three-year tariff control period.



4. Under the proposed tariff-setting methodology, the average retail tariff would consist of (i) the Power Purchase Price (PPP), which would be passed through to the end users in the retail tariff, and (ii) the average distribution margin, which would be set on the formula-based methodology
5. IESCO has calculated its revenue requirements for the 2006-08 periods using the following parameters:
  - Inflation: the CPI has been set to increase annually by the inflation rate of 10%.
  - Total Unit Sales: Starting with unit sales of 5,848 GWH as projected in Table-1 of the petition for the first year (2005/06), projected sold units during the successive years have been estimated on the basis of routine increasing average of previous years.
  - Target Transmission & Distribution Losses: The allowed levels of transmission and distribution losses are set at 14.40% for the first year, 14.20% for 2006-07, and 14.10%, in the last year of the control period.
  - Power Purchase Price (PPP): Power Purchase price (prior to adjustments for transmission & distribution losses) has been projected as Rs: 3.215 Rs/kwh for the year 2005-06 based on the PPP allowed by NEPA in IESCO Tariff determination taking into account mid year adjustments, thereafter increased annually by the inflation rate. However actual PPP would be regulated by NEPA over the control period.
  - Purchase Costs: The cost of electricity purchased by IESCO has been calculated as the PPP (unadjusted for transmission & distribution losses) times the units of electricity purchased. This is also the equivalent of the units of electricity sold times the PPP adjusted for transmission & distribution losses (PPP divided by 1 minus the percentage of permissible losses).
  - O&M<sub>T</sub>: O&M expenditure has been worked out as Rs: 2,673 (M) for the financial year 2005-06 which is around 0.46 Rs./kWh, O&M cost per unit has been adjusted annually. by the CPI factor thereafter.
  - Old Asset Base: The value of the Old Asset Base at the beginning of the first year (2005/06) has been set as the book value of IESCO's fixed assets (net fixed assets plus capital work in progress),



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- New Investments: New investments will be made as per the investment plan provided in Annex-2 of the petition.
- Depreciation: The depreciation rate has been set as follows:
 

Building	2.500%
Distribution plant	5.000%
Other Plant & Equipment	20.00%
- Profit Base: The Profit Rate Base is calculated as the sum of (i) the Old Asset Base at the beginning of the year, (ii) Working Capital requirement which is equal to (1 month PPP+ Net Fixed Asset in Operation) iii) the New Investments for the year, iv) Less depreciation for the year, v) Less deferred credits.
- Rate of Return: ROR has been estimated to meet with cashflow requirements of the IESCO, which works out to be 15.30% for the entire control period.

6. IESCO submitted that *cost reflective tariffs* (both at an aggregate level and by consumer category or class) will benefit both, the consumers and IESCO as it will result in getting the funding for investments required to improve service quality & reliability, network expansion of IESCO's distribution network and promote the financial sustainability of IESCO to the ultimate benefit of consumers.

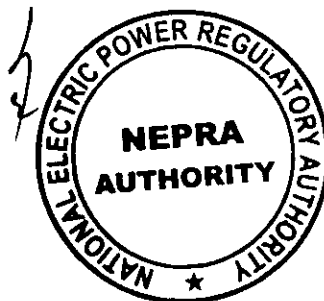
7. IESCO has requested that the Power Purchase Price be treated as a pass-through while average distribution margin for the first year and the subsequent years within the control period be *based on a formula*. The suggested formula is as follows:

The average distribution margin for each year within the control period would be set in accordance with IESCO's expected revenue requirements, based on the following formula:

$$\text{Avg. Margin}_t = \text{O\&M}_t + \frac{\text{Depreciation}_t (\text{Net of Amortization}) + \text{ROA}_t}{\text{Total Unit Sales}_t}$$

Where:

O&M<sub>t</sub> is the expected operating and maintenance cost per kWh (for year t), which includes the estimated cost of technical service and repair, necessary materials for operation, salary, mandatory social insurance payments, administration, management and



other operating costs related to IESCO’s distribution and supply business. The O&M component for the first year of the control period would be established on the basis of forecast demand and inflation. In subsequent years, the O&M component would be determined in the following manner:

$$O\&M_t = (1 + \frac{CPI_t}{100}) \times O\&M_{t-1}$$

Where;

- $CPI_t$  is the forecasted increase or decrease in Consumer Price Index during year t;
- $O\&M_{t-1}$  is the O&M component for the previous year(t-1)

Within the rebase period, this component would be automatically adjusted for the inflation expected in the subsequent year.

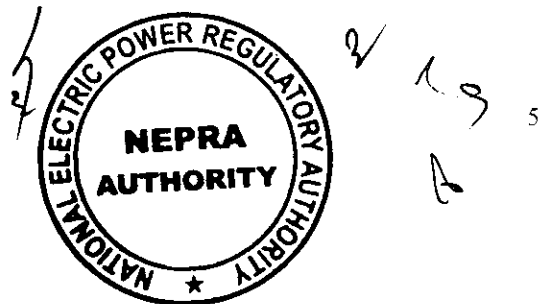
Depreciation; The depreciation (for year t) will be calculated based on; (i) the value of net fixed assets at the start of the year, set at a fixed amount (Old Asset Base); plus (ii) new assets invested by IESCO ( as specified within an investment programme approved by NEpra). The assets will be depreciated for a specified number of years based on a straight-line method.

$ROA_t$ : The return on investment (weighted average cost of capital) will be calculated as follows:

$$ROA_t = \text{Profit Rate Base}_t \times \text{Weighted average cost of capital (\%age)}$$

Where;

$\text{Profit Rate Base}_t$  is defined for year t as the sum of (i) the value of Old Asset Base (net fixed assets at the start of the year) (ii) Working Capital which is equal to (1 month PPP + 5% of Net fixed Assets in operation at the beginning of the Year),iii) Capital expenditures for the year (New Investments), in accordance with the approved investment program, iv) Less depreciation for the year v) Less deferred credits.



Weighted average cost of capital is the after-tax return on the Profit Rate Base. As the investment is financed with a combination of debt and equity, the appropriate rate of return would be a market-based weighted average cost of capital.

Total Unit Sales: A schedule of the total unit sales (in kWh) of IESCO across all customer categories is forecast for each year of the price control. This forecast will be used to determine the average distribution margin per unit (Rs/kWh) needed to cover the revenue requirement expected for each year.

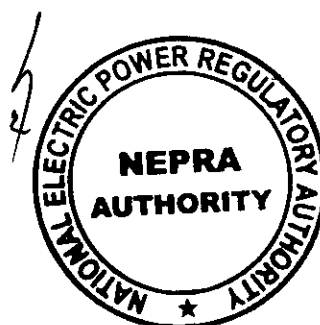
8. IESCO has further requested that to make the tariff structure simple and transparent, there should be a transparent and predictable formula for setting and revising tariffs. During the period of the price control, IESCO's tariffs will be rebalanced so that IESCO's total margin is recovered from customers in accordance with the costs of serving different categories of customers. Customer-specific retail tariffs will be set as follows:

$$\begin{array}{lclclcl} \text{Category-specific} & & & & \text{Category-specific} & \\ \text{Retail} & = & \text{PPP} & + & \text{Distribution} & \\ \text{Tariff} & & & & \text{Margin} & \end{array}$$

**SUBMISSIONS OF INTERVENER**

**All Pakistan Textile Mills Association (APTMA)**

9. Representative of APTMA questioned the level of distribution and transmission losses as projected by IESCO and criticized the inclusion of 4% transmission losses. He pointed out that the allowable losses should only include the difference between the amount of electricity purchased by IESCO and the amount electricity billed by it.
10. Depreciation is projected to increase by almost 100% in 2006 which seems extra ordinary in the absence of massive investments in infrastructure.

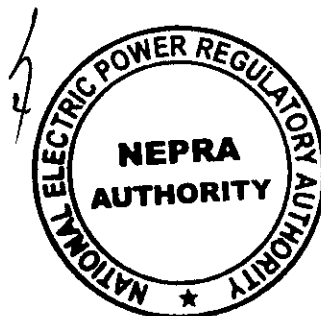


11. IESCO should not be concerned about PPP as it is a pass-through item and should instead focus on distribution margin. IESCO has not been able to demonstrate clearly how that distribution margin has been arrived at. O&M costs should not be arbitrarily increased by 10% in future years. Instead, a weighted average of last few years' WPI should be used to make future projections of O&M costs. Furthermore, the requested Return of 15.3% is quite high and inappropriate.
12. APTMA representative contended that a multi-year tariff can only be awarded to a generation company. As per NEPRA rules, especially Rule 12 of the distribution rules sub rule 6, no DISCO can enter into a power acquisition contract of duration longer than one year. So a three year tariff cannot be legally allowed until new NEPRA rules in this regard are notified by the Government.
13. Under rule 17 of NEPRA Distribution rules, a DISCO's investment program has to be approved by the Authority. As no such request for approval has been made so far, therefore, no future investment should be allowed as part of the tariff pending its approval by the Authority,

**SUBMISSIONS OF COMMENTATORS:**

Irrigation & Power Department, Government of Punjab

14. IESCO's tariff petition is against the policy of Government of Pakistan, which is committed to reduce the electricity tariff with the passage of time due to expected relief in the levelized tariff of IPPs with effect from the year 2004-05. There is a need to prescribe the methodology for reduction in tariff in case Power Purchase Price from IPPs is reduced subsequently in the coming years. Electricity tariff in Pakistan is already high as compared to other developing nations and with any further increase in electricity tariff our industrial products would not be able to compete in world markets.
15. Average sale tariff of NTDC may be made uniform for each DISCO, so that DISCOs are checked from monopolistic price hike of tariff.



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Moreover, this would provide a cross check on the line losses and in-house operating costs claimed by DISCOs.

**ISSUES ARISING OUT OF THE PROCEEDINGS**

16. The following main issues arising out of the proceedings as well as those considered relevant to the determination of IESCO are discussed in the succeeding paragraphs:

- I. Distribution Margin
  - a) Sales Growth
  - b) Distribution Losses
  - c) O&M Costs
  - d) Depreciation
  - e) Other Income
  - f) Return on Rate Base
  - g) Income Tax
- II. Power Purchase Price (PPP)
- III. Revenue Accrual and Average Sale Rate
- IV. The use of system charges/wheeling charges.
- V. Tariff Structure
- VI. Period of Multi-Year Tariff

**I. Distribution Margin**

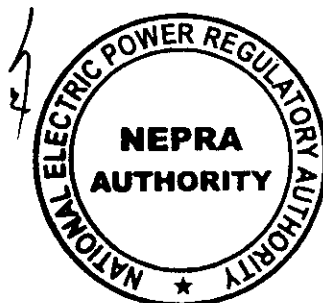
17. IESCO has claimed Distribution Margin (DM) to be calculated on the basis of forecasted sales for the year to cover its O&M costs, Depreciation and Return on Rate Base as per the following formula:

$$Avg.Margin(Rs\ per\ kWh) = \frac{O\ \&\ M\ +\ Depreciation\ +\ ROA}{Total\ Unit\ Sales}$$

18. The cost components and return comprising of the revenue requirement relating to distribution margin are analyzed in the following paragraphs to assess the reasonability of DM for FY 07.

a) Sales Growth

19. IESCO has forecasted its annual sales growth as 6% during each year of the proposed control period. The growth rate assumed by IESCO is in line with the past trend as indicated in table-1 of the petition. Given the



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past trends and the actual sales figures for the last twelve months and provided the demand expectations as well as estimated GDP growth, the growth in IESCO's sales for FY 07 has been estimated at 12.33%.

b) Distribution Losses

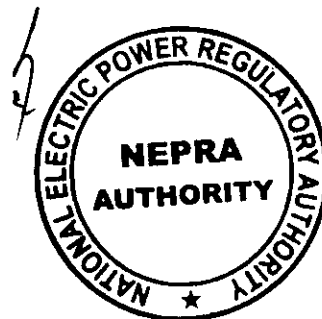
20. IESCO had proposed distribution losses target of 10.4% for the year FY 06. According to the information provided by IESCO the actual losses recorded during FY 04 were 9.9%. IESCO has further stated that its losses up to May 05 were 9.6% and are expected to be around 10% by end June 05. Although much improvement cannot not expected from this loss level but in view of the investment envisaged for Energy Loss Reduction Programme (ELR) the IESCO should be able to reduce its losses further. Authority therefore considers 9.9% distribution losses would be realistic and achievable and decides to adopt for assessment of cost of power purchased per kWh sold for FY 07.

21. IESCO has not included the losses of 132 kV system. Presently detailed information regarding losses at 132 kV system has not been provided, therefore, an accurate assessment of losses in the split up 132 kV system is not possible. Considering the comparative configuration of 132 kV IESCO system the losses for this part of the distribution system are estimated as 3.51%. As such an overall loss level of 13.41% is set as target for FY 07.

c) O&M Cost

i) Salaries & Wages

22. The actual salaries, wages and other benefits including post retirement benefits for FY 02, FY 03, FY 04 and FY 05 as per the Audited Accounts were Rs.992 million, Rs.1,093 million and Rs.1553 million and Rs.1,386 million respectively. There has been an abnormal increase in salaries, wages and other benefits during FY 04, which is mainly because of provision of extra amount for retirement benefits subsequent to Actuarial Study. The figure of FY 05 is fairly in line with the normal trend (disregarding the extra provision of retirement benefits) and can be



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adopted as benchmark for estimating the figure of salaries, wages and other benefits for FY 06.

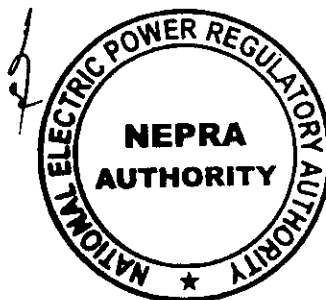
23. IESCO has stated that Federal Government has announced an increase of 15% in the salaries of employees, which will also be applicable to its employee. In view of past trend and current increase announced by the Government the Authority considers 25% increase in salaries, wages and other benefits over FY 05 would be a reasonable assumption for making assessment on this account for FY 06. Accordingly Rs.1,733.038 million is the estimated amount in this regard for FY 06. Adjusting it by including the affect of 10% expected inflation, the amount being allowed for salaries, wages and other benefits is Rs.1,906.341 million (Annex-1) and is to be recovered through consumer-end tariff.

ii) Repair & Maintenance

24. The actual repair & maintenance expenses during FY 02, FY 03, FY 04 and provisional for FY 05 as per the information provided were Rs. 273 million, Rs.277 million, Rs.260 million and Rs. 292 million. The expenses on this account show a consistency and IESCO has not indicated any abnormal change in the FY 06 except for inflation. During year FY 05 the inflation rate has been around 10%. The same trend is expected to continue in future therefore repair & maintenance expenses of Rs. 292.022 million during FY 05 and Rs.321.224 million during FY 06 have correspondingly been increased to Rs. 353.347 million (Annex-1).

iii) Traveling/Transportation

25. Actual traveling (TA/DA) expenses as per the Audited Accounts of IESCO were Rs.39 million, Rs.44 million, Rs.48 million, Rs.50 million for FY 02, FY 03, FY 04 and FY 05 respectively. IESCO has provided detailed working on the basis of revised traveling allowances as announced by the Federal Government according to which its traveling expenses would increase by about Rs.42.256 million during FY 06 over Rs.50 million expected during FY 05. Based upon the past trend and recent revision announced by the Federal Government the Authority considers



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Rs.92.251 million would be reasonable assessment for traveling expenses for FY 06 and adjusting for inflation estimates the traveling expenses for FY 07 to be Rs. 101.476 million.

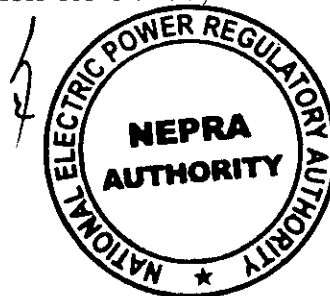
26. IESCO has incurred Rs.45 million, Rs.62 million, Rs.72 million and Rs.85 million on account of transportation during FY 02, FY 03, FY 04 and FY 05 respectively. IESCO has stated that due to drastic increases in oil prices its transportation expenses are expected to be much higher as compared to the previous years. The Authority is also aware of this fact and considers 15% increase over FY 05 would be sufficient to cater for the variation in oil prices during FY 06. Accordingly Rs.97.75 million on account of transportation expenses is estimated for FY 06 and this amount, after catering for the effect of inflation rises to Rs. 107.525 million for FY 07 (Annex-1).

iv) Miscellaneous

27. During last three years very significant increase has been observed in miscellaneous expenses. The actual miscellaneous expenses incurred during FY 02, FY 03, FY 04 and FY 05 were Rs. 112 million, Rs.138 million, Rs. 187 million and Rs. 190 million respectively. As stated by IESCO the increase is mainly due to the increase in bill collection charges from Rs.2.00 per bill to Rs.10.00 per bill by the banks. After examination of the evidence the Authority considers that the increase demanded by IESCO is justified. Accordingly the Authority has decided to accept IESCO's estimate of Rs.332.143 million on account of miscellaneous expenses for FY 06 and has estimated Rs. 365.357 million for FY 07 in this regard (Annex-1).

d) Depreciation

28. The assets of IESCO have been financed mainly through equity, debt and deferred credit (Consumers' capital contribution/Deposit works). The deferred credit is amortized over the life of the assets and this amortization is recognized as other income. IESCO has estimated Rs.1,061 million as depreciation for FY 06, which is about 83% higher



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than the depreciation of Rs.599 million for FY 05. The actual depreciation during FY 02, FY 03, FY 04 and FY 05 was around 3.68%, 3.65% and 3.72% of the average gross fixed assets in operation as on June 30<sup>th</sup> of each year respectively while the estimated depreciation for FY 06 is about 5.35%. In Authority's opinion the estimated depreciation is on the higher side and needs to be corrected according to the average of the last three years which works out to be 3.68% and this has been used for calculating depreciation for FY 06. Applying this rate to the average gross fixed assets, the estimated depreciation for FY 07 is estimated as Rs. 742.582 million (Annex-1).

e) Other Income

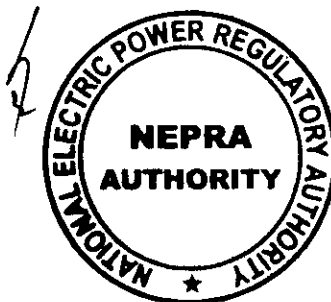
29. Other income includes: a) Income from meter rentals & service rent; b) Amortization of deferred credits (amortization of consumers' capital contribution), c) Miscellaneous income that includes income from late payment surcharge, profit on bank deposit, sale of scrap, and any income, which is not covered under aforementioned heads:

i) Rental & Service Income from Meter Rentals

IESCO has earned on account of meter rentals and service charges during FY 02, FY 03, FY 04 and FY 05 Rs. 37.291 million, Rs. 36.969 million, Rs. 34.894 million and Rs. 37.776 million respectively. IESCO has not provided income on this account during FY 06. The Authority considers that IESCO would get revenue at least equal to its revenue on this account earned during the period from FY 02 to FY 05. The Authority is of the opinion that IESCO would be able to earn Rs. 45 million during FY 07 from meter and service rent.

ii) Amortization of Deferred Credits

IESCO has estimated Rs. 387 million as amortization of deferred credit for FY 06. According to the audited accounts for FY 02, 03,



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04 & FY 05 the amortization of deferred credit was Rs. 195.741 million, Rs. 214.343 million, Rs. 231,878 million and Rs. 255.857 million respectively. The Authority is of the opinion that the amount estimated by IESCO is reasonable and will remain the same for FY 07 , therefore, is being adopted as such.

iii) Miscellaneous Income

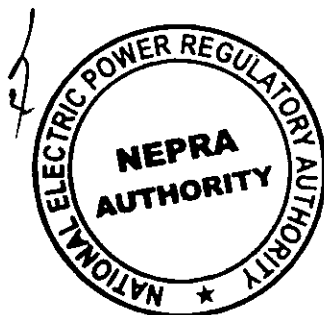
IESCO has estimated Rs. 100 million as miscellaneous income for FY 06. Miscellaneous income during FY 02, FY 03, FY 04 and FY 05 was Rs. 277 million, Rs. 298 million, Rs. 355 million and Rs. 429 million. In view of the past trend, the estimated amount of Rs. 100 million from miscellaneous sources is much lower and cannot be expected as such. Based upon the past trend the Authority considers that Rs. 350 million would be a fair assessment for FY 06 as well as for FY 07 on account of miscellaneous income.

f) Return on Rate Base (RORB)

i) Investment Program

30. IESCO has proposed an investment program of Rs. 1,260.3 million (for system expansion), Rs.277.23 million (for distribution rehabilitation) and Rs. 2,132.2 million (for secondary transmission and grid) during FY 06. IESCO intends to finance its investment programme to the extent of Rs. 592.60 million through consumer contribution and remaining Rs. 3,077.13 million through loans.

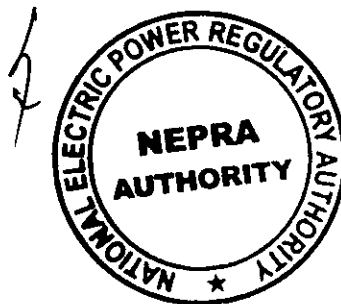
31. As per audited accounts of IESCO the actual capital expenditure inclusive of deposit works for FY 02, FY 03, FY 04 and FY 05 was Rs. 640.3320 million, Rs. 1,037.396 million, Rs.1040.02 million and Rs. 1818.776 million respectively. The major portion of actual capital expenditure was met through Consumer's Capital Contribution to the tune of Rs.525 million, Rs. 534 million, Rs.1143 million and Rs.685.123 million for FY 02, FY 03, FY 04 and FY05 respectively. In other words the investment through IESCO's own sources was only Rs. 115 million, Rs.



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503 million, 0 million and Rs. 1,133.653 million during FY 02, FY 03, FY 04 and FY 05 respectively.

32. The Authority is however aware that IESCO under the control of integrated WAPDA was not able to carry out the extension or augmentation of its system capacity commensurate with its load growth. Therefore the estimation of investment requirement based on past performance or achievement may not be realistic. Moreover in order to upgrade its distribution system for the purpose of achieving the performance standards prescribed by NEPRA, IESCO will have to carry out an extensive program of refurbishment, expansion and augmentation of its 132 kV sub-transmission and 11 kV/400 volts distribution system.
33. The Authority has examined the investment program details as provided by IESCO in its petition. According to IESCO its total investment inclusive of consumers' contribution credits is expected to be Rs. 14,350.22 million over the next 5 years (Annex-2). Out of this amount the portion that IESCO would have to finance (and therefore relevant to tariff-setting) is Rs. 10,861.72 million, which would be funded through borrowing and the rest amounting to Rs. 3,488.5 million through consumers' deposits.
34. However due to the prescription of the "eligibility criteria" for consumers of distribution companies notified vide SRO 743(I)/2003 dated July 26, 2003, prospective consumers will be required to pay the initial cost relating to installation and connection charges of the dedicated distribution system only. Development of the Common Distribution System (CDS), or reinforcement of the existing CDS is required to accommodate the prospective consumers into the Distribution system. Therefore investment in such extension or reinforcement of Distribution system would have to be financed either by the concerned Distribution Company or in the case of initial cost deposit by the consumer will have to be returned to the consumer treating it as an agreed financial arrangement. The Authority is of the opinion that the company would



have to incur a comparatively larger amount in the initial years. The Authority is also aware of the fact that the envisaged investment program for FY 06 is over ambitious and beyond the company's capacity to spend. On an overall basis for the 5 years the expansion programme has to be spread over the five years in a realistic manner based on the IESCO's capability to carry out such a programme. The Authority considers that the entire investment is not made on 1st day of a financial year but is spread over the whole year therefore the return cannot be allowed on the investment for the whole year as assumed by IESCO. For the purpose of assessment of return on assets an investment to the tune of Rs. 3,545 million is considered reasonable for FY 07. In case IESCO incurs more or less than the level of Rs. 3,545 million IESCO's will be allowed an adjustment on this account in the next financial year according to the prescribed formula indicated at Annex-10.

ii) Rate Base (RB)

35. IESCO has requested for FY 06 a rate base of Rs.10,909 million. The rate base has been proposed to be worked out according to the following formula:

$$\text{RateBase} = \text{NFAIO}_{(\text{Opening})} + 5\%(\text{NFAIO}) + \text{PPP}_{(\text{1month})} + \text{NI} + \text{CWIP} - \text{DC}$$

Where:

NFAIO<sub>(Opening)</sub> = Net Fixed Assets In Operation at beginning of the year,

Provision @5% of Net fixed assets in operation

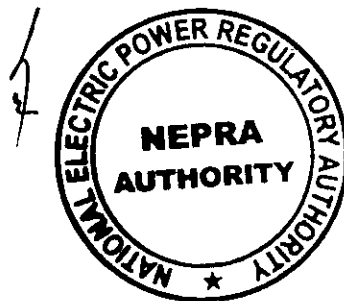
PPP<sub>(1Month)</sub> = Equal to 1 month of Power Purchase Price

NI = New Investment during the year

CWIP = Capital Works in Progress

DC = Deferred Credit (Consumers' capital contribution)

36. The Authority has considered the IESCO's request for provision of working capital equal to one month Power Purchase Price (PPP) and 5% on Net Average Fixed Assets in Operation. The Authority is of the opinion that the working capital requirement is assessed by taking into account the current assets and current liabilities. In the instant case IESCO has



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taken into account only current assets part and has ignored the current liabilities. The Authority is also of the view that IESCO is a going concern and its working capital requirements are already catered for and costs in this regard are included under the head financial and other charges. The Authority has therefore decided not to consider the provision for working capital as requested by IESCO for calculating Regulatory Asset Base (RAB).

37. Based upon the consideration in the preceding paragraphs and in view of the actual results of FY 05 along with the information provided by the IESCO, the rate base for IESCO for FY 07 has been assessed as Rs. 8,318.652 million. The details of Rate Base are indicated in the table 1.

Table 1  
Regulatory Assets Base (RAB)

		Rs. Million		
Sr.No.	Description	FY 05	FY 06	FY 07
	<b>Gross Fixed Assets In Operation</b>			
1	Opening Fixed Assets in Operation	15,331.956	16,818.238	18,131.357
2	Transferred During the Year	1,486.282	1,313.119	4,095.000
3	<b>Closing Fixed Assets in Operation (1+2)</b>	<b>16,818.238</b>	<b>18,131.357</b>	<b>22,226.357</b>
4	<b>Cumulative Depreciation</b>	<b>6,215.711</b>	<b>6,858.784</b>	<b>7,601.366</b>
5	<b>Net Fixed Assets in Operation (3-4)</b>	<b>10,602.526</b>	<b>11,272.573</b>	<b>14,624.991</b>
6	Closing Capital Work in Progress	1313.119	1,050.000	500.000
7	<b>Total Assets (5+6)</b>	<b>11,915.645</b>	<b>12,322.573</b>	<b>15,124.991</b>
	<b>Less:</b>			
8	Deferred Credit	5,067.630	5,273.630	5,536.630
9	<b>Regulatory Rate Base (7-8)</b>	<b>6,848.015</b>	<b>7,048.943</b>	<b>9,588.361</b>
	<b>Average Regulatory Rate Base</b>		<b>6,948.479</b>	<b>8,318.652</b>

Note: Yearly comparison of actual and projected assets and liabilities is given in Balance Sheet indicated as Annex-3 and statement of changes in financial position at Annex-4.

iii) Weighted Average Cost of Capital (WACC)

38. The IESCO has requested for 15.30% Return on Rate Base (RORB) for the entire control period in order to meet its cash flow requirements.
39. The Authority in its determination dated June 28, 2004 and November 5, 2004 had determined 11.15% post tax RORB. The determination of



RORB was based on detailed study and analysis. The basic parameters used in the analysis have now changed and need to be corrected accordingly. The reference risk free rate (PIB yield) has increased from 6.7% to 9.2% that has resulted in corresponding increase in cost of debt. The revised cost of debt thus works out as 13.24%. Using a cost of debt as 13.24%, cost of equity as 13.02%, Debt-Equity ratio of 31:69 and tax rate 35%, the Weighted Average Cost of Capital (WACC) is calculated as 11.65% according to the following formula:

$$WACC = \{k_e \times (E / V)\} + \{k_d \times (1-T_c) (D / V)\}$$

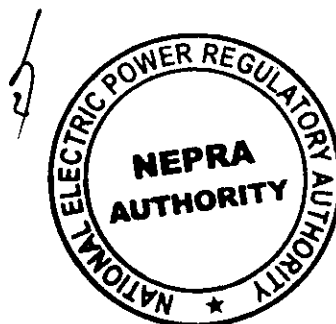
Where:

Ke and Kd are cost of equity and debt, E/V and D/V are equity and debt ratios respectively, and T<sub>c</sub> is the tax rate.

g) Income Tax

40. IESCO has stated that after notification of its tariff it will be obliged to pay income tax @ 35% on its income therefore it should be allowed to pass on the impact of this tax liability to the end-consumers through tariff increase. IESCO has also provided letter from Central Board of Revenue (CBR) in support of its claim. Based upon the evidence provided by IESCO the Authority has decided to incorporate the impact of 35% income tax which is estimated as Rs. 402.409 million for assessment of the gross revenue requirement of IESCO.
41. According to the costs and returns allowed in the preceding paragraphs, the Revenue Requirement for calculating Distribution Margin for the test year i.e. FY 07 is estimated as under:

	<u>Million Rs</u>
O&M Costs	2,834.046
Depreciation	742.582
Other income	(782.000)
Return on Net Fixed Assets in operation	1,088.762
Income Tax	<u>402.409</u>
Distribution Margin Cost	4,285.799



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42. Based upon the Distribution Revenue Requirement assessment of Rs.4,285.799 million and expected units to be sold 6,864 GWh, the Distribution Margin per unit sold for FY 07 is worked out as Paisa 62.4388/kWh (Annex-1).

## **II. Power Purchase Price (PPP)**

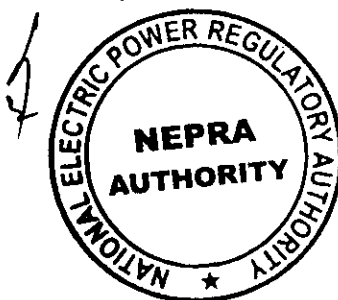
43. Eight DISCOs, unbundled from WAPDA distribution system (Ex-WAPDA DISCO) will purchase power from the Central Power Purchase Agency (CPPA) established within NTDC. The Power Purchase Price (PPP) will be computed as a transfer price in accordance with the mechanism laid down in the determination of the Authority dated April 13, 2004 with respect to tariff for NTDC. The Power Purchase Price according to aforesaid mechanism shall include wheeling charges i.e. cost of transportation of power by NTDC to various DISCOs. According to the prescribed mechanism the PPP for purchasing 7,927 GWh by IESCO for FY 07 is assessed as Rs. 27,667.947 million or Rs. 3.4903/kWh (Annex-5), which is considered for Revenue Requirement calculation as well as the basis for future annual indexation of PPP.

## **III. Revenue Accrual and Average Sale Rate**

44. Based upon the analyses in the preceding paragraphs, the overall revenue requirement has been assessed as Rs. 31,953.739 million (Annex-6). The breakup of major components of revenue requirement is as follows;

EPP	Rs. 19,036.944 Million
CPP	Rs. 7,280.674 Million
Transmission Charge	Rs. 1,350.322 Million
Distribution Margin	<u>Rs. 4,285.799 Million</u>
Total Revenue Requirement	Rs. 31,953.739 Million

45. The revenue to IESCO on the prevailing rates is estimated as Rs. 29,543 million (Annex-7) against the estimated revenue requirement of Rs. 31,953.739 million for FY 07. As such the current IESCO average tariff is insufficient to meet it's revenue requirement: therefore an increase in its existing rate is required. The Authority, in line with the Tariff Standards



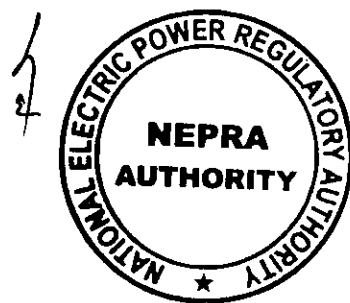
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and Procedures Rules (TS&PR) and Subsidy Policy for Consumers of Power Distribution Companies (No. DS(P) Misc./04 dated November 2004) issued by Government of Pakistan, considers that the tariff of different consumer categories needs to be adjusted in order to reduce cross-subsidies and distortions within the different consumer categories and to bring the consumer class rates close to the respective cost of service. The Authority has therefore decided to adjust the tariff of different consumer categories in the manner that the resulting consumer class rates are as close to their marginal cost as possible. The revised rates are indicated in the attached revised schedule of tariff.

**IV. The use of system charges/wheeling charges.**

46. IESCO may be required to transport power to bulk power consumers (BPCs) purchasing power from generating companies, selling outside the CPPA single buyer arrangement or from other distribution companies. In such cases IESCO will be allowed to charge for the cost incurred on transportation of power involved and billing / retail sale service provided to the BPC or another Distribution company.
47. The distribution charge, which IESCO is allowed to charge its own consumers on average, however also includes pilferage losses being caused due to inefficiency of the host DISCO or the DISCO providing the transportation service through its distribution system. This charge can not be imposed on the consumer who is buying power from some other source therefore the distribution charge has to be adjusted to exclude pilferage losses. The revenue requirement leading to distribution charge should therefore be divided on expected units sold based on technical losses only. Correcting for technical losses instead of overall losses the distribution charge is adjusted to arrive at the use of system charge (UOSC).

$$\text{UOSC} = \text{DM} \times \frac{(1 - \% \text{ overall losses})}{(1 - \% \text{ technical losses})}$$



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48. The technical losses relating to transportation of bulk power over 132 kV system are estimated as 4%, and within the distribution system as 5% for FY 06. Therefore Distribution charge would be adjusted for each case depending on which part of IESCO system is involved as under:

- i) Where only 132kV system is involved

$$UOSC = \frac{DM * (1 - L)}{(1 - 0.04)} \text{ paisa/kWh}$$

Where only 11 kV Distribution System is involved considering 5% distribution technical losses

$$UOSC = \frac{DM * (1 - L)}{(1 - 0.05)} \text{ paisa/kWh}$$

- ii) Where both 132 kV system and 11 kW distribution system is involved

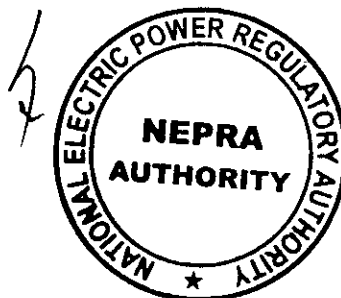
$$UOSC = \frac{DM * (1 - L)}{(1 - 0.09)} \text{ paisa/kWh}$$

Where;

Distribution Margin (DM) for FY 07 is set as paisa 62.4388/kWh. 'L' will be the overall percentage loss target for the year as 13.41% for FY 07.

#### **V. Tariff Structure**

49. Existing tariff structure for various consumers' categories in the IESCO distribution area is given in Annex-7.
50. For the existing residential consumers having peak load requirement or sanctioned load of above 20 kW an optional tariff based on time of use metering is being introduced. However this tariff shall be mandatory for the new residential consumers having peak load requirement or sanctioned load exceeding 20 kW.
51. An option for shifting to time of day metering is being allowed to commercial consumers having peak load requirement or sanctioned load exceeding 20 kW.

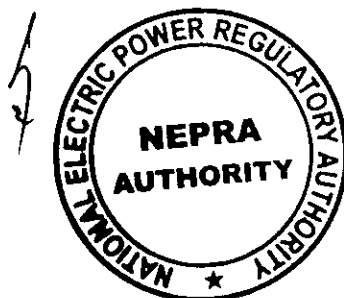


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52. With respect to elimination of all the surcharges viz., fuel adjustment surcharge, hydel surcharge and Additional surcharge, these are being merged into one component of tariff i.e., Variable Charge whereas the Fixed Charge a component is being retained, thus the tariff rates as appearing in the bill of consumers are simplified to contain only fixed charges (where applicable) and variable charges.
53. Moreover in view of the non-licensee status being no longer allowed to distribute or sell power under the NEPRA Act the definition of Bulk supply tariff needs to be changed. Any person who purchases power from the DISCO in bulk and resells to its consumers (e.g. Housing Colonies and MES installations) will require a Distribution License. The definition and categorization has therefore been changed as single point supply for further resale by a Distribution Licensee. The terms and conditions of tariff have also been revised to accommodate the above mentioned changes.
54. IESCO is directed to undertake a study for the assessment of the cost of service to each consumer category and consumption class separately and to submit a proposal for a revision of the tariff structure and the associated terms and conditions of tariff on the basis of the study. The revised structure shall be considered by the Authority for approval and applicability.

**VI. Period of Multi-Year Tariff**

55. IESCO has proposed a Multi-year Tariff (MYT), for three years starting from FY 06 to remain effective till June 2008. The Authority considers that a multi-year price cap incentive tariff (MYT) regime is not appropriate for distribution companies which are expected to remain in Government ownership and management for a considerable period of time. The MYT can be considered for those distribution companies, which are expected to be partially divested and handed over to private



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management in the near future. Therefore the matter of MYT for IESCO will be considered when IESCO becomes a priority for privatization. IESCO's request for a Multi-year Tariff is therefore, not accepted.

**VII. Indexation/Adjustment**

(i) Return on Rate Base & Depreciation

56. The Authority has allowed RORB based upon the average of opening (estimated) and closing (estimated) RAB for FY 07 as indicated in table 1. Adjustment for variation in RORB due to variation in RAB shall be with respect to approved investment plan only. IESCO shall demonstrate with documentary evidence that the investment was according to the approved plan. IESCO shall also indicate that ultimate targets against the allowed investments are achieved. IESCO shall be required to give following details;

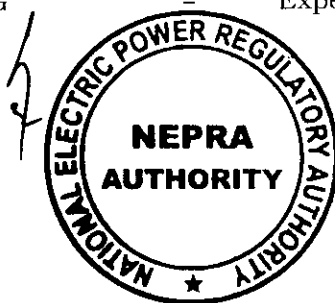
1. Investment to meet NEPRA's prescribed performance standards;
2. Investment for system expansion corresponding to demand growth;
3. Investment for system loss reduction and corresponding efficiency improvement;

57. The Authority shall not allow RORB on the investment which will not be approved by the Authority. The adjustment for variation in RORB due to variation in RAB shall be made according to the following formula;

$$\text{RORB(adj)} = [(I(a) - I(e)) \times \text{WACC}/2 + (D(a) - D(e))] / [\text{US}(a) * (1 + G)]$$

Where:

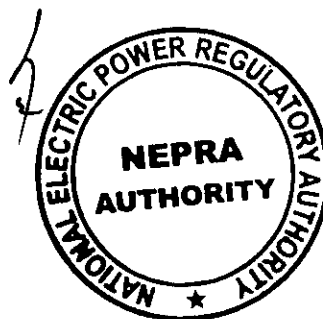
- RORB(adj) = Required adjustment in tariff due to variation in investment
- I(a) = Actual investment during the year under review
- I(e) = Estimated investment for the year under review
- WACC = Weighted Average Cost of Capital
- D(a) = Actual depreciation for the year under review
- D(e) = Estimated depreciation for the year under review
- US(a) = Actual units in million kWh sold in the year under review
- G = Expected growth rate in sales next year



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ii) Adjustment in Power Purchase Price

58. IESCO requested that it should be allowed to pass on any variation in PPP to the consumers immediately. The PPP varies on two account; i) due to variation in Generation Source Mix (GSM); ii) variation in fuel prices. The Authority considers that allowing the consumer-end sale price to fluctuate immediately on account of variation in PPP would create unnecessary volatility in the consumer-end rates. At the same time Authority feels that it would be unjust to defer variation in PPP for a longer period, which may put extra financial burden on the company thus leading to a liquidity problem for the company. In order to strike balance the consumers and the distribution company, the Authority has decided to allow biannual adjustment on account of variation in PPP. The adjustment mechanism is given at Annex-8.
59. The estimated annual weighted average PPP for the initial year FY 07 is estimated as Rs. 3.4903 per kWh. This PPP will become the reference PPP for calculating the PPP difference when compared with the actual PPP during FY 07. The actual PPP for the year will be calculated as the weighted average PPP for the year i.e. equal to the total amount billed to IESCO for the units delivered, divided by the units delivered during the year. The actual annual weighted average PPP experienced by IESCO in a year will become the estimated annual weighted average PPP for the next year of the control period.
60. IESCO shall submit its calculation for adjustment in average sale rate due to variation in PPP by 10<sup>th</sup> of next month immediately after the period for which such adjustment would be required along with the proposed adjustment in consumer-class rate. The Authority will determine the revised tariff within 10 working days of receipt of information from IESCO. The variation in average sale rate will be distributed between the various consumer classes such that cross-subsidization is minimized as far as possible.



**ORDER**

61.

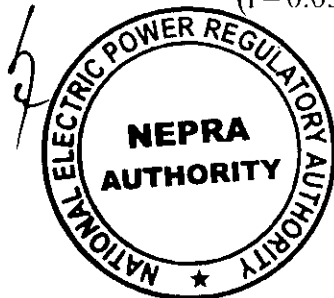
- I. Islamabad Electric Supply Company (IESCO) is allowed to charge its consumers such tariff as set out in the schedule of tariff for IESCO as per Annex-9. The consumer-end tariff shall remain applicable till the time IESCO files a petition for revision of tariff, subject to the variation allowed due to adjustment of tariff on account of variation in power purchase price and RAB according to the mechanism/formula prescribed at Annex-8 and Annex-10.
- II. IESCO shall submit its calculation for adjustment in average sale rate due to variation in PPP and RAB by 10<sup>th</sup> of next month immediately after the period as laid down in the prescribed mechanism for adjustment for which such adjustment would be required along with the proposed adjustment in consumer-class rate. The Authority will determine the revised tariff within 10 working days of receipt of information from IESCO. The variation in average sale rate will be distributed between the various consumer classes such that cross-subsidization is minimized as far as possible. Any tariff adjustment so determined by the Authority shall be deemed to have been notified by the Federal Government through the notification of this order.
- III. The terms and conditions related to the schedule of tariff shall be those as attached to this determination as Annex-11.
- IV. IESCO is allowed to charge the users of its system a use of system charge (UOSC) equal to:

- i) Where only 132kV system is involved.

$$UOSC = DM \times \frac{(1-L)}{(1-0.04)} \text{ Paisa / kWh}$$

- ii) Where only 11 kV distribution system is involved.

$$UOSC = DM \times \frac{(1-L)}{(1-0.05)} \text{ Paisa / kWh}$$



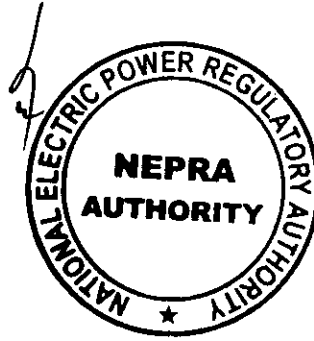
iii) Where both 132 kV and 11 kV distribution systems are involved.

$$UOSC = DM \times \frac{(1-L)}{(1-0.09)} \text{ Paise / kWh}$$

Where:

Distribution charge for the FY 07 is set as paise 62.4388/kWh. 'L' will be the overall percentage loss target for the year as 13.41% for FY 07.

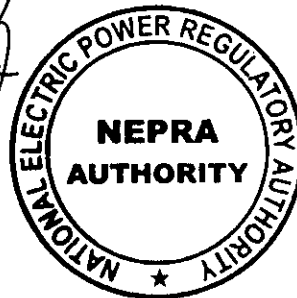
- V. The tariff set out at Annex-9, the mechanisms for adjustment of average sale rate on account of variation in power purchase price (Annex-8), variation in return and depreciation due to difference in estimated and actual investment (Annex-10) and terms and conditions (Annex-11) related to the proposed tariff be sent to the Federal Government for notification under Section 31(4) of the Act.



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**ISLAMABAD ELECTRIC SUPPLY COMPANY**  
**INCOME STATEMENT**  
**YEAR ENDING JUNE 30th**

Audited FY 02	Audited FY 03	Audited FY 04		UNIT	Draft FY05	Projected	
						FY06	FY07
			<b>Units Received</b>	(Gwh)		6792	7,927
			Units Lost (Distribution Losses)	(Gwh)		944	1,063
			Units Lost (Distribution Losses)	%		13.90%	13.41%
4,587	4,729	5,205	<b>Units Sold</b>	(Gwh)	5,517	5,848	6,864
			<b>Cost of Purchase Rs. per kWh Received</b>			3.083	3.4903
			<b>Cost of Purchase Rs. per kWh Sold</b>			3.581	4.031
4.056	4.309	4.370	<b>Distribution Margin Rs./kWh Sold</b>			0.631	0.624388
			<b>Overall Tariff - Nominal</b>	Ps./Kwh	4.368	4.212	4.655
			<b>OPERATING REVENUE</b>				
18,605.546	20,376.458	22,745.336	Sale of Electricity		24,096.292	24,628.836	31,953.740
37.291	36.969	34.894	Rental & Service Income		37.776	40.000	45.000
<b>18,642.836</b>	<b>20,413.427</b>	<b>22,780.230</b>	<b>Total Operating Revenues</b>		<b>24,134.068</b>	<b>24,668.836</b>	<b>31,998.740</b>
195.741	214.343	231.878	Amortization of Deferred Credit		255.857	387.000	387.000
<b>18,838.577</b>	<b>20,627.770</b>	<b>23,012.108</b>	<b>Operating Costs</b>		<b>24,389.925</b>	<b>25,055.836</b>	<b>32,385.740</b>
-	0.000	0.000	Capacity Purchase Price		0.000	8,012.323	7,280.674
17,162.390	18,545.152	20,376.821	Energy Purchase Price		18,326.257	11,795.745	19,036.944
			Transmission Charge			1,132.732	1,350.322
992.178	1,093.081	1,552.865	Salaries, wages and other benefits		1,386.430	1,733.038	1,906.341
273.422	277.462	259.860	Repair & maintenance		292.022	321.224	353.347
39.266	43.632	48.464	Travelling		50.000	92.251	101.476
45.304	62.294	72.141	Transportation		85.000	97.750	107.525
112.094	137.887	186.855	Miscellaneous		189.643	332.143	365.357
482.666	518.823	546.116	Depreciation		598.573	643.073	742.582
<b>19,107.319</b>	<b>20,678.331</b>	<b>23,043.122</b>	<b>Cost of Sales</b>		<b>20,927.925</b>	<b>24,160.278</b>	<b>31,244.569</b>
(268.742)	(50.561)	(31.013)	<b>Gross Profit</b>		<b>3,462.000</b>	<b>895.559</b>	<b>1,141.171</b>
277.025	298.476	355.271	Other Income		428.510	350.000	350.000
<b>8.283</b>	<b>247.916</b>	<b>324.258</b>	<b>Profit/(Loss) before Interest &amp; Tax</b>		<b>3,890.510</b>	<b>1,245.559</b>	<b>1,491.171</b>
511.715	559.553	463.365	Financial & Other Charges		397.452	285.193	341.431
(503.432)	(311.638)	(139.10743)	<b>Net Profit/(Loss) for the Year before tax</b>		<b>3,493.058</b>	<b>960.365</b>	<b>1,149.740</b>
			<b>Tax</b>		0.000	336.128	402.409
			<b>Net Profit/(Loss) for the Year after tax</b>		<b>3,493.058</b>	<b>624.237</b>	<b>747.331</b>
(1,593.0751)	(2,096.507)	(2,408.145)	Income / (Loss) brought forward		(2,547.253)	945.805	1,559.835
			Prior year adjustments		0.000	10.207	0.000
<b>(2,096.507)</b>	<b>(2,408.145)</b>	<b>(2,547.253)</b>	<b>Accumulated Profit / (Loss)</b>		<b>945.805</b>	<b>1,559.835</b>	<b>2,307.166</b>
0.09%	2.50%	3.11%	Rate of Return before interest & tax (%)		34.40%	17.926%	17.926%
			Return after tax (%)			11.65%	11.65%
9,659	9,915	10,436.921	Rate Base		11,309.187	6,948.479	8,318.651



**SUMMARY OF THE INVESTMENT PLANS OF IESCO FROM 2006-08  
FOR SYSTEM AUGMENTATION PROGRAM (SAP).**

**DISTRIBUTION EXPANSION**

**SIZE OF INVESTMENT**

Rs. in millions

2006	2007	2008	Total
1,260.300	1,340.800	1,398.500	4,005.600

**OBJECTIVE OF DISTRIBUTION EXPANSION**

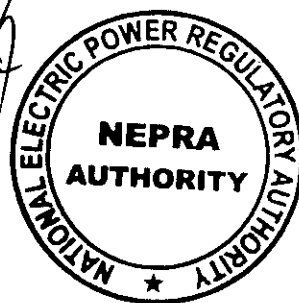
Distribution expansion to connect new consumer (in domestic, commercial, industrial and agricultural sector) and to provide adequate and reliable distribution network and services in view of the future power requirement.

**TECHNICAL ASPECTS**

**SCOPE OF THE WORK**

**DETAIL**

No. of new connections	228,741
Addition of 11 KV lines	1,709.920 Km
Addition of LT Lines	1,799.430 Km
Additional Transformers	7,585 of different capacities
New Vehicles	240 No.



DISTRIBUTION REHABILITATIONSIZE OF INVESTMENT

Rs. in millions

2006	2007	2008	Total
277.230	313.780	334.180	925.190

DISTRIBUTION REHABILITATION MEASURES

Distribution Rehabilitations Measures at:

- Energy Loss Reduction
- Improvement in quality of supply
- Improvement in reliability
- Improvement in safety
- Release of generation, transmission and distribution capacity
- Improve customer service and reduce complaints
- Reduce cost of operation and maintenance
- Improve equipment's life length

TECHNICAL ASPECTSSCOPE OF THE WORKDETAIL

Addition of 11 KV lines	450 Km
Addition of LT Lines	150 Km
HT Line re-conductring	750 Km
LT Line re-conductring	123 Km
Transformers (New)	201 of different capacities
Transformers (Aug)	396 of different capacities
Addition of HT Capacitors	60 Nos.
11 KV Panels	36 Nos.
Energy Meters	181,293
Service Cables	456 Km.



Annex-2 Continued (Page 2 of 3)

## SECONDARY TRANSMISSION AND GRIDS PROJECTS (STG)

### SIZE OF INVESTMENT

Rs. in millions

2006	2007	2008	Total
2,132.210	1,884.420	593.493	4,610.123

### OBJECTIVES OF SECONDARY TRANSMISSION AND GRIDS PROJECTS (STG)

In order to ensure dispersal of power further to the sub-transmission ends, a reliable secondary system comprising 220,132 and 66 KV transmission lines grids stations has to be established by setting up new facilities and also the existing secondary system will have to be strengthened / reinforced through additions, augmentation and upgrading of present facilities according to the load requirement.

The facilities of sub transmission line and grid station proposed in the present scheme are designed to cater for the maximum diversified loads anticipated on IESCO power system.

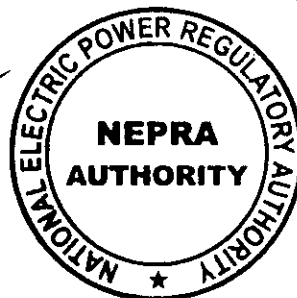
### TECHNICAL ASPECTS

#### SCOPE OF THE WORK

#### DETAIL

New 132 KV lines	803 Km
New 132 KV Grid Stations	10 No.
Extension of 132 KV Grid Stations	21 No
Augmentation of 132 KV Grid Stations	07 No
Conversion of 33 ,66 KV Grid Stations	10 No.
Re-conductring of 132 KV lines	86 Km

Annex-2 Continued (Page 3 of 3)



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# ISLAMABAD ELECTRIC SUPPLY COMPANY

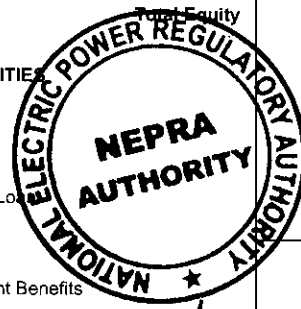
Annex-3

## BALANCE SHEET

As On JUNE 30th

MILLION RUPEES

Audited	Audited	Audited		Draft	Projected	
FY 02	FY 03	FY 04		FY05	FY06	FY07
			<b>ASSETS</b>			
			<b>FIXED ASSETS</b>			
13,620.531	14,593.921	15,331.956	Fixed Assets in Operation	16,818.238	18,131.357	22,226.357
4,565.961	5,096.285	5,609.852	Less: Accumulated Depreciation	6,215.711	6,858.784	7,601.366
<b>9,054.569</b>	<b>9,497.636</b>	<b>9,722.104</b>	<b>Net Fixed Assets in Operation</b>	<b>10,602.526</b>	<b>11,272.573</b>	<b>14,624.991</b>
604.623	673.477	980.625	Work in Progress	1,313.119	1,050.000	500.000
<b>9,659.192</b>	<b>10,171.113</b>	<b>10,703</b>	<b>Total Fixed Assets</b>	<b>11,915.645</b>	<b>12,322.573</b>	<b>15,125</b>
4.386	7.426	8.301	Long term loans and advances	6.692	6.692	6.692
1.117	0.149	0.171	Deferred Cost	0.168	0.000	0.000
0		0	Long Term Investment	0.000	0	0
<b>5.503</b>	<b>7.576</b>	<b>8.472</b>		<b>6.860</b>	<b>6.692</b>	<b>6.692</b>
			<b>CURRENT ASSETS</b>			
547	589	558	Stores , Spares & loose tools	702.687	544	667
2,203	1,856	2,130	Accounts Receivable	2,422.737	3,041	3,041
0	0	0	Less: Provision for Bad Debt	0.000	0	0
2,203	1,856	2,130	Accounts Receivable-Net	2,422.737	3,041	3,041
1,256	915	1,012	Loans, advances, deposits and other receivables	5,729.659	5,730	5,730
532	201	735	Cash & Bank Balances	1,490.231	568	216
<b>4,539</b>	<b>3,561</b>	<b>4,435</b>	<b>Total Current Assets</b>	<b>10,345.314</b>	<b>9,883</b>	<b>9,654</b>
<b>14,203.197</b>	<b>13,739.810</b>	<b>15,146.270</b>	<b>Total Assets</b>	<b>22,267.819</b>	<b>22,212.176</b>	<b>24,785.659</b>
			<b>CAPITAL AND LIABILITIES</b>			
			<b>SHARE CAPITAL AND RESERVES</b>			
50,000	50,000	50,000	Authorised Share Capital	50,000	50,000	50,000
			5,000,000,000 ordinary shares of Rs. 10 each			
<b>0.010</b>	<b>0.010</b>	<b>0.010</b>	<b>issued, subscribed and paid up share capital</b>	<b>0.010</b>	<b>0.010</b>	<b>0.010</b>
<b>2,445.765</b>	<b>2,445.765</b>	<b>2,445.765</b>	<b>Deposit for issue of shares</b>	<b>5,043.174</b>	<b>5,043.174</b>	<b>5,043.174</b>
(2,097)	(2,408)	(2,547)	Retained Earnings/(Accumulated Loss)	945.805	1,560	2,307
<b>349.267</b>	<b>37.630</b>	<b>(101.478)</b>	<b>Total Equity</b>	<b>5,988.989</b>	<b>6,603.019</b>	<b>7,350.350</b>
<b>4,052.095</b>	<b>4,369.243</b>	<b>4,638.364</b>	<b>Deferred Credit</b>	<b>5,067.630</b>	<b>5,273.630</b>	<b>5,536.630</b>
			<b>LONG TERM LIABILITIES</b>			
231.667	165.153	104.285	New Loans		200.000	2,000.000
2,433.84	2,217.84	2,002.08	Foreign Direct Loans	67.131	36.000	0.000
2,325.588	2,055.951	922.333	Foreign Relent Loans	1,786.58	1,571.08	1,355.58
268.483	236.430	174.586	Central Government Loans	851.687	793.687	735.687
<b>5,259.574</b>	<b>4,675.378</b>	<b>3,203.286</b>	WAPDA Bonds	131.797	131.797	0.000
1,442	1,444	1,841	Employees Retirement Benefits	2,837.197	2,732.566	4,091.269
532.882	598.049	680.486	Security Deposits	1,928.632	2,079	2,215
32	91	42	<b>CURRENT LIABILITIES</b>	813.177	863.177	913.177
227	404	2,366	Creditors	55.177	746	678
39.740	40.906	107.036	Due to WAPDA & Associated undertakings	2,366.002	1,366	1,366
79.631	31.719	40.533	Accrued Liabilities	62.560	72.210	158.862
1,124.047	1,159.354	1,813.290	Capital Contribution awaiting connections	50.628	50.628	50.628
39.137	36.029	24.475	Receipt against deposit work	2,163.290	1,564.995	1,564.995
37.254	34.782	10.819	Unrealized Income Tax	33.214	33.214	33.214
893.272	685.204	280.498	Unrealized Electricity Duty	27.618	27.618	27.618
95.783	131.838	199.416	Unrealized Sales Tax	619.658	619.658	619.658
<b>2,567.573</b>	<b>2,615.096</b>	<b>4,884.189</b>	Other liabilities	254.053	170.273	170.273
<b>14,203.194</b>	<b>13,739.810</b>	<b>15,146.270</b>	<b>Total Capital and Liabilities</b>	<b>22,267.827</b>	<b>22,201.976</b>	<b>24,775.459</b>

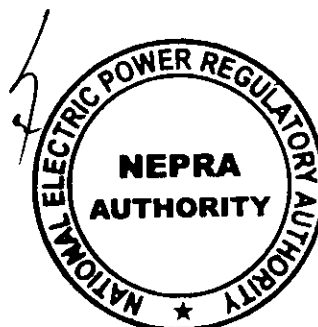


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**ISLAMABAD ELECTRIC SUPPLY COMPANY**  
**Statement of Changes in Financial Position**

MILLION RUPEES

Audited	Audited	Audited	SOURCES OF FUNDS	Draft	Projected	
FY 02	FY03	FY04		FY05	FY06	FY07
(503.432)	(311.638)	(139.107)	<b>Cash Flow From Operating Activities</b>			
			Profit / (Loss) for the year	3,493.058	960.365	1,149.740
			<b>Adjustments for non-cash charges and other items:</b>			
482.666	518.823	546.116	Depreciation	605.859	643.073	742.582
145.862	152.189	499.168	Provision for employees' retirement benefits & other provision	254.387	300.000	203.927
2.371	4.743	4.955	Provision for Obsolete Stores & Spares	0.000	0.000	0.000
1.008	1.008	0.000	Amortization of Deferred cost	0.000	0.168	0.000
(195.741)	(214.343)	(231.878)	Amortization of Deferred credit	(255.857)	(387.000)	(387.000)
511.715	559.553	463.365	Financial Charges	397.452	285.193	341.431
0.000	(62.593)	(31.396)	Saving in receipts against deposit works transferred to other income			
<b>444.449</b>	<b>647.743</b>	<b>1,111.223</b>	<b>Cash Flow From Operating Activities Before Adjustment for Working Capital</b>	<b>4,494.899</b>	<b>1,801.799</b>	<b>2,050.679</b>
			<b>(Increase)/Decrease in Current Assets</b>			
197.971	(41.143)	30.987	Stores, spares and loose tools	(145.081)	158.746	(122.850)
(179.633)	346.651	(273.932)	Trade debts	(292.436)	(618.626)	0.000
(182.791)	340.660	(96.802)	Loans, advances, deposits and other receivables	(4,717.375)	0.000	0.000
<b>(164.452)</b>	<b>646.168</b>	<b>(339.748)</b>	<b>Total Adjustments</b>	<b>(5,154.892)</b>	<b>(459.880)</b>	<b>(122.850)</b>
			<b>Increase/(Decrease) in current liabilities</b>			
(45.142)	59.232	(49.202)	Creditors	13.058	691.176	(68.154)
80.628	(190.468)	1,521.837	Due to WAPDA & Associated undertakings	0.000	(1,000.000)	0.000
4.025	1.166	66.130	Accrued Liabilities	(44.475)	9.649	86.652
(15.841)	190.198	67.579	Other liabilities	779.430	(682.075)	0.000
<b>23.669</b>	<b>60.128</b>	<b>1,606.343</b>		<b>748.012</b>	<b>(981.250)</b>	<b>18.498</b>
<b>(140.783)</b>	<b>706.296</b>	<b>1,266.595</b>	<b>Effect on Cash Flows due to Working Capital Changes</b>	<b>(4,406.880)</b>	<b>(1,441.130)</b>	<b>(104.352)</b>
<b>303.666</b>	<b>1,354.039</b>	<b>2,377.819</b>	<b>Cash (used in)/Generated From Operating Activities</b>	<b>88.019</b>	<b>360.669</b>	<b>1,946.328</b>
			<b>Receipts against deposits works</b>		0.000	
524.742	533.951	1,143.409	<b>Pension Obligation Paid</b>	(167.177)	(150.000)	(67.976)
0.000	(149.578)	(102.160)	<b>Tax Paid</b>		(336.128)	(402.409)
(12.902)	(510.116)	(454.295)	<b>Financial Charges Paid</b>	(397)	(285)	(341)
<b>815.505</b>	<b>1,228.296</b>	<b>2,984.773</b>	<b>Net Cash Flows From Operating Activities</b>	<b>(476.810)</b>	<b>(410.652)</b>	<b>1,134.512</b>
			<b>Cash Flows From Investing Activities</b>			
(640.332)	(1,037.396)	(1,040.020)	Capital Expenditure	(1,818.776)	(1,050.000)	(3,545.000)
(0.035)	(0.048)	(0.022)	Long term Deposits	0.003	0.000	0.000
(1.955)	(3.040)	(0.875)	Long term loans and Advances	1.609	0.000	0.000
<b>(642.322)</b>	<b>(1,040.485)</b>	<b>(1,040.917)</b>	<b>Net Cash Flows From Investing Activities</b>	<b>(1,817.164)</b>	<b>(1,050)</b>	<b>(3,545)</b>
			<b>Cash Flows From Financing</b>			
0.000	(584.195)	(1,472.093)	Long-term loan-Repayment	(366.089)	(304.631)	(441.297)
			Increase in deposit for issue of shares	2,597.409	0.000	0.000
			Long-term new loan		200.000	1,800.000
			Capital Contributions	685.123	593.000	650.000
<b>69.480</b>	65.164	82.437	Security Deposits Received	132.691	50	50
<b>69.480</b>	<b>(519.031)</b>	<b>(1,389.656)</b>		<b>3,049.134</b>	<b>538.369</b>	<b>2,058.703</b>
<b>242.663</b>	<b>(331.219)</b>	<b>534.200</b>	<b>Net (Decrease)/Increase in Cash &amp; Bank Balances</b>	<b>755.360</b>	<b>(922.283)</b>	<b>(351.785)</b>
<b>289.227</b>	<b>531.890</b>	<b>200.670</b>	<b>Cash and Bank Balances at Beginning of the year</b>	<b>734.870</b>	<b>1,490.231</b>	<b>567.948</b>
<b>531.890</b>	<b>200.670</b>	<b>734.870</b>	<b>Cash &amp; Bank Balances at the end of the year</b>	<b>1,490.231</b>	<b>567.948</b>	<b>216.163</b>



**Monthly Energy Charge  
FY 06-07**

Particulars	Unit	July	August	September	October	November	December	January	February	March	April	May	June	Total
Units Delivered	GWh	7,258	7,877	7,493	7,030	5,977	5,788	5,750	5,623	5,500	6,252	7,323	7,809	79,680
Energy Charge	Rs./kWh	1.79	1.75	1.89	2.30	2.07	2.76	3.72	2.87	2.80	3.01	2.32	2.32	2.41

**DISCO Wise Purchase of Power  
FY 06-07**

Name of DISCO	GWh												
	July	August	September	October	November	December	January	February	March	April	May	June	Total
IESCO	733	803	799	717	567	508	580	547	510	592	726	843	7,927
LESCO	1,575	1,695	1,549	1,462	1,169	1,215	1,140	1,133	1,148	1,370	1,680	1,659	16,795
GEPCO	679	779	740	650	528	474	488	496	465	610	712	727	7,345
MEPCO	1,086	1,228	1,092	1,058	912	863	880	832	803	968	1,155	1,177	12,056
FESCO	914	1,011	959	859	723	691	668	669	659	819	943	978	9,895
PESCO	880	970	960	868	747	730	753	718	713	743	837	954	9,870
TESCO	254	256	259	275	270	282	252	250	278	246	242	252	3,116
HESCO	688	682	700	694	621	558	547	544	526	627	614	762	7,563
QESCO	448	453	435	446	440	468	442	432	397	277	414	458	5,110
<b>Total</b>	<b>7,257</b>	<b>7,877</b>	<b>7,493</b>	<b>7,029</b>	<b>5,977</b>	<b>5,789</b>	<b>5,749</b>	<b>5,622</b>	<b>5,499</b>	<b>6,253</b>	<b>7,323</b>	<b>7,809</b>	<b>79,677</b>

**DISCO Wise Energy Purchase Price  
FY 06-07**

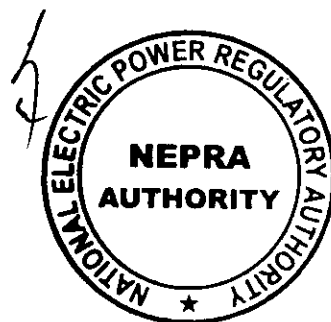
Name of DISCO	Million Rs.												
	July	August	September	October	November	December	January	February	March	April	May	June	Total
IESCO	1,311	1,408	1,513	1,650	1,172	1,401	2,159	1,571	1,430	1,783	1,685	1,953	19,037
LESCO	2,816	2,973	2,934	3,364	2,416	3,348	4,245	3,251	3,215	4,123	3,898	3,843	40,429
GEPCO	1,213	1,366	1,401	1,496	1,091	1,306	1,816	1,423	1,301	1,835	1,652	1,684	17,584
MEPCO	1,942	2,155	2,068	2,435	1,885	2,379	3,278	2,389	2,249	2,915	2,680	2,726	29,101
FESCO	1,634	1,774	1,816	1,977	1,495	1,905	2,489	1,921	1,846	2,466	2,188	2,266	23,776
PESCO	1,572	1,701	1,817	1,998	1,544	2,012	2,803	2,061	1,996	2,235	1,942	2,210	23,889
TESCO	453	449	490	633	557	779	939	716	780	742	562	583	7,683
HESCO	1,231	1,197	1,326	1,598	1,284	1,540	2,035	1,560	1,472	1,888	1,424	1,764	18,318
QESCO	801	795	823	1,026	909	1,289	1,647	1,241	1,112	834	961	1,061	12,498
<b>Total</b>	<b>12,973</b>	<b>13,817</b>	<b>14,189</b>	<b>16,177</b>	<b>12,353</b>	<b>15,958</b>	<b>21,412</b>	<b>16,131</b>	<b>15,401</b>	<b>18,822</b>	<b>16,992</b>	<b>18,090</b>	<b>192,316</b>

**DISCO Wise Purchase Price (Energy + Capacity + Transmission)  
FY 06-07**

Name of DISCO	Million Rs.												
	July	August	September	October	November	December	January	February	March	April	May	June	Total
IESCO	2,063	2,159	2,257	2,393	1,841	2,080	2,844	2,232	2,134	2,537	2,426	2,703	27,668
LESCO	4,612	4,828	4,782	4,986	3,988	5,107	5,967	4,959	4,939	6,046	6,082	5,816	62,112
GEPCO	2,021	2,244	2,217	2,300	1,812	1,951	2,458	2,068	1,940	2,583	2,441	2,502	26,537
MEPCO	3,093	3,284	3,202	3,534	2,930	3,375	4,313	3,402	3,246	4,058	3,836	3,873	42,145
FESCO	2,621	2,767	2,818	2,918	2,397	2,802	3,399	2,833	2,827	3,512	3,204	3,311	35,408
PESCO	2,736	2,854	2,945	3,173	2,846	3,288	4,062	3,333	3,179	3,341	2,991	3,329	38,078
TESCO	862	850	891	1,070	1,014	1,230	1,392	1,171	1,244	1,163	940	965	12,792
HESCO	2,030	1,949	2,122	2,486	2,142	2,351	2,878	2,419	2,356	2,680	2,138	2,492	28,043
QESCO	1,308	1,272	1,345	1,574	1,578	1,984	2,305	1,916	1,708	1,213	1,431	1,576	19,210
<b>Total</b>	<b>21,345</b>	<b>22,207</b>	<b>22,579</b>	<b>24,434</b>	<b>20,547</b>	<b>24,168</b>	<b>29,619</b>	<b>24,332</b>	<b>23,573</b>	<b>27,133</b>	<b>25,488</b>	<b>26,566</b>	<b>291,993</b>

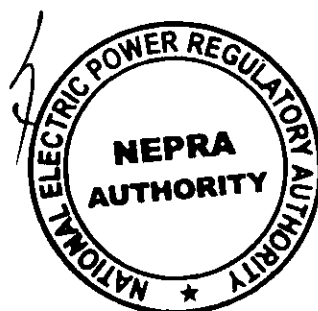
**DISCO Wise Purchase Price (Energy + Capacity + Transmission)  
FY 06-07**

Name of DISCO	Rs./kWh												
	July	August	September	October	November	December	January	February	March	April	May	June	Overall
IESCO	2.81	2.69	2.82	3.34	3.25	4.09	4.91	4.08	4.18	4.28	3.34	3.21	3.49
LESCO	2.93	2.85	3.09	3.41	3.41	4.20	5.23	4.38	4.30	4.41	3.62	3.51	3.70
GEPCO	2.98	2.88	3.00	3.54	3.43	4.12	5.04	4.17	4.17	4.24	3.43	3.44	3.61
MEPCO	2.85	2.67	2.93	3.34	3.21	3.91	4.90	4.09	4.04	4.19	3.32	3.29	3.50
FESCO	2.87	2.74	2.94	3.40	3.31	4.05	5.09	4.23	4.29	4.29	3.40	3.38	3.58
PESCO	3.11	2.94	3.07	3.65	3.81	4.51	5.40	4.64	4.46	4.50	3.57	3.49	3.86
HESCO	2.95	2.86	3.03	3.58	3.45	4.21	5.27	4.45	4.48	4.27	3.48	3.27	3.71
QESCO	2.92	2.81	3.09	3.53	3.59	4.24	5.21	4.43	4.30	4.38	3.45	3.44	3.76



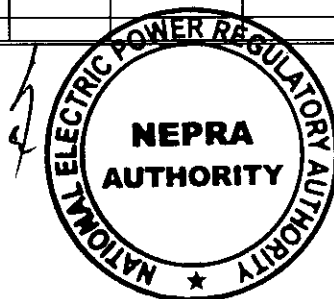
**Islamabad Electric Supply Company (IESCO)**  
**Estimated sales revenue on the basis of existing tariff for FY 06**

Description	Sales	Sales Mix	Load	Existing Tariff		Revenue		
				Fixed Charge	Variable	Fixed Charge	Variable	Total
				Rs.per kW per	Charge	Rs.Million	Rs.Million	Rs.Million
	GWh		Factor	Month	Rs.per kWh			
<b>Residential - A1</b>								
Up to 50 Units	136	1.98%			1.40	-	191	191
Consumption Exceeding 50 Units								
01-100 Units	1,305	19.01%			2.57	-	3,359	3,359
101-300 Units	1,039	15.14%			3.47	-	3,607	3,607
301 - 1000 Units	353	5.14%			5.76	-	2,032	2,032
Above 1000 Units	121	1.76%			6.90	-	834	834
<b>Total Residential</b>	<b>2,954</b>	<b>43.04%</b>					<b>10,023</b>	<b>10,023</b>
<b>Commercial - A2</b>								
For peak load requirement up to 20 kW	185	2.69%			6.80	-	1,255	1,255
	335	4.88%			7.17	-	2,401	2,401
For peak load requirement exceeding 20 kW	232	3.38%	36.42%	330.00	3.84	288	891	1,179
<b>Total Commercial</b>	<b>752</b>	<b>10.95%</b>				<b>288</b>	<b>4,547</b>	<b>4,836</b>
<b>Industrial</b>								
B1	126	1.83%			5.21	-	655	655
B2	272	3.97%	30.78%	331.20	3.65	405	994	1,398
B2 - TOD (Peak)	4	0.06%	0.00%	331.20	5.11	-	19	19
B2 - TOD (Off-peak)	56	0.81%	29.45%		3.72	86	206	292
B3	90	1.31%	31.36%	320.16	3.91	126	352	478
B3 - TOD (Peak)	71	1.03%	0.00%	320.16	4.58	-	324	324
B3 - TOD (Off-peak)	436	6.35%	62.49%		3.15	309	1,374	1,683
B4	65	0.94%	30.85%	309.12	3.90	89	252	341
B4 - TOD (Peak)	38	0.55%	0.00%	309.12	4.41	-	166	166
B4 - TOD (Off-peak)	300	4.37%	47.54%		3.02	270	906	1,176
<b>Total Industrial</b>	<b>1,457</b>	<b>21.22%</b>				<b>1,284</b>	<b>5,250</b>	<b>6,534</b>
<b>Single Point Supply for further distribution</b>								
C1(a) Supply at 400 Volts - Peak load requirement up to 20 kW	2	0.04%			5.16	-	13	13
C1(b) Supply at 400 Volts - Peak load requirement exceeding 20 kW	111	1.62%	54.57%	242.88	4.79	68	534	602
C2 Supply at 11 kV	334	4.87%	37.07%	238.46	4.51	295	1,507	1,802
C3 Supply above 11 kV	104	1.52%	48.36%	236.26	4.42	70	461	530
<b>Total Single Point Supply</b>	<b>552</b>	<b>8.05%</b>				<b>432</b>	<b>2,514</b>	<b>2,946</b>
<b>Agricultural Tube-wells - Tariff D</b>								
Scarp	54	0.79%			5.06	-	273	273
Agricultural Tube-wells	16	0.23%	7.65%	90.53	3.12	26	50	76
<b>Total Agricultural</b>	<b>70</b>	<b>1.02%</b>				<b>26</b>	<b>323</b>	<b>348</b>
Public Lighting - Tariff G	65	0.95%			6.58	-	427	427
Tariff H - Residential Colonies attached to industries	10	0.14%			6.19	-	61	61
Special Contracts - Tariff K (AJK)	1,004	14.63%	77.00%		4.20	-	4,215	4,215
Special Contracts - Tariff K (Rawat)	0	0.00%			4.49	-	1	1
<b>Total</b>	<b>6,864</b>	<b>100%</b>				<b>2,031</b>	<b>27,360</b>	<b>29,391</b>
Low Power Factor Penalty								50
Minimum Charges Residential								50
Minimum Charges Commercial								52
<b>Total Revenue</b>	<b>6,864</b>							<b>29,543</b>



**Islamabad Electric Supply Company (IESCO)**  
**Estimated sales revenue on the basis of new tariff for FY 2006-07**

Description	Sales GWh	Sales Mix	Load Factor	New Tariff (NEPRA)		Revenue (as per NEPRA)		
				Fixed Charge Rs./kW/ Month	Variable Charge Rs./ kWh	Fixed Charge Rs.Million	Variable Charge Rs.Million	Total
<b>Residential</b>								
Up to 50 Units	136	1.98%			1.60	-	218	218
<b>For peak load requirement up to 20 kW</b>								
01-100 Units	1,305	19.01%			2.70	-	3,524	3,524
101-300 Units	1,039	15.14%			3.70	-	3,845	3,845
301-1000Units	353	5.14%			6.25	-	2,206	2,206
Above 1000 Units	121	1.76%			7.50	-	906	906
<b>For peak load requirement exceeding 20 kW</b>								
Time of Use (TOU) - Peak				365.00	6.00			
Time of Use (TOU) - Off-Peak				365.00	3.55			
<b>Total Residential</b>	<b>2,954</b>	<b>43.04%</b>				<b>-</b>	<b>10,698</b>	<b>10,698</b>
<b>Commercial - A2</b>								
For peak load requirement up to 20 kW	185	2.69%			7.52	-	1,388	1,388
	335	4.88%			7.65	-	2,564	2,564
<b>For peak load requirement exceeding 20 kW</b>								
Regular	232	3.38%	36.50%	365.00	4.62	318	1,073	1,391
Time of Use (TOU) - Peak				365.00	6.00			
Time of Use (TOU) - Off-Peak				365.00	3.55			
<b>Total Commercial</b>	<b>752</b>	<b>10.95%</b>				<b>318</b>	<b>5,024</b>	<b>5,343</b>
<b>Industrial</b>								
B1	126	1.83%			5.62	-	706	706
B2	272	3.97%	31.00%	365.00	3.93	439	1,071	1,510
B2 - TOU (Peak)	4	0.06%	0.00%	365.00	5.01	-	19	19
B2 - TOU (Off-peak)	56	0.81%	29.50%	365.00	3.89	101	216	316
B3 - TOU (Peak)	83	1.21%	0.00%	355.00	4.40	-	366	366
B3 - TOU (Off-peak)	513	7.48%	62.50%	355.00	3.31	464	1,699	2,164
B4 - TOU (Peak)	45	0.65%	0.00%	340.00	4.29	-	193	193
B4 - TOU (Off-peak)	358	5.21%	48.00%	340.00	3.15	391	1,126	1,517
<b>Total Industrial</b>	<b>1,456</b>	<b>21.22%</b>				<b>1,395</b>	<b>5,396</b>	<b>6,791</b>
<b>Single Point Supply for further distribution</b>								
C1(a) Supply at 400 Volts - Peak load requirement up to 20 kW	2	0.04%			5.68	-	14	14
C1(b) Supply at 400 Volts - Peak load requirement exceeding 20 kW	111	1.62%	55.00%	365.00	5.27	101	587	689
Time of Use (TOU) - Peak				365.00	6.00			
Time of Use (TOU) - Off-Peak				365.00	3.55			
C2 Supply at 11 kV	334	4.87%	37.00%	355.00	4.96	440	1,659	2,098
Time of Use (TOU) - Peak				355.00	5.95			
Time of Use (TOU) - Off-Peak				355.00	3.45			
C3 Supply above 11 kV	104	1.52%	48.50%	340.00	4.86	100	506	606
Time of Use (TOU) - Peak				340.00	5.90			
Time of Use (TOU) - Off-Peak				340.00	3.40			
<b>Total Single Point Supply</b>	<b>552</b>	<b>8.05%</b>				<b>641</b>	<b>2,766</b>	<b>3,407</b>
<b>Agricultural Tube-wells - Tariff D</b>								
D1 Scarp	54	0.79%			5.50	-	296	296
D2 Agricultural Tube-wells	16	0.23%	8.00%	90.00	3.35	12	53	65
Time of Use (TOU) - Peak				355.00	6.00			
Time of Use (TOU) - Off-Peak				355.00	2.75			
<b>Total Agricultural</b>	<b>70</b>	<b>1.02%</b>				<b>12</b>	<b>350</b>	<b>362</b>
Public Lighting - Tariff G	65	0.95%			7.59	-	493	493
Tariff H - Residential Colonies attached to industries	10	0.14%			6.78	-	66	66
Special Contracts - Tariff K (AJK)	1,004	14.63%	77.00%	355.00	3.99	634	4,007	4,641
Time of Use (TOU) - Peak				355.00	6.00			
Time of Use (TOU) - Off-Peak				355.00	3.55			
Special Contracts - Tariff K (Rawat)	0	0.00%			4.94	-	1	1
<b>Sub-Total</b>	<b>6,864</b>	<b>100%</b>				<b>3,000</b>	<b>28,802</b>	<b>31,802</b>
Low Power Factor Penalty								50
Minimum Charges Residential								50
Minimum Charges Commercial								52
<b>Grand-Total</b>	<b>6,864</b>							<b>31,954</b>



**Annex-8****Adjustment Mechanism For Power Purchase Price (PPP)**

The indexation factors to vary the consumer-end tariff on account of variation in Power Purchase Price shall be:

**Year 1**

Annual adjustment end of year 1 effective 1<sup>st</sup> July 2007

$$\Delta PP_1 = \left( \frac{PPa_1 - PPe_1}{1 - 0.1341} \right) / 1.1738$$

Average sale rate on 1<sup>st</sup> July 2007 will be  $Rt_1 = Rt_0 \pm \Delta PP_1$

Average sale rate on 1<sup>st</sup> July 2007  $Rt_0$  will be considered as Rs 4.655/kWh

**Year 2**

Mid-year adjustment for year 2 effective 1<sup>st</sup> January 2008

$$\Delta PP_{2,1} = \left( \frac{PPa_{2,1} - PPa_{1,1}}{1 - 0.1112} \right) / 1.06$$

Annual adjustment for year 2 effective 1<sup>st</sup> July 2008

$$\Delta PP_2 = \left[ \frac{PPa_2 - PPa_1}{1 - 0.1275} - \Delta PP_{2,1} \right] / 1.06$$

Average sale rate on 1<sup>st</sup> January 2008 will be  $Rt_{2,1} = Rt_1 \pm \Delta PP_{2,1}$

Average sale rate on 1<sup>st</sup> July 2008 will be

$$Rt_2 = Rt_{2,1} \pm \Delta PP_2$$

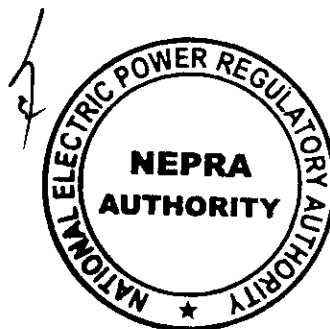
Where:

$PPe_1$  is the estimated weighted average power purchase price for the duration of year 1, which is Rs. 3.4903 per kWh purchased,

$PPa_1$  be the actual weighted average power purchase price for the duration of year 1,

$PPa_{2,1}$ ,  $PPa_2$  would denote the same parameters as above for the year 2.

Annual growth rate for FY 08 assumed is 6%.



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### Transfer Price or Transfer Charge to XWDISCOS

NTDC shall charge the DISCOS formed consequent to the unbundling of WAPDA (termed as XWDISCOS), a transfer charge for procuring power from approved generating companies (termed as CPGENCOS) and its delivery to XWDISCOS for a billing period as under:

$$XTC = XCTC + XETC$$

Where:

XTC = Transfer charge to XWDISCOS

XCTC = Capacity Transfer Charge to XWDISCOS

XETC = Energy Transfer Charge to XWDISCOS

XCTC =  $\frac{CpGenCap + USCF}{XWD}$

Where:

(i) CPGenCap = the summation of the capacity cost in respect of all CPGencos in Rs for a billing period minus the amount of liquidated damages received during the month.

(ii) XWD = the sum of the maximum demand of the XWDISCOS in kW recorded during a billing period at all the delivery metering points at which power is received by the XWDISCOS.

(iii) USCF = the fixed charge part of the use of system charges in Rs per kW per month.

XETC =  $\frac{CpGenE (Rs) - US_{KESC} \times ER_{tKESC}}{XWUs (kWh)}$

Where:

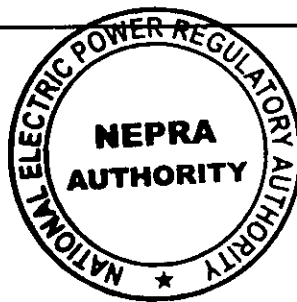
(i) CPGenE = the summation of the variable charge rate (Rs per kWh) approved for each of the CPGenCOs times the energy in kWh procured from the respective CPGENCO during the billing period.

(ii)  $ER_{tKESC}$  = The marginal generation energy charge established during the billing period.

(iii)  $US_{KESC}$  = Units (kWh) delivered to KESC by NTDC.

(iv) XWUs = the summation of the energy units (kWh) recorded at the delivery metering point of all the XWDISCOS during a billing period.

The transfer charge is inclusive of the transmission loss charge as the same is rolled in on account of the costs divided on units delivered basis to arrive at the Transfer Charge, therefore NTDC shall, for the purpose of clarity intimate to all DISCOS the generation part of the Transfer Charge during a billing period by deducting from the Transfer Charge the Transmission Charge or Use of System Charges.



## SCHEDULE OF ELECTRICITY TARIFFS FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)

### A-1 GENERAL SUPPLY TARIFF - RESIDENTIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
a)	For Sanctioned load up to 20 kW			
i	Up to 50 Units	-		1.60
	For Consumption exceeding 50 Units			
ii	For first 100 Units	-		2.70
iii	For next 200 Units	-		3.70
iv	For next 700 Units	-		6.25
v	Above 1000 Units	-		7.50
b)	For Sanctioned load exceeding 20 kW	-		
			Peak	Off-Peak
	Time Of Use	365.00	6.00	3.55

Under this tariff, there shall be minimum monthly customer charge at the following rates even if no energy is consumed.

a) Single Phase Connections:

Rs. 75/- per consumer per month

b) Three Phase Connections:

Rs. 150/- per consumer per month

### A-2 GENERAL SUPPLY TARIFF - COMMERCIAL

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
a)	For Sanctioned load up to 20 kW			
i	For first 100 Units	-		7.52
ii	Above 100 Units	-		7.65
b)	For Sanctioned load exceeding 20 kW	365.00		4.62
			Peak	Off-Peak
c)	Time Of Use	365.00	6.00	3.55

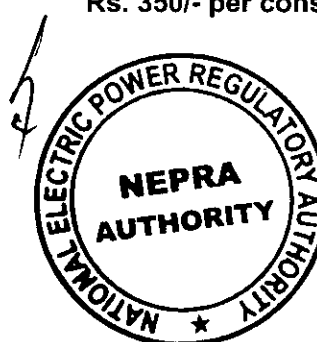
Under this tariff, there shall be minimum monthly charges at the following rates even if no energy is consumed.

a) Single Phase Connections;

Rs. 175/- per consumer per month

b) Three Phase Connections:

Rs. 350/- per consumer per month



**SCHEDULE OF ELECTRICITY TARIFFS  
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)**

**B INDUSTRIAL SUPPLY TARIFFS**

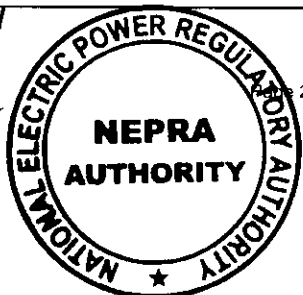
Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
B1	Up To 20 kW (at 400/230 Volts)	-	5.62	
B2	21-500 kW (at 400 Volts)	365.00	3.93	
	Time Of Use		Peak	Off-Peak
B2	21-500 kW (at 400 Volts)	365.00	5.01	3.89
B3	For All Loads up to 5000 kW (at 11,33 kV)	355.00	4.40	3.31
B4	For All Loads (at 66,132 kV)	340.00	4.29	3.15

For B1 consumers there shall be minimum monthly charges of Rs. 100 per kW per month of sanctioned load in case the consumer does not consume any energy.

For B2 & B3 consumers there shall be a minimum charge of Rs.100 per kW per month applicable on the basis of average maximum demand recorded during last operational six months in case the consumer does not consume any energy whereas B4 consumers shall be charged a fixed minimum charge of Rs. 500,000.

**C - SINGLE-POINT SUPPLY FOR PURCHASE IN BULK BY A DISTRIBUTION LICENSEE AND MIXED LOAD CONSUMERS NOT FALLING IN ANY OTHER CONSUMER CLASS**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
C -1	For supply at 400/230 Volts			
	a) Sanctioned load up to 20 kW	-	5.68	
	b) Sanctioned load above 20 kW & up to 500 kW	365.00	5.27	
C -2	For supply at 11,33 kV up to and including 5000 kW	355.00	4.96	
C -3	For supply at 66 kV & above and sanctioned load above 5000 kW	340.00	4.86	
	Time Of Use (Optional)		Peak	Off-Peak
C -1(b)	For supply at 400/230 Volts above 20 kW & up to 500 kW	365.00	6.00	3.55
C -2	For supply at 11,33 kV up to and including 5000 kW	355.00	5.95	3.45
C -3	For supply at 66 kV & above and sanctioned load above 5000 kW	340.00	5.90	3.40



**SCHEDULE OF ELECTRICITY TARIFFS  
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)  
D - AGRICULTURE TARIFF**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
D-1(a)	SCARP less than 20 kW	-		5.50
D-2	Agricultural Tube Wells	90.00	Peak	Off-Peak
D-1(b)	SCARP and Agricultural more than 20 kW	355.00	6.00	2.75

Note:- The consumers having sanctioned load less than 20 kW can opt for TOU metering.

**E - TEMPORARY SUPPLY TARIFFS**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES
		Rs/kW/M	Rs/kWh
E-1(i)	Residential Supply	-	7.50
E-1(ii)	Commercial Supply	-	7.65
E-2	Industrial Supply	-	5.62

For the categories of E-1(i&ii) above, the minimum bill of the consumers shall be Rs. 50/- per day subject to a minimum of Rs.500/- for the entire period of supply, even if no energy is consumed.

**F - SEASONAL INDUSTRIAL SUPPLY TARIFF**

125% of relevant industrial 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 remains in force for at least one year.*

**G- PUBLIC LIGHTING**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES
		Rs/kW/M	Rs/kWh
	Street Lighting	-	7.59

There shall be a minimum monthly charge of Rs.500/- per month per kW of lamp capacity installed.

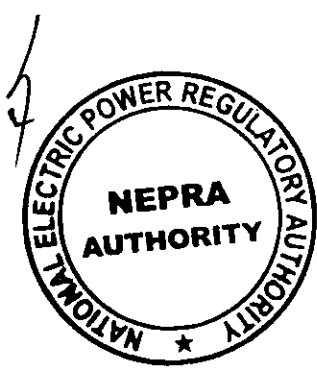


**SCHEDULE OF ELECTRICITY TARIFFS  
FOR ISLAMABAD ELECTRIC SUPPLY COMPANY (IESCO)  
- RESIDENTIAL COLONIES ATTACHED TO INDUSTRIAL PREMISES**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES
		Rs/kW/M	Rs/kWh
	Residential Colonies attached to industrial premises	-	6.78

**K - SPECIAL CONTRACTS**

Sr. No.	TARIFF CATEGORY / PARTICULARS	FIXED CHARGES	VARIABLE CHARGES	
		Rs/kW/M	Rs/kWh	
1	Azad Jammu & Kashmir (AJK) Time Of Use	355.00	3.99	
		355.00	Peak 6.00	Off-Peak 3.55
2	Rawat Lab		4.94	



**Annex-10****Adjustment Mechanism for RORB**

IESCO shall be allowed an adjustment in RORB due to variation in RAB according to the following mechanism:

$$\text{RORB(adj)} = [(I_{(a)} - I_{(e)}) \times \text{WACC}/2 + (D_{(a)} - D_{(e)})] / [\text{US}_{(a)} * (1 + G)]$$

Where:

RORB(adj) = Required adjustment in tariff due to variation in investment

I(a) = Actual investment during the year under review

I(e) = Estimated investment for the year under review

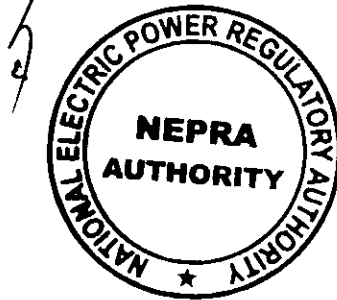
WACC = Weighted Average Cost of Capital

D(a) = Actual depreciation for the year under review

D(e) = Estimated depreciation for the year under review

US(a) = Actual units in million kWh sold in the year under review

G = Expected growth rate in sales next year



**TERMS AND CONDITIONS OF TARIFF  
(FOR SUPPLY OF ELECTRIC POWER TO CONSUMERS BY DISTRIBUTION LICENSEES)**

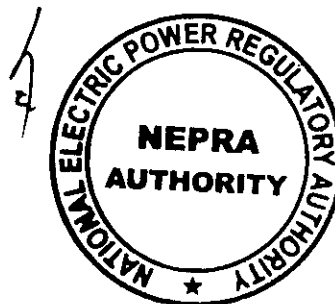
**PART – I**

**GENERAL DEFINITIONS**

The Company, for the purposes of these terms and conditions means Islamabad Electric Supply Company (IESCO) engaged in the business of distribution of electricity within the territory mentioned in the licence granted to it for this purpose.

1. "Month or Billing Period", unless otherwise defined for any particular tariff category, means a billing month of 30 days or less reckoned from the date of last meter reading.
2. "Minimum Charge", means a charge to recover the costs for providing customer service to consumers even if no energy is consumed during the month.
3. "Fixed Charge" means the part of sale rate in a two-part tariff to be recovered on the basis of "Billing Demand" in kilowatt on monthly basis.
4. "Billing Demand" means the highest of maximum demand recorded in a month except in the case of agriculture tariff D2 where "Billing Demand" shall mean the sanctioned load.
5. "Variable Charge" means the sale rate per kilowatt-hour (kWh) as a single rate or part of a two-part tariff applicable to the actual kWh consumed by the consumer during a billing period.
6. "Maximum Demand" where applicable, means the maximum of the demand obtained in any month measured over successive periods each of 30 minutes duration except in the case of consumption related to Arc Furnaces, where "Maximum Demand" shall mean the maximum of the demand obtained in any month measured over successive periods each of 15 minutes duration.
7. "Sanctioned Load" where applicable means the installed load in kilowatt as applied for by the consumer and allowed/authorized by the Company for usage by the consumer.
8. "Power Factor" shall be to the ratio of kWh to KVAh recorded during the month or the ratio of kWh to the square root of sum of square of kWh and kVARh,.
9. Point of supply means metering point where electricity is delivered to the consumer.
10. Peak and Off Peak hours for the application of Time Of Use (TOU) Tariff shall be the following time periods in a day:

	<u>PEAK TIMING</u>	<u>OFF-PEAK TIMING</u>
Dec to Feb (inclusive)	5 PM to 9 PM	Remaining 20 hours of the day
Mar to May (inclusive)	6 PM to 10 PM	-do-
Jun to Aug (inclusive)	7 PM to 11 PM	-do-
Sept to Nov (inclusive)	6 PM to 10 PM	-do-



11. "Supply", means a supply for single-phase/three-phase appliances inclusive of both general and motive loads subject to the conditions that in case of connected or sanctioned load exceeding 4kW supply shall be given at three-phase.
12. "Consumer" means a person or his successor-in-interest as defined under Section 2(iv) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).
13. "Charitable Institution" means an institution, which works for the general welfare of the public on no profit basis and is registered with the Federal or Provincial Government as such and has been issued tax exemption certificate by Central Board of Revenue (CBR).
14. NTDC means the National Transmission and Dispatch Company.
15. The "Authority" means "The National Electric Power Regulatory Authority (NEPRA)" constituted under the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

**A. GENERAL CONDITIONS**

1. "The Company shall render bills to the consumers on a monthly basis or less on the specific request of a consumer for payment by the due date.
2. The Company shall ensure that bills are delivered to consumers at least seven days before the due date. If any bill is not paid by the consumer in full within the due date, a Late Payment Surcharge of 10% (ten percent) shall be levied on the amount billed excluding Govt. tax and duties etc. In case bill is not served at least seven days before the due date then late payment surcharge will be levied after 7<sup>th</sup> day from the date of delivery of bill.
3. The supply provided to the consumers shall not be available for resale.
4. In the case of two-part tariff average Power Factor of a consumer at the point of supply shall not be less than 90 percent. In the event of the said Power factor falling below 90 percent, the consumer shall pay a penalty of two percent increase in the fixed charges determined with reference to maximum demand during the month corresponding to one percent decrease in the power factor below 90 percent.

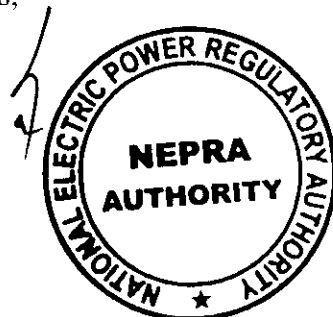
**PART – II**

**(Definitions and Conditions for supply of power specific to each consumer category)**

**A-1 RESIDENTIAL**

This Tariff is applicable for supply to;

- i) Residences,
- ii) Places of worship,
- iii) Approved religious and charitable institutions,
- iv) Government and Semi-Government Offices and institutions,
- v) Government Hospitals and Dispensaries,



vi) Educational institutions.

Consumers having sanctioned load up to 20 kW shall be billed on single-part kWh rate i.e. A-1(a) tariff.

All new consumers having sanctioned load exceeding 20 kW shall be provided T.O.U metering arrangement and shall be billed on the basis of tariff A-1(b) as set out in the Schedule of Tariff.

All existing consumers having sanctioned load exceeding 20 kW shall be provided T.O.U metering arrangement by the Company no later than 30 June 2008.

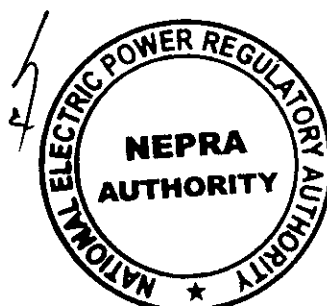
## **A-2 COMMERCIAL**

1. This tariff is applicable for supply to commercial offices and commercial establishments such as;
  - i) Shops,
  - ii) Hotels and Restaurants,
  - iii) Petrol Pumps, Service Stations,
  - iv) Compressed Natural Gas filling stations,
  - v) Private Hospitals/Clinics/Dispensaries,
  - vi) places of Entertainment, Cinemas, Theaters, Clubs;
  - vii) Guest Houses,
  - viii) Office of Lawyers, Solicitors, Law Associates and Consultants etc.
2. Consumers under tariff A-2 having sanctioned load up to 20 kW shall be billed under a Single-Part kWh rate A-2(a)
3. All existing consumers under tariff A-2 having sanctioned load exceeding 20 kW shall be billed on A-2(b) tariff till such time that they are provided T.O.U metering arrangement; thereafter such consumers shall be billed on T.O.U tariff A-2(c).
4. All existing consumers under tariff A-2(b) shall be provided T.O.U metering arrangement by the Company no later than 30th June 2008.
5. All new connections having load requirement exceeding 20 kW shall be provided T.O.U meters and shall be billed under tariff A-2(c).
6. The consumers having sanctioned load up to 20 kW and below, supply to three phase, 400 volts compressor and pump motors of the air conditioning equipment installed in centrally air-conditioned premises and other three-phase, 400 volts apparatus of general utility in the premises mentioned above under this Tariff, shall be governed by the Industrial Tariff B-1. This condition shall not apply to consumers having sanctioned load in excess of 20 kW.

## **B INDUSTRIAL SUPPLY**

### **Definitions**

1. "Industrial Supply", means a supply for bona fide industrial purposes in factories including the supply required for the offices and for normal working of the industry



and also for water pumps and tube-wells operating on three phase 400 volts, other than those meant for the irrigation or reclamation of agricultural land.

2. For the purposes of application of this tariff an "Industry" means a bona fide undertaking or establishment engaged in manufacturing, value addition and/or processing of goods.
3. This Tariff shall also be available for consumers having single-metering arrangement such as;
  - i) Poultry Farms,
  - ii) Fish Hatcheries and Breeding Farms; and
  - iii) software houses

**Conditions**

An industrial consumer 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 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 corresponding Regular industrial Tariff category and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.

**B – 1 SUPPLY AT 400 VOLTS THREE-PHASE AND/OR 230 VOLTS SINGLEPHASE**

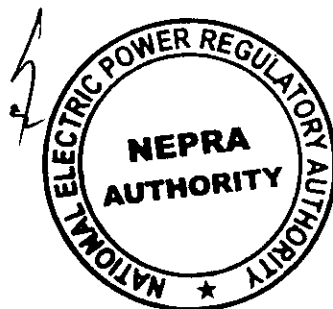
1. This tariff is applicable for supply to Industries having sanctioned load up to and including 20 kilowatts.
2. Consumers having sanctioned load up to 20 kW shall be billed on single-part kWh rate.

**B-2 SUPPLY AT 400 VOLTS**

1. This tariff is applicable for supply to Industries having sanctioned load above 20 kW up to and including 500 kW.
2. All new applicants i.e prospective consumers applying for service to the Company after the date of notification of the tariff shall be provided T.O.U metering arrangement and charged according to the applicable T.O.U tariff.
3. All existing consumers under this tariff shall be provided T.O.U metering arrangement by the Company no later than 30th June 2008 and billed accordingly.

**B-3 SUPPLY AT 11 kV AND 33 kV**

1. This tariff is applicable for supply to Industries having sanctioned load above 500 kW up to and including 5000 kW and also for Industries having sanctioned load of 500 kW or below who opt for receiving supply at 11 kV or 33 kV.



2. If for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
3. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the remaining cost of service connection shall be regulated by the NEPA eligibility criteria.
4. All B-3 Industrial Consumers shall be billed on the basis of T.O.U tariff given in the Schedule of Tariff.

**B-4 SUPPLY AT 66 kV and 132 kV**

1. This tariff is applicable for supply to Industries for all loads above 5000 kW receiving supply at 66 kV and 132 kV and also for Industries having load 5000 kW or below who opt to receive supply at 66 kV or 132 kV.
2. If for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
3. The Grid Station required for provision of supply falls within the purview of the dedicated system under the NEPA Eligibility Criteria, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of remaining cost of service connection shall be regulated by NEPA Eligibility Criteria.
4. All B-4 Industrial Consumers shall be billed on the basis of two-part T.O.U tariff.

**C SINGLE-POINT (SINGLE-METERING) SUPPLY**

“Single-Point Supply” for the purpose of this Tariff, means a supply given at one point;

- i) to a licensee for the purpose of further distribution within its respective exclusive territory and jurisdiction,
- ii) to a mix-load consumer not reselling to any other consumer.



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### **General Conditions**

If for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice will be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days the fixed charges shall be assessed on proportionate basis for actual number of days between the date of old reading and the new reading.

#### **C-1 SUPPLY AT 400/230 VOLTS**

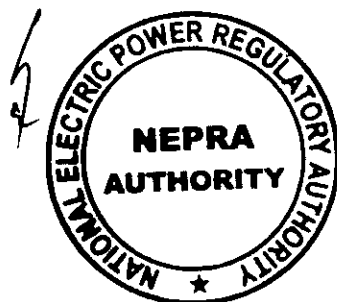
1. This Tariff is applicable to a consumer having mix-load such as residential, commercial, tube-well and others at a single metering arrangement at 400 volts, having sanctioned load up to and including 500 kW.
2. Consumers having sanctioned load up to 20 kW shall be billed on single-part kWh rate i.e. C-1(a) tariff.
3. All new consumers having sanctioned load exceeding 20 kW shall be billed on the basis of Time-of-Use (T.O.U) tariff C-1(b) given in the Schedule of Tariff.
4. All the existing consumers governed by this tariff having sanctioned load exceeding 20 kW shall be provided T.O.U metering arrangements by June 30<sup>th</sup> 2008.

#### **C-2 SUPPLY AT 11 kV AND 33 kV**

1. This tariff is applicable to consumers receiving supply at 11 kV or 33 kV at one-point metering arrangement and having sanctioned load up to and including 5000 kW.
2. The supply under this Tariff shall not be available to a prospective consumer unless he provides, to the satisfaction and approval of the Company, his own Transformer, Circuit Breakers and other necessary equipment for receiving and controlling the supply, or, alternatively pays to the Company for all apparatus and equipment if so provided and installed by the Company. The recovery of the remaining cost of service connection shall be regulated by the NEPA eligibility criteria.
3. Existing consumers governed by this tariff shall be provided with T.O.U metering arrangement by June 30<sup>th</sup> 2008.

#### **C-3 SUPPLY AT 66 kV AND ABOVE**

1. This tariff is applicable to consumers having sanctioned load above 5000 kW receiving supply at 66 kV and above.
2. The Grid Station required for provision of supply falls within the purview of the dedicated system under the NEPA Eligibility Criteria, the supply under this Tariff shall not be available to such a prospective consumer unless he provides, to the satisfaction and approval of the Company, an independent grid station of his own including Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus for receiving and controlling the supply, or, alternatively, pays to the Company for all such Land, Building, Transformers, Circuit Breakers and other necessary equipment and apparatus if so provided and installed by the Company. The recovery of remaining cost of service connection shall be regulated by NEPA Eligibility Criteria.



- Existing consumers governed by this tariff shall be provided with T.O.U metering by June 30<sup>th</sup> 2008.

#### **D AGRICULTURAL SUPPLY**

“Agricultural Supply” means a supply for Lift Irrigation Pumps and/or pumps installed on Tube-wells intended solely for irrigation or reclamation of agricultural land or forests, and include supply for lighting of the tube-well chamber.

#### **Special Conditions Of Supply**

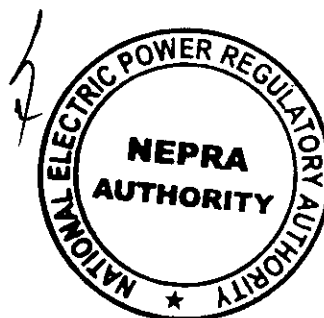
- This tariff shall apply to:
  - Reclamation and Drainage Operation under Salinity Control and Reclamation Projects (SCARP),
  - Bonafide forests, agricultural tube-wells and lift irrigation pumps for the irrigation of agricultural land.
  - Tube-wells meant for aqua-culture, viz. fish farms, fish hatcheries and fish nurseries.
  - Tube-wells installed in a dairy farm meant for cultivating crops as fodder and for upkeep of cattle.
- If for any reason, the meter reading date of a consumer is altered and the acceleration/retardation in the date is up to 4 days, no notice shall be taken of this acceleration or retardation. But if the date is accelerated or retarded by more than 4 days, the fixed charges shall be assessed on proportionate basis for the actual number of days between the date of the old reading and the new reading.
- The lamps and fans consumption in the residential quarters if any attached to the tube-wells shall be charged entirely under Tariff A-1 for which separate metering arrangements should be installed.
- The supply under this Tariff shall not be available to consumer using pumps for the irrigation of parks, meadows, gardens, orchards, attached to and forming part of the residential, commercial or industrial premises in which case the corresponding Tariff A-1, A-2 or Industrial Tariff B-1, B-2 shall be respectively applicable.

#### **D – 1 (a)**

- This tariff is applicable to all Reclamation and Drainage Operation pumping under SCARP related installation having sanctioned load less than 20 kW.
- Consumers having sanctioned load up to 20 kW shall be billed on single-part kWh rate i.e. D-1(a) tariff given in the Schedule of Tariff.

#### **D – 1 (b)**

- This tariff is applicable to all Reclamation and Drainage Operation pumping under SCARP related installation and other consumers falling under Agriculture Supply having sanctioned load more than 20 kW.
- All new consumers having sanctioned load exceeding 20 kW shall be billed on the basis of Time-of-Use (T.O.U) tariff D-1(b) given in the Schedule of Tariff.



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3. All the existing consumers having sanctioned load exceeding 20 kW shall be provided T.O.U metering arrangements by June 30<sup>th</sup> 2008 and shall be governed by D-1(a) till that time.
4. The consumers having sanctioned load less than 20 kW can opt for T.O.U metering arrangement and those opting for T.O.U metering arrangement shall be billed accordingly.

**D – 2**

1. This tariff is applicable to consumer falling under Agriculture Supply having sanctioned load less than 20 kW excluding SCARP related installations.
2. The fixed charges under this Tariff shall be recovered on the basis of sanctioned load in kilowatt as the billing demand and such charges will be applicable even if no energy is consumed during a month.

**E – 1 TEMPORARY RESIDENTIAL/COMMERCIAL SUPPLY**

Temporary Residential/Commercial Supply means a supply given to persons temporarily 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 for all kinds of single phase loads. For connected load exceeding 4 kW, supply may be given at 400 volts (3 phase) to allow a balanced distribution of load on the 3 phases. Normally, temporary connections shall be allowed for a period of 3 months however this can be extended on three months basis subject to clearance of outstanding dues.

**Special Conditions of Supply**

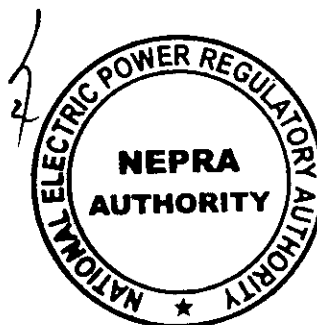
1. This tariff shall apply to Residential and Commercial consumers for temporary supply.
2. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.

**E 2 TEMPORARY INDUSTRIAL SUPPLY**

“Temporary Industrial Supply” means a supply given to an Industry for the bonafide purposes mentioned under the respective definitions of “Industrial Supply”, during the construction phase prior to the commercial operation of the Industrial concern.

**Special Conditions Of Supply**

1. Ordinarily the supply under this Tariff shall not be given by the Company without first obtaining security equal to the anticipated supply charges and other miscellaneous charges for the period of temporary supply.
2. Normally, temporary connections shall be allowed for a period of 3 months; however this may be extended on three months basis subject to clearance of outstanding dues.



**F SEASONAL INDUSTRIAL SUPPLY**

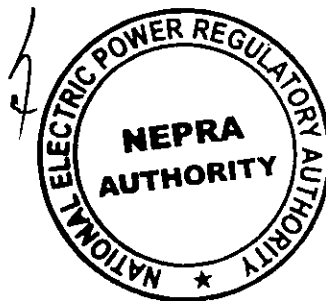
“Seasonal Industry” for the purpose of application of this Tariff, means an industry which works only for part of the year to meet demand for goods or services arising during a particular season of the year. However, any seasonal industry running in combination with one or more seasonal industries, against one connection, in a manner that the former works in one season while the latter works in the other season, thus running throughout the year, will not be classified as a seasonal industry for the purpose of the application of this Tariff.

**Definitions**

1. “Year” means any period comprising twelve consecutive months.
2. All “Definitions” and “Special Conditions of Supply” as laid down under the corresponding Industrial Tariffs shall also form part of this Tariff so far as they may be relevant.

**Special Conditions Of Supply**

1. This tariff is applicable to seasonal industry.
2. Fixed Charges per kilowatt per month under this tariff shall be levied at the rate of 125% of the corresponding regular Industrial Supply Tariff Rates and 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 Company’s Supply System for the first time during the course of a season.
3. The consumers falling within the purview of this Tariff shall have the option to change over to the corresponding Industrial Supply Tariff, provided they undertake to abide by all the conditions and restrictions, which may, from time to time, be prescribed as an integral part of those Tariffs. The consumers under this Tariff will have the option to convert to Regular Tariff and vice versa. This option can be exercised at the time of obtaining a new connection or at the beginning of the season. Once exercised, the option will remain in force for at least one year.
4. All seasonal loads shall be disconnected from the Company’s Supply System at the end of the season, specified by the consumer at the time of getting connection, for which the supply is given. In case, however, a consumer requires running the non-seasonal part of his load (e.g., lights, fans, tube-wells, etc.) throughout the year, he shall have to bring out separate circuits for such load so as to enable installation of separate meters for each type of load and charging the same at the relevant Tariff.
5. Where a “Seasonal Supply” consumer does not come forward to have his seasonal industry re-connected with the Company’s Supply System in any ensuing season, the service line and equipment belonging to the Company and installed at his premises shall be removed after expiry of 60 days of the date of commencement of the season previously specified by the consumer at the time of his obtaining new connection/re-



connection. However, at least ten clear days notice in writing under registered post shall be necessary to be given to the consumer before removal of service line and equipment from his premises as aforesaid, to enable him to decide about the retention of connection or otherwise. No Supply Charges shall be recovered from a disconnected seasonal consumer for any season during which he does not come forward to have his seasonal industry re-connected with the Company's Supply System.

**G PUBLIC LIGHTING SUPPLY**

"Public Lighting Supply", means a supply for the purpose of illuminating public lamps.

**Definitions**

"Month" means a calendar month or a part thereof in excess of 15 days.

**Special Conditions Of Supply**

The supply under this Tariff shall be used exclusively for public lighting installed on roads or premises used by General Public.

**H RESIDENTIAL COLONIES ATTACHED TO INDUSTRIES**

This tariff is applicable for one-point-supply to residential colonies attached to the industrial supply consumers having their own distribution facilities.

**Definitions**

"One Point Supply", for the purpose of this Tariff, means the supply given at one point to Industrial Supply Consumers for general and domestic consumption in the residential colonies attached to their factory premises, for a load of 5 kilowatts and above, for the purpose of further distribution to various persons residing in the attached residential colonies and also for the purpose of perimeter lighting in the attached residential colonies.

"General and Domestic Consumption", for the purpose of this Tariff, means consumption for lamps, fans, domestic applications, including heaters, cookers, radiators, air-conditioners, refrigerators and domestic tube-wells.

"Residential Colony" attached to the Industrial Supply Consumer, means a group of houses annexed with the factory premises constructed solely for residential purpose of the bonafide employees of the factory, the establishment or the factory owners or partners, etc.

**Special Conditions of Supply**

The supply under this Tariff shall not be available to persons who meet a part of their requirements from a separate source of supply at their premises.

