# BEFORE THE NATIONAL ELECTRIC POWER REGULATORY AUTHORITY ISLAMABAD.

The Lahore Electric Supply Company Ltd, (LESCO) 22-A, Queens Road, Lahore through its Chief Executive Officer Mr. Mohammad Azhar Iqbal.

**PETITIONER** 

# <u>PETITION FOR DETERMINATION OF REVENUE REQUIREMENT AND TARIFF FOR FY 2010-11.</u>

## Respectfully Submitted,

- 1. That Lahore Electric Supply Company Limited (LESCO) is an ex-WAPDA DISCO owned by the Government of Pakistan. As a result of structural reforms introduced by the Government in the Power Sector, LESCO was incorporated as a Public Limited Company having Registration No. L-09415 of 1997-98 (old) and 0038810 (new) and Certificate of Incorporation No. JRL-6278 dated February 18, 1998 under Companies Ordinance 1984. Accordingly, LESCO has been granted a Distribution License bearing No. 03/DL/2002 by the National Electric Power Regulatory Authority (NEPRA) on April 01, 2002. LESCO is providing a public utility service of distribution and supply of electricity within the territories as defined in its License.
- 2. That NEPRA, Under the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 (hereinafter NEPRA Act), is responsible for regulating the electricity sector in Pakistan which includes determining the revenue requirement, tariffs and other terms and conditions for the supply of electricity by the generation, transmission and distribution companies and to recommend the same to the Federal Government for notification. For this purpose NEPRA has laid down certain guidelines and procedures under the NEPRA Tariff Standards and Procedures Rules, 1998.
- 3. That LESCO, being a bona fide power distribution licensee, requires adequate revenue in order to perform its obligatory duties prescribed by NEPRA under the NEPRA Act, NEPRA Performance Standards (Distribution) Rules 2005, NEPRA Consumer Eligibility Criteria, 2003, Distribution License of LESCO and other obligations as determined by NEPRA from

time to time. The main sources of funding available to the petitioner for its revenue requirements are; (i) generation of adequate revenue through tariff and (ii) borrowings.

- 4. That in order to fulfill and perform its obligatory duties as mentioned above and to ensure financial viability of LESCO by recovering its prudently incurred costs and reasonable return, in order to upkeep and maintain its existing distribution services/network and to support the future investments for expansion of distribution services/network, this petition is being filed for FY 2010-11 through its Chief Executive Officer Mr. Mohammad Azhar Iqbal, who has been duly authorized to sign and file this petition by the Board of Directors of LESCO vide its resolution passed in the Board meeting held on February 20<sup>th</sup>, 2010. An extract of this resolution is attached as **Annex-1**.
- 5. That vide said resolution following officers have also been authorized by the Board of Directors LESCO to submit and sign, individually or jointly, the documents necessary in support of this petition and to appear before NEPRA and represent LESCO in and during the proceedings of this petition:-

A.	Mr. Mohammad Azhar Iqbal	Chief Executive Officer
В.	Mr. Rana Mohammad Ajmal	Technical Director/ Operation Director
C.	Mr. Farasat Zaman	Customer Services Director
D.	Mr. Saghir Ahmad	Human Resource & Admin Director
$\mathbf{E}.$	Mr. Abid Latif Lodhi	Finance Director
F.	Mr. Sayyed Mubashar Masood	Legal Director / Company Secretary
G.	Mr. Imtiaz Ahamd Butt	Manager MIS

- 6. That the grounds and facts forming the basis of this petition are as under:
  - i. The Distribution Margin determined in the NEPRA's previous determinations is not sufficient to meet with LESCO's proposed revenue requirements for FY 2010-11 on account of the increase in the asset base, the inflationary trend, salaries, new hiring, repair and maintenance etc.
  - ii. Due to delayed determinations/notifications etc., LESCO has not been able to recover the determined revenue requirement, implement its envisaged investment plan in time and derive the timely benefits thereof. Hence, LESCO is entitled to claim the portion of the revenue requirement which could not be recovered due to the delay.
  - iii. LESCO strongly feels that the baseline of the T&D losses determined by NEPRA in its determination dated 23-02-2007 is unjustified and unrealistic. The subsequently determined target for the T&D losses is based on the aforementioned baseline and hence was unrealistic. Therefore, this pre-determined baseline needs to be revisited and rationalized and the separate targets of Transmission and Distribution losses for FY 2010-11 be fixed accordingly.
  - iv. Till date, the tariff determined for the 1<sup>st</sup> quarter of FY 2009-10, as notified vide SRO 1129 dated Dec 21<sup>st</sup>, 2009, is applicable whereas the determinations for the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> quarters of FY 2009-10 are still to be made. As a result, LESCO could not recover its revenue requirement in a timely fashion resulting in a shortfall in the recovery of the determined revenue requirement.

The aforementioned position necessitates revision in tariff for FY 2010-11. This petition is, therefore, being filed in accordance with the NEPRA Tariff Standards and Procedure Rules

1998 Part II Section-3 and with the intent that tariff for FY 2010-11 be determined, notified and effective from the very first day of the FY 2010-11.

# 7. Objectives of the Petition

The aim of this petition is to obtain approval for the timely implementation of cost reflective tariffs to yield LESCO's required revenues for FY 2010-11 and its recovery from consumer.

The implementation of cost reflective tariffs will benefit consumers and LESCO, as it will;

- i) Enable LESCO to improve service quality and reliability.
- ii) Provide adequate funds for the operation, maintenance and expansion of distribution network.
- iii) Ensure the financial sustainability of LESCO.

# 8. LESCO's Revenue Requirement

- A) Distribution Margin
- B) Power Purchase Price
- C) Unrecovered Cost (Prior Period Adjustment)

The detail of each component of the revenue requirement is discussed below:

## A. Distribution Margin

The distribution margin covers LESCO's O&M costs, depreciation, other income and return on regulatory asset base. The detail of distribution margin is as follows:

- i. O & M Expenses: It includes salary, house acquisition, employees' retirement benefits, repair & maintenance and other operating costs related to LESCO's distribution and supply business. The detail of which is as under:
  - a. Salary: Salary, including employee benefits, is the major component of O & M expenses. Since the petitioner was incorporated as a company in compliance with the power sector reform policy of the Government of Pakistan (GOP), and the WAPDA employees working in the Lahore Area Electricity Board gradually became employees of the petitioner in terms of the Manpower Transition Plan, therefore LESCO had to maintain the GOP pay scales and the terms of employment for the employees which were prevalent in WAPDA. The GOP, in its annual budget for FY 2009-10, increased the running basic pay of Govt. employees @ 20% and the same is being adopted for FY 2010-11. Similarly 5% increase from December, 2010 onwards is assumed as an effect of annual increment. Employee benefits have been based on the average of the annual increase in the last three audited years. On these assumptions the working of salary & employee benefits comes out to be Rs. 4,625 million. A comparative view of previous years is shown in the table below:-

Table-1

(million Rs.)

Description	2006-07	2007-08	2008-09	2009-10	2010-11
		Actual		Prov.	Estimated
Basic Pay	1,145	1,419	1,745	2,145	2,636
Employee Benefits	1,164	1,273	1,511	1,734	1,989
Total	2,309	2,692	3,256	3,879	4,625
% Change		14%	21%	19%	19%

In addition to the estimated figure of Rs. 4,625 million an amount of Rs. 379 million has also been estimated on account of new hiring cost for the period of 01-07-2010 to 30-06-2011.

b. **House Acquisition** has been based on the average annual increase in the last three audited years, which works out to be Rs. 653 million. The comparative figures for house acquisition are shown in the table below:-

Table-2					
Description	2006-07	2007-08	2008-09	2009-10	2010-11
House Acquisition	359	411	475	557	653
% Change	22%	14%	16%	17%	17%

c. Employee's Retirement Benefits have been based on the average of the annual increase in the last three audited years. The comparative employee retirement benefits are tabulated below:-

Table-3						
Description 2006-07 2007-08 2008-09 2009-10						
Pension	1,583	1,775	2,171	2,541	2,974	
Medical	326	353	394	438	487	
Utility Expense	197	278	444	625	748	
Leave Encashment	174	76	128	140	154	
Total	2,280	2,482	3,137	3,744	4,363	
% Change	17%	09%	26%	19%	16%	

- d. **Repair & Maintenance:** The R & M expenses have been assumed @3.50% of the net fixed assets which comes out to be Rs.1465 million.
- e. Other Operating Expenses include rent rates & taxes, utility expenses, communications, office supplies, traveling expenses, professional fees, auditor remunerations, outsourced services, management fees, vehicle running & maintenance, electricity bill collection expenses, directors' fees and bad debt expenses. The comparative other operating expenses are tabulated below:

Table-4 (million Rs.)					
Account Heads	2007-08	2008-09	2009-10	2010-11	
Rent, Rates and Taxes	34	33	34	36	
Utility expenses	35	40	45	50	
Communication	22	23	24	24	
Office supplies and other expenses	61	62	71	80	
Travelling Expenses	122	134	141	148	
Professional fees	18	26	29	31	
Auditors' remuneration	0.50	0.60	0.72	0.79	
Outsourced Services	1.91	2.50	2.50	2.75	
Management fees	92	103	104	106	
Vehicle running and maintenance	166	249	291	343	
Miscellaneous Expenses	79	65	78	93	
Sub Total	630	737	820	915	
Yearly %age Change		16.98%	11.26%	11.64%	
Electricity bills Collection expenses	255	233	293	299	
Director's Fees	0.50	1.09	0.98	1.33	
Bad Debt Expenses	-	1,542	-	-	
Total	886	2513	1,114	1,214	

Except for the electricity bill collection expenses, directors' fees and bad debt expenses, all other operating expenses have been worked out based on the average of the annual increase in the last three audited years.

#### ii. Depreciation:

The depreciation for FY 2010-11 is calculated on the basis of: (i) the value of existing assets; plus (ii) addition in assets during FY 2010-11. The assets will be depreciated on a straight-line method as per utility practice i.e. land @ 0%, buildings & civil works @ 2%, plant and machinery @ 3.5%, office equipment @ 10%, mobile plant & equipment @ 10% and other assets @ 10%. Based upon these assumptions, the figures for depreciation works out to be Rs 2,051 million.

# iii. Return of Rate Base (RORB):

RORB = Rate Base X WACC

Where:

Rate Base = Net Fixed Assets in Operations + Additions during the year -

Deferred Credits (assets not financed by LESCO)

And

WACC = Weighted Average Cost of Capital has been taken as

determined by NEPRA in its determination dated 10-12-2009

i.e. 17.3% (pretax).

The working of Rate Base is tabulated below:

Table-5			(Million Rs)
Description	2009	2010	2011
Opening Gross Fixed Assets (GFA)	31,716	37,680	47,960
Add: Transferred during the year	5,964	10,280	9,305
Closing GFA	37,680	47,960	57,265
Less: Accumulated Depreciation	11,588	13,300	15,350
Net Fixed Assets in Operation	26,092	34,660	41,914
Add: Capital WIP (Closing)	2,645	4,406	3,988
Total Fixed Assets	28,737	39,066	45,902
Less: Deferred Credits (assets not financed by LESCO)	18,597	21,548	24,404
Total Assets Base	10,140	17,518	21,498
Regulatory Assets Base	9,069	13,829	19,508

# iv. Development / Investment plan:

LESCO intends to execute its development / investment plan for FY 2010-11 in the areas of development of power (DOP), energy loss-reduction (ELR), secondary transmission and grid (STG) and others, the amounts whereof are Rs.550 million (own resources), Rs.750 million, Rs.3,508 million and Rs.536 million respectively. The summary whereof is as under:

Table-6

(Million Rs)

#	Description	2009-10 Estimated	2010-11 Projected	Remarks
1	Development Of Power: (DOP)	450	550	
2	Energy Loss Reduction: (ELR)	772	750	
3	STG:			
Α	-Own Resources	2,703	1,667	ANNEX-2
В	-World Bank loan	1,096	736	ANNEX-3
С	-Asian Dev. Bank loan	1,183	1,105	ANNEX-4
4	TOU Meters	1,594	0	
5	Others	716	536	
	Total	8,514	5,344	

#### v. Other Income:

This includes markup on bank deposits, late payment surcharge, amortization of deferred credits and income from other sources, the detail whereof has been shown in the table below. Except for the amortization of deferred credits, sale of scrap and profit on bank deposit, the average annual increase in the last three years has been applied on the estimated figures of 2009-10. The banks have offered profit rates of up to 17% on daily product basis during FY 2008-09 as against 11.75% in the FY 2007-08, which was the main reason for hike in this head but is not expected in FY 2010-11. Therefore, Other Income estimated on the assumptions discussed above is mentioned hereunder:

Table-7

(million Rs.)

Table-/					
Description	2006-07	2007-08	2008-09	2009-10	2010-11
Amortization of Deferred Credits	384	449	486	575	687
Profit on bank deposit	419	434	1,030	477	502
Scrap Sales	61	89	36	36	36
Service fee for collection of TV Fee	97	108	115	115	126
Non-utility operations	279	356	304	304	312
Miscellaneous	244	285	431	431	505
Meter & Service Rentals	255	396	460	460	524
Late Payment Surcharge	628	717	903	903	1083
Total	2367	2834	3,765	3301	3775

The estimated figures of O&M cost, Depreciation, RORB and Other Income is based on the Audited Statements for FY 2008-09 and provisional accounts for FY 2009-10 (actual for the period 01-07-2009 to 21-12-2009 and estimated for the period of 01-01-2010 to 30-06-2010) and their sum total results in LESCO's distribution margin. Dividing this sum total by the total units to be sold (estimated 15,400 M kWh) yields the average distribution margin per kWh. Accordingly, the distribution margin for year 2010-11 comes at Rs. 14,361.00 Million or Rs.0.933 per kWh. The detail of total distribution margin is summarized as under:

Table-8

(million Rs.)

		(
Description	2009-10	2010-11
-	(Provisional)	Estimated
O & M Expenses	10,821	12,708
Depreciation	1,704	2,051
RORB	2,406	3,377
Other Income	(3,301)	(3,775)
Total D. M.	11,630	14,361

#### B. Power Purchase Cost

As a matter of fact, the cost of the electricity purchased is a "pass through item," to be recovered from the consumer through the tariff, without affecting LESCO's Distribution Margin. The Power Purchase Cost is adjusted with the allowed T&D losses.

The power purchase cost, projected for FY 2010-11, has been worked out on the basis of the average purchase rate assumed by NEPRA in its determination dated 10-12-2009 for FY 2009-10 i.e. Rs.6.73/kWh.

#### Baseline for the determination of the Transmission & Distribution Losses

In terms of the determination dated 23-02-2007 NEPRA laid down the Baseline for Transmission and Distribution losses, separately, as follows:

#### a. Distribution Losses

#### FY 2005-06

Authority presumed that LESCO, in view of its envisaged investment on ELR, would have been able to reduce its Distribution Loss from 13.2% (actual of 2004-05) by 0.66% so Target was presumed as 12.54%.

#### FY 2006-07

Authority presumed in the same determination that LESCO would be able to further reduce its Distribution Loss from 12.54% (Target presumed for 2005-06) by another 1.25% so Target for 2006-07 was fixed at 11.29%.

(In one determination the Target of Distribution Loss was reduced by 2%)

# b. Transmission Loss

Transmission loss Target for 2006-07 was fixed at 3% which was to be adjusted on actual basis; LESCO to provide data of 12 consecutive months.

Accordingly T&D Loss Target for FY 2006-07 was fixed at 14.29%

- c. Since the mechanism for calculating the Transmission loss was [and still is] inaccurate due to the time lapse in the reading of meters installed at the Combined Distribution Points (CDPs) and the incoming 11-kV panel at the grids, therefore the transmission loss could not be calculated accurately. Accordingly, based on this inaccuracy, the figures provided to the Authority are as under:
  - i. (0.14%) for FY 2006-07
  - ii. 0.42% for FY 2007-08
  - iii. 0.6% for FY 2008-9
- **d.** These figures have NO possible technical justification and hence should not have formed the baseline.
- e. Similarly the 2% reduction in the Target of Distribution Loss for the period 2005-07 by NEPRA vide its determination dated 23-02-2007, was based solely on the presumption that LESCO would be able to reduce its Distribution Losses on account of the envisaged investment on ELR. This was unjustified and unrealistic, as the actual data for this period, being available, should have been taken into account rather than basing the target on presumptions.

- f. NEPRA, vide its determination dated 10-12-2009, determined the target of T&D losses for FY 2009-10 as 12%, including 1% of Transmission losses without adjusting the baseline as against the requested figure of 13.22% (distribution losses of 12% and transmission losses of 1.22%).
- g. For the verification of losses in its transmission system, LESCO conducted two studies i.e. one conducted in-house and the other by an independent third party through simulation. The results of these studies are as under:
  - 1- Study conducted by LESCO (Sample Location Basis) (Annex-5)

	_1_	_2_	3	Avg.
Transformation Losses	0.03%	1.38%	0.95%	0.78%
Transmission Losses	2.49%	2.08%	<u>3.52%</u>	2.70%
Total	<b>2.52%</b>	<u>3.46%</u>	<u>4.47%</u>	3.48%

2- Study conducted by third party i.e. M/s Power Planners International (Annex-6)

٠.	Total	2.96%
b.	Transmission Losses	2.29%
a.	Transformation Losses	0.67%

# C. Unrecovered Costs (Prior Period Adjustment)

NEPRA determined the consumer end tariff for 1<sup>st</sup> Qtr of FY 2009-10 on 10-12-09 which is applicable to date i.e. the date of the filing of this tariff petition for FY 2010-11. The actual figures of Revenue earned from July-2009 to Jan-2010 have already been received which amounts to Rs.64,582 million. Now, keeping the units to be sold as the same as determined by NEPRA in its determination dated 10-12-2009 i.e. 14,528 GWh, the revenue to be earned from Feb-2010 to June-2010 has been estimated to be Rs.64,402 million which is summarized as under:

	Table-9		(million Rs.)		
Description	Units Sold (GWh)	Revenue from	Tariff Subsidy	Total Revenue	
		Consumer			
July-09 to Jan-10	8,131	50,670	13,910	64,581	
Feb-10 to Jun-10	6,397	46,823	17,579	64,402	
Total	14,528	97,493	31,489	128,983	
Revenue Requirement (2009-10)				139,258	
Estimated Un-recovered Cost				(10,275)	

#### D. Summary of revenue requirement

The revenue requirement as explained in detail above is summarized in the table below:-

Table-10	(million	(million Rs.)	
Description	Mln. Rs.		
Distribution Margin	14.	,361	
Power Purchase Cost	119	,202	
Un-recovered Cost (Prior Year Adj.)	10	,275	
To	otal 143	,838	

- E. Consumer-end Tariff: For the FY 2010-11, LESCO's existing tariff requires to be adjusted according to the estimates of Power Purchase Cost (adjusted), Distribution Margin and the unrecovered cost as explained in detail hereinabove.
- 9. That in order to ensure the financial viability of the petitioner, its revenue requirements, required for the FY 2010-11, consisting of Power Purchase Price (adjusted), Distribution Margin and unrecovered cost, LESCO's existing tariff (Qtr-1 of FY 2009-10) is proposed to be adjusted in terms of the estimates/projections justified and explained hereinabove. Accordingly the comparative table of existing tariff design and proposed tariff design on the basis of categories of consumers likely to be affected by such modification is provided at Annex-9.
- 10. That this Petition is being filed in compliance of the Ministry of Water & Power direction given in its letter No.PI-10(12)/2009 dated 09-02-2010 endorsed by PEPCO vide its letter No.DG-3-N/PEPCO/681-85 dated 11-02-2010 by fulfilling the requirements of the NEPRA Tariff Standards and Procedure Rules 1998 Part II Rule-3.
- 11. That the following summary, giving brief particulars of data, facts and evidence in support of this petition (annexed herewith) forms an integral part hereof:-

A.	Copy of Resolution of Board of Directors LESCO	(Annex-1)
В.	Revenue Requirement for FY 2010-11	(Annex-7)
C.	Category-wise units sold, proposed tariff and revenue FY 2009-10	(Annex-8)
D.	Comparative Schedule of Tariff	(Annex-9)
E.	Financial Statements (Three years comparison)	(Annex-10)
F.	Summary of Revenue Requirement	(Annex-11)

- 12. That in view of the grounds and facts mentioned above, it is respectfully prayed that while admitting and allowing this petition, the tariff of LESCO for the FY 2010-11 may very graciously be determined as estimated hereinabove by keeping in view the following:
  - **a.** Ensuring the financial viability of the petitioner for the reliable supply of electricity to its 3.1 million consumers;
  - **b.** Timely determination of tariff along with its monthly adjustments, providing sufficient time to the petitioner for the recovery of the determined revenue requirement.
  - c. Redefining the baseline for determination of target of T&D losses by taking a realistic approach in view of the determination dated 23-02-2007;
  - **d.** Fixing of the target of T&D losses according to the re-defined baseline and keeping in view the delayed / non-recovery of determined revenue requirements including investment on account of late determination/notification;

e. Approving the investment plan of Rs. 5,344 million;

f. Allowing Rs. 14,361 million as Distribution Margin;

**g.** Any other relief.

**PETITIONER** 

The Lahore Electric Supply Company Ltd.

Through:

Mohammad Azhar Iqbal

Chief Executive Officer LESCO

Dated: 01-03-2010

Lahore Electric Supply Company Limited Summary of Revenue Requirements

Summary of Revenue Requirements		2007-08	2008-09	2009-10	2010-11
Description	Units			Prov.	Estimated
Sales	GWh	13,766	13,168	14,528	15,400
Distribution and Trasmision losses	% age	12.85	13.28	13.22	13.02
Purchases	GWh	15,795	15,184	16,741	17,705
Purchases	GWII	15,795	13,104	10,741	17,700
Power Purchase Price (PPP)	Mln. Rs.	72,449	82,197	112,714	119,202
Power Purchase Price (PPP)	Rs./kWh	4.59	5.41	6.73	6.73
Power Purchase Price (PPP) -Adjusted	Rs./kWh	5.26	6.24	7.76	7.74
Operating & Maintenance Costs					
Pay and Allowances	Mln. Rs.	5,585	6,868	8,180	9,642
Other operating & Admn. Expenses	Mln. Rs.	886	971	1,436	1,600
Insurance	Mln. Rs.		_	_	_
Maintenace Expenses	Mln. Rs.	799	923	1,206	1,467
Provision for Bad Debts	Mln. Rs.	-	1,542	-,200	.,.57
GOP Tariff Subsidy - LESCO Share	Mln. Rs.	2,665	14,821	31,489	_
Total	MIn. Rs.	9,935	25,125	42,310	12,708
Total		0,000	20,120	12,010	12,100
Revenue Requirement	Mln. Rs.				
Power Purchase Price	Mln. Rs.	72,449	82,197	112,714	119,202
O&M Cost	Mln. Rs.	7,270	8,762	10,499	12,325
Bad Debt Provision	Min. Rs.	-	1,542	-	-
New Hiring Cost	Mln. Rs.	-	-	322	383
Depriciation	Mln. Rs.	1,034	1,165	1,704	2,051
RORB	Mln. Rs.	(9,643)	106	2,407	3,377
Prior Period Adjustments (Uncovered Costs)	Mln. Rs.	-	-	4,639	10,274
Total	MIn. Rs.	71,111	93,771	132,284	147,613
Less Other Operating Revenue	Mln. Rs.	845	946	1,035	1,21
Less Other Non-Operating Revenue	Mln. Rs.	1,989	2,819	2,266	2,56
Total	Mln. Rs.	2,834	3,765	3,301	3,77
Net Revenue Requirment from Tariff-	Mln. Rs.	68,277	90,006	128,983	143,83
excl. Taxation Taxation	Mln. Rs.	_	_	_	_
Net Revenue Requirment from Tariff-			-		
incl. Taxation	Rs./kWh	4.960	6.835	8.878	9.34
Break-up					
Power Purchase Price	Rs./kWh	5.263	6.242	7.758	7.74
Distribution Margin	Rs./kWh	(0.303)	0.476	0.778	0.90
Prior Period adjustments (Uncovered)	Rs./kWh	-	-	0.319	0.66
Tariff without Taxation	Rs./kWh	4.960	6.718	8.856	9.31
Taxation	Rs./kWh	1	-	-	-
Tariff with Taxation	Rs./kWh	4.960	6.718	8.856	9.31

LESCO Tariff Petition for FY 2010-11