



NATIONAL TRANSMISSION AND DESPATCH COMPANY LTD

No. MD/NTDCL/FD/1681-85

Dated: 17.09.2014

Mr. Syed Safeer Hussain
Registrar
National Electric Power Regulatory Authority (NEPRA)
NEPRA Tower, Attaturk Avenue (East), G-5/1
Islamabad.

Subject: Filing of Tariff Petition for Determination of Transfer/Wheeling Charges for the Year 2014-15.

Registrar	7678
By No.	18-09-14
Dated	18-09-14

NTDCL intends to file its Tariff Petition for the year 2014-15 to meet with revenue requirements for the year and to cater operating and development cost of the system. In this regard please find enclosed herewith the following:

1. Copy of Tariff Petition for 2014-15.
2. Board Resolution.
3. Affidavit.
4. Standard Petition Formats duly filled in.
5. Tariff Petition fee amounting to Rs.1,243,840/- after deduction of Income Tax Rs. 108,160/- vide cheque # 06695838 dated 05-09-2014.

This is submitted for your information and acceptance of the captioned please.

Regards,

For information & u/pd.

BR-II/PA

MF

Copy to.

SAT-1

cc: VCL/m (Lic)

- m (CT)

- m (CAI)

- m (MLE)

18/9/14

Tahir Mahmood 17/9/14

(Tahir Mahmood)

Managing Director-NTDCL

Copy to:

1. GM (CPPA) NTDC, WAPDA House, Lahore
2. GM (Planning) NTDC, WAPDA House, Lahore
3. GM (Technical) NTDC, WAPDA House, Lahore
4. GM (SO) NTDC, NPCC, Islamabad.



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Cheque No. 06695838

Date

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Pay NEPRA or bearer

Rupees Twelve lac Forty three thousand PKR 1243840/-

Eight hundred forty only

IBAN: PK56UNIL0112042701031753

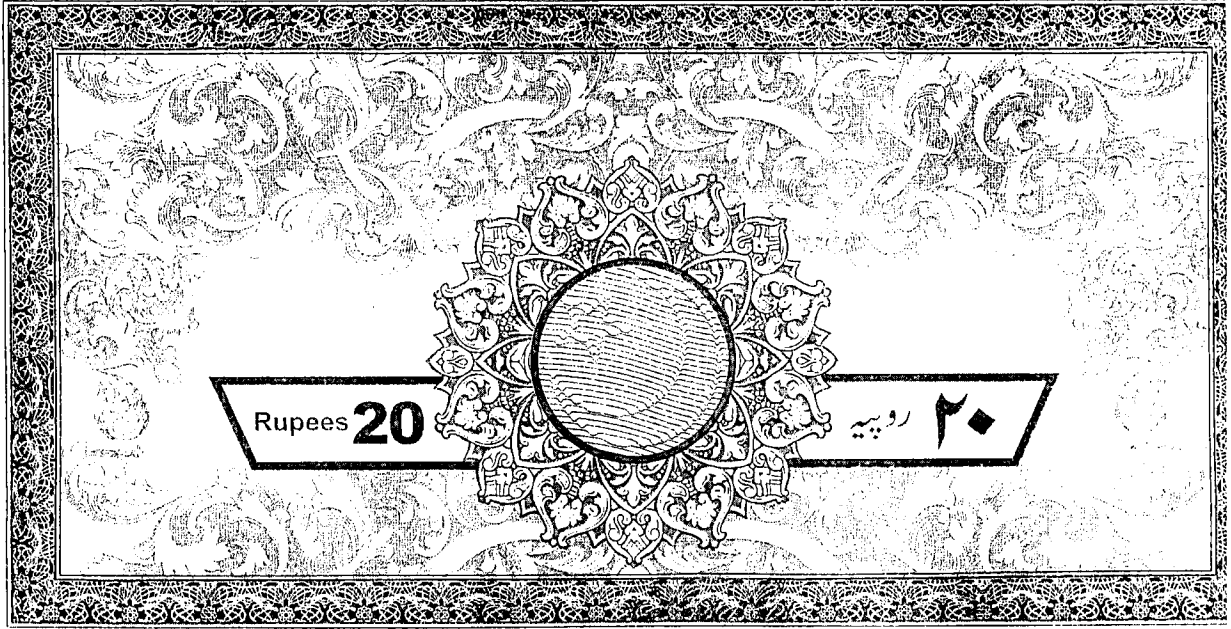
FINANCE DIRECTOR NTDC LTD.

Please do not write below this line.

Qual
Signature

⑈06695838⑈0860427⑈0112042701031753⑈000⑈

J
Managing Director NTDC
WAPDA House Lahore.



**Before the National Electric Power
Regulatory Authority**

Affidavit

I, Tahir Mahmood, Managing Director, National Transmission and Despatch Company Limited (Transmission Licensee // TL/01/2002) being duly authorized representative / attorney of National Transmission and Despatch Company Limited, hereby solemnly affirm and declare that the content of the accompanying petition / application No. MD/NTDCL/FD/1681-85 dated 17-9-2014 including all supporting documents are true and correct to the best of my knowledge and belief and that nothing has been concealed. I also affirm that all further documentation and information to be provided by me in connection with the accompanying petition shall be true to the best of my knowledge and belief.

DEPONENT

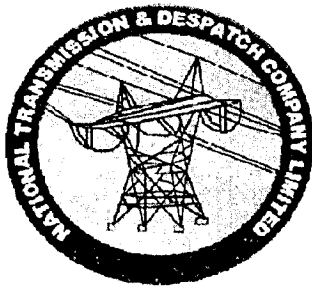
Tahir Mahmood

(Tahir Mahmood)
Managing Director NTDCL



ATTEST

ATTESTED
Oath Commission



National Transmission & Despatch Company Ltd.

[Tariff Petition] [2014-15]

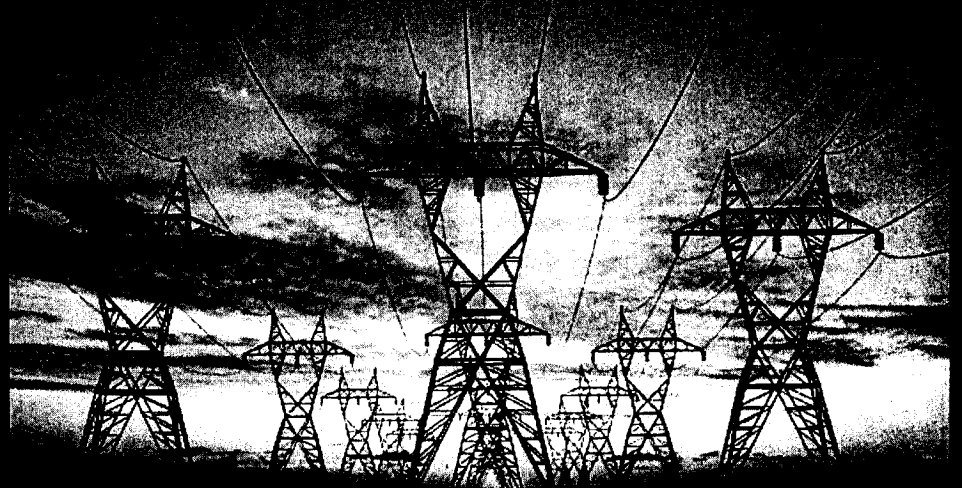


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1. Petitioner's Information

a. Introduction

National Transmission and Despatch Company Limited (referred as NTDCL or the Company hereinafter) 414-Wapda House, Lahore, Pakistan was incorporated on November 06, 1998, out of the Water and Power Development Authority, to build, operate and maintain extra high-voltage electric power transmission system in Pakistan, and commenced commercial operation on March 1st, 1999. NTDC was granted Transmission License No. T.L/01/2002 on 31st December 2002 by NEPRA to engage in the exclusive transmission business for a term of thirty (30) years, pursuant to Section 17 of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

Company has the status of a non-listed public limited company formed under the Companies Ordinance, 1984. It is one of the successor companies of WAPDA which is one of the established and well operated power companies in Pakistan having approximately 13,000 circuit-Km high voltage lines.

b. Representatives

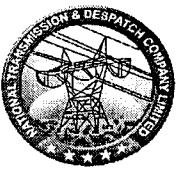
Following are the authorized representatives of the company:

- Managing Director
- General Manager GSO
- General Manager Planning (P)
- General Manager (SO), NPCC
- Finance Director

c. Functional Setup

Under article 08 of the license issued by NEPRA, NTDCL is required to establish the following functions:

- i) A **"System Operator"** (SO) for safe and reliable operation, control, switching and dispatch of transmission system and generation facilities and provision of balancing services;
- ii) A **"Transmission Network Operator"** (TNO) for Operation & Maintenance, Planning, Design and expansion of the transmission system; and
- iii) A **"Contract Registrar and Power Exchange Administrator"** (CRPEA) to record and monitor contracts relating to bilateral trading system between the licensees and bulk power consumers and between the generation licensees and DISCOs;
- iv) A **"Central Power Purchasing Agency"** (CPPA) for procurement of power on behalf of Distribution Companies.



Under the new functional set up of NTDC, the licensee is required to charge only transmission and dispatch charges called as Use of System Charge (UoSC) on electricity transmitted to DISCOs. As per NEPRA determined parameters, the impact of T&T Losses has not been considered in the revenue requirement while soliciting the increase in Use of System Charge for the year 2014-15.

2. Summary of the last Tariff Determination

For the year 2012-13, NEPRA determined and allowed NTDC to charge tariff on the following terms and conditions:

a. Use of System Charge

NTDC, being the transmission company has been allowed to charge following two part tariff i.e. a fixed and variable to Distributions Companies including K-Electric for transmission of electricity.

$$\text{Fixed Charge (UoSCF)} = \text{Rs.102.43 per kW per month}$$

$$\text{Variable Charge (UoSCV)} = \text{Rs. 0.2367 per kWh X LAL factor*}$$

* Where LAL Factor is a factor for Adjustment of Losses and Load imposed on the transmission system by a user.

The above tariff was filed for FY 2012-13 and due to delayed determination /notification which was issued prospectively at the end of the 1st quarter for FY 2013-14, therefore sales of NTDC remained suppressed by application of old tariff i.e 85.91 per kW per month. Thus leaving uncovered cost for FY 2012-13, the financial impact thereof is elaborated in the subsequent paragraphs.

b. Transfer Price or Transfer Charge to XWDISCOS

NTDC shall charge the DISCOS, a transfer charge for procuring power from approved generating companies and its delivery to DISCOs for a billing period as under:

$$TP = CTP + UOSC + ETC$$

Where:

TP = Transfer Price to DISCOs/KESC

CTP = Capacity Transfer Price to DISCOs/KESC in Rs./kW/Month

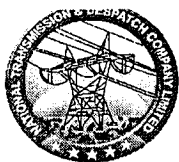
UOSC = Use of System Charge to DISCOs/ KESC in Rs./kW/ Month

ETP = Energy Transfer Price to DISCOs/KESC in Rs./kWh

$$CTC = \frac{\text{Gen C}}{\text{PD(sys)}}$$

$$UOSC = \frac{\text{USCF}}{\text{PD(sys)}}$$

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Where:-

GenC = Summation of the Capacity Cost pertaining to generation in Rupees for a billing period minus the amount of liquidated damages received during that billing period.

USCF = NTDC transmission charge in Rupees for a billing period.

PD(sys) = Peak Demand of the System recorded during a billing period in kW.

Note : To calculate the CTC and UOSC in Rupees for each DISCOs/ KESC for a billing period, the rate of CTC and UOSC will be further multiplied by the particular DISCO/ KESC's demand recorded at the time of system peak in kW.

$$ETC = \frac{\text{GenE}}{\text{EUs}}$$

Where:

GenE = Total Energy charge in Rupees during a billing period.

EUs = Energy units (kWh) recorded at the Common Delivery Metering Points of all the DISCOs/KESC during a billing period.

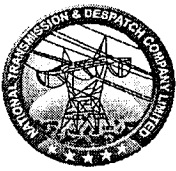
3. Grounds for Filing Tariff Petition

The company believes that tariff determined by NEPRA should provide sufficient and adequate stream of cash flows to maintain its system, discharge its financial commitments, invest on the augmentation and expansion of transmission network in the National Interest and also earn reasonable rate of return on equity. As per NEPRA standard and guidelines 17(3) (i), tariff should allowed licensees the recovery of all costs prudently incurred to meet the demonstrated needs of their customers. NTDC has consistently been sustaining average loss of around Rs. 3.30 billion (FY 2012-13 Rs. 4.723 billion) per year due to T & T losses incurred beyond 2.5% disallowed by NEPRA as obvious from the audited results for FY 2012-13. On the basis of aforesaid reasons the company is filing its tariff petition for FY 2014-15 inclusive of uncovered cost for FY 2012-13 & 2013-14.

Following are the main reasons/grounds to make afresh tariff petition.

- The prevailing UoSC is not sufficient for the Petitioner to meet the anticipated Revenue Requirement in FY 2014-15 due to inflationary impact in operational & financial cost, regulatory equity base, construction of new grids and expansion of transmission network.

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- Due to prospective application of tariff through notification for FY 2012-13, the Petitioner remained unable to recover its determined revenue requirement.
- As tariff for FY 2012-13 notified in FY 2013-14 therefore NTDCL could not file tariff petition for FY 2013-14, resultantly NTDCL remained unable to fulfill its entire financial obligations so uncovered for FY 2013-14 is also incorporated in tariff petition for FY 2014-15.
- Increase in General Establishment Expenditure due to an Adhoc and other reliefs announced by GoP in annual budget.
- The induction of employees against vacant posts due to retirement and induction against system expansion in the Transmission Network of NTDC.
- Increase in Maintenance cost due :
 - To ensure the desired reliability, security and adequacy of the transmission network,
 - To maintain and strengthen the transmission system to the optimum level,
 - For augmentation / expansion in the transmission network of NTDC.
- Financial burden of T & T losses due to arbitrary determine benchmark of 2.5% - 3.0% approved by the NEPRA Authority which is swallowing return on average Rs. 3.3 billion per year.
- NTDCL being the infrastructure based company needs borrowings for expansion program which results in increase in financial charges.
- To seek a minimal of 13.11% return on equity as allowed by the Authority in its last tariff determination for NTDCL.

4. Calculation of Revenue Requirement based on above Assumptions

In view of the aforementioned underlying justifications/assumptions, the petitioner has, therefore, calculated its revenue requirements under the specific heads of expenditure stipulated as per NEPRA's tariff determination methodology. As per last tariff determination, NTDC has also incorporated uncovered cost for FY 2012-13 & FY 2013-14 respectively.



Mln Rs.				
Sr. No.	Description	2011-12	2012-13	2013-14
		--Actual--	--Actual--	Provisional
Revenue Requirement				
1	GE&A (including CPPA)	4,290	5,589	5,459
2	Repair & Maintenance	545	512	607
3	Insurance	102	103	119
4	Depreciation	3,717	3,854	4,113
5	Financial Charges	805	749	1,782
7	Provisions doubtful receivables		100	-
6	Transmission Losses	2,331	4,728	1,125
8	Return on Equity	7,535	2,104	7,739
7	Income Tax	90	84	-
9	Total	19,414	17,823	20,944
12	Less: other income	(1,396)	(1,040)	(1,121)
13	Revenue Requirement	18,017	16,782	19,823
14	Average Monthly MDI (MW)	16,734	16,279	16,880
15	Average Tariff Rs. kW/Month	89.72	85.91	97.86

In the above table two claims of uncovered costs which have been arisen for FY 2012-13 & FY 2013-14 are incorporated in the total revenue requirement for FY 2014-15 and explained in the subsequent paragraphs.

a. Uncovered Cost FY 2012-13

NTDC's revenue requirement determined by NEPRA for FY 2012-13 in FY 2013-14 i.e July 19, 2013 amounting to Rs. 21,137 Million and was notified on September 24, 2013. The tariff was notified in FY 2013-14 and due to delayed tariff determination and notification warrants NTDC to claim unrecovered cost in the present tariff petition accordingly.

The detail of uncovered cost for FY 2012-13 is summarized below:

	Rs.Mln
Tariff Determined by NEPRA for FY 2012-13	21,137
Use of System Charges Invoiced for FY 2012-13	(16,782)
Total Variance	4,355

Total variance is comprised of two variances i.e Price variance and Volume variance.

Price Variance

$$\{\text{Tariff rate determined (2012-13)} - \text{Tariff rate applied (2011-12)}\} \times \text{Average Actual MDI for FY 2012-13} \\ (\text{Rs.102.43} - \text{Rs.85.91}) \times 16,279 \text{ MW} = \text{Rs.3,227 Million}$$

Volume Variance

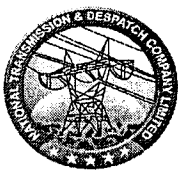
$$(\text{NEPRA determined MDI} - \text{Actual MDI}) \times \text{Rate Determined by NEPRA} \\ (17,196 \text{ MW} - 16,279 \text{ MW}) \times \text{Rs.102.43}^{**} = \text{Rs.1,128 Million}$$

$$\text{Total Variance} = \text{Price Variance} + \text{Volume Variance}$$

$$\text{Total Variance} = (3,227 + 1,128) = \text{Rs. 4,355 Million}$$

*Average Monthly MDI

** Rs.kW/Month



b. Adjustment of Loans against KESC (now K-Electric) payables towards NTDC:

It is to apprise that CPPA-NTDC was charging hourly marginal cost rate for billing of energy cost to K-Electric.

Economic Coordination Committee (ECC) of the Cabinet on September 03, 2008 decided that KESC (now K-Electric) would be treated at par with DISCOs for invoicing/billing of energy cost purposes and accordingly a committee was constituted for determination and settlement of balances between NTDC and KESC.

On the recommendations of ECC it was decided that a partial transaction of difference between the two rates amounting to Rs. 31,000 Million would be settled by Government of Pakistan (GoP) with NTDCL against GoP Foreign Relent Loans including outstanding markup of Rs. 24,610 Million, but adjustment of this transaction by GoP is still awaited. Therefore, NTDC continued to incorporate accrual of markup in its books for the period from FY 2009-10 to FY 2011-12 amounting to Rs. 9,050 Million, out of which Rs. 5,892 Million were expensed out as financial charges charged to operations with yearly impact of Rs. 1,964 Million as accrued expense and balance amount of Rs. 3,158 Million were charged to WIP as IDC.

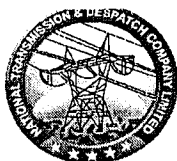
In June 2013 GoP adjusted Rs. 2,540 Million as non cash adjustment and did not claim any markup on the balance outstanding amount of loan. Therefore, NTDC has reversed accrued markup charged up till now.

This debt-equity swap has impact on component of Use of System Charge (UoSC). In the preceding years these loans were considered as part of debt portion in the capital structure of the Company and used to accrue financial charges on these loans.

Thus the capital structure of the Company has been transformed in which loans were reduced and equity has risen by corresponding amount of loan. Resultantly financial charges of the company will be reduced and return on equity component of Use of System Charge (UoSC) has also increased.

In the wake of above situation the whole transaction has been observed since its inception within the tariff regime of NEPRA. It reveals that tariff will not be significantly impacted as it is a mere change in the head of revenue requirement.

However, an overall impact has been calculated to the tune of Rs 740 Million which has been over claimed by the petitioner since the occurrence of this transaction and the same has been adjusted in the Uncovered Cost of FY 2012-13.



A comparison of financial charges claimed in the tariff and resultant increase in return on equity is tabulated below:

Rs. Mln					
Description	Actual 2008-09	Actual 2009-10	Actual 2010-11	Actual 2011-12	Total
ROE after adjustment of KESC Loans (excluding Loans)	8,894	9,401	10,290	11,125	39,710
ROE without adjustment of KESC Loans (including loans)	6,633	7,453	8,564	10,089	32,739
Difference (A)	2,262	1,949	1,726	1,035	6,971
Accrued mark-up expensed out (B)	1,824	1,964	1,964	1,964	7,716
Net (Benefit) /Loss to NTDC (A-B)	437	(15)	(238)	(928)	(745)

Net uncovered cost for the FY 2012-13 after adjustment of KESC loans is as follows:

Rs. Mln	
Total (Price & Volume) Variance	= 4,355
Adjustment of KESC loans	= (745)
Net Uncovered Cost For FY 2012-13	= <u>3610</u>

c. Uncovered cost for FY 2013-14

As tariff for FY 2012-13 notified in FY 2013-14 therefore NTDC could not file tariff petition for FY 2013-14, resultantly NTDC remained unable to fulfill its entire financial obligations so uncovered for FY 2013-14 warrants NTDC to claim in the current tariff petition. The tariff for FY 2013-14 has been calculated in line with the tariff methodology of NEPRA and the same has been compared with the provisional results of FY 2013-14.

NTDC is filing tariff petition in FY 2014-15 whereas the tariff calculated & exhibited in the below table for FY 2013-14 may be claimed as uncovered cost in the tariff petition for FY 2014-15.

Rs. Mln					
Sr No	Revenue Requirement	NEPRA Rs.102.43 /kW/Month	2013-14 (Prov)	Desired	Uncovered Cost FY 2013-14
1	GE&A (including CPPA)	4,825	5,459	-	634
2	Repair & Maintenance	595	607	-	12
3	Insurance	112	119	-	7
4	Depreciation	4,083	4,113	-	30
5	Financial Charges	3,729	1,782	-	(1,947)
6	Transmission Losses	-	1,125	-	(1,125)
7	Return on Equity	9,329	7,739	13,569	5,829
8	Income Tax	-	-	-	-
9	Total	22,673	20,944	13,569	3,440
10	Less: other income	(1,536)	(1,121)		415
11	Total Revenue Requirement	21,137	19,823		3,855



Tariff Level

Mln Rs.					
Sr.No.	Description	2011-12	2012-13	2013-14	2014-15
Revenue Requirement:-		Actual	Actual	Provisional	Estimated
1	GE&A (including CPPA)	4,290	5,589	5,459	6,426
2	Repair & Maintenance	545	512	607	845
3	Insurance	102	103	119	132
4	Depreciation	3,717	3,854	4,113	4,325
5	Financial Charges	805	749	1,782	2,576
6	Provisions for doubtful receivables	-	100	-	-
7	Transmission Losses	2,331	4,728	1,125	-
8	Return on Equity	7,535	2,104	7,739	16,218
9	Income Tax	90	84	-	-
10	Total	19,414	17,823	20,944	30,522
11	Uncovered Cost 2012-13	-	-	-	3,610
12	Uncovered Cost 2013-14	-	-	-	3,855
13	Less: other income	(1,396)	(1,040)	(1,121)	(1,320)
14	Total Revenue Requirement	18,017	16,782	19,823	36,668
15	Average Monthly MDI MW/Month	16,734	16,279	16,880	17,594
16	Average Tariff Rs. kW/ month	89.72	85.91	97.86*	173.67

*Average tariff arrived at Rs.97.86, tariff for FY 2012-13 i.e Rs.102.43/kW/Month notified on September 24,2013 therefor tariff for FY 2011-12 Rs.85.91 /kW/month was applied for 1st quarter of FY 2012-13 accordingly.

Assumptions to the Tariff Petition:

The realistic assumptions have been taken into account while preparing the petition; the major assumptions are detailed hereunder:

a. MW Demand of DISCOs

Overall 4.23% growth of MDI (Maximum Demand Indicator) MW for FY 2014-15 is assumed and therefore estimated demand worked out on the basis of DISCOs projected demand of 4.78 % and same has been attributed to DISCOs after considering the flat demand of 650 MW of K-Electric.

**b. Operating Cost****i. General Establishment Expenses**

General Establishment includes Pay and Allowances, Employee Benefits, Staff Cost, and Other Admn expenses. Being a public sector entity we follow pay scales of GoP, hence any increase in salary and other employee benefits approved in finance bill by GoP have to be adopted by the Company under the terms of employment.

The components of Revenue Requirements including operating Cost for FY 2012-13 has already determined by NEPRA in its determination dated July 19, 2014.

• Pay & Allowances & Employee Benefits

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Pay and Allowance	1,402.96	1,787.90	2,298.46	2,649.16	2,916.94	3,309.71
Induction against Vacant Posts						303.74
Employee Benefits	365.15	363.50	423.34	601.10	660.66	730.00
Total	1,768.11	2,151.41	2,721.80	3,250.26	3,577.60	4,343.45
Increased % age		21.7%	26.5%	19.4%	10.1%	21.4%

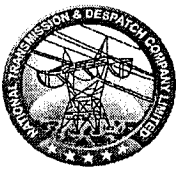
Pay & Allowances & Employee Benefits for FY 2013-14

GoP has granted 10% adhoc relief on running basic pay in the annual budget for FY 2013-14, a premature increment also granted to employees on up-gradation of posts. The Impact of annual increment at the rate 6% and one running basic pay was granted to employees on the occasion of Eid-ul-Fitr. These entire factor resulted in overall 13.6 % increase in pay & allowances and employee benefits.

Pay & Allowances and Employee Benefits for FY 2014-15

The increase with regard to Pay and Allowance and Employee Benefits has been incorporated in the tariff projections for FY 2014-15.

GoP in its annual budget for FY 2014-15 has granted 10% Adhoc relief allowance on running basic pay of employees. Increase in conveyance allowance @ 5% to employees of BPS 1 to 15, 20% increase in Cash Medical allowance to employees of BPS 1-15, grant of premature increment to employees of BPS 1 to 4. Moreover employee benefits include house acquisition



○ **Pension**

GoP in federal budget for FY 2013-14 has granted 10% increase to pensioners. It is worth to mention here that despite 10 % increase in pension head, there has been a reduction of 36% witnessed as compared with 2012-13. This is mainly due to onetime expense incurred in shape of arrears as allowed by GoP to old pensioners in the year 2012-13. GoP has allowed certain allowances to old pensioners in the year 2013 with a retrospective effect and in some instances 10 years arrears have been granted like CLA @ 7%, adhoc relief Rs. 300-400 to BPS 1-17, secretarial allowance @ 20% to all pensioners, one increment allowed to all old pensioners who were retired at maximum of their pay scale and two increments were allowed in cases of up-gradation from 2007 onwards and enhancement of family pension from 50% to 75%. The increase in this head has been assumed @ 10 % for FY 2014-15 and applied on the provisional figures of FY 2013-14.

○ **Leave Encashment**

In case an employee retires on superannuation, he will be granted lump-sum payment having maximum of 365 days leave in his credit balance as per government rules. An increase of 10% in this head is assumed in line with salary.

○ **Post Retirement Free electricity**

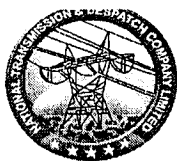
A minimum 10% increase has been assumed in the captioned head and the same incremental effect is incorporated in the proposed tariff.

○ **Post Retirement Medical Facility**

Medical facilities are provided to the retired employees of the NTDCL and in April, 2014 GoP has announced, a cash medical allowance @ 25% to BPS 1-15 and @20% to BPS 16 allowed in lieu of medical facilities. NTDCL has assumed increase in Medical Expenses for FY 2013-14 @ 10% and @ 25% for FY 2014-15.

• **Other General Establishment & Administrative Expenses**

Other components of General Established & Admin Expenses includes vehicle running expenses, travelling expenses, utilities rent, rates and taxes, professional & Management fees, offices supplies and other expenses, advertising and publicity, outside services employed, & miscellaneous expenses which have been increased as per CPI.



with 25% projected enhancement in rental ceiling of acquired houses which is due to be enhanced by GoP, as per practice, during current i.e FY 2014-15. The aforementioned factors attribute an overall increase of 15% in this head.

• Induction Plan

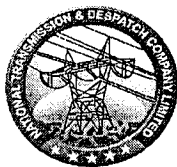
NTDC work force and line staff is a backbone of its progress. The management of NTDC along with its team is striving hard to ensure an efficient transmission network in view of increasing load growth and economic activity. To ensure efficient transmission network, NTDC needs competent and skilled professionals in technical, finance and administrative areas of company. Currently NTDC is a staff deficient company and endeavoring to provide reliable, transmission of electricity to DISCOs and K-Electric. This situation also emerges as a result of heavy turnover due to retirement as witnessed in recent years. The following analysis clearly describes the shortage of staff in the company. Out of 2,198 sanctioned vacant posts NTDC intends to hire 1,651 employees for critical posts which attributes to Rs. 304 Million for remaining eight months period keeping in view recruitment plan for FY 2014-15.

							Figures in Nos	
Sr. No.	Description	Sanction Strength	Working Strength				Deficiency	%age
			Regular	Contract	Daily Wages	Total		
Officers BPS-17 & ABOVE								
a	Technical	1,051	914	11	-	925	126	11.99%
b	Non Technical	241	190	9		199	42	17.43%
Officials BPS 1 To 16								
a	Technical	3,433	2,589	209	16	2,814	619	18.03%
b	Non Technical	4,398	2,752	443	21	3,216	1,182	26.88%
c	Supportive	1,730	1,181	117	35	1,333	397	22.95%
Sub Total		9,561	6,522	769	72	7,363	2,198	22.99%

• Retirement Benefits:

The post retirement benefits include pension, medical facility & free supply facility & leave encashment to the retired employees. The year wise comparison of post retirement benefits is as under: -

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Pension	697.23	622.38	723.35	1,500.67	956.63	1,052.29
Leave Encashment	50.95	34.27	108.04	85.84	94.42	103.86
Free Electricity	78.46	71.86	88.18	95.81	105.39	115.93
Medical Facility	86.69	88.18	71.86	39.67	43.64	54.55
Total	913.33	816.69	991.43	1,721.99	1,200.08	1,326.63
Increased % age		-10.6%	21.4%	73.7%	-30.3%	10.5%



The detail is as under:

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Vehicle Expenses Maintenance	154.90	167.01	204.30	234.26	242.85	287.82
Travelling Expenses	65.94	76.18	92.95	122.16	135.52	159.29
Utilities	43.84	45.52	59.81	108.12	103.11	96.73
Rent, Rates And Taxes	32.53	37.69	46.02	72.33	74.19	76.88
Charges for Common Services (AOH)	27.23	19.53	22.19	32.29	34.64	39.84
Professional Fees/ Management Fee	13.85	9.04	5.81	14.26	46.09	46.09
Offices Supplies and Other Expenses	14.38	16.69	16.67	16.20	21.42	23.56
Advertising and Publicity	1.46	64.35	111.87	1.11	4.67	5.14
Outside Services Employed	31.38	30.29	7.53	12.92	12.94	14.23
Miscellaneous Expenses	14.56	51.96	9.35	2.66	5.72	6.15
Total	400.07	518.27	576.50	616.30	681.15	755.73
Increased % age		29.5%	11.2%	6.9%	10.5%	10.9%

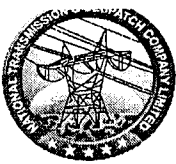
○ Vehicle Running Expenses

Vehicle Running Expenses increased by 2 % in FY 2013-14 as compared with FY 2012-13 and projected Rs.287.82 Million for FY 2014-15 with an increase of 20%. As most of the vehicles are 20-30 years old and completed useful life of 10 years. Moreover the cost of POL & spares of vehicles are increasing due to inflation. The above increase is justified in the wake of patrolling for ever expanding transmission system spreading across the country, especially remote areas of Baluchistan and KPK, approximately 13,000 circuit km. An intensive patrolling is also inevitable by technical staff for the maintenance of the transmission system and security staff to avoid threats of sabotage activities.

○ Travelling Expenses

The major increase of 31.4% has been observed in FY 2012-13 due to revision in travelling rates of aggregate average of 75% carrying 150% increase in mileage allowance i.e. Rs. 1.0 per Km to Rs. 2.50 per Km, 50% increase in daily allowance, increase in luggage charges from Rs. 0.08/Kg/Km to Rs. 0.20 /Kg/Km. Hotel charges at least equal to two dailies are allowed for hotel accommodation .

An increase of 13.4% has been witnessed under the head of travelling expense in FY 2013-14. Further an increase of 15% has been assumed in FY 2014-15 that justifies patrolling of ever expanding transmission system spreading across the country.



○ **Utilities**

Utilities includes Power, Light, Gas and Water Charges & Communication, there has been an enormous hike in the prices of electricity during FY 2012-13 showing 81% increase and during 2013-14 showed a declining trend of negative 5% . Utilities expenses declining trend is due to eliminating spectrum charges which were paid during FY 2013-14, whereas relative stable trend in oil prices is considered.

○ **Rent, Rates & Taxes**

There has been an overall increase of 57.2% in FY 2012-13 which was mainly due to 100% increase in rent rates by WAPDA for NTDC offices located at WAPDA House Lahore and there has been a slight increase of 3% has also been reported for FY 2013-14. As most of NTDC lower formation's offices are hired on rental basis, therefore, a minimal increase on account of annual renewal in Rent & Rates and taxes has been assumed in the calculations for FY 2014-15.

○ **Charges for Common Services**

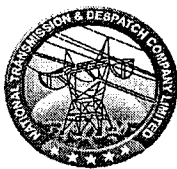
An increase in charges for common services assumed for FY 2014-15 due to inflationary impact . WAPDA House security service provided by WAPDA, telephone exchange facility, and others.

○ **Professional Fees & Management Fee**

Professional fee increased in FY 2013-14 due to numerous audits conducted by NTDCL on direction of GoP i.e, Circular Debt audit, special audit of receivables & payables in respect of power producers and power distributors. Further an independent study on T&T losses has also been conducted by NTDCL as per directions of NEPRA. For FY 2014-15 NTDCL has assumed an revision in the professional fee in line with CPI and also made a provision for up-coming appointments of arbitrators/mediators for litigations with IPPs, so Professional fee is expected to almost remain at the level of last year.

○ **Offices Supplies**

In FY 2013-14, an nominal increase of Rs.5.2 Mln has been witnessed over the expense of Rs. 16.3 Mln. of FY 2012-13 and for FY 2014-15, the office supplies has been estimated as per average CPI of 10% of last five years.



○ **Advertising & Publicity**

In FY 2013-14, an nominal increase of Rs. 3.56 Mln has been witnessed over the expense of Rs. 1.11 Mln. of FY 2012-13 and for FY 2014-15, advertising expenses has been estimated for FY 2014-15 with an increase of 10 % i.e. Rs.5.14 Mln to cater the need to publish bidding / tender ads for upcoming new projects of the company.

○ **Outside services employed**

NTDCL hired the services of Baluchistan Constabulary for security of transmission system/lines. An increase of 11% under this head has been recorded in FY 2013-14 and 10% increase is projected for FY 2014-15.

○ **Transmission License Renewal Fee (NEPRA)**

The transmission license renewal fee has been taken at the level indexed by NEPRA for FY 2014-15 which is amounting to Rs. 4.166 Mln and the same has been paid.

○ **Misc. Expenses**

It includes increase in entertainment charges, store handling, bank charges, subscription & periodicals etc. which are well within CPI.

ii. Repair & Maintenance

Implementation of all of its service standards and improvement of transmission network is vital to ensure the desire level of reliability of transmission network. This can be only possible through continuous repair and maintenance of Transmission Network by NTDC. Presently, NTDCL transmission network 220Kv & 500Kv Grid Stations/ Transmission lines are a blend of old and new which requires regular maintenance.

Moreover, NTDCL grids/transmissions lines confronted with every increasing demand due to GoP priority/policy to utilize existing capacity at optimum level, so repair and maintenance will surge up beyond ordinary wear & tear to maintain reliability and sustainability of the system. During the last couple of years, the maintenance cost remained on lower side due to almost stagnant growth of generation coupled with underutilized capacity owing to adverse generation mix.

Now, the present Govt. has prioritized the Power sector, in order to deal with the crises of Power sector, not only started numerous power projects and also emphasized for optimum utilization of available capacity. The continuous increase in the load has necessitated NTDC to ensure the reliability and sustainability of the transmission network system. To achieve this level of service we have made a realistic activity wise detailed budget by keeping in view the

Managing Director NTDC
WAPDA House Lahore



transmission system which is annexed. Therefore, Authority is requested to allow NTDC an estimated amount of Rs 845.40 Million under head of repair and maintenance as calculated in the annexed detailed maintenance plan calculated/consolidated of grid wise requirements.

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Average Gross Assets	91,903	102,586	107,991	113,840	125,115	139,959
Repair & Maintenance	574	600	545	512	607	845
% age	0.62%	0.58%	0.50%	0.45%	0.49%	0.60%

iii. Insurance

The assets of the company are protected /covered under WAPDA equipment protection scheme (WEPS), in which value of insurance is calculated @ 0.30% of book value of Grid Stations. The Insurance cost has been established at the same methodology. This usually paid on the book value and subject to change every year.

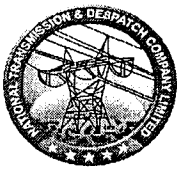
Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Pro.	Estimated
Book value of Assets	62,128	66,343	65,583	70,470	80,037	91,589
Insurance	76.23	93.27	101.58	102.91	119.48	132.15
%age to Book Value	0.12%	0.14%	0.15%	0.15%	0.15%	0.14%

iv. Depreciation

Depreciation is also a component which may change as a result of addition or deletion in the fixed assets and would require adjustments accordingly. The depreciation for FY 2013-14 has been recorded Rs.4,113 Mln & the depreciation for FY 2014-15 is calculated on the basis of (i) Value of existing assets, (ii) Additions in existing assets during the FY 2014-15.

The assets were depreciated on the basis of straight line method as per power sector practice i.e Land @ 0%, Civil works and building @ 2%, Transmission & Despatch Equipments @ 3.5%, Furniture and fittings, other office equipments & Vehicles @ 10%. Based upon these assumptions the deprecation is worked out as under.

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Assets	98,659	106,512	109,470	118,210	132,020	146,054
Amount of Depreciation	3,782	3,639	3,717	3,854	4,113	4,325
% age to Gross Assets	3.8%	3.4%	3.4%	3.3%	3.1%	3.0%



v. Financial Charges

NTDC loans comprises mostly GoP relent loans as NTDC is an infrastructure based company which is continuous enhancing its transmission network system according to growing needs of Distribution Companies. To coup with the demand of Distribution Companies NTDC has undertaken numerous projects. These Projects are to be financed through loans as well as return on equity. For mega projects foreign loans are inevitable as 80% of the projects cost consist of transmission equipment which are generally imported from abroad so foreign loans are inevitable to finance those projects. Therefore substantial portion of NTDC loans pertain to foreign loans obtained by GoP from donors agencies like World Bank, ADB, JICA, KFW (Germany), and EDCF(Korea) which have been relent to NTDC @ 12% - 17% markup in accordance with relent policy of GoP. As per current relent policy GoP charges @ 15% markup on such loans.

Moreover, some of the projects like Sahi-wal Sub Stations (SSS), KESC Interconnection, Muzaffar Garh Gatti Transmission Line, and Extension of 8-Sub Stations Project have been financed through local borrowing for which NTDC has taken local loans @ 6-Month KIBOR plus 2% to 2.15 % for these projects.

Apart from existing loans, financial charges for FY 2014-15 are projected on the basis of additional disbursement out of current loans/new loans to finance annex investment plan. Financial charges after allocating to work in progress then become the part of revenue requirement.

The financial charges for last five years with one year projection are depicted as under:

Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Provisional	Estimated
Total Financial Charges.	1,848	2,552	4,455	4,305	5,270	7,030
Allocated to WIP	819	1,570	3,650	3,557	3,488	4,454
Charged to Operation	1,029	982	805	749	1,782	2,576

vi. Other Income

This includes income of services rendered to DISCOs, IPPs in shape of planning, telecommunication, design, mark up on bank deposits, amortization of deferred credit, etc. Due to declining trend in KIBOR rates during the preceding years, there has been a decline in profit rates on bank deposits.

The average annual increase during the last three financial years has been applied on the estimation of profit on bank deposits and income of service rendered to DISCOs and IPPs.



Description	Rs. Mln					
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
	Actual				Prov:	Esti:
Other Income	1,096	1,127	1,396	1,040	1,121	1,320

c. Corporate Taxation

Income Tax is assumed as a pass through item as per NEPRA's determined methodology, thus the impact of tax is not taken in the tariff petition. However, it will be claimed on actual basis as allowed by the Authority.

d. Receivables

Recovery of billing against Use of System Charge from CPPA has been assumed 100%.

e. Payables

100% payment has been assumed to the creditors.

f. Return on Equity (ROE)

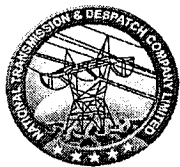
Return on Equity is vitally important in regulated industries including electricity, gas etc. because in essence, regulating Authority seeks to measure a utility's cost of capital (equity + debt) and to set tariff so that the utility company will just earn reasonable rate of return. If the estimate is too low, then the company will not attract sufficient capital to meet long run demand for service and ultimately the public will suffer. If the estimates for cost of capital allowed are too high, customers will pay too much for service.

Return on Equity for NTDC

As calculation of Beta is independent of whether local market data or developed market data is used. Since NTDC is a non-quoted company on stock exchange so we have to collect the data from comparable companies. But there is no comparable company listed in the local market at present.

NTDC was allowed Return of Equity (ROE) of 12.75% as determined by the Authority for the determination of 2004, 2006 & 2011 and improved ROE to 13.11 % in the determination of 2012-13 against requested ROE of 14.66% to enable NTDC to maintain, develop and provide reliable services for the evacuation of electricity from all the generation points across the country to at all level of transmission lines.

NTDC still believes that the ROE desired @ 14.66% in the last tariff petition is legitimate keeping in view market conditions. It is also worth to mention here that NTDC has initiated a



numerous projects in line with Gop priority which involves a sizeable counterpart funding and to finance the financial charges other than charged to operations. However NTDC has calculated return on equity @ 13.11% for FY 2014-15 as per NEPRA's last tariff determination.

6. Development Program

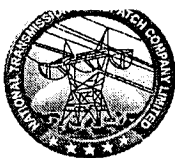
Development Program is required for expansion / enhancement of NTDC Transmission network for evacuation of power to meet future demand of the Distribution Companies.

As National Transmission & Despatch Company (NTDC), the petitioner has been granted exclusive license of transmission business in Pakistan and since then it has been assumed actively the role of System Operator (SO) and Transmission Network Operator (TNO). Being the national Grid Company of the country, NTDC is solely responsible for overall reliability, planning and coordination of the electricity transmission in Pakistan except the area under K-Electric.

NTDC, in the best National Interest, has been vigorously pursuing its system expansion/augmentation especially in the areas construction of new grids, transmission lines, adding new transformers at the existing grid stations and augmentation of the transformers with higher capacity.

The prevailing crisis of power shortage in the country over the last couple of years has crippled the economy. NTDC management, in line with the preferential requirements as set by GoP, has planned to accelerate the completion of existing ongoing projects and to expand its transmission network for evacuation of power from newly upcoming generation projects to eradicate power shortage in the country.

The announcement of upfront tariff from wind based energy power projects at Jhimpir and Ghoro clusters has attracted interest of investors for more than 2000 MW of generation capacity. Similarly federal & provincial governments are promoting solar energy by attracting fast track projects such as 1000 MW Quaid-e-Azam Solar Park (a priority of 100 MW up till December 2014), other ongoing prioritized projects such as 969 MW Neelum Jehlum Hydro Project and 630 MW (2x315) Chasma C-III & C-IV Nuclear Projects are expected to be substantially completed by the end of 2015. Therefore, it is imperative to built Extra High Voltage (EHV) transmission lines and grid stations before the COD of these projects. As the time line of these projects is too short and donor agencies could not be arranged so far, hence, NTDC has to finance these projects through own sources through return on equity.



The above mentioned prioritized projects involves substantial capital investment with PC-I Cost of Rs. 40.115 billion for which at present no donor is available and NTDC own sources/return on equity seems not enough to meet this critical situation, however, NTDC management is committed to exert all its optimal efforts to execute these prioritized projects through return on equity as well as to approach and negotiate for local financing arrangements keeping in view the limited time constraints. Presently, negotiations have initiated for local financing in respect of Neelum Jehlum Hydro project whose priority segment is expected to be completed by December 2015.

Further, other vital projects like Jamshore-Moro, UCH-II high voltage transmission lines etc. have also been planned and included in the investment plan.

In addition to above mentioned projects, NTDC is also endeavoring to enhance reliability of existing transmission network of 500/220kv grid system by deploying 13 Nos transformers which are being imported from Iran having capacity of 250 MVA each with PC-I cost of Rs. 3.90 billion through own sources. NTDC has also worked out a plan to replace depleted material /equipment to strengthen the system amounting to Rs 1.739 billion to be financed by ADB.

NTDC management is also planning for interconnection facilities to evacuate power from across the border projects like proposed project for construction of cross-border interconnection transmission line at 500kV in respect of proposed Central Asia-South Asia (CASA-1000) a 1300 MW project, linking the four countries Kyrgyz Republic, Tajikistan, Afghanistan & Pakistan, to facilitate the transfer of surplus power from Central Asian countries to Pakistan and import of 100MW power from Iran to Gawadar.

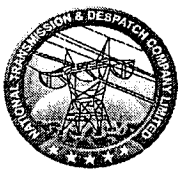
Govt of Pakistan in near future is planning to undertake some new ventures involving extraordinary investment for erection of power evacuation facilities like Gadani Power Park 6600 MW, KII/KIII 2400 MW Nuclear Project at Karachi and Dasu Hydel Project 4500 MW capacity for which NTDC present tariff structure would not support, thus NEPRA is requested to suggest some tariff mechanism to cater heavy financing involved for the execution of these projects.

Apart from above new critical projects, NTDC has also executing ongoing projects of vital importance (Annex-II), some of them are near to completion and others will likely to be completed in the next 12-24 months. These projects will be a good addition to enhance/strengthen our transmission system capacities.

NTDCL Investment Plan as tabulated below has been prepared to maintain the existing capability of providing services i.e, strengthening and enhancing the capacity of grid stations and transmission lines as well as expansion in the transmission network to evacuate power from

National Transmission and Despatch Company Ltd.

*Managing Director NTDC
PDA House Lahore.*



up-coming mega infra structure based power projects before achieving their CODs by keeping in view time limit constraints.

Keeping in view the prioritized projects NTDC Investment Program is made up of two broad categories:

- i- On Going Projects
 - a) Vital Projects
 - b) Other Projects

Rs. Mln

Description	PC-I Cost			Estimated for FY 2014-15		
	Local	Foreign	Total	Local	Foreign	Total
On- Going Projects						
Vital Projects	38,070	48,095	86,165	3,770	3,400	7,170
Other Projects	19,459	18,936	38,395	598	50	648
Sub Total	57,529	67,031	124,560	4,368	3,450	7,818

The Project wise detail of NTDC ongoing vital & other Projects are tabulated below.

Rs. Mln

Sr No.	Project Name	PC-I Cost			Budgeted for FY 2014-15		
		Local	Foreign	Total	Local	Foreign	Total
1	220 KV G/S at Ghazi Road, Lahore with 220 KV D/C T/Line 132 KV Expansion System	1,325	1,267	2,592	250	500	750
2	Power Transmission Enhancement Project (Tranche-II) (S/F) 10 Sub projects (i) 9 Sub Projects of 500KV & 220KV S/S& T/Lines	9,275	10,918	20,193	700	1,000	1,700
3	220/132KV Dera Murad Jamali Sub Station	415	465	880	500	-	500
4	Addition of 500/200KV Sub Station T/L for Strengthening the existing NTDC system i) 500KV Lahore New ii) 500KV Shikarpur iii) 220KV D.I.Khan	11,078	13,450	24,528	800	1,000	1,800
5	4 Nos New Projects to be financed by JBIC (i) 500 KV RY Khan G/S & T/L (ii) 220 KV Chishtian T/L (iii) 220 KV Gujrat G/S & 220 KV T/L (iv) 220 KV Shalamar G/S & 220 KV T/L (4 Projects - JBIC Loan)	5,365	7,787	13,152	500	800	1,300
6	Imported of 100 MW Power from Iran (with 220KV G/S Gowadar and allied T/L form Iran to Gowader funded by Iran	1,730	1,934	3,664	300	-	300
7	Power Transmission Enhancement Project Tranche-I (19 Sub Projects of 500/220 KV Sub Stations and T/ Lines)	4,503	8,114	12,617	320	-	320
8	New 220 KV G/Station at Khuzdar/220 KVDadu - Khuzdar D/C T/Line	4,380	4,160	8,540	400	100	500
9	Others	19,459	18,936	38,395	598	50	648
Total		57,529	67,031	124,560	4,368	3,450	7,818



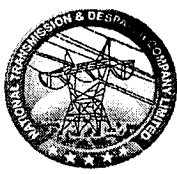
- ii- New Projects
- Critical projects
 - Vital projects
 - Other projects

Description	PC-I Cost			Estimated for FY 2014-15		
	Local	Foreign	Total	Local	Foreign	Total
New Projects						
Critical Projects	19,410	22,047	41,456	6,377	6,000	12,378
Vital Project	36,172	45,336	81,508	2,560	6,000	8,560
Other New Projects	39,873	81,173	121,045	1,070	2,800	3,869
Sub Total	95,454	148,555	244,009	10,007	14,800	24,807

The Project wise detail of NTDC new critical , vital & other projects are tabulated below:

New-Critical Projects					Rs.Mln		
Sr No.	Project Name	PC-I Cost			Budgeted FY 2014-15		
		Local	Foreign	Total	Local	Foreign	Total
1	Transmission for Dispersal power from Neelum-Jhelum Hydro Power Project	8,951	12,717	21,668	-	6,000	6,000
2	Interconnection of Chashma Neculer (C-3&C-4)	1,485	1,618	3,103	1,500	-	1,500
3	Quaid-e-Azam Solar Park at Lal-Suhanra (Phase-II)	2,161	1,905	4,066	1,918	-	1,918
4	Evacuation of 600 MW Solar (Proposed to be carried out by NTDG)	5,996	5,282	11,278	2,959	-	2,959
	Evacuation of power from wind power projects at Jhimpir and Ghara Wind Clusters						
	Total	18,593	21,522	40,115	6,377	6,000	12,378

New- Vital Project					Rs.Mln		
Sr No.	Project Name	PC-I Cost			Budgeted FY 2014-15		
		Local	Foreign	Total	Local	Foreign	Total
1	3rd 500KV Jamshoro-Moro- R.Y Khan Single Circuit T/Line Tranch-III	17,400	19,834	37,234	500	3,000	3,500
2	Transmission Interconnection for Dispersal of Power From UCH-II Tranch-III	1,219	1,289	2,508	250	1,000	1,250
3	Augmentation of 500/220KV & 220/131KV Transformer in NTDC System New Depleted Material Tranch-III	766	3,129	3,894	1,300	-	1,300
4	(Now Replacement of Depleted Matrial at existing grid station of NTDC System)	336	1,403	1,739	110	1,000	1,110
5	AIDB Loan No. 2846-PAK Interconnection scheme for import of power from CASA-1000	12,878	16,415	29,293	400	1,000	1,400
Total		32,599	42,070	74,669	2,560	6,000	8,560
Others New Projects		39,873	81,173	121,045	1,070	2,800	3,869
Grand Total		152,984	215,586	368,569	14,375	18,250	32,625



Projects completed During FY 2013-14:

To strengthen the existing as well expansion of system the following assets have been capitalized during 2013-14.

Sr. No	Name of Projects
1	220 KV Grid Station Shalamar, Lahore.
2	220KV Dadu-Khuzdar D/C T/Line & 220KV Grid Station at Kuzdar
3	220 KV grid Station & Bandala. And Associated T/Line
4	220 KV Rohri Grid Station and associated T/Line
5	550 Kv D.G Khan SubStation
6	Up Gradation of NPCC Islamabad
7	220 Kv Grid Station Loralai T/L Grid Station
8	220 KV grid Station & Transmission Line Okara.
9	Transmission Line Kassowal

Projects Expected to be completed during FY 2014-15

Following grids /transmission lines are expected to be added in the system during FY 2014-15.

Sr. No	Name of Projects
1	220Kv Toba Tek Singh Grid Station & associated T/Line T-II
2	500 Kv Ghazi Barotha Extension T-II
3	220 Kv Grid Station Kassowal
4	220 Kv Chishtian Sub station & associated T/ Line
5	SVC at Kot Lakhpat Lahore
6	220KV Dadu-Khuzdar D/C T/Line & 220KV Grid Station at Kuzdar JICA -
7	220 KV Rohri Grid Station and associated T/Line
8	Tranche-I, DG Khan-Loralai T/Line Project



7. Consideration for NEPRA For Adjustment of T&T Losses

NEPRA in its determination of April 14, 2004 assessed 2.5% Transmission and Transformation (T&T) losses for 500kv and 220kv systems of NTDC. The same benchmark for T&T losses @ 2.5% was maintained by NEPRA in its determination of January 6, 2006 and determination of May 9, 2011. Further, the Authority in its determination of July 19, 2013 revised the benchmark for T&T losses from 2.5% to 3% with the direction to conduct independent study of T&T losses.

Accordingly, NTDC appointed M/s Power Planner International (PPI) as consultant for independent evaluation of T&T losses. The consultant has shared the draft report with GM Planning (Power) NTDC which is likely to be finalized by the mid of October, 2014. The same will be submitted to NEPRA on its finalization accordingly.

NEPRA determined the tariff for FY 2012-13 on July 19, 2013 and notified the same in September 24, 2013. In the said determination, the benchmark of T&T losses revised from 2.5% to 3%. Due to delayed notification the petitioner could not incorporate the revised benchmark in the relevant year i.e FY 2012-13 hence the petitioner has the legitimate right to recover the same as uncovered cost in the current tariff petition. The impact is calculated as under:

Impact of T&T Losses

(Rs Mlns)

Month	Cost Beyond 2.5%	Cost Beyond 3%	Difference of Uncovered Cost
Jul-12	785.99	452.56	333.43
Aug-12	972.83	667.15	305.68
Sep-12	506.78	238.12	268.66
Oct-12	609.09	337.80	271.29
Nov-12	386.60	142.97	243.63
Dec-12	343.54	62.24	281.30
Jan-13	654.85	337.27	317.58
Feb-13	376.72	157.35	219.38
Mar-13	91.43	-	91.43
Apr-13	-	-	-
May-13	-	-	-
Jun-13	-	-	-
Total	4,727.83	2,395.45	2,332.39



The above table exhibits that NTDC has legitimate right to claim Rs. 2,332.39 million as uncovered cost for FY 2012-13. Though it would not cast a direct impact on the tariff but an adjustment will be made in the future billing to DISCOs & K-Electric and trade receivables of NTDC will be adjusted by Rs. 2,332.39 million accordingly.

It would be worthwhile to mention here that NEPRA assesses benchmark for T&T losses by reckoning yearly average base, but in fact losses varies from month to month during the year due to multiple reasons i.e. seasonal impact, generation mix, system constraints and distance of generation point to end user and govt. preference to supply electricity to major urban cities etc. Therefore, NEPRA's assessed benchmark seems inappropriate that may lead to irrational allocation of T&T losses which resultantly cause an increase in financial burden of NTDC. The petitioner is of the view that benchmark set by NEPRA is on yearly basis but unfortunately NEPRA is gauging NTDC losses on monthly basis which is based on yearly benchmark thus by ignoring the numerous factors as explained above which having been causing huge financial loss to the Company The losses already gauged by NEPRA may be adjusted accordingly.

It is therefore proposed that:

- NEPRA may allow us T& T losses by considering the uncontrollable factors like seasonal impact, generation mix, system constraints and distance of load centre to supply point to end users and Government priority to supply electricity major urban areas, etc. to safeguard the petitioner from huge financial loss.
- T&T losses which allowed @ 2.5% -3.0% from FY 2009-10 to FY 2013-14 was actually yearly benchmark and the same has been applied by NEPRA to gauge the monthly T&T losses. Resultantly NTDC is not able to recover its cost of service fully and return on equity (ROE) also affected adversely. It is therefore suggested that adjustment on yearly based benchmark for T&T losses may please be determined at the end of financial year instead of monthly basis. The losses amounting to Rs. 14,671/- Mln from FY 2009-10 to FY 2013-14 which have already been disallowed may be adjusted/ actualized on the basis of respective yearly benchmark.

The total T&T losses sustained by the Company are tabulated below:

Description	Rs. Mln					Total
	2009-10	2010-11	2011-12	2012-13	2013-14	
	Actual				Provisional	
Transmission losses	3,571	2,916	2,331	4,728	1,125	14,671
% age of Losses	3.40%	3.00%	2.80%	3.01%	2.43%	-

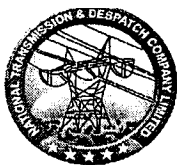


8. Procurement and Civil Work Other than PSDP

Apart from PSDP, following is the Annual Development Program (ADP) of NTDC for its following operational needs:

- As there is operational needs of material / equipments for smooth functioning and upkeep of transmission network of NTDC, for that purpose it requires to procure 500/220kv equipments. In addition to this, vehicles are important means to transact the business, keeping in view the scarcity and conditions of present vehicle fleet of NTDC it is imperative to add new vehicles.
- Computers are also necessary gadgets to fulfill daily work needs; in this regard NTDC intends purchase computers to meet the needs of formations. The above estimates include cost of accounting software and data base hardware for capacity enhancement/automation.
- NTDC -being a sole transmission company operating throughout the country may face problems in system during the year so that a provision of contingencies made under emergent work/ sabotage activities.
- In order to meet with the requirements of residential and office building needs GSO regions of NTDC are engaged in civil work.
- A provision for security needs is also included to safeguard NTDC vital assets such as warehouses, NPCC and vulnerable grids located in KPK and Baluchistan.

Description	GSO Regions				Rs. In Million	
	Lahore	Islamabad	Hyderabad	Multan	Other Formation	Total
Procurement of Material/Equipment for GSO Regions to be procured for F.Y 2014-15	55.30	35.20	18.18	33.05	-	141.73
Vehicles for Operations Purpose	145.74	11.47	36.53	7.16	1.38	202.28
Computers and Accesories	2.14	2.03	1.41	2.27	37.17	45.02
Emergent Work (Contingencies)	-	-	-	-	100.00	100.00
Total - A	203.18	48.70	56.12	42.48	138.55	489.03
Civil Works for GSO regions	50.00	39.00	36.00	28.00	42.50	195.50
Civil Work/ Procurement of Security Equipment	3.50	2.40	7.08	24.83	89.14	126.94
Total - B	53.50	41.40	43.08	52.83	131.64	322.44
Total: (A+B)	256.68	90.10	99.20	95.31	270.19	811.48



9. Summary of Tariff Petition

NTDC may be allowed to charge the tariff as under:

- Use of System Charge (UoSC) to recover the total costs of NTDC and return on equity.

As the revenues of NTDC are to be accrued from Use of System Charge, therefore, NTDC requests NEPRA for increase in the Rate of Use of System Charge.

Revenues and profit positions for the actual and projected period for the year 2011-12 to FY 2014-15 are also depicted in the following table.

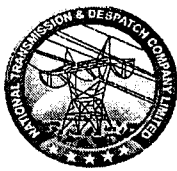
Sr/No	Description	2011-12 Actual	2012-13 Actual	2013-14 (Provisional)	2014-15 Estimated
1	Average monthly Demand (MW)	16,736	16,279	16,880	17,594
2	Demand Growth over last year		-2.73%	3.69%	4.23%
3	Use of System Charge (Rs/kW/Month)	100.15	85.91	85.91 102.43	173.67
4	Expected Revenues (Mln. Rs.)	18017	16782	19,823	36,668



10. Determination Sought

Approval from NEPRA is solicited for the grant of Use of System charge (UoSC) to be charged to distribution companies and K-Electric:

- Determination of proposed tariff of Rs.173.67/kW/Month for FY 2014-15 inclusive of uncovered cost for FY 2012-13 & 2013-14.
- Authority is requested to determine tariff and allow the Petitioner, on the basis of anticipated sale of 17,594 MW per month, to meet the revenue requirement as mentioned in the tariff petition including:-
 - Use of System Charge of Rs. 29,202/- Million for FY 2014-15;
 - Prior Year Adjustment of FY 2012-13, Rs 3,610/- Million.
 - Prior Year Adjustment of FY 2013-14, Rs 3,855/- Million.
- To allow NTDC to claim Rs. 2,332.39 Million as uncovered cost for FY 2012-13 on account of T&T losses.
- Effective date of implementation of determined tariff may be mentioned in the determination of Use of System Charge (UoSC).
- To approve annexed investment plan.
- T&T losses which allowed @ 2.5% to 3.0% from FY 2009-10 to FY 2013-14 was actually yearly benchmark and the same has been applied by NEPRA to gauge the monthly T&T losses. Adjustment on yearly based benchmark for T&T losses may please be determined at the end of financial year instead of monthly basis. The losses which have already been disallowed may be adjusted/ actualized on the basis of yearly respective benchmark and existing standard of 3.0% T& T losses it to be applied on annual basis for FY 2014-15.



11. List of Attachments

- Major Assumption to the project (Annex-I)
- Revenue Requirement (Annex-II)
- Maintenance Plan (Annex-III)
- Calculation of Return on Equity as per NEPRA methodology (Annex-IV)
- Financial Statements (Annex-V)
- Monthly Average Peak Demand (MW) of DISCOs Actual / Estimated for the period 2011-12 to 2014-15 (Annex-VI)
- Investment program of NTDC for the period 2014-15. (Annex-VII)
- Project Profile (Annex-VIII)
- KESC adjustment (Annex-IX)

National Transmission and Despatch Company Ltd.

Major Assumptions to the projections for FY 2014-15

Assumption		% Change
MW Demand: As per planning department of NTDCL projected demand of 4.78 % and same has been attributed to DISCOs after considering the K-Electric flat demand of 650 MW.		4.23%
Use of System Charge:		
Salaries, Wages and Other benefits (Avg.) (10% adhoc relief, 10% pension, 6% increment)		21.4%
Retirement Benefits		10.5%
Utilities	Based on furnace oil prices and change in slab rates eliminate spectrum charges effect.	12.0%
Rent, Rates and Taxes	Contractual increase.	12.0%
Office Supplies	As per CPI index to cover-up stationary requirement.	10.0%
Travelling Expenses	Security Patrolling and Pendency	15.0%
Vehicle Expenses	Increase in fuel prices and poor vehicles conditions.	20.0%
Advertisement Expenses	As per CPI and eliminate media share campaign.	10.0%
Professional Fee	As per CPI after eliminating extra audit & legal fee.	2.0%
Common Service Charges	Charges for Common Service from Wapda	5.0%
Miscellaneous	Well within CPI	8.0%
Insurance	0.3% of Book Value of Assets as per WEPS	14.0%
Maintenance Expenses	Based on Maintenance Plan	39.0%
Payables Payment of Current Dues		100.0%
Receivables (Recovery of current Invoice Billed)		100.0%
Required rate of return on Equity		13.1%

Managing Director NTDCL
Wapda House Lahore

Summary of Maintenance Plan

(Rs. in million)

Sr.NO	GSO Region	2013-14	Estimates 2014-15
		Expense (P)	
1	Lahore	342	425
2	Islamabad	86	201
3	Hyderabad	152	186
4	Multan	26	33
Total		607	845


Managing Director NTDC
WAPDA House Lahore.

GSO Lahore Maintenance Plan Summary

(Rs. In million)

Sr. No.	Name of Grid Station/ Transmission Lines	Expenditure 2013-14 (P)	Requirement 2014-15	Commissioning Year
1	500 KV Grid Station Gatti Faisalabad	5.53	6.79	1978
2	500 KV Grid Station Sheikhpura	12.90	38.61	2003
3	500 KV Grid Station Nokhar	13.60	20.12	2009
4	220 KV Grid Station Ghakar	19.22	12.84	1977
5	220 KV Grid Station SarfarazNagar	13.37	24.55	1995
6	220 KV Grid Station New Kotlakhpat Lahore	47.14	54.85	1962
7	220 KV Grid Station Ravi Lahore	50.33	55.00	1970
8	220 KV Grid Station Wapda Town Lahore	4.88	9.83	2010
9	220 KV Grid Station Kala Shah Kaku	33.97	35.73	1970
10	220 KV Grid Station Bund Road Lahore	34.37	40.88	1988
11	220 KV Grid Station Sialkot	8.17	4.80	1999
12	220 KV Grid Station Nishatabad Faisalabad	14.58	25.84	1982
13	220 KV Grid Station Jaranwala Road Faisalabad	21.70	36.20	1982
14	220 KV Grid Station Sammundri Road Faisalabad	38.60	34.30	1982
15	220 KV Grid Station Ludewala Sarghoda	21.80	21.50	1982
16	Deputy Manager (M) Division Gatti Faisalabad	0.15	1.40	1979
17	Deputy Manager (M) Division Tarbela	1.50	1.50	1979
Total		341.81	424.73	

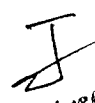

Managing Director NTDC
WAPDA House Lahore.

500KV GRID STATION NTDC GATTI FAISALABAD

Date of Commissioning

22.07.1978

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber suction pipe, canvas discharge pipe/delivery pipe	0.40	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
2	Street light of colony/switch yard lights, boundary wall lights, indoor lights.	0.15	
3	400W, 250W, 125W, 40W, 20W chokes/bulbs/tubelights	0.10	
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	0.20	
5	Switch Yard cubical, M.Ks, R. Ps, C. Ps, sealing rubbers, repair of locks and paint	0.08	
6	Paint of 220/132/11KV transformers, control room panels & indoor equipments/switch yard M.Ks	0.30	
7	Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.05	
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	0.40	
9	C.Bs/Isolators major/minor overhauling	0.30	
10	Repair/replacement of air compressors, motors and all allied accessories	0.25	
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.20	
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	0.07	
13	Grass eradication sprays, Dengue Prevention spray, water filters etc.	0.10	
14	Fire fighting equipments repair, refill and addition	0.25	
15	T/Fs magnetic contactors, cooling fans, C.Bs and wiring repairs	0.10	
16	oil dehydration plant valves, pumps, filters, heaters etc	0.12	
17	oil regeneration plant pneumatic valves, fullers earth, seals, oils, pump motors, compressors, blowers etc	-	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
18	petty purchases e.g non oxidant oil compounds, lubricants, gas seals, bearings, cleaning stuff, paper, hand tools etc	0.20	
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.09	
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.15	
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.10	
22	Galvanizing/aluminum paint of rusty switch yard structures	0.05	
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	-	
24	H.T tape, silica gel	0.07	
25	Plant/flowers, mud pots for grid upkeep/beautification	0.50	
26	CCTV/Walkie-Talkie repair/replacement	0.10	
27	Heavy duty steel racks for bulk material stacking	0.15	
28	Aluminum ladder, bamboo ladder, fiber glass ladder (18', 24', 36' height)	0.25	
29	Bench vice 6"	-	
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concretes, pedestal drill machine with multiple gears	-	
31	Grinder/cutter 4", 7" sizes, bench cutter grinder 12" size	0.09	
32	Hydraulic press machine with all size dies for ground operations	-	
33	Hand held hydraulic press machine for overhead presses on bus bar etc.	-	
34	Hydraulic conductor cutter	-	
35	Welding plant 400Amp, 600Amp. With allied accessories	0.04	
36	Gas welding/cutting plant with allied accessories	-	
37	Generator 5KVA for emergency field operations	0.50	
38	Pilot lifter 03-Ton	-	
39	Tool cabinet	0.02	
40	Manual/electric grass cutting machine	0.05	
41	Smoke detectors for control room building	0.10	
42	Manual/electric oil lifting pump	0.01	
43	repair of various test equipments like contact resistance, timer, primary injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	0.20	
44	Portable temporary grounding	0.02	
45	P.P.E. items (safety helmets, shoes, belts, goggles, gloves etc.	0.03	
46	miscellaneous/emergent	1.00	
Total		6.79	


 Managing Director NTDC
 WAPDA House Lahore.


500KV GRID STATION NTDC SHEIKHUPURA

Sr. #.	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
A	1 Tube well, disposal pump/motor repair, rubber suction pipe, canves discharge pipe/delivery pipe	0.10	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
	2 Street light of colony/switch yard lights, boundary wall lights, indoor lights,	0.30	
	3 400W,250W,125W,40W,20W chokes/bulbs/tubelights	0.20	
	4 Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	0.60	
	5 Switch Yard cubical, M.Ks, R.Ps, C.Ps, sealing rubbers, repair of locks and paint	1.00	
	6 Paint of 220/132/11 KV transformers, control room panels & indoor equipments/switch yard M.Ks	0.30	
	7 Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.10	
	8 Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	2.00	
	9 C.Bs/Isolators major/minor overhauling	-	
	10 Repair/replacement of air compressors, motors and all allied accessories	2.00	
	11 Water filtration plant repair, A.C. repair, gas charging etc.	0.50	
	12 Male/Female contacts, guides, supports of 220/132/11 KV Isolators/Trollies etc.	8.61	
	13 Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.10	
	14 Fire fighting equipments repair, refill and addition	0.20	
	15 T/Fs magnatic contactors, colling fans, C.Bs and wiring repairs	0.60	
	16 oil dehydration plant valves,pumps, filters, heaters etc	0.50	
A	17 oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors, blowers etc petty purchases e.g non oxidantioi compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	-	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
	18	0.50	
	19 power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.30	
	20 Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.10	
	21 earthing material, heat shrink tubes, bus bar shroudes etc	0.10	
	22 Galvanizing/aluminum paint of rusty switch yard structures	2.20	
	23 Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.10	
	24 H.T tape, silica gel	0.20	
	25 Plant/flowers, mud pots for grid upkeep/beautification	0.20	
	26 CCTV/Walkie-Talkie repair/replacement	0.10	
	27 Heavy duty steel racks for bulk material stacking	1.50	
	28 Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.30	
	29 Bench vice 6"	-	
	30 Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, padestal drill machine with multiple gears	0.20	
	31 Grinder/cutter 4",7" sizes, bench cutter grinder 12" size	0.10	
	32 Hydraulic press machine with all size dyes for ground operations	0.10	
	33 Hand held hydraulic press machine for overhead presses on bus bar etc.	0.10	
	34 Hydraulic conductor cutter	0.10	
	35 Welding plant 400Amp, 600Amp. With allied accessories	0.10	
	36 Gas welding/cutting plant with allied accessories	0.20	
	37 Generator 5KVA for emergency field operations	0.20	
	38 Pilot lifter 03-Ton	0.10	
	39 Tool cabinet	0.10	
	40 Manual/electric grass cutting machine	0.10	
	41 Smoke detectors for control room building	0.10	
	42 Manual/electric oil lifting pump	-	
	43 repair of various test equipments like context resistance, timer, primery injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	6.00	
	44 Portable temporary grounding	1.00	
	45 P.P.E. items (safety helmets, shoes, belts, goagles, gloves etc.	0.40	
	46 misscellaneous/emergent	7.00	
Total		38.61	

Managing Director NTDC
WAPDA House Lahore.

500KV GRID STATION NTDC NOKHAR

Sr. #	Description	Rs. Mln	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
A	1 Transformer Oil Testing Charges	1.20	9/1/2014
	2 CCTV Cameras	2.50	N.A
	3 Repair of 220V DC Chargers	0.05	6/8/2013
	4 Repair of 110V DC Chargers	0.05	15/09/2013
	5 Repair of 48V DC Chargers	0.05	12/11/2013
	6 220V DC Battery Bank one	3.00	N.A
	7 110V DC Battery Bank one	3.00	N.A
	8 Water filtration plant	2.00	N.A
	9 Filters + Engine Oil + Tyres of Dehydration	0.32	N.A
	10 Diesel Generator Lubrication oil-filter	0.05	N.A
	11 Paint spray gun	0.05	N.A
	12 Heat shrinkable gun	0.05	N.A
	13 Hardware material	3.40	N.A
	14 Security Arms & Ammunition	2.20	7/8/2013
	15 Flood lights for security purpose	1.20	1/6/2013
	16 Miscelleseous (Unseen)	1.00	N.A
Total		20.12	


Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC GAKHAR

Date of Commissioning 1977

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber	0.15	N/A
2	Street light of colony/switch yard lights,	0.25	
3	400W, 250W, 125W, 40W, 20W chokes / bulbs/ tubelights	0.30	
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights.	0.15	
5	Switch yard cubical, M.Ks, R.Ps, sealing rubbers, repair of locks and pain.	0.15	
6	Paint of 220/132/11kv transformers, control room equipments/switch yard M.Ks	0.25	
7	Nomenclature plate /tags of all control room equipments/ switch yard equipment/ colony residence.	0.10	
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	1.50	
9	C.Bs/Isolators major/minor overhauling	1.00	
10	Repair/replacement of air compressors, motors and all allied accessories	0.25	
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.15	
12	Male/female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	0.50	
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.15	
14	Fire fighting equipments repair, refill and addition	0.10	
15	T/Fs magnetic contactors, colling fans, C.Bs and wiring repairs	0.25	
16	oil dehydration plant valves,pumps, filters, heaters etc	0.10	
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors , blowers etc	0.18	
18	petty purchases e.g non oxidantilol compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	0.15	
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.50	
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.10	
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.08	
22	Galvanizing/aluminum paint of rusty switch yard structures	0.08	
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.05	
24	H.T tape, silica gel	0.10	
25	Plant/flowers, mud pots for grid upkeep/beautification	1.00	
26	CCTV/Walkie-Talkie repair/replacement	0.05	
27	Heavy duty steel racks for bulk material stacking	0.25	
28	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.05	
29	Bench vice 6"	0.10	
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, pedestal drill machine with multiple gears	0.10	
31	Grinder/cutter 4", 7" sizes, bench cutter grinder 12" size	0.10	
32	Hydraulic press machine with all size dyes for ground operations	0.10	
33	Hand held hydraulic press machine for overhead presses on bus bar etc	0.10	
34	Hydraulic conductor cutter	0.05	
35	Welding plant 400Amp, 600Amp. With allied accessories	0.13	
36	Gas welding/cutting plant with allied accessories	0.20	
37	Generator 5KVA for emergency field operations	0.25	
38	Pilot lifter 03-Ton	-	
39	Tool cabinet	0.02	
40	Manual/electric grass cutting machine	0.08	
41	Smoke detectors for control room building	0.05	
42	Repair of various test equipment like contact resistance, timer, primer injection, megger, earth resistance test, dew point test, vidar test, Hi pot test, DES test, winding resistance test, TTR test, Voltage variac test, AVO meter, clamp on meter etc.	0.25	
43	Portable temporary grounding	0.10	
44	P.P.E items (safety helmets, shoes, belts, goagles, gloves etc.)	0.05	
45	Miscellaneous / emergent	2.00	
Total		11.600	

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

1	T&P & P.P.E. items	0.08	N/A
2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	0.10	
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	0.10	
4	Management of disk washing,purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.05	
5	Phase plates, danger plates, phase marking etc	0.05	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.01	
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.01	
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala-SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	0.05	
9	missing step bolts fixing	0.10	
10	Dewatering, back filling, civil foundations repair	0.10	
11	miscellaneous/emergent	0.59	
Total		1.240	

Managing Director NTDC
WAPDA House Lahore.

220 KV Grid Station New Kotlakhpat Lahore

Sr. #	Description of Expenditures	Rs. Mln	Remarks
1	R&M Grid Station from 07/2014 to 06/2015		To meet with the routine & emergent repair/maintenance of Grid Station & Transmission lines (detailed below)
2	R&M Transmission Lines from 07/2014 to 06/2015		
Total Expenditures from 07/2014 to 06/2015:		-	
DETAIL OF MATERIAL TO BE PROCURED/WORK ORDER FOR R&M OF GRID STATION AND TRANSMISSION LINE FROM 07/2014 TO 06/2015			
Sr. #	Description	Rs. Mln	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	220 KV Grid Station New Kotlakhpat Lahore	0.70	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
2	Street light of colony/switch yard lights, boundary wall lights, indoor lights,	2.00	
3	400W,250W,125W,40W,20W chokes/bulbs/tubelights	0.20	
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	0.10	
5	Switch Yard cubical, M.K.s, R.P.s, C.P.s, sealing rubbers, repair of locks and paint	1.30	
6	Paint of 220/132/11KV transformers, control room panels & indoor equipments/switch yard M.K.s	0.60	
7	Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.50	
8	Terminal clamps of C.B.s, T/F.s, B.B.s, C.T.s, Isolators, P.T.s etc.	2.00	
9	C.B.s/Isolators major/minor overhauling	2.50	
10	Repair/replacement of air compressors, motors and all allied accessories	-	
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.40	
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	2.90	
13	Grass eradication sprays, Dengue Prevention spray, water filters etc.	1.00	
14	Fire fighting equipments repair, refill and addition	1.00	
15	T/F.s magnetic contactors, cooling fans, C.B.s and wiring repairs	1.30	
16	oil dehydration plant valves, pumps, filters, heaters etc	1.00	
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors, blowers etc	2.00	
18	petty purchases e.g non oxidant oil compounds, lubricants, gas seals, bearings, cleaning stuff, paper, hand tools etc	1.50	To meet with the routine & emergent operation/repair/maintenance of Grid Station & residential colony
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.80	
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	1.80	
21	earthing material, heat shrink tubes, bus bar shroudes etc	1.00	
22	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.50	
23	H.T tape, silica gel	0.20	
24	Plant/flowers, mud pots for grid upkeep/beautification	0.25	
25	CCTV/Walkie-Talkie repair/replacement	0.30	
26	Heavy duty steel racks for bulk material stacking	1.00	
27	Aluminum folder ladder, bamboo ladder, fiber glass ladder (18',24',36' height)	0.20	
28	Hydraulic press machine with all size dies for ground operations	0.50	
29	Hand held hydraulic press machine for overhead presses on bus bar etc.	0.25	
30	Gas welding/cutting plant with allied accessories	0.10	
31	Generator 5KVA for emergency field operations	0.10	
32	Smoke detectors for control room building	1.00	
33	repair of various test equipments like contact resistance, timer, primary injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	1.00	
34	P.P.E. items (safety helmets, shoes, belts, goggles, gloves etc.	0.40	
35	miscellaneous/emergent	2.00	
Total		32.40	
(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
1	T&P & P.P.E. items	1.00	To meet with the routine & emergent repair/maintenance of Transmission Lines.
2	Transmission line hardware including repair sleeves, P.G.s, terminal clamps, earthing material etc	0.80	
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	1.80	
4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.90	
5	Phase plates, danger plates, phase marking etc	1.00	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	3.50	
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	5.00	
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	4.00	
9	missing step bolts fixing	0.95	
10	Dewatering, back filling, civil foundations repair	1.50	
11	miscellaneous/emergent	2.00	
Total		22.45	
Grand Total		54.85	


Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC RAVI

Date of Commissioning 1970

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
A	1 Attend the SF-6Gas leakage in 220kv G/S Ravi DIA 6.	35.00	N/A
	2 Replacement of 08 Nos. Bus Bar Isolators of 132kv Switch yard.		
	3 Replacement of 05 Nos. Line Isolators of 132kv Switch yard.		
	4 Replacement of 110v/220v DC Battery Banks		
	5 Replacement of different bus br spans		
	6 Replacement of 03 Nos AEG breakers.		
	7 Replacement of different types of clamps.		
	8 Fingers, Tripping coils, closing CT, 500MCM cables of 11kv outgoing incoming trollyes.,		
	9		
Total		35.000	

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
B	1 Bud Joints of different towers of 220kv transmission lines SKP-NKLP-KSK-SKP-BDR I-II-III-IV , SKP-RAVI, ATLAS RAVI.	20.00	N/A
	2 Anit corrssion paint on different towers in river bed , drainings, drainagetreem , and DAIK NALA.		
	3 Completion of missing braces of different towersof all 220kv transmission lines under DLC No. 06.		
	4 Welding o nut bolts braces of different towers to aviod the theft.		
	5 Repair of damage Rail /Greely conductor at different Spans of 220kv Transmission Lines under DLC No. 06.		
	6 Purchase of T&P.		


Managing Director NTDC
WAPDA House Lahore.

220 KV Grid Station Wapda Town Lahore

Date of Commissioning

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Replacement of all old 132kv CTs , PTs and isolators installed in 132kv switch yard subject to availability of required material.	8.00	Very old equipment since 1985
2	132kv C.B E1Q1 Annual Maintenance	0.05	08.12-2012
3	132kv C.B E2Q1 Annual Maintenance & Breker Overhauling	0.10	04.11-2013
4	132kv C.B E3Q1 Annual Maintenance	0.05	31.08-2012
5	132kv C.B E4Q1 Breker Overhauling	0.10	05.11-2013
6	220 KV Grid Station New Kotlakhpat Lahore	0.05	29.04-2013
7	132kv C.B E6Q1 Annual Maintenance	0.05	13.03-2013
8	132kv C.B E7Q1 Annual Maintenance	0.05	06.11-2013
9	132kv C.B E8Q1 Annual Maintenance	0.05	25.10-2013
10	132kv C.B E9Q1 Annual Maintenance	0.05	10.10-2013
11	132kv C.B E10Q1 Annual Maintenance	0.05	03.06-2013
12	132kv C.B E11Q1 Annual Maintenance	0.05	21.01-2014
13	132kv C.B E12Q1 Annual Maintenance	0.05	19.02-2013
14	132kv C.B E13Q1 Annual Maintenance	0.05	28.02-2013
15	132kv C.B E14Q1 Annual Maintenance	0.05	01.10-2013
16	132kv C.B E15Q1 Annual Maintenance	0.05	19.11-2012
17	220kv G/S C.B D1Q1 Annual Maintenance	0.05	
18	220kv G/S C.B D2Q1 Annual Maintenance	0.05	02.04-2014
19	220kv G/S C.B D3Q1 Annual Maintenance	0.05	01.04-2014
20	220kv G/S C.B D4Q1 Annual Maintenance	0.05	07.07-2011
21	220kv G/S C.B D5Q1 Annual Maintenance	0.05	23.02-2011
22	220kv G/S C.B D7Q1 Annual Maintenance	0.05	04.04-2014
23	11kv incoming T-4 Annual Maintenance	0.02	2013-14
24	11kv outgoing Feeder Palas Annual Maintenance	0.02	2013-14
25	11kv outgoing Feeder Shaukat Khanum Annual Maintenance	0.02	2013-14
26	11kv outgoing Feeder Klass Annual Maintenance	0.02	2013-14
27	11kv outgoing Feeder S/Shah Annual Maintenance	0.02	2013-14
28	11kv outgoing Feeder A.H.S Annual Maintenance	0.02	2013-14
29	11kv outgoing Feeder WTN-2 Annual Maintenance	0.02	2013-14
30	11kv outgoing Feeder WTN Phase2 Annual Maintenance	0.02	2013-14
31	11kv outgoing Feeder Nespak Annual Maintenance	0.02	2013-14
32	11kv outgoing Feeder N/Iqbal Annual Maintenance	0.02	2013-14
33	11kv outgoing Feeder G/Lahore Annual Maintenance	0.02	2013-14
34	11kv outgoing Feeder T-5 Annual Maintenance	0.02	2013-14
35	11kv outgoing Feeder WTN-5 Annual Maintenance	0.02	2013-14
36	11kv outgoing Feeder Baggrian Annual Maintenance	0.02	2013-14
37	11kv outgoing Feeder IEP-1 Annual Maintenance	0.02	2013-14
38	11kv outgoing Feeder WTN LAB Annual Maintenance	0.02	2013-14
39	11kv outgoing Feeder Millat Annual Maintenance	0.02	2013-14
40	11kv outgoing Feeder PIA Annual Maintenance	0.02	2013-14
41	11kv outgoing Feeder IEP-2 Annual Maintenance	0.02	2013-14
42	11kv outgoing Feeder T/Garden Annual Maintenance	0.02	2013-14
43	11kv outgoing Feeder Valancia Annual Maintenance	0.02	2013-14
44	11kv outgoing Feeder NFC Annual Maintenance	0.02	2013-14
45	11kv outgoing Feeder WTN-4 Annual Maintenance	0.02	2013-14
46	11kv outgoing Feeder C/Road Annual Maintenance	0.02	2013-14
47	11kv outgoing Feeder WTN-3 Annual Maintenance	0.02	2013-14
48	11kv outgoing Feeder T-6 Annual Maintenance	0.02	2013-14
49	11kv outgoing Feeder WTN-1 Annual Maintenance	0.02	2013-14
50	11kv outgoing Feeder UET Annual Maintenance	0.02	2013-14
51	11kv outgoing Feeder Coca Cola Annual Maintenance	0.02	2013-14
52	11kv outgoing Feeder ARA Annual Maintenance	0.02	2013-14
53	11kv outgoing Feeder AGS Annual Maintenance	0.02	2013-14
54	11kv outgoing Feeder PGHS Annual Maintenance	0.02	2013-14
55	11kv outgoing Feeder WTN-6 Annual Maintenance	0.02	2013-14
56	11kv outgoing Feeder Eden Palace Annual Maintenance	0.02	2013-14
Total		9.830	


 Managing Director WTD
 WAPDA House Lahore.

220KV GRID STATION NTDC SARFRAZ NAGAR

Date of Commissioning 1995

Sr. #	Description	Rs. Mln	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber	0.50	May-2011, Nov-2012
2	Street light of colony/switch yard lights,	1.50	Nil
3	400W, 250W, 125W, 40W, 20W chokes / bulbs/ tubelights	0.15	Jul-13
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights.	0.10	Nil
5	Switch yard cubical, M.Ks, R.Ps, sealing rubbers, repair of locks and pain.	1.10	Nil
6	Paint of 220/132/11kv transformers, control room equipments/switch yard M.Ks	0.50	Nil
7	Nomenclature plate /tags of all control room equipments/ switch yard equipment/ colony residence.	1.00	Nil
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	1.20	Feb-10
9	C.Bs/Isolators major/minor overhauling	1.80	Nil
10	Repair/replacement of air compressors, motors and all allied accessories	0.20	Nil
11	Water filtration plant repair, A.C. repair, gas charging etc.	1.80	Jun-14
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trollies etc.	0.20	Nil
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.35	Nil
14	Fire fighting equipments repair, refill and addition	1.70	Aug-13
15	T/Fs magnatic contactors, colling fans, C.Bs and wiring repairs	1.00	Jun-12
16	oil dehydration plant valves,pumps, filters, heaters etc	0.80	Sep-12
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors, blowers etc	0.90	Nil
18	petty purchases e.g non oxidantiol compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	0.30	Nil
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	-	Aug-14
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	1.00	Nil
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.50	Nil
22	Galvanizing/aluminum paint of rusty switch yard structures	0.70	Apr-14
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.80	Nil
24	H.T tape, silica gel	-	Apr-14
25	Plant/flowers, mud pots for grid upkeep/beautification	-	May-12
26	CCTV/Walkie-Talkie repair/replacement	0.30	Feb-14
27	Heavy duty steel racks for bulk material stacking	0.20	Nil
28	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.20	Nil
29	Bench vice 6"	-	Nil
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, padestal drill machine with multiple gears	-	Nil
31	Grinder/cutter 4",7" sizes, bench cutter grinder 12" size	-	Nil
32	Hydraulic press machine with all size dyes for ground operations	0.50	Nil
33	Hand held hydraulic press machine for overhead presses on bus bar etc.	-	Nil
34	Hydraulic conductor cutter	-	Nil
35	Welding plant 400Amp, 600Amp. With allied accessories	-	Nil
36	Gas welding/cutting plant with allied accessories	0.10	Nil
37	Generator 5KVA for emergency field operations	0.10	Nil
38	Pilot lifter 03-Ton	-	Nil
39	Tool cabinet	0.20	Nil
40	Manual/electric grass cutting machine	0.05	Nil
41	Smoke detectors for control room building	1.00	Nil
42	Manual/electric oil lifting pump	-	Nil
43	Repair of various test equipment like conctect resistance, timer, primer inection, megger, earth resistance test, dew point test, vidar test, Hi pot test, DES test, winding resistance t est, TTR test, Voltage variac test, AVO meter, clamp on meter etc.	0.80	Nil
44	Portable temporary grounding	0.40	Nil
45	P.P.E items (safety helmets, shoes, belts, goagles, gloves etc.)	0.30	Nil
	Miscellaneous / emergent	1.50	Nil
Total		23.750	

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 Managing Director, NTDC
 WAPDA House, Lahore

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
B	1	T&P & P.P.E. items	0.08
	2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	0.10
	3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	0.10
	4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.05
	5	Phase plates, danger plates, phase marking etc	0.05
	6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.01
	7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.01
	8	Welding of nuts and bolts of the remaining around 175 towers of y/wala-SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	0.05
	9	missing step bolts fixing	0.10
	10	Dewatering, back filling, civil foundations repair	0.10
	11	misscelleneous/emergent	0.15
Total			0.800

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Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC KALA SHAH KAKU

Date of Commissioning 1970

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber	0.08	N/A
2	Street light of colony/switch yard lights,	0.50	N/A
3	400W, 250W, 125W, 40W, 20W chokes / bulbs/ tubelights	0.20	N/A
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights.	1.00	N/A
5	Switch yard cubical, M.K.s, R.P.s, sealing rubbers, repair of locks and pain.	0.30	N/A
6	Paint of 220/132/11kv transformers, control room equipments/switch yard M.K.s	0.70	N/A
7	Nomenclature plate /tags of all control room equipments/ switch yard equipment/ colony residence.	0.10	N/A
8	Tenninal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	2.50	N/A
9	C.Bs/Isolators major/minor overhauling	1.00	N/A
10	Repair/replacement of air compressors, motors and all allied accessories	0.40	N/A
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.60	N/A
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	0.80	N/A
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.30	N/A
14	Fire fighting equipments repair, refill and addition	0.20	N/A
15	T/Fs magnatic contactors, colling fans, C.Bs and wiring repairs	0.30	N/A
16	petty purchases e.g non oxidantioi compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	0.30	N/A
17	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.50	N/A
18	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.70	N/A
19	earthing material, heat shrink tubes, bus bar shroudes etc	0.20	N/A
20	Galvanizing/aluminum paint of rusty switch yard structures	0.20	N/A
21	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.20	N/A
22	H.T tape, silica gel	0.30	N/A
23	Plant/flowers, mud pots for grid upkeep/beautification	0.30	N/A
24	CCTV/Walkie-Talkie repair/replacement	0.60	N/A
25	Heavy duty steel racks for bulk material stacking	0.50	N/A (future concern)
26	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.10	N/A (future concern)
27	Hydraulic press machine with all size dyes for ground operations	0.05	N/A (future concern)
28	Hand held hydraulic press machine for overhead presses on bus bar etc.	0.03	N/A (future concern)
29	Welding plant 400Amp, 600Amp. With allied accessories	0.06	N/A (future concern)
30	Gas welding/cutting plant with allied accessories	0.20	N/A (future concern)
31	Manual/electric grass cutting machine	0.01	N/A (future concern)
32	Smoke detectors for control room building	1.00	N/A (future concern)
	Repair of various test equipment like conctect resistance, timer, primer inection, megger, earth resistance test, dev point test, vidar test, Hi pot test, DES test, winding resistance test, TTR test, Voltage variac test, AVO meter, clamp on meter etc.	1.00	N/A
34	P.P.E items (safety helmets, shoes, belts, goagles, gloves etc.)	0.20	Dec-13
35	Anti - rust epoxy paint at different locations of towers	6.00	N/A (future concern)
36	Purchase of T&P and PPE items for T/L	0.50	Jan-14
37	Fixing and welding of nut bolts and missing braces of towers	2.00	N/A (future concern)
38	Management of discs washing purchase of CTC and cleaning clothes, repair of aged/ damaged conductor	0.50	N/A (future concern)
39	Purchasing of hardware of transmission line including repair sleeves, barbed wire, phase, dager plates.	2.50	N/A (future concern)
40	Dewatering , back filling of tower foundations	2.00	N/A (future concern)
41	Miscellaneous / emergent	6.00	N/A (future concern)
Total		34.93	

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

1	T&P & P.P.E. items	0.08	N/A
2	Transmission line hardware including repair sleeves, P.Gs, teminal clamps, earthing material etc	0.10	
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	0.10	
4	Management of disk washing,purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.05	
5	Phase plates, danger plates, phase marking etc	0.05	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.01	
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.01	
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala-SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	0.05	
9	missing step bolts fixing	0.10	
10	Dewatering, back filling, civil foundations repair	0.10	
11	misscellaneous/emergent	0.15	
Total		0.80	
Grand Total		35.73	

Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC BUND ROAD

Date of Commissioning 1988

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber	0.80	,2008
2	Street light of colony/switch yard lights.	1.50	Nil
3	400W, 250W, 125W, 40W, 20W chokes / bulbs/ tubelights	0.50	22-01-2014
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights.	1.50	,16-01-2014
5	Switch yard cubical, M.Ks, R.Ps, sealing rubbers, repair of locks and pain.	1.20	Nil
6	Paint of 220/132/11kv transformers, control room equipments/switch yard M.Ks	0.80	Nil
7	Nomenclature plate /tags of all control room equipments/ switch yard equipment/ colony residence.	1.00	Nil
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	2.70	,07-04-2014
9	C.Bs/Isolators major/minor overhauling	3.00	Nil
10	Repair/replacement of air compressors, motors and all allied accessories	0.80	,24-06-1988
11	Water filtration plant repair, A.C. repair, gas charging etc.	1.50	,2008
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	3.50	,20-11-2013
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	1.50	Nil
14	Fire fighting equipments repair, refill and addition	1.00	Nil
15	T/Fs magnetic contactors, colling fans, C.Bs and wiring repairs	1.10	Nil
16	petty purchases e.g non oxidantil compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	1.90	,22-01-2014
17	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.90	,03-04-2014
18	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	1.20	Nil
19	earthing material, heat shrink tubes, bus bar shroudes etc	1.50	Nil
20	Galvanizing/aluminum paint of rusty switch yard structures	2.50	Nil
21	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.60	Nil
22	H.T tape, silica gel	0.20	Nil
23	Plant/flowers, mud pots for grid upkeep/beautification	0.40	Nil
24	CCTV/Walkie-Talkie repair/replacement	1.50	Nil
25	Heavy duty steel racks for bulk material stacking	1.50	Nil
26	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.30	Nil
27	T&P items	0.03	Nil
28	Heavy duty drill machine etc	0.10	,22-01-2014
29	Hydraulic press machine with all size dyes for ground operations	0.40	Nil
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, pedestal drill machine with multiple gears	0.15	Nil
31	Hydraulic conductor cutter	-	,22-01-2014
32	Welding plant 400Amp, 600Amp. With allied accessories	0.10	Nil
33	Gas welding/cutting plant with allied accessories	0.10	Nil
34	Generator 5KVA for emergency field operations	0.10	Nil
35	Pilot lifter 03-Ton	-	,10-02-2014
36	Smoke detectors for control room building	0.90	Nil
37	Repair of various test equipment like conctect resistance, timer, primer inection, megger, earth resistance test, dew point test, vidar test, Hi pot test, DES test, winding resistance t est, TTR test, Voltage variac test, AVO meter, clamp on meter etc.	1.00	Nil
38	PTG	-	Nil
39	P.P.E items (safety helmets, shoes, belts, goagles, gloves etc.)	0.30	,22-01-2014
40	Miscellaneous / emergent	2.00	Nil
Total		40.075	

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

1	T&P & P.P.E. items	0.08	N/A
2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	0.10	
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	0.10	
4	Management of disk washing,purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.05	
5	Phase plates, danger plates, phase marking etc	0.05	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.01	
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.01	
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	0.05	
9	missing step bolts fixing	0.10	
10	Dewatering, back filling, civil foundations repair	0.10	
11	misscellaneous/emergent	0.15	
Total		0.800	
Total		40.875	


Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC SIALKOT

Date of Commissioning: 12-08-1999

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
A	1 Annual Maintenance of 220KV Circuit Breaker along with associated C.Ts	0.40	N.A
	2 Annual Maintenance of 132KV Circuit Breaker along with associated C.Ts	0.70	
	3 Annual Maintenance of Auto Transformers	0.32	
	4 Annual Maintenance of 11KV Incoming, out going and auxiliary	0.30	
	5 Annual Maintenance of 220/132KV Lightning Arrestor	0.05	
	6 220/132KV SF-6 Purity Test	0.03	
	7 Replacement of 132 KV Circuit Breaker	3.00	
Total		4.800	


Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC NISHATABAD FAISALABAD

Date of Commissioning
17-12-1982

Sr. #	Description of Expenditures	Rs. In Million	Remarks
1	R&M Grid Station from 07/2014 to 06/2015		To meet with the routine & emergent repair/maintenance of Grid Station & Transmission lines (detailed below)
2	R&M Transmission Lines from 07/2014 to 06/2015		
Total Expenditures from 07/2014 to 06/2015:		-	

DETAIL OF MATERIAL TO BE PROCURED/WORK ORDER FOR R&M OF GRID STATION AND TRANSMISSION LINE FROM 07/2014 TO 06/2015

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber suction pipe, canvas discharge pipe/delivery pipe	0.50	27-02-2014
2	Street light of colony/switch yard lights, boundary wall lights, indoor lights,	0.50	12-04-2014
3	400W,250W,125W,40W,20W chokes/bulbs/tubelights	0.50	26-06-2014
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	1.20	
5	Switch Yard cubical, M.Ks, R.Ps, C.Ps, sealing rubbers, repair of locks and paint	0.80	03-01-2014
6	Paint of 220/132/11KV transformers, control room panels & indoor equipments/switch yard M.Ks	0.40	
7	Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.30	0
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	0.50	22-06-2014
9	C.Bs/Isolators major/minor overhauling	1.00	25-01-2014
10	Repair/replacement of air compressors, motors and all allied accessories	0.80	21-06-2014
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.30	24-05-2014
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	0.30	
13	Grass eradication sprays, Dengue Prevention spray, water filters etc.	0.35	20-06-2014
14	Fire fighting equipments repair, refill and addition	0.40	19-03-2014
15	T/Fs magnetic contactors, cooling fans, C.Bs and wiring repairs	0.60	16-06-2014
16	oil dehydration plant valves, pumps, filters, heaters etc	0.30	
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors, blowers etc	-	
18	petty purchases e.g non oxidant oil compounds, lubricants, gas seals, bearings, cleaning stuff, paper, hand tools etc	0.30	
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.30	
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.01	
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.10	
22	Galvanizing/aluminum paint of rusty switch yard structures	0.15	06-06-2014
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.10	
24	H.T tape, silica gel	0.10	15-04-2014
25	Plant/flowers, mud pots for grid upkeep/beautification	0.50	
26	CCTV/Walkie-Talkie repair/replacement	0.80	
27	Heavy duty steel racks for bulk material stacking	0.20	
28	Aluminum folder ladder, bamboo ladder, fiber glass ladder (18',24',36' height)	0.10	
29	Bench vice 6"	0.10	
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concretes, pedestal drill machine with multiple gears	0.300	
31	Grinder/cutter 4",7" sizes, bench cutter grinder 12" size	0.10	
32	Hydraulic press machine with all size dyes for ground operations	0.50	
33	Hand held hydraulic press machine for overhead presses on bus bar etc.	-	
34	Hydraulic conductor cutter	0.100	
35	Welding plant 400Amp, 600Amp. With allied accessories	2.00	
36	Gas welding/cutting plant with allied accessories	0.10	
37	Generator 5KVA for emergency field operations	0.20	
38	Pilot lifter 03-Ton	-	
39	Tool cabinet	0.10	
40	Manual/electric grass cutting machine	0.03	
41	Smoke detectors for control room building	-	
42	Manual/electric oil lifting pump	0.20	
43	repair of various test equipments like contact resistance, timer, primary injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	0.50	
44	Portable temporary grounding	0.20	
45	P.P.E. items (safety helmets, shoes, belts, goggles, gloves etc.	0.30	
46	miscellaneous/emergent	2.00	
Total		18.135	

	Name of Transmission Lines	Date of Commissioning
1	220kv T/L GYW CCT-I & II	26-07-1987
2	220kv T/L Gatti-JWRCCT-I & II	CCT-I 26-10-1991 & CCT-II 26-
3	220kv T/L Gatti - KSK CCT-I & II	03-07-1979
4	220kv T/L Gatti - NBD CCT-I & II	03-07-1979

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

1	T&P & P.P.E. items	0.60	28-05-2014
2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	2.00	10-03-2014
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	0.60	
4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.40	29-03-2014
5	Phase plates, danger plates, phase marking etc	0.20	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.60	09-05-2014
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.10	
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	-	
9	missing step bolts fixing	0.20	
10	Dewatering, back filling, civil foundations repair	1.00	
11	miscellaneous/emergent	2.00	
Total		7.700	
Grand Total		25.835	

Managing Director NTDC
MPDA House Lahore.

220KV GRID STATION NTDC JARANWALA ROAD FAISALABAD

Date of Commissioning 17-12-1982

Sr. #	Description of Expenditures	Rs. In Million	Remarks
1	R&M Grid Station from 07/2014 to 06/2015		To meet with the routine & emergent repair/maintenance of Grid Station & Transmission lines (detailed below)
2	R&M Transmission Lines from 07/2014 to 06/2015		
Total Expenditures from 07/2014 to 06/2015:		-	

DETAIL OF MATERIAL TO BE PROCURED/WORK ORDER FOR R&M OF GRID STATION AND TRANSMISSION LINE FROM 07/2014 TO 06/2015

Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber suction pipe, canves discharge pipe/delivery pipe	1.00	,27-02-2014
2	Street light of colony/switch yard lights, boundary wall lights, indoor lights,	1.00	,12-04-2014
3	400W, 250W, 125W, 40W, 20W chokes/bulbs/tubelights	0.20	,26-06-2014
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	3.00	
5	Switch Yard cubical, M.K.s, R. Ps, C. Ps, sealing rubbers, repair of locks and paint	0.10	,03-01-2014
6	Paint of 220/132/11 KV transformers, control room panels & indoor equipments/switch yard M.K.s	0.20	
7	Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.50	0
8	Terminal clamps of C.B.s, T/Fs, B.B.s, C.T.s, Isolators, P.T.s etc.	0.50	,22-06-2014
9	C.B.s/Isolators major/minor overhauling	0.50	,25-01-2014
10	Repair/replacement of air compressors, motors and all allied accessories	0.50	,21-06-2014
11	Water filtration plant repair, A.C. repair, gas charging etc.	1.00	,24-05-2014
12	Male/Female contacts, guides, supports of 220/132/11 KV Isolators/Trolleys etc.	0.80	
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	2.00	,20-06-2014
14	Fire fighting equipments repair, refill and addition	0.50	,19-03-2014
15	T/Fs magnetic contactors, colling fans, C.B.s and wiring repairs	0.50	,16-06-2014
16	oil dehydration plant valves, pumps, filters, heaters etc	0.30	
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors, blowers etc	0.20	
18	petty purchases e.g non oxidant oil compounds, lubricants, gas seals, bearings, cleaning stuff, paper, hand tools etc	0.50	
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.30	
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.50	
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.20	
22	Galvanizing/aluminum paint of rusty switch yard structures	0.40	,06-06-2014
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.60	
24	H.T tape, silica gel	0.20	,15-04-2014
25	Plant/flowers, mud pots for grid upkeep/beautification	0.70	
26	CCTV/Walkie-Talkie repair/replacement	0.50	
27	Heavy duty steel racks for bulk material stacking	0.30	
28	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18', 24', 36' height)	0.30	
29	Bench vice 6"	0.20	
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, pedestal drill machine with multiple gears	0.500	
31	Grinder/cutter 4", 7" sizes, bench cutter grinder 12" size	0.20	
32	Hydraulic press machine with all size dyes for ground operations	-	
33	Hand held hydraulic press machine for overhead presses on bus bar etc.	0.50	
34	Hydraulic conductor cutter	-	
35	Welding plant 400Amp, 600Amp. With allied accessories	0.50	
36	Gas welding/cutting plant with allied accessories	-	
37	Generator 5KVA for emergency field operations	0.50	
38	Pilot lifter 03-Ton	0.50	
39	Tool cabinet	0.10	
40	Manual/electric grass cutting machine	0.20	
41	Smoke detectors for control room building	0.20	
42	Manual/electric oil lifting pump	0.20	
43	repair of various test equipments like contact resistance, timer, primary injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	2.00	
44	Portable temporary grounding	0.50	
45	P.P.E. items (safety helmets, shoes, belts, goggles, gloves etc.	0.20	
46	miscellaneous/emergent	2.50	
Total		26.100	

	Name of Transmission Lines	Date of Commissioning
1	220kv T/L GYW CCT-I & II	,26-07-1987
2	220kv T/L Gatti-JWRCT-I & II	CCT-I 26-10-1991 & CCT-II 26-11-1982
3	220kv T/L Gatti - KSK CCT-I & II	,03-07-1979
4	220kv T/L Gatti - NBD CCT-I & II	,03-07-1979

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
1	T&P & P.P.E. items	0.50	19-06-2014
2	Transmission line hardware including repair sleeves, P.G.s, terminal clamps, earthing material etc	2.00	,03-05-2014
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	1.50	18-02-2014
4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.10	14-02-2014
5	Phase plates, danger plates, phase marking etc	0.50	Nil
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.40	02-05-2014
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	1.20	Nil
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP	0.80	Nil
9	SNR line up to 10-12 meters to avoid theft	0.30	Nil
10	missing step bolts fixing	0.80	2010
11	Dewatering, back filling, civil foundations repair	2.00	11-06-2011
12	miscellaneous/emergent		
Total		10.100	
Grand Total		36.200	

Managing Director NTDC
WAPDA House Lahore.

220KV GRID STATION NTDC SAMUNDRI ROAD FAISALABAD

		Date of Commissioning	
Sr. #	Description of Expenditures	Rs. In Million	Remarks
1	R&M Grid Station from 07/2014 to 06/2015		To meet with the routine & emergent repair/maintenance of Grid Station & Transmission lines (detailed below)
2	R&M Transmission Lines from 07/2014 to 06/2015		
Total Expenditures from 07/2014 to 06/2015:		-	
DETAIL OF MATERIAL TO BE PROCURED/WORK ORDER FOR R&M OF GRID STATION AND TRANSMISSION LINE FROM 07/2014 TO 06/2015			
Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
A	1 Tube well, disposal pump/motor repair, rubber suction pipe, canves discharge pipe/delivery pipe	1.00	27-02-2014
	2 Street light of colony/switch yard lights, boundary wall lights, indoor lights.	0.50	12-04-2014
	3 400W,250W,125W,40W,20W chokes/bulbs/tubelights	0.50	26-06-2014
	4 Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	2.00	
	5 Switch Yard cubical, M.Ks, R.Ps, C.Ps, sealing rubbers, repair of locks and paint	0.20	03-01-2014
	6 Paint of 220/132/11KV transformers, control room panels & indoor equipments/switch yard M.Ks	0.20	
	7 Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.50	0
	8 Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	0.50	22-06-2014
	9 C.Bs/Isolators major/minor overhauling	1.00	25-01-2014
	10 Repair/replacement of air compressors, motors and all allied accessories	1.00	21-06-2014
	11 Water filtration plant repair, A.C. repair, gas charging etc.	0.50	24-05-2014
	12 Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trollies etc.	1.50	
	13 Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.20	20-06-2014
	14 Fire fighting equipments repair, refill and addition	2.00	19-03-2014
	15 T/Fs magnatic contactors, colling fans, C.Bs and wiring repairs	0.50	16-06-2014
	16 oil dehydration plant valves,pumps, filters, heaters etc	-	
	17 oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors , blowers etc	-	
	18 petty purchases e.g non oxidantiol compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	1.00	
	19 power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.50	
	20 Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.50	
	21 earthing material, heat shrink tubes, bus bar shroudes etc	0.40	
	22 Galvanizing/aluminum paint of rusty switch yard structures	0.20	06-06-2014
	23 Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.50	
	24 H.T tape, silica gel	1.00	15-04-2014
	25 Plant/flowers, mud pots for grid upkeep/beautification	1.00	
	26 CCTV/Walkie-Talkie repair/replacement	0.20	
	27 Heavy duty steel racks for bulk material stacking	0.10	
	28 Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.50	
	29 Bench vice 6"	0.50	
	30 Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, pedestal drill mackine with multiple gears	0.250	
	31 Grinder/cutter 4",7" sizes, bench cutter grinder 12" size	0.25	
	32 Hydraulic press machine with all size dyes for ground operations	-	
	33 Hand held hydraulic press machine for overhead presses on bus bar etc.	0.50	
	34 Hydraulic conductor cutter	-	
	35 Welding plant 400Amp, 600Amp. With allied accessories	0.60	
	36 Gas welding/cutting plant with allied accessories	-	
	37 Generator 5KVA for emergency field operations	-	
	38 Pilot lifter 03-Ton	0.50	
	39 Tool cabinet	0.10	
	40 Manual/electric grass cutting machine	0.20	
	41 Smoke detectors for control room building	1.00	
	42 Manual/electric oil lifting pump	0.20	
	43 repair of various test equipments like conctect resistance, timer, primery injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	2.00	
	44 Portable temporary grounding	0.50	
	45 P.P.E. items (safety helmets, shoes, belts, goagles, gloves etc.	0.20	
	46 misscellaneous/emergent	2.00	
Total		26.800	
Name of Transmission Lines		Date of Commissioning	
1	220kv T/L GYW CCT-I &II	26-07-1987	
2	220kv T/L Gatti-JWRCCT-I &II	CCT-I 26-10-1991 & CCT-II 26-11-1982	
3	220kv T/L Gatti - KSK CCT-I &II	03-07-1979	
4	220kv T/L Gatti - NBD CCT-I & II	03-07-1979	
(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
B	1 T&P & P.P.E. items	1.00	19-06-2014
	2 Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	1.00	03-05-2014
	3 Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	1.00	18-02-2014
	4 Management of disk washing,purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.10	14-02-2014
	5 Phase plates, danger plates, phase marking etc	0.10	Nil
	6 Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.50	02-05-2014
	7 Fixing of galvanized short braces in the most vulnerable areas on priority basis	1.00	Nil
	8 Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	0.20	Nil
	9 missing step bolts fixing	0.10	Nil
	10 Dewatering, back filling, civil foundations repair	0.50	2010
	11 misscellaneous/emergent	2.00	11-06-2011
Total		7.500	
Grand Total		34.300	

Managing Director NTL
WAPDA House Lahore.

Date of Commissioning 17-12-1982

Sr. #	Description of Expenditures	Rs. In Million	Remarks
1	R&M Grid Station from 07/2014 to 06/2015		To meet with the routine & emergent repair/maintenance of Grid Station & Transmission lines (detailed below)
2	R&M Transmission Lines from 07/2014 to 06/2015		
Total Expenditures from 07/2014 to 06/2015:		-	
DETAIL OF MATERIAL TO BE PROCURED/WORK ORDER FOR R&M OF GRID STATION AND TRANSMISSION LINE FROM 07/2014 TO 06/2015			
Sr. #	Description	Rs. In Million	Last Date if Activity Performed
(A) GRID MAINTENANCE/REPAIR ESTIMATE:			
1	Tube well, disposal pump/motor repair, rubber suction pipe, canves discharge pipe/delivery pipe	1.00	Jun-14
2	Street light of colony/switch yard lights, boundary wall lights, indoor lights,	0.50	Jun-14
3	400W,250W, 125W,40W,20W chokes/bulbs/tubelights	5.00	Jun-14
4	Circuit Breakers, contactors, overcurrent relays, timer, terminal block, thimble, distribution box for street lights & panel lights etc.	0.40	Jun-14
5	Switch Yard cubical, M.Ks, R.Ps, C.Ps, sealing rubbers, repair of locks and paint	1.00	Aug-13
6	Paint of 220/132/11KV transformers, control room panels & indoor equipments/switch yard M.Ks	0.15	Dec-13
7	Nomenclature plates/tags of all control room equipments/switch yard equipment/colony residences	0.10	Jul-14
8	Terminal clamps of C.Bs, T/Fs, B.Bs, C.Ts, Isolators, P.Ts etc.	0.45	
9	C.Bs/Isolators major/minor overhauling	1.00	
10	Repair/replacement of air compressors, motors and all allied accessories	0.30	
11	Water filtration plant repair, A.C. repair, gas charging etc.	0.20	Jun-14
12	Male/Female contacts, guides, supports of 220/132/11KV Isolators/Trolleys etc.	0.50	
13	Grass eradication sprays, Dngue Prevention spray, water filters etc.	0.25	May-14
14	Fire fighting equipments repair, refill and addition	0.25	Jan-14
15	T/Fs magnatic contactors, colling fans, C.Bs and wiring repairs	0.40	May-14
16	oil dehydration plant valves,pumps, filters, heaters etc	-	
17	oil regeneration plant pneumatic valves fullers earth, seals, oils, pump motors, compressors , blowers etc	-	
18	petty purchases e.g non oxidantioi compounds, lubricants, gas seals, bearings, cleaning stuff,paper, hand tools etc	1.00	May-14
19	power and control cable termination kits, joints, repair sleeves, thimbles, connectors etc	0.20	May-14
20	Annunciation blocks, control switches, indication lamps, rectifiers, meters etc	0.04	
21	earthing material, heat shrink tubes, bus bar shroudes etc	0.08	
22	Galvanizing/aluminum paint of rusty switch yard structures	0.10	
23	Repair/replacement of capacitors, fuses, supports, insulators, tubes etc.	0.20	
24	H.T tape, silica gel	0.10	Feb-14
25	Plant/flowers, mud pots for grid upkeep/beautification	0.50	Mar-14
26	CCTV/Walkie-Talkie repair/replacement	0.40	May-14
27	Heavy duty steel racks for bulk material stacking	-	
28	Aluminum folder ladder, bamboo ladder, fiber galss ladder (18',24',36' height)	0.04	
29	Bench vice 6"	-	
30	Hand held drill machine, heavy duty hammer drill machine for drilling in 18" concrets, padestal drill machine with multiple gears	-	
31	Grinder/cutter 4",7" sizes, bench cutter grinder 12" size	-	
32	Hydraulic press machine with all size dyes for ground operations	-	
33	Hand held hydraulic press machine for overhead presses on bus bar etc.	-	
34	Hydraulic conductor cutter	-	
35	Welding plant 400Amp, 600Amp. With allied accessories	-	
36	Gas welding/cutting plant with allied accessories	-	
37	Generator 5KVA for emergency field operations	-	
38	Pilot lifter 03-Ton	-	
39	Tool cabinet	0.20	
40	Manual/electric grass cutting machine	0.05	Apr-14
41	Smoke detectors for control room building	-	
42	Manual/electric oil lifting pump	0.02	
43	repair of various test equipments like conctect resistance, timer, primery injection, megger, earth resistance test, dew point test, Vidar test, Hi pot test, DES test, Winding resistance test, TTR test, Voltage Variac test, AVO meter, Clamp on meter etc.	0.05	Feb-14
44	Portable temporary grounding	0.06	
45	P.P.E. items (safety helmets, shoes, belts, goagles, gloves etc.	0.09	
46	miscellaneous/emergent	2.00	Jun-13
Total		16.615	
(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
	Name of Transmission Lines		Date of Commissioning
1	220kv T/L GYW CCT-I & II		26-07-1987
2	220kv T/L Gatti-JWRCCT-I & II		CCT-I 26-10-1991 & CCT-II 26-11-1982
3	220kv T/L Gatti - KSK CCT-I & II		03-07-1979
4	220kv T/L Gatti - NBD CCT-I & II		03-07-1979
(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:			
1	T&P & P.P.E. items	1.00	01-08-2011
2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	1.50	
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	-	
4	Management of disk washing,purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.15	01-01-2014
5	Phase plates, danger plates, phase marking etc	0.05	
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.10	
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	0.08	06-2014
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	-	
9	missing step bolts fixing	-	
10	Dewatering, back filling, civil foundations repair	-	
11	miscellaneous/emergent	2.00	
Total		4.880	
Grand Total		21.495	

Managing Director NTL
WAPDA House Lahore.

500KV T/L (M)DIVISION GATTI, FAISALABAD.

Name of Transmission Lines		Date of Commissioning
1	500kv BAROTHA - GATTI #1	TG = 22-07-1979, BG-1 = 30-04-2003
2	500kv BAROTHA - GATTI #2	TG = 23-07-1985, BG-2 = 11-05-2003
3	500kv GATTI - LAHORE #1	14-10-1993

(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

1	T&P & P.P.E. items	0.05
2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	-
3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	-
4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.10
5	Phase plates, danger plates, phase marking etc	0.05
6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.10
7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	-
8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	-
9	missing step bolts fixing	-
10	Dewatering, back filling, civil foundations repair	0.10
11	miscellaneous/emergent	1.00
Total:		1.40


Managing Director NTDC
WAPDA House Lahore.

500KV T/L (M)DIVISION TARBELA.

Name of Transmission Lines		Date of Commissioning
1	500kv TARBELA - BAROTHA #1	TB-1 = 23-04-2003,
2	500kv TARBELA - BAROTHA #2	TB-2 = 11-05-2003,
3	500kv BAROTHA - GATTI #1	TB-1 = 22-07-1979, BG-1= 23-04-2003
4	500kv BAROTHA - GATTI #2	TF-2 = 08-1985, BG-2= 11-05-2003


(B) TRANSMISSION LINES REPAIR/MAINTENANCE ESTIMATE:

B	1	T&P & P.P.E. items	0.06	
	2	Transmission line hardware including repair sleeves, P.Gs, terminal clamps, earthing material etc	-	
	3	Short hardware of transmission line including barbed wire its assemblies and fittings (where ever missing or damaged) etc	-	
	4	Management of disk washing, purchase of CTC and cleaning clothes, repair of aged/damaged conductor.	0.15	
	5	Phase plates, danger plates, phase marking etc	0.06	
	6	Anti rust epoxy paint especially on most critical and rusty locations in high polluted sections	0.13	
	7	Fixing of galvanized short braces in the most vulnerable areas on priority basis	-	
	8	Welding of nuts and bolts of the remaining around 175 towers of y/wala- SNR line and around 95 towers of NKLP-SNR line up to 10-12 meters to avoid theft	-	
	9	missing step bolts fixing	0.10	
	10	Dewatering, back filling, civil foundations repair	1.00	
	11	miscellaneous/emergent	1.50	
Total:				

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Managing Director NTDC
WAPDA House Lahore.

GSO Islamabad Maintenance Plan Summary

Sr.No.	Name of Grid Station / Transmission Line	Expenditure 2013-14 (P)	Estimates 2014-15	Commissioning Year
Grid Stations				
1	500 KV Grid Station NTDCL, Rawat	6.71	24.50	1997
2	500 KV Grid Station NTDCL, Shiekh Mohammadi Peshawar	10.68	35.32	1992
3	220 KV Grid Station NTDCL Burhan	12.21	34.25	1977
4	220 KV Grid Station NTDCL ISPR	6.53	16.30	1998
5	220 KV Grid Station NTDCL Daudkhel	7.30	17.65	1996
6	220 KV Grid Station NTDCL Shahibagh	3.02	5.82	2006
7	220 KV Grid Station NTDCL Mardan	12.98	19.28	1992
8	220 KV Grid Station NTDCL Bannu	3.41	5.65	1999
9	220 KV Grid Station NTDCL, University	1.07	10.70	2004
Grid Station Total		63.90	169.47	
Transmission Lines				
10	500/220KV T/L Division,NTDCL Peshawar	7.61	9.00	1995
11	500/220KV T/L Division,NTDCL Rewat	14.73	23.00	1977
Transmission Lines Total		22.34	32.00	
Total		86.24	201.47	



 Managing Director NTDCL
 WAPDA House Lahore.

500 KV GRID STATION NTDC, RAWAT

Name of Grid Station/Transmission line.

500KV Grid Station Rawat.

Date of commissioning.			Jun-1997
S.No	Activity/Description of Maintenance	Estimated cost (Rs. In Million)	Last date of Activity performed.
1	Shunt Reactor maintenance and replacement of defective parts	0.60	Shunt Reactor put in to bar, being not commissioned since 2007.
2	Annual maintenance of auto transformers, 500/220/132KV and 11KV power transformer.	2.00	Overhauling of Diverter switch of Auto Transformer 500/220 KV T-1, T-2,
3	Maintenance & testing of 500/220/132 KV Circuit Breakers and provision of spare parts and replacement of hard ware.	3.00	Maintenance/overhauling of pneumatic operating mechanism and replacement of twin head.
4	Maintenance / replacement of 500/22/132 KV Isolators, CCVT, CVT and lightening arrestors.	3.00	Annual maintenance / lubrication of isolators.
5	500KV Circuit Breakers compressor unit overhauling / replacement.	4.00	Gaskets of compressors replaced.
6	Station battery replacement	5.00	-
7	Refilling of Fire Fighting Equip:	0.30	6/2014.
8	Painting of Transformers/other equipments	0.10	Jun-14
9	Dissolve Gas Annalysis (DGA) Testing 1 set	6.50	--
TOTAL		24.50	


Managing Director NTDC
WAPDA House Lahore.

500 KV GRID STATION,NTDC, SHIEKH MOHAMMADI PESHAWAR

500 Grid station, NTDC Peshawar		Date of Commissioning: 1992	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity Performed
1	Replacement of 220KV AEG make Pneumatic circuit breaker	15.00	First time
2	Replacement of 1-No 220 VDC Battery bank	1.30	May-13
3	Purchasing of 500/220/132/11KV, Protection relays, energy meters and Instruments meter	3.50	Different dates during 2013-14
4	Purchase of search lights	0.50	Different dates during 2013
5	TSG, Reclamation & S.P experts visits	0.10	Different dates during 2013
6	Hiring of crane and tractor for grid Maintenance.	0.30	Different dates during 2013
7	Tools and Plants	2.00	2011
8	Purchase of T/F Oil	0.50	Apr-13
9	School and Dispensary equipment Purchase.	1.50	First time
10	Electrification of school and dispensary with 200KVA Distribution t/f.	1.00	First time
11	Reclamation workshop Auto T/F R&M Charges	3.50	Different dates during 2013-14
12	Oil Testing charges from PTESU	0.50	Different dates during 2013-14
13	Purchase of 11KV cable and other Allied accessories	1.00	Different dates during 2013-14
14	11KV Trolleys VCB R&M	0.20	Different dates during 2013-14
15	firefighting equipment filling	0.20	2012
16	Purchase of chemicals spray for yards Wild growth eradication	0.15	Different dates during 2013-14
17	Repair of security cameras	0.10	May-13
18	R&M of power transformer Auto Transformer cooling Fan	0.20	Different dates during 2013-14
19	R&M Cooling plants installed in Control & relay room	0.20	2013
20	R&M/purchase of communication System of grid security	0.10	Apr-13
21	Overhauling of water filtration Plant	0.80	2008
22	Seasonal tree plantation & flower	0.07	Spring 2013
23	Purchase of silica Gel & SF 6 Gas	1.00	2009
24	R&M 500/220KV Auto T/F T-1 & T-2, fire fighting system	0.10	Different dates during 2013-14
25	R&M 220 & 110V DC battery ch	0.20	2012
26	R&M 500KV emergency generator	0.15	Different dates during 2013-14
27	Purchase of electrolyte & Distilled Water for batteries	0.10	Different dates during 2013-14
28	R&M of tube well T/F & tube well Motor	0.15	Different dates during 2013-14
29	R&M of A.C compressors dyers	0.20	Different dates during 2013-14
30	Purchase of AC/DC MCB connector& relay Different dates 2013-14	0.10	Different dates during 2013-14
31	Purchase of hydraulic oil Mobil oil etc	0.20	Different dates during 2013-14
32	Switch yard equip: local repair	0.40	Different dates during 2013-14
TOTAL		35.32	


Managing Director NTDC
WAPDA House Lahore.


220KV GRID STATION NTDC BURHAN

220KV Grid Station NTDC Burhan		Date of Commissioning:1977	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity Performed
1	Replacement of minimum oil BBC 132KV circuit breaker with AREVA SF-6 Gas circuit breaker.	10.20	Apr-13
2	Installation charges of SF-6 Gas Circuit breaker.	1.50	Apr-13
3	220/132 kV Isolators with 2000 Amp Capacity (20 set)	4.50	Apr-13
4	5 No. 60 kg cylinder of SF-6 gas for refilling of circuit breakers.	1.10	Sep-13
5	Transformer oil 5000 Ltr for topping up and overhauling of minimum oil 132KV circuit breaker.	0.93	Apr-14
6	Replacement of 10 No. energy meters.	0.85	2002
7	220KV CT BCC 1600/5 with vertical support structure.	1.50	May-06
8	Purchasing of Sodium Search Light	0.23	Jun-14
9	Enhancement of fire fighting equipments	0.40	Nov-09
10	Maintenance of Air Conditioning Plant	0.40	Apr-14
11	Additional 110V Battery Bank alongwith accessories.	1.00	-
12	Replacement of 220KV Battery Bank	2.80	1996
13	1000MCM spare cable required to meet contingency.	1.00	1977
14	500MCM spare cable required to meet contingency.	0.50	1981
15	Tools and Plants	0.20	2009
16	Technical visit of TSG and reclamation work shop experts.	0.50	On different dates of fiscal year 2013 to 2014
17	Tangent Delta Tests of Auto Transformers oil.	0.50	Jun-01
18	Hiring of crane, tractor vehicle for grid maintenance activities.	0.50	On different dates of fiscal year 2013 to 2014
19	Repairing of turbines 50HP of water supply alongwith accessories.	0.20	1995
20	Purchasing for 220/132KV yard lightening system 400 watt.	0.20	Jun-14
21	Auto and power transformer fans maintenance, including rewinding and bearing charges.	0.20	Jun-14
22	Spray (round up) for removing wild grass.	0.10	May-14
23	Repair and maintenance of air compressor.	0.10	May-14
24	For purchasing of Main AC/DC circuit breaker and magnetic contactors.	0.10	Mar-14
25	Purchasing of hydraulic oil for 132KV minimum oil circuit breaker.	0.20	Sep-12
26	Petty purchases.	0.50	Monthly basis
27	Maintenance of security cameras.	0.05	Jun-14
28	Additional 1 No. power transformer for dual auxiliary supply alongwith installation charges.	-	-
29	Relays for 220/132/11KV power system.	4.00	9/12/2013
TOTAL		34.25	


Managing Director NTDC
WAPDA House Lahore.


220KV GRID STATION NTDC ISPR

220KV Grid Station NTDC ISPR		Date of Commissioning:1998	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity Performed
1	1. Replacement of damaged Protection Relays with new ones.(08 No)	8.00	23-05-2014
2	Replacement of 44 No. 132 kV China make isolators with new ones.	2.90	18-06-2014
3	Procurement of 11 kV Pannels /spares	2.00	Daily
4	Routine maaintenance of all equipment installed	3.40	weekly
TOTAL		16.30	


Managing Director NTDC
WAPDA House Lahore.


220KV GRID STATION NTDC DADUKHEL

220KV Grid Station NTDC DAUDKHEL		Date of Commissioning:1996	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity Performed
1	02 No. 60 kg cylinder of SF-6 gas for refilling of circuit breakers.	0.30	Jan-13
2	Replacement and installation of 12 No. energy meters.	1.00	Mar-13
3	Purchasing of Sodium Search Light	0.20	Feb-14
4	Enhancement of fire fighting equipments	0.40	Oct-13
5	Replacement and repairing of Air Conditioners	2.00	Repairing(04-2014), Replacement (Never)
6	Replacement of 220V Battery Bank	2.80	Oct-10
7	1000MCM spare cable required to meet contingency.	1.00	1996
8	500MCM spare cable required to meet contingency.	0.50	1996
9	Tools and Plants	0.20	1996
10	Visit of Technical experts in emergencies	0.50	Numerous dates from 2013-2014
11	Tangent Delta Tests of Auto Transformers oil.	0.50	Jun-01
12	Hiring of crane, tractor vehicle for grid maintenance activities.	0.50	Numerous dates from 2013-2014
13	Repairing of turbines 50HP of water supply alongwith accessories.	0.50	2005
14	Purchasing for 220/132KV yard lightening system 400 watt.	0.20	Mar-14
15	Auto and power transformer fans maintenance, including rewinding and bearing charges.	0.20	Jun-14
16	Spray (round up) for removing wild grass.	0.10	2014
17	Repair and maintenance of air compressor.	0.10	Jan-14
18	For purchasing of Main AC/DC circuit breaker and magnetic contactors.	0.10	Apr-14
19	Petty purchases.	0.50	Monthly basis
20	Maintenance of security cameras.	0.05	2013
21	Additional 1 No. power transformer for dual auxiliary supply alongwith installation charges.	2.00	1996-
22	Relays for 220/132/11KV power system.	4.00	9/12/2013
TOTAL		17.65	


 Managing Director NTDC
 WAPDA House Lahore.


220KV GRID STATION NTDC SHAHIBAGH

<u>220KV Grid Station NTDC Shahibagh</u>		Date of Commissioning:2006	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity
i.	Replacement of 220 kV side isolators motors 24 Nos	0.60	2006
ii.	Replacement of 132 kV side isolators motors 08 Nos	0.20	2006
iii.	Replacement of 220V and 110 V Battery sets (01 set each)	1.90	Fresh demand
iv.	Transformer Oil Testing Charges	0.12	Fresh demand
v.	Routine Maintenance, unforeseen works/emergencies and security Arrangements	3.00	---
TOTAL		5.82	


Managing Director NTDC
WAPDA House Lahore.


220KV GRID STATION NTDC MARDAN

220KV Grid Station NTDC Mardan		Date of Commissioning 1992		
Sr. No.	Activity/Description of Maintenance	Estimate Cost (Rs.in million)	Last Date of Activity Performed	Remarks
1	160MVA 220/132KV Auto Tf: (Make Meident Sha) Carriage Charges from Mardan to PTESU Workshop Lahore for Major repair works	1.48	16.08.2012	As per instruction of Worthy M.D NTDC Lahore camp at 220KV GSS NTDC Mardan.
2	160MVA 220/132KV Auto Tf: (Make Fuji) Dismantling charges	0.40	2010	-do-
3	Control Panel for 5Nos.Transformers	1.00	-	-
4	Relay Panel for 5-Nos. Transformers	5.00	-	-
5	Grid Maintenance routine & emergency works.	1.50	-	-
6	A,C Plants Floor stand type	2.50	-	Approved by M.D NTDC
7	Un foreseen Expenditure in emergency situation.	2.00	-	-
8	110-V & 220-V Rectifier (1+1)	0.80	-	NO spare available for emergency
9	1000mcm Cable (1000-meters)	0.40	-	-
10	500mcm Cable (1000-meters)	0.40	-	-do-
11	Conductors 900mm ² (500meters)	0.50	-	-do-
12	Nut Bolts , connecting claims	0.10	-	-do-
13	MW meter(20-Nos.) & Ampere meters (40-Nos)	0.20	-	-do-
14	Replacement of old damaged Control Cables with certain modifications in scheme	3.00	--	--
TOTAL		19.28		


 Managing Director NTDC
 WAPDA House Lahore.

220KV GRID STATION NTDC BANNU

220KV Grid Station NTDC BANNU		Date of Commissioning:1999	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in millions)	Last Date of Activity Performed
1	Replacement of Rotary switches of all 132KV CB	0.10	Till commissioning
2	Replacement various contactors of Controlling Circuit of 132KV CB's	0.07	Till commissioning
3	1No. 60 kg cylinder of SF-6 gas for refilling of circuit breakers.	0.25	May-14
4	Transformer oil 2000 Ltr for topping up and overhauling of tape changer of Auto T/F T-1, T-2	0.37	Apr-09
5	Purchasing of Sodium Vapor Lamps for illumination of 220/132KV Switch yard	0.11	2010
6	Enhancement of Fire Fighting Equipments	0.05	2011
7	Purchasing of Battery cells	0.20	Till Commissioning
8	Purchase of Oil DES, TTR, C&DF & CB Timing Test Sets	0.10	Nil
9	Hiring of Tractor For Removal of Wild Growth from G/S	0.20	2008
10	Purchase of Submersible water pump along with Motor for G/S Colony	0.60	N.A
11	Installation of Security CCTV Cameras for G/S	0.30	Nil
12	Purchase of 01 No. 11KV I/C & O/G switch gear panels	3.00	2010
13	Technical Visit of TSG	0.30	Feb-14
TOTAL		5.65	



 Managing Director NTDC
 WAPDA House Lahore.

220 KV GRID STATION,NTDC, UNIVERSITY

Name of Grid Station/Transmission line.			220 KV G/S University.
Date of commissioning.			Spring 2004
S.No	Activity/Description of Maintenance	Estimated cost (Rs. In Million)	Last date of Activity performed.
1	Purchase of 11 kV Trolleys	0.50	---
2	Routine Maintenance of all Equipments installed.	1.20	Almost Weekly
TOTAL		1.70	

500/220KV T/L DIVISION,NTDC PESHAWAR

500/220KV T/L Division,NTDC Peshawar		Date of Commissioning:08-12-1995	
Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. In millions)	Last Date of Activity Performed
1	R& M 500 kV Transmission lines 53-05-03-000	5.00	Sabotage of tower No. 327 dt 05-05-2014
2	R& M 220 kV Transmission lines 53-05-04-000	4.00	Induction of new transmission lines of Mansehra
TOTAL		9.00	


 Managing Director NTDC
 WAPDA House Lahore

500/220KV T/L DIVISION,NTDC RAWAT

500 KV Brotha-Rawat Transmission Line.		Date of Commissioning	October 5, 2007
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	*Const. of Retaining Wall of Tower No. 02	3.00	N/A
2	Const. of Retaining Wall of Tower No. 21	3.00	N/A
3	Const. of Retaining Wall of Tower No. 222	2.50	N/A
4	Const. of Retaining Wall of Tower No. 223	2.50	N/A
5	Const. of Retaining Wall of Tower No. 275	2.50	N/A
6	Const. of Retaining Wall of Tower No. 268	2.50	N/A
7	Const. of Retaining Wall of Tower No. 251	2.50	N/A
8	Const. of Retaining Wall of Tower No. 216	2.50	N/A
9	Const. of Retaining Wall of Tower No. 235	2.00	N/A
Total cost		23.00	

500 KV Tarbela-Rawat		Date of Commissioning	19-02-1997
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	*Const. of Retaining wall tower No. 42	4.00	N/A
2	*Const. of Retaining wall tower No. 43	4.00	N/A
3	*Const. of Retaining wall tower No. 44	4.00	N/A
4	Const. of Retaining wall tower No. 94	2.00	N/A
5	Const. of Retaining wall tower No. 122	2.00	N/A
6	Const. of Retaining wall tower No. 132	2.50	N/A
7	Const. of Retaining wall tower No. 183	2.50	N/A
8	Repair & Maintenance & Protection of Tower	2.50	N/A
Total Cost.		23.50	

500 KV Rawat-Ghakkar Ckt-I & II		Date of Commissioning	11/10/2009
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Const. of Retaining wall tower No. 373	3.00	N/A
2	Const. of Retaining wall tower No. 374	3.00	N/A
3	*Const. of Retaining wall tower No. 173	3.00	N/A
4	*Const. of Retaining wall tower No. 228	3.00	N/A
5	*Const. of Retaining wall tower No. 288	3.00	N/A
6	*Const. of Retaining wall tower No. 292	3.00	N/A
7	Const. of Retaining wall tower No. 262	3.00	N/A
8	*Repair & Maintenance & Protection of tower No. 243, 260, 243	0.70	N/A
Total Cost.		21.70	

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11/10/2009

500 KV Ghakkar-Sheikhupura (Ckt-I & II)		Date of Commissioning	11/10/2009
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Const. of Retaining wall tower No. 98	2.50	N/A
2	Maintenance of Retaining Wall Ghakkar-Lahore Transmission Line (I & II)	1.50	N/A
	Total Cost.	4.00	

220 KV Mansehra-ISPR Transmission Line.		Date of Commissioning	--
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Const. of Retaining wall tower No. 138	3.00	N/A
2	Const. of Retaining wall tower No. 140	3.00	N/A
3	Const. of Retaining wall tower No. 257	3.00	N/A
4	Const. of Retaining wall tower No. 276	3.00	N/A
5	Const. of Retaining wall tower No. 272	3.00	N/A
6	Const. of Retaining wall tower No. 317	3.00	N/A
7	Const. of Retaining wall tower No. 318	3.00	N/A
8	Const. of Retaining wall tower No. 337	3.00	N/A
9	Const. of Retaining wall tower No. 343	3.00	N/A
10	*Welding of Nut & Bolts (Complete Transmission Line)	8.00	N/A
	Total Cost.	35.00	

220 KV Burhan-Sangjani (I & II)		Date of Commissioning	17-12-1998
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	*Re-Conducting of Tower No. 9 to 11	3.00	N/A
2	Const. of Retaining wall tower No. 34	2.50	N/A
3	Const. of Retaining Wall tower No. 36	2.00	N/A
4	Const. of Retaining Wall tower No. 44	2.50	N/A
	Total Cost.	10.00	

220 KV Mangla-Rawat Transmission Line		Date of Commissioning	9/6/1977
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	*Re-Routing of Tower No. 189 to 194 as approved by Desing Dept. NTDC lahore. (Dismanteling of Tower, Foundation, Erection, Stringing etc)	50.00	N/A
2	*Const. of Retaining wall tower No. 70	4.00	N/A
	Total Cost.	54.00	N/A



Managing Director NTDC
WAPDA House Lahore.

220 KV Tarbela-Burhan Circuit-I		Date of Commissioning	9/6/1977
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Repair of Reaining Wall tower No. 31,	0.50	N/A
2	Const. of Retaining wall tower No. 52	3.00	N/A
	Total Cost.	3.50	

220 KV Mangla-Ghakkar Ckt-I & II		Date of Commissioning	18-07-1967
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	*Const. of Retaining wall tower No. 117 (drawing approved by Design office lahore.)	3.00	N/A
	Total Cost.	3.00	


220 KV Rawat-Univ Circuit-I & II		Date of Commissioning	13-09-2004
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Repair, Maintenance & Protection of Tower No. 114, 117, 119, 121, 122, 125, 137	4.00	N/A
	Total Cost.	4.00	

220 KV Rawat-Bahria-Sangjani Ckt-I & II		Date of Commissioning	9/6/1977
S#	Activity/ Description of Maintenance	Estimated Cost (in Million)	Last date of activity performed
1	Const. of Retaining Wall Tower No. 30	2.00	N/A
2	Const. of Retaining Wall Tower No. 29	2.00	N/A
3	Const. of Retaining Wall Tower No. 28	2.00	N/A
	Total Cost.	6.00	
T/L TOTAL			187.70


 Managing Director NTDC
 WAPDA House Lahore.


GSO Hyderabad Maintenance Plan Summary

Sr.No.	Name of Grid Station/ Transmission Line	Expenditure 2013-14 (P)	Estimates 2014-15	Commissioning Year
Grid Stations				
1	220 KV System GSO NTDC Hala Road Hyderabad	25.90	32.20	1976
2	500 KV P&I Division GSO NTDC Jamshoro	0.91	1.00	
3	500KV Grid Station GSO NTDC Dadu	1.59	2.25	1983
4	500 KV Grid Station GSO NTDC Guddu	1.58	2.02	
5	220 KV Grid Station GSO NTDC TM Khan Road Hyderabad	2.06	2.50	2000
6	XEN Civil Division GSO NTDC Hyderabad	36.57	43.77	
7	220 KV G/S GSO NTDC Shikarpur	0.92	2.25	2001
8	500 KV G/Station GSO NTDC Jamshoro	1.36	1.00	1983
9	220 KV G/Station GSO NTDC Quetta	6.77	7.84	1983
10	220 KV G/Station GSO NTDC Sibbi	39.38	48.50	1977
11	500 KV NKI G/S GSO NTDC Karachi	4.83	36.53	2006
12	220KV Grid Station GSO NTDC Rohri	0.48	0.65	2010
Grid Station Total		122.34	180.51	
Transmission Lines				
12	220KV T/Line Jamshoro	15.73	1.00	1984
13	500 KV T/L Division GSO NTDC Dadu	9.42	3.20	1987
14	220KV T/Line Shikarpur, Rohri, Dharki	4.65	1.65	2009
Transmission Lines Total		29.80	5.85	
Total		152.14	186.36	


Managing Director NTDC
WAPDA House Lahore.

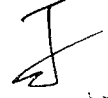
220 KV System GSO NTDCL Hala Road Hyderabad

		Date of Commissioning: 1976	
S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Shifting of 160 MVA Auto Transformer (Burnt) from 220KV Grid Station Hala Road Hyderabad to PTESU Workshop NKLP Lahore	1.50	Jun-14
2	Fire fighting system refilling and maintenance	0.30	08.05.2013
3	Payment required to be made to TSG regarding different maintenance activities performed at 220KV Grid Station Hala Road Hyderabad	2.10	2013-14
4	Material shifting from different warehouses of NTDCL to "A" Type Store GSO NTDCL Kotri	1.00	2013-14
5	Maintenance of 220KV, 132KV switchyard and 11kVPannels allied equipments for smooth working of 220KV System	0.70	2013-14
6	Replacement /Installation of 20/26 MVA Transformer from Lahore to Hyderabad	18.00	Oct-12
7	220V DC Battery Bank Replacement	2.00	Apr-09
8	220KV CVT Replacement	0.60	Oct-09
9	11kV Bank 1+5	5.00	Aug-86
10	11kV CTs (Incoming) 1600/800/5Amp 2sets	0.50	Aug-98
11	11kV CTs (Outgoing) 400/200/5Amp 3sets	0.50	Aug-98
Total		32.20	


Managing Director NTDC
WAPDA House Lahore.

500 KV P&I Division GSO NTDCL Jamshoro

		<u>Date of Commissioning: NIL</u>	
S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Repairing of relay 500KV Grid Station Dadu, Jamshoro & 220KV Grid Station Hala Road Hyderabad.	0.25	2013-14
2	Repair of dehydration plant being used at 500KV Grid Station Jamshoro, Dadu & 220KV Grid Station Hala Road & T.M.Kahn Road Hyderabad.	0.30	2013-14
3	Repair of Test set available at 500KV Grid Station Dadu, Jamshoro & 220KV Grid Station Hala Road Hyd.	0.20	2013-14
4	Repair of Alarm indication electronics cards 500KV Grid Station Dadu, Jamshoro & 220KV Grid Station Hala Road Hyderabad.	0.25	2013-14
Total		1.00	


 Managing Director NTDCL
 WAPDA House Lahore.

500KV Grid Station GSO NTDC Dadu

Date of Commissioning: 1983

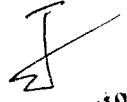
S.No.	Acitivity/ Description of Maintenance	Estimated Cost	Last Date of Activity Performed
		(Rs. In Millions)	
1	Repair and maintenance (Emergency and Preventive) of Circuit Breakers, Isolators, Transformers, Shunt Reactors and other Grid Station equipments etc.	0.90	Annual Maintenance/ overhauling of T/Fs, shunt Reactors, C.Bs, Isolators, Replacement of Gaskets, Repair of faulty Parts etc 2013-14
2	Repair and Maintenance of 08 ton Split type Air Conditioners	0.20	Overhauling and service 2013-14
3	Relay Room, Control Room, Offices Repair and Maintenance	0.20	Lighting, Painting, Ventilation etc 2013-14
4	Grid Station Lighting	0.20	Replacement of Chokes, Bulbs, fixtures, supply cables etc 2013-14
5	Refilling of Fire Extinguishers	0.20	Refilling, replacement of nozzles and pipes 2013-14
6	Repair and Maintenance of Battery Banks and Battery Chargers	0.05	Replacement of defective cells, cleaning, ventilation, replacement of electrolyte and distilled water, contact lubrication etc 2013-14
7	Spray Paint of Grid Station equipments e.g. Transformers, Shunt Reactors, MKs, Offices etc	0.20	2013-14
8	Grass cutting in switchyard area	0.30	In progress
Total		2.25	


Managing Director NTDC
WAPDA House Lahore.

500 KV Grid Station GSO NTDCL Guddu

Date of Commissioning: NIL


S.No.	Activity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Shunt Reactor maintenance and replacement of defective parts	0.36	Annual maintenance, gaskets replaced, leakage attend
2	Annual maintenance of auto transformers, 500/220kV 450MVA Auto Transformers	0.35	Annual maintenance, rewinding greasing of Fans and over hauling of Diverter switch
3	Maintenance and testing of 500kV Circuit Breakers and provision of spare parts and replacement of hard ware.	0.33	Maintenance / overhauling of pneumatic operating mechanism and replacement of twin head.
4	Maintenance/replacement of 500kV Isolators, CCVT, CVT and lighting Arrestors.	0.39	Annual maintenance, Lubrication of Isolators
5	500kV Circuit Breakers compressor unit overhauling /replacement	0.20	Gaskets of compressors replaced
6	Annual testing carried out by TSG NTDC like Thermovision Survey of Grid Station and Energy Meters testing.	0.30	02/2013 and 05/2014
7	Refilling of Fire Fighting Equipments	0.10	Feb-14
Total		2.02	


Managing Director NTDC
WAPDA House Lahore.

220 KV Grid Station GSO NTDCL TM Khan Road Hyderabad

Date of Commissioning: 30.09.2000


S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Repair and Annual Maintenance of all equipments installed in 220kV & 132kV Switchyards, Battery Room, 11kV Room during the year 2014-15, as per SOP. Replacement of 220V DC Battery Bank (110 Cells).	1.15	As Per SOP Schedule, the annual maintenance and testing of all the equipments was carried-out. The 220V DC Battery Bank was installed on 04.05.2007.
2	Re-filling of Fire Extinguishers	0.10	21.05.2014
3	Repair and Annual Maintenance of all the equipments installed in Control Room & Relay Room during the year 2014-15, as per SOP.	0.50	As Per SOP Schedule, the annual maintenance and testing of all the equipments was carried-out.
4	Annual Service & Repair of 14 Nos Air Conditioner Units installed in Control Room, Relay Room, Telecom Room, Offices & Mosque.	0.10	21.05.2014
5	Repair and Maintenance of 7km long water supply line from Akram Canal to NTPS NTDCL Colony TMKhan Road Hyderabad during the year 2014-15.	0.40	The emergent repair and maintenance of the water supply line was carried-out as and when it was broken.
6	Repair and Maintenance of petty civil works of the grid station during the year 2014-15.	0.25	The emergent petty civil works were carried-out repeatedly as and when needed.
Total		2.50	


Managing Director NTDC
WAPDA House Lahore.

XEN Civil Division GSO NTDCL Hyderabad

Date of Commissioning: NIL

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Estimate for Dressing, Leveling CC Block Along With SMS Room at 132/220Kv Switch Yard Sides & Grid Station T M Khan Road Hyderabad.	0.89	Under process
2	Estimate of Rehabilitation of RCC Trenches & Trench Covers, Construction of Trench Covers Re-Construction of Trenches & Sand Repair Equipment Foundation of Bay No-03 at 500Kv Grid Station Dadu.	3.93	Approved
3	Estimate For Spreading & Supplying Of Crushed Stone/Water Born gravel Of 3/4" Size At 132 Kv Grid Station Dadu.	3.42	Under process
4	Estimate For Spreading & Supplying Of Crushed Stone /Water Born Gravel Of 3/4" Size At 220 Kv Grid Station Dadu.	9.92	Under process
5	Estimate For ICI Coal tar Fencing & Foundation of Switch Yard at 132Kv Grid Station Dadu.	0.85	Under process
6	Estimate for Painting of Switch Yard Fencing & Cleaning of Site at 500/220kv Grid Station GSO NTDC NKI Karachi.	1.50	Under process
7	Supply and Filling Sand, Water Born Gravel at 220Kv Grid Station NTDC Shikarpur	3.73	Under process
8	Barbed Wire Fencing at 220Kv Grid Station NTDC Sibbi	2.34	Approved
9	Barbed Wire Fencing at 220Kv Grid Station NTDC Quetta	1.80	Under process
10	Estimate For Roof Topping & AM&R of Control House Building And Renovation of Bathrooms at 220Kv Grid Station TM Khan Road Hyderabad.	2.50	Under process
11	Estimate For AM & R Repair and Colour Washing of Boundary Wall at 500Kv Grid Station Dadu.	1.15	Under process
12	Estimate for Dismantling, Reconstruction, Angle Iron Fixing, Cement Plaster & Colour Washing of Boundary Wall at 220Kv Grid Station Hala Road Hyderabad.	4.78	Approved
13	Maintenance & Repair of Boundary Wall , Counter Fort Walls, Control House Building & Equipment Foundation at 220Kv Grid Station NTDC Shikarpur	3.99	Under process
14	Re-Strengthen of tower No. (JH-36-37) by Providing Earth Filling & RCC Protection wall near 220Kv Grid Station Hala Road Hyderabad	2.99	Approved
Total		43.77	


 Managing Director
 WAPDA Hyderabad

220 KV G/S GSO NTDCL Shikarpur

Date of Commissioning: 2001

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Annual Maintenance and testing of 220 /132 KV Circuit Breakers, repair of defective parts purchase of lubricants & cleaning components.	0.25	N/A
2	Annual Maintenance and testing of 220/ 132kv Circuit Breakers & provision of spare & replacement of hardware	0.30	N/A
3	Testing / replacement of 220 / 132KV isolators, CCVTS, CVTS & lighting arrestors.	0.30	N/A
4	220 KV circuit breaker compressor unit overhauling / replacement	0.20	N/A
5	Purchasing of lights, cooling system of control house building, repair of furniture & steel almaries etc.	1.20	N/A
Total		2.25	


Managing Director NTDC
WAPDA House Lahore.

500 KV G/Station GSO NTDCL Jamshoro

Date of Commissioning: 1983-84

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Annual Maintenance of Auto Transformers 500/220/132 KV and shunt Reactor repair of defective parts and purchase of spares as per requirement.	0.30	N/A
2	Maintenance and testing of 500/220/132KV Circuit Breakers, repair of defective parts purchase of lubricants, cleaning components and overhauling of compressor units etc.	1.50	N/A
3	Maintenance of 500/220/132KV Isolators, CCVT, CVT and Lighting arrestors replacement of defective parts/ hardware purchase of Lubricants and cleaning solvent etc.	0.20	N/A
Total		2.00	




Managing Director NTDC
WAPDA House Lahore.

220 KV G/Station GSO NTDCL Quetta

Date of Commissioning: 1983-84

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Repair/Maintenance of 08Nos. 220KV C.Bs, compressor unit overhauling/replacement	0.08	Annual/ Routine R&M
2	Repair/Maintenance of 04 Nos. 132KV C.Bs.	0.06	Annual/ Routine R&M
3	R & M of 30 Nos. 220 KV Isolators.	0.35	Annual/ Routine R&M
4	R&M of 132KV Isolators	1.50	Annual/ Routine R&M
5	R & M/ Replacement of Station Battery Bank/ Battery Charger.	0.35	Annual/ Routine R&M
6	R&M of 11KV outgoing / incoming system	0.10	Annual/ Routine R&M
7	Fire Fighting Extinguishers	0.50	Annual Refilling/ Repair
8	R&M of 220 KV Colony & Mosque	1.20	Minor R &M
9	132/220 KV Yard fencing etc	0.10	Minor R &M
10	Office Building / Control Rooms	0.60	Minor R &M
11	Backfilling	1.00	Routing R & M
12	Stone Pitching	1.00	Routing R & M
13	Replacement/Repair of damaged Discs	0.50	Routing R & M
14	Provision of missing braces/fabrication etc.	0.50	Routing R & M
Total		7.84	


Managing Director NTDC
WAPDA House Lahore.

220 KV G/Station GSO NTDCL Sibbi

Date of Commissioning: 1977

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Annual maintenance of Auto Transformer 220/132 KV and 11KV power transformer	3.00	Overhauling of Divertor Switch carried out on June/July 2012.
2	Maintenance & testing of 220/132 KV circuit breakers and provision of spare parts and replacement of hard ware.	2.00	Maintenance and overhauling
3	Maintenance / Replacement f 220/132KV isolators CCTV, CVT and lightening arrestors.	2.50	Annual Maintenance
4	220/132 KV Circuit breakers overhauling/ replacement	5.00	-
5	Station Battery replacement (If Required)	5.00	-
6	Refilling of fire fighting equipment	1.00	May-14
7	Maintenance / Rehabilitation of Sabotage activities on Transmission Lines (if required)	30.00	-
Total		48.50	


 (Signature of the Officer)
 10/01/2014

500 KV NKI G/S GSO NTDC Karachi

Date of Commissioning: 05.05.2006

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
i.	Annual Maimtenance of Auto Tronsformer 500/220/23 KV	0.40	
ii.	Maintenance & Testing of 500/220 KV / 23 KV C.V provision of spare parts & replacement of hardware	0.40	
iii.	Maintenance of 500 / 220 KV Isolators, 500 CVT & 220 CVT 500 KV & 220 KV L.A.S	0.10	
iv.	Station Battery replacement (if required)	5.00	
v.	Refilling of Fire Fighting Equipment	0.50	Jun-08
vi.	Maintenance / replacement of Sergi System Spare Parts	30.00	
vii.	Colony System of Control House Building	0.10	
viii.	Battery Chargers	0.03	
Total		36.53	


Managing Director NTDC
WAPDA House Lahore.

220KV Grid Station GSO NTDCL Rohri

Date of Commissioning 25.12.2010

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	Annual maintenance/testing of 160MVA Auto Transformer Huapeng China Made	0.15	29.12.2013
2	Maintenance/ testing of 220kv/132kv breakers (03 Nos) SF6 Gas operated	0.15	29.12.2013
3	Maintenance/testing of 220kv/132kv isolators, CCVT, CVT and Lighting arrester	0.10	Nil due to non availability of testing sets
4	Maintenance of Diesel Generator	0.15	Nil
5	Re filling of fire fighting Equipments	0.10	28.02.2013
Total		0.65	



Managing Director NTDC
WAPDA House, Lahore.


220KV Transmission Line Jamshoro

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
(a) 220KV T/Line Jamshoro - KDA33 Double Circuit		<u>Date of Commissioning: 1984</u>	
1	Maintenance of Line including installation of missing tower braces with fabrication, replacement of disc insulators, and installation/preparation of conductor clamps for Dead End Towers at different tower locations for re-strengthening of T/Line.	0.50	5/6/2014
(b) 220KV T/Line Jamshoro – Hala Road Double Circuit		<u>Date of Commissioning: 1990/1996</u>	
2	Maintenance of Line including installation of missing tower braces with fabrication, replacement of damaged disc insulators, and installation/preparation of conductor	0.20	3/5/2014
(c) 220KV T/Line Jamshoro – T. M. Khan Road Double		<u>Date of Commissioning: 2006</u>	
3	Maintenance of Line including installation of missing tower braces with fabrication, installation of conductor	0.30	4/6/2014
Sub Total		1.00	

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Managing Director NTDC
Wapda House Lahore

S.No.	Activity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
(i)	500 Kv T/L NK1 - JAMSHORO CIRCUIT NO: I	Date of Commissioning: 19.04.2006	
	(a) Patrolling of T/ L Lines. (b) Installation of Braces & Fabrication. (c) Re Cycling of NUT & Bolts (Due to not available in NTDC). (d) Fabrication of Braces (e) Back Filling of Foundation. (f) Replacement of Spacer Dampers (g) Tightening of Nut & Bolts of Towers & Hard ware. (h) Replacement of Disc Insulators (i) Attend the Rusted Nut & Bolts. (j) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	2.00	30.06.2014
(ii)	500 Kv T/L HUB - NKI CIRCUIT NO: I	Date of Commissioning: 25.04.2006	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Replacement of Disc Insulators (h) Attend the Rusted Nut & Bolts. (i) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	0.20	19.06.2014
(iii)	500 Kv T/L HUB - JAMSHORO (DIRECT) CIRCUIT NO: II	Date of Commissioning: 29.10.1996	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Towers & Hard ware (h) Replacement of Disc Insulators (i) Attend the Rusted Nut & Bolts. (j) Tree Cutting (k) Repairing of Conductor (j) Washing/Cleaning of Disc Insulators	0.20	18.06.2014
(iv)	500 Kv T/L JAMSHORO - DADU CIRCUIT NO: I	Date of Commissioning: 24.07.1987	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Replacement of Disc Insulators (h) Attend the Rusted Nut & Bolts. (i) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	0.10	30.06.2014


Managing Director NTDC
WAPDA House Lahore.

(v)	500 Kv T/L DADU - JAMSHORO CIRCUIT NO: II	Date of Commissioning: 19.10.1994	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Replacement of Disc Insulators (h) Attend the Rusted Nut & Bolts. (i) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	0.10	27.06.2014
(vi)	500 Kv T/L DADU - GUDDU CIRCUIT NO: I	Date of Commissioning: 19.10.1998	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Replacement of Disc Insulators (h) Attend the Rusted Nut & Bolts. (i) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	0.10	18.06.2014
(vii)	500 Kv T/L GUDDU - DADU CIRCUIT NO: I	Date of Commissioning: 29.08.1995	
	(a) Patrolling of T/ L Lines. (b) Re Cycling of NUT & Bolts (Due to not available in NTDC). (c) Fabrication of Braces (d) Back Filling of Foundation. (e) Replacement of Spacer Dampers (f) Tightening of Nut & Bolts of Towers & Hard ware. (g) Replacement of Disc Insulators (h) Attend the Rusted Nut & Bolts. (i) Tree Cutting (j) Repairing of Conductor (k) Washing/Cleaning of Disc Insulators	0.50	27.06.2014
Total		3.20	

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Managing Director NTDC
WAPDA House Lahore.

220KV T/Line Shikarpur, Rohri, Dharki

S.No.	Acitivity/ Description of Maintenance	Estimated Cost (Rs. In Millions)	Last Date of Activity Performed
1	220KV T/Line Daharki Engro	Date of Commissioning 24.06.2009	
	Installation of Tower Braces/Replacement of Disc Insulator to allotted emergency and patrolling	1.30	02.2014 & 05.2014 Patrolling and installation of tower braces
2	220KV T/Line Shikarpur Rohri	Date of Commissioning 24.06.2009	
	Installation of Tower Braces/Replacement of Disc Insulator to allotted emergency and patrolling	0.35	06.2014 (Patrolling)
Total		1.65	

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**Managing Director NTDC
WAPDA House Lahore.**

GSO Multan Maintenance Plan Summary

Sr.No.	Name of Grid Station / Transmission Line	Expenditure 2013-14 (P)	Estimates 2014-15	Commissioning Year
Grid Stations				
1	500 KV Grid Station NTDCL MuzaffarGarh	1.71	2.60	2000
2	500 KV Grid Station NTDCL Yousafwala	1.91	2.90	1987
3	500KV GRID STATION NTDCL Multan	9.55	10.40	1981
4	220KV Grid Station NTDCL Vehari	2.92	4.01	1998
5	220KV Grid Station NTDCL MuzaffarGarh	1.09	1.50	2008
6	220KV Grid Station NTDC Bahawalpur	1.23	2.02	2005
Grid Station Total		18.42	23.43	
Transmission Lines				
7	220KV T/L division NTDCL Multan	3.90	5.10	1980
8	500KV T/L (S) division NTDCL Multan	2.37	2.51	1986
9	500KV T/L (N) division NTDCL Multan	0.93	1.80	1986
Transmission Lines Total		7.20	9.41	
Total		25.62	32.84	



Managing Director NTDC
WAPDA House Lahore.

500 KV Grid Station NTDCL Muzaffargarh

Date of Commissioning

7-Mar-2000

Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in Millions)	Last Date of Activity Performed
1	Major Over Hauling of Tap Changer ATB-II (600 MVA)	0.05	Energized in 2009
2	General / Routine Maintenance of Equipment Installed & Plants etc. (Annually)	0.50	-
3	Lights for Yard, Boundary Walls, Store and Control Room Building etc.	0.50	-
4	Air Conditioners Major Maintenance (Compressor Repair/Replacement, Gas Charging, accessories and labor Charges etc.)	0.50	-
5	Scotty Cylinders for Analyzing Transformer Oil (DGA (Dissolved Gas Analysis) Lab)	0.40	Expiry From 2011
6	General/Routine Maintenance for P&I Division	0.15	-
7	Miscellaneous	0.50	-
Total		2.60	-



Managing Director NTDC
WAPDA House Lahore.

500 KV Grid Station NTDCL Yousafwala

Date of Commissioning

1987


Sr. No.	Activity/Description of Maintenance	Estimated Cost (Rs. in Millions)	Last Date of Activity Performed
1	Major Over Hauling of Tap Changer ATB-I & ATB-II (600 MVA)	0.20	Energized in 2007
2	General / Routine Maintenance of Equipment Installed & Plants etc. (Annually)	0.50	-
3	Lights for Yard, Boundary Walls, Store and Control Room Building, Colony etc.	0.25	-
4	Air Conditioners Major Maintenance (Compressor Repair/Replacement, Gas Charging, accessories and labor Charges etc.)	0.60	-
5	Dissolved Gas Analysis	0.20	-
6	General/Routine Maintenance for P&I Division	0.15	-
7	Miscellaneous	1.00	-
Total		2.90	-

Managing Director NTDCL
WAPDA House Lahore.

500KV GRID STATION NTDCL MULTAN

DATE OF COMMISSIONING 1981


Sr.No	Description of Maintenance	Estimated cost (Rs. Million)	Last Date Activity performed
1	General Annual Grid Maintenance of 500KV/220KV/132KV (Manufacturing of parts etc)	2.40	
2	Emergency Grid Maintenance of 500KV/220KV/132KV	0.50	15/05/2014
3	Maintenance of Grid Station Cooling System	1.00	
4	Repair & Maintenance of Trans and Despatch Plant	6.10	
5	Repair & Maintenance of General Plant	0.40	
	Total Cost	10.40	


Managing Director NTDCL
WAPDA House Lahore.

220KV Grid Station NTDCL Vehari

Date of Commissioning:
29-03-1998


Sr. No.	Activity/ Description of Maintenance	Estimated Cost. (Rs.in Mln)	Last Date of Activity Performed
1	Mercury Lamps 250-Watts	0.03	Routine Maintenance
2	Indication Lamps DC	0.06	-do-
3	Mercury Chokes 250 Watt	0.04	-do-
4	Power Plug with Accessories	0.01	-do-
5	Energy Saver	0.03	-do-
6	Trolley Mounted and without trolley fire extinguishers CO2, Foam Type, A&R Chemical & Purchase of Different type of fire extinguishers.	0.15	-do-
7	Soda Soap, Phenol and K/Oil etc.	0.01	-do-
8	Batteries, AVO meter Torch and misc. equipment.	0.02	-do-
9	Sand paper, WD 40, DepoxyElphi etc.	0.02	-do-
10	Oil & lubrication for compressors	0.04	-do-
11	Motor Rewinding, AC Units, Tube Well (Repairing) Disposal Pump (repairing)	0.08	-do-
12	T&P different items for Grid Maintenance	0.08	-do-
13	Purchase of walky Talky set & repair of Phone set for control room	0.08	-do-
14	Purchase of Ladder & Ropes	0.03	-do-
15	Purchase of steel Racks & Almirah	0.04	-do-
16	Finger contacts of 220 & 132KV Isolators	0.05	-do-
17	AC Petal make compressor , Refilling of Gas etc	0.15	-do-
18	C & DF Test Set	0.70	-do-
19	Opening/closing test set	0.25	-do-
20	Electrical grass cutter machine, repair	0.05	-do-
21	Testing & repairing charges for transformers, batteries, rectifiers etc.	0.30	-do-
22	unfor seen expenses	0.15	-do-
23	Repair of 11KV Trolleys	0.08	-do-
24	Compressor Purchase etc.	0.08	-do-
25	220KV & 132KV Circuit Breakers Overhauling	1.50	The C.Bs has not been overhauled since commissioning.
TOTAL:		4.01	


Managing Director NTDC
WAPDA House Lahore.

220KV Grid Station NTDCL Muzaffargarh

Date of commissioning: 30-06-2008


Sr. No.	Activity/ Description of Maintenance	Estimated Cost (Rs. in Millions)	Last Date of Activity Performed
1	Annual Maintenance of All grid Station Equipment (Annual Shut downs)	0.30	2014
2	Refilling of Fire Fighting equipment	0.10	2013
3	Purchasing/ Repairing of AC Units of Control room, Relay room and SMS Room	0.20	2013
4	Purchasing of Silica Gel for Auto T/Fs T-1, T-2 and Power T/F T-3	0.10	2013
5	Repairing of transformer fans	0.05	2013
6	Purchasing/ Repairing of Search Lights for switch yard and street lights	0.15	2013
7	Purchasing of MCBs for distribution panels	0.10	2013
8	Purchasing of Misc Items i.e. Switches, Sockets, Tube Lights, power plugs, WD-40, Grease, Cotton Rags etc.	0.50	--
Grand Total		1.50	


Managing Director NTDC
WAPDA House Lahore.

220KV Grid Station NTDC Bahawalpur

Date of commissioning:
27-02-2005


Sr. No.	Activity/ Description of Maintenance	Estimated Cost (Rs. in Millions)	Last Date of Activity Performed
1	Tap Changer Overhauling of Auto T/Fs T-1, T-2, T-3 and Power T/F T-4	0.20	2011
2	Annual Maintenance of All grid Station Equipment (Annual Shut downs)	0.25	2014
3	Refilling of Fire Fighting equipment	0.10	2013
4	Purchasing/ Repairing of AC Units of Control room, Relay room and SMS Room	0.30	2013
5	Purchasing of Silica Gel for Auto T/Fs T-1, T-2, T-3 and Power T/F T-4	0.10	2013
6	Repairing of transformer fans	0.50	2013
7	Repairing of Charger Fans	0.02	2010
8	Purchasing/ Repairing of Search Lights for switch yard and street lights	0.15	2013
9	Purchasing of MCBs for distribution panels	0.05	2013
10	Purchasing of Misc Items i.e. Switches, Sockets, Tube Lights, power plugs, WD-40, Grease, Cotton Rags etc	0.30	--
11	Purchasing of anti scale agent and filters for water filtration plant	0.05	--
Grand Total		2.02	


 Managing Director NTDC
 WAPDA House Lahore.


Sr. No.	220KV Transmission Line Division Multan	Activity / Description of Maintenance	Estimated Cost (Rs. In Million)	Date of Commissioning	Last Date of Activity performed
1	Multan-NGPS cct-1	Washing/Cleaning of Disc Insulators, Replacement of broken/flushed Disc Insulators,, BackFilling, Tree Trimming/cutting, patrolling, Thermovision, NightPatrolling, Installation of missing braces/nuts & bolts, Tightning of Loose Jumpers/Nuts & Bolts etc.	0.20	2/6/1980	24/06/2014
2	Multan-NGPS cct-2		0.20		24/06/2014
3	Multan-S/Road cct-1		0.20	30/6/1995	24/06/2014
4	Multan-S/Road cct-2		0.20		24/06/2014
5	M/Garh-Multan cct-1		0.20	12/3/1994	26/06/2014
6	M/Garh-Multan cct-4		0.20		26/06/2014
7	M/Garh-Multan cct-2		0.20	7/1/1994	27/06/2014
8	M/Garh-Multan cct-3		0.20	1/2/1995	27/06/2014
9	M/Garh-Lalpir cct-1		0.20	8/12/1997	20/06/2014
10	M/Garh-Lalpir cct-2		0.20		20/06/2014
11	M/Garh-Pakgen cct-1		0.20	12/08/1997	20/06/2014
12	M/Garh-Parco cct-1		0.20	17/02/2000	20/06/2014
13	M/Garh-Parco cct-2		0.20		20/06/2014
14	Kapco-Multan cct-3		0.20	8/5/1989	27/06/2014
15	Kapco-Multan cct-4		0.20		27/06/2014
16	Kapco-Multan cct-6		0.20	2/10/1998	24/06/2014
17	Kapco-Vehari cct-5		0.20		24/06/2014
18	Kapco-M/Garh cct-1		0.20	30/7/1993	20/06/2014
19	Kapco-Pakgen cct-2		0.20	8/12/1997	20/06/2014
20	M/Garh-BWP cct-1		0.20	18/2/2005	30/06/2014
21	M/Garh-BWP cct-2		0.20		30/06/2014
22	Multan-Vehari cct-1		0.20	29/03/1998	26/06/2014
23	Multan-Vehari cct-2		0.20	30/01/2000	26/06/2014
24	YousafWala-Vehari cct-1		0.20	29/03/1998	26/06/2014
25	YousafWala-Vehari cct-2		0.20		26/06/2014
26	220KV M/Garh(New)-TPS M/Garh		0.10		20/06/2014
	Total		5.10		


Managing Director NTDC
WAPDA House Lahore.

Sr.#	500 KV Transmission Line (South) Division Multan	Estimated Cost (Rs. In Million)	DATE OF COMMISSIONING	LAST DATE OF ACTIVITY
1	500 KV Multan--M/Garh - II. Washing/Cleaning/Backfilling/ Thermovission and tightening of joints. patrolling Maintenance.	0.30	10/3/2000	28-05-2014
2	500 KV M/Garh - Guddu - II Washing/Cleaning/Backfilling Thermovission and tightening of joints. Patrolling/Maintenance.	0.60	16-12-1986	27-05-2014
3	500 KV Guddu- Multan - I Washing/Cleaning/Backfilling Thermovision and tightening of joints. Patrolling/Maintenance.	0.70	4/5/1991	28-05-2014
4	500 KV Guddu - Multan - III Washing/Cleaning/Backfilling Thermovission and tightning of joints. Patrolling/Maintenance.	0.70	8/1/1997	28-05-2014
5	500kv M/Garh - Gatti - I Washing/Cleaning/Backfilling Thermovision and tightening of joints. Patrolling/Maintenance.	0.21		26-05-2014
	Total	2.51		


 Managing Director NTDC
 WAPDA House Lahore.

S.No.	500KV Transmission Line (N) Division Multan	Estimated Cost (Rs. In million)	Last Date of Activity Performed	DATED OF COMMISSIONING
1	MULTAN-SAHIWAL T/LINE Repair of Foundations & back filling of T.No.79,80,81	0.50	-	05.06.1992
2	YOUSAFWALA-LAHORE T/LINE Repair of Foundations 397,398,399	0.30	-	05.06.1992
3	MULTAN-GATTI T/LINE Repair of Foundations of T.No.161,162,163	0.05	-	28.06.1995
4	ROUSH-MULTAN T/LINE Repair of Foundations of T.No.571 to 573	0.10	-	18.11.1986
5	GATTI-ROUSH T/LINE Boundary Wall & back filling of T.No.52, Repair of Foundations of T.No.328,371.	0.20	-	18.11.1986
6	M/GARH-GATTI T/LINE Repair of Crack Foundations of T.Nos.484 to 490 due to river & Back filling / boundary Wall of T.No.780	0.80	-	22.11.2008
Total		1.95		


 Managing Director NTDC
 WAPDA House Lahore.

National Transmission & Despatch Company Ltd.

Expenditure

For the period Ending 3th June,

Rs. Mln

	Description	Actual 2011-12	Actual 2012-13	Provisional 2013-14	Estimated for FY 2014-15
1	Cost of Purchase of Power				
	Capacity Charges	186,652	185,020	-	-
	Energy Charges	649,203	662,996	-	-
	Ancillary Services				
	Total Cost of Purchase of Power	835,855	848,016	-	-
2	Transmission Cost				
a	Salaries, Wages and Other benefits	3,713	4,972	4,778	5,670
b	Vehicle Expenses Maintenance	204	234	240	288
c	Travelling Expenses:	93	122	139	159
d	Utilities	60	108	103	97
e	Rent, Rates And Taxes:	46	72	74	77
f	Charges for Common Services (AOH)	22	32	35	40
g	Professional Fees/ Management Fee	6	14	46	46
h	Offices Supplies and Other Expenses	17	16	21	24
i	Advertising and Publicity	112	1	5	5
j	Outside Services Employed:	8	13	13	14
k	Miscellaneous Expenses	9	3	6	6
l	Repair & Maintenance	545	512	607	845
m	Insurance	102	103	119	132
n	Depreciation	3,717	3,854	4,113	4,325
o	Provision for doubtful Debts	7,559	100	-	-
	Total	16,212	10,158	10,298	11,729
3	Financial Charges				
	Foreign Direct Loans				
	Foreign Relent Loans	3,668	3,755	4,885	6,319
	Federal Government Loan				
	Bonds				
	Currency Fluctuation				
	Local currency loans	783	546	385	711
	Bank Charges	5	4	-	-
	Total	4,455	4,305	5,270	7,030
b	Allocated to Work in Progress	(3,650)	(3,557)	(3,488)	(4,454)
c	Net Financial Charges	805	749	1,782	2,576
4	Special appropriation to cover				
e	Previous Year's adjustment				
f	Contribution to contingency Reserve				
g	Any other appropriation permitted by Federal Govt.				
	Total Appropriation				
	Total Expenditure (1+2+3+4)	852,872	858,923	12,080	14,304

As the Financial Statement for FY 2013-14 are under audit process so will be provided soon after.


The expenditure mentioned above are all exclusive of transmission losses.


Managing Director NTDC
PDA House Lahore.

National Transmission & Despatch Company Ltd.
Revenue Requirement

Rs. Mln

Sr. No.	Description	Actual 2011-12	Actual 2012-13	Provisional 2013-14	Estimated 2014-15
1	Transmission Costs:				
a-	General Establishment & Admin (Incl. CPPA)	4,290	5,589	5,459	6,426
b-	Repair & Maintenance	545	512	607	845
c-	Insurance	102	103	119	132
d-	Depreciation	3,717	3,854	4,113	4,325
	Total Transmission Cost	8,653	10,058	10,298	11,729
2	Financial Charges				
a-	Foreign Relent Loans	3,668	3,755	4,885	6,319
b-	Local Loans	783	546	385	711
c-	Other	5	4	-	-
	Total Financial Charges	4,455	4,305	5,270	7,030
	Allocated to Work in Progress	(3,650)	(3,557)	(3,488)	(4,454)
	Net Financial Charges	805	749	1,782	2,576
	Total Costs (1+2)	9,458	10,807	12,080	14,304
3	Return on Equity	9,866	6,932	8,864	16,218
4	Income Tax	90	84	-	-
	Total Costs Including Return on Equity	19,414	17,823	20,944	30,522
5	Uncovered Cost 2012-13				3,610
6	Uncovered Cost 2013-14				3,855
7	Less Other Income	(1,396)	(1,040)	(1,121)	(1,320)
	Revenue Requirement	18,017	16,782	19,823	36,668


Managing Director NTDC
NTDC House, New Delhi

NATIONAL TRANSMISSION AND DESPATCH COMPANY
ESTIMATION OF EQUITY BASE AND ALLOWABLE RETURN

Rs. Mln

Description	Actual 2011-12	Actual 2012-13	Estimated 2013-14	Estimated 2014-15
A Fixed Assets				
a) Original Cost of Fixed Assets in Operations	109,470	118,210	132,020	147,897
Less: Consumers Capital Contribution	58	55	52	49
Accumulated Depreciaton	43,887	47,740	51,983	56,308
Net Fixed Assets in operation	65,525	70,415	79,986	91,540
b) Capital Work in Progress	52,278	56,850	64,058	85,261
Total - A	117,803	127,265	144,044	176,801
B Current Assets				
a) Store & Spare (3% of the gross fixed assets in operation)	3,284	3,546	3,961	4,437
b) Accounts Receivables (equal to 30 no of days outstanding of annual billing)	1,481	1,379	1,629	3,014
c) Cash & Bank Balance (1/6th of annula operation expenses other than non-cash items)	1,735	1,159	1,328	1,663
Total - B	6,500	6,084	6,918	9,114
Total A + B	124,304	133,350	150,962	185,915
C				
D Less:				
a) Foreign Loan - Direct	-	-	-	-
b) Foreign Loan - Relent	21,439	26,292	30,647	38,484
c) Federal Government Loan				
d) Borrowing from Government's approved consumers)	3,884	2,862	1,904	6,945
g) Employees Retirement Benefits	7,325	9,097	9,800	10,702
h) Creditors, accrued and other current liabilities (equal to 2/3rd of current assets)	4,334	4,056	4,612	6,076
Total - D	37,051	42,308	46,963	62,207
E Equity base (C-D)	87,253	91,042	103,999	123,708
F Rate of Return	12.75%	13.11%	13.11%	13.11%
Return on Equity (E * F)	11,125	11,936	13,569	16,218

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
Projected Income Statement

Rs. Mln

Particular	2011-12 Actual	2012-13 Actual	2013-14 (Provisional)	2014-15 (Estimated)
Sales				
Use of System Charges - NTDC	18,017	16,782	19,823	36,668
Sale of Electricity - CPPA	850,441	871,717	-	-
Total	868,459	888,499	19,823	36,668
Cost of Sale				
Cost of electricity	850,442	871,664	-	-
Operating Cost	8,653	10,045	10,298	11,729
Transmission Loss	2,331	4,728	1,125	-
Provision for Doubtfull debt	7,559	100	-	-
	18,543	14,873	11,423	11,729
Operating Profit/ (Loss)	(526)	1,962	8,400	24,939
Other Income-NTDC	1,396	1,040	1,121	1,320
Other Income-CPPA	2,191	95,820	-	-
	3,588	96,860	1,121	1,320
Profit / (Loss) before Interest & tax	3,062	98,822	9,521	26,259
Finance Cost	805	749	1,782	2,576
Profit / (Loss) before taxation	2,256	98,073	7,739	23,683
Taxation	90	84	-	-
Net Profit / (Loss) after tax	2,166	97,989	7,739	23,683
ACCUMULATED PROFIT / (LOSS) B/F	(63,694)	(61,527)	36,462	44,201
ACCUMULATED PROFIT / (LOSS) C/D	(61,527)	36,462	44,201	67,885


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
Projected Balance Sheet

Rs. Mln

Particular	2011-12 Actual	2012-13 Actual	2013-14 (Pro)	2014-15 Estimated
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SHARE CAPITAL AND RESERVES

Share capital	52,700	52,700	52,700	52,700
Accumulated loss	(61,527)	36,462	44,201	67,885
	(8,827)	89,162	96,902	120,585
Share Deposit Money	7,163	7,163	7,163	7,163

NON CURRENT LIABILITIES

Long term loans	35,722	37,604	32,550	45,428
Deferred liabilities	7,325	9,097	9,800	10,702
Deferred credit	58	55	52	49
	43,105	46,756	42,402	56,179

CURRENT LIABILITIES

Trade and other payables	758,546	343,893	333,692	326,804
Accrued mark up / Interest	2,986	4,415	8,521	3,446
Short term borrowings				
Current portion of long term loans	13,292	17,513	28,711	27,000
Provision for taxation	548	56	56	56
	775,372	365,877	370,979	357,306
Total equity and liabilities	816,813	508,958	517,445	541,233

NON-CURRENT ASSETS

Property, plant and equipment	65,584	70,470	80,168	91,719
Capital WIP	52,278	56,850	64,058	85,261
Long-term loans and advances	1,097	1,226	1,226	1,226
Long-term deposits	9	7	7	7
	118,968	128,554	145,459	178,213

CURRENT ASSETS

Stores, spare parts and loose tools	6,648	9,367	9,367	9,367
Trade debts	575,905	234,882	235,548	232,152
Current maturity of loans and advances	3,821	47	47	47
Loans and advances	18,487	41,519	41,519	41,519
Accrued Interest	35	20	20	20
Other receivables	27,794	46,336	46,337	46,336
Short term investments	100	-	-	-
Receivable from GoP	43,000	31,000	31,000	31,000
Cash and bank balances	22,055	17,232	8,149	2,579
	697,844	380,404	371,986	363,019
Total assets	816,813	508,958	517,445	541,232


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
Projected Cash Flow Statement


Rs. Mln

Particular	2011-12 Actual	2012-13 Actual	2013-14 (Estimated)	2014-15 (Estimated)
1- CASH FLOWS FROM OPERATING ACTIVITIES				
Profit / (Loss) for the year	2,256	98,073	7,739	23,68
Add				
Depreciation	3,717	3,854	4,113	4,32
Amortization of Deferred Credits	(3)	(3)	(3)	(
Interest Income	(2,791)	(982)	(1,118)	(1,31
Provision for doubtful debts	7,559	(95,484)	-	-
Financial Cost	805	749	1,782	2,57
Others	1,183	2,248	1,569	1,85
	10,470	(89,619)	6,342	7,43
Working capital changes:				
(Increase)/decrease in current assets:				
Stores, spare parts and loose tools	1,109	(2,719)	-	-
Trade debts	(194,861)	280,793	(665)	3,39
Other Current Assets	14,262	(37,930)	-	-
(Increase)/decrease in current Liabilities:				
Trade and other payables	194,040	(246,939)	(10,201)	(6,88
Other Current Liabilities	(673)	-	-	-
	13,877	(6,793)	(10,867)	(3,49
Cash generated from operations	26,603	1,661	3,215	27,62
Finance cost paid	(1,326)	(2,877)	(1,164)	(12,10
Income tax paid / payment	(168)	(576)	-	-
Employees Benefits paid	(445)	(441)	(866)	(95
Net Cash from operating Activities	24,665	(2,233)	1,185	14,57
2- CASH FLOWS FROM INVESTING ACTIVITIES				
Capital expenditure incurred on Property, Plant & Equip.	(14,803)	(9,757)	(17,530)	(32,62
Proceed from Disposal of property, Plant & Equip.	2	3	-	-
Interest Income	1,083	997	1,118	1,31
Increase in long term deposits	(2)	2	-	-
Net cash used in investing activities	(13,720)	(8,755)	(16,412)	(31,30
3- CASH FLOWS FROM FINANCING ACTIVITIES				
Decrease in deposit for shares	-	-	-	-
Proceed from long term loans	9,362	8,231	9,030	18,25
Repayment of long term loans	(6,448)	(2,063)	(2,887)	(7,08
Net cash from financing activities	2,914	6,167	6,143	11,16
Net (decrease)/increase in cash and cash equivalents during year	13,859	(4,822)	(9,083)	(5,57
Cash and cash equivalents at beginning	8,196	22,055	17,233	8,14
Cash and cash equivalents at end of year	22,055	17,233	8,149	2,57


Managing Director NTDC
WAPDA House Lahore.

NTDCL Wheeling Charges for FY 2014-15

Rate Rs. KW/M	100.15		100.15		100.15 & 85.91		85.91		85.91 & 102.43		173.67	
	FY 2009-10		FY 2010-11		FY 2011-12		FY 2012-13		FY 2013-14		FY 2014-15	
Name of Company	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)
FESCO	1,796.27	1,901.12	1,820.64	2,188.05	1,943.50	2,090.73	1,863.58	1,921.21	2,084.56	2,452.78	2,184.62	4,552.96
GEPCO	1,581.90	2,158.76	1,633.89	1,963.61	1,525.94	1,649.53	1,624.93	1,675.17	1,656.61	1,936.82	1,736.13	3,618.26
HESCO	1,616.87	1,943.15	1,701.75	2,045.17	938.61	1,008.09	983.00	1,013.39	1,049.87	1,236.55	1,100.26	2,293.05
SEPCO	-	-	-	-	837.72	904.27	903.80	931.74	861.73	1,010.70	903.09	1,882.13
IESCO	1,388.60	1,668.82	1,465.92	1,761.74	1,507.03	1,627.54	1,396.12	1,439.29	1,486.28	1,739.78	1,557.62	3,246.22
LESCO	3,120.08	3,749.71	3,117.42	3,746.52	3,461.31	3,724.02	3,218.24	3,317.75	3,344.67	3,940.46	3,505.22	7,305.21
MEPCO	2,265.79	2,723.03	2,641.93	3,175.07	2,565.34	2,763.93	2,403.46	2,477.78	2,513.25	2,941.75	2,633.89	5,489.28
PESCO	2,154.40	2,589.16	2,207.16	2,652.56	2,360.00	2,536.87	2,300.50	2,371.63	2,344.71	2,754.47	2,457.26	5,121.17
QESCO	847.94	1,019.06	842.30	1,012.28	814.14	872.52	827.76	853.36	826.13	971.21	865.79	1,804.38
KESC	775.83	932.40	781.67	939.41	780.83	839.30	757.50	780.92	712.50	838.77	650.00	1,354.66
G-Total (KW)	15,547.68	18,685.20	16,212.69	19,484.41	16,734.42	18,016.80	16,278.91	16,782.25	16,880.32	19,823.29	17,593.87	36,667.32


 Managing Director NTDC
 NAPDA House Lahore.

Average MDI For FY 2009-10

DISCO	July-09		August-09		September-09		October-09		November-09		December-09		January-10		February-10		March-10		April-10		May-10		June-10		Total	Total Amount (Rs.)
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI	
FESCO	1,975.61	197.86	1,998.47	200.15	2,001.16	200.42	1,807.70	181.04	1,549.44	155.18	1,650.59	165.31	1,454.83	145.70	1,625.71	162.82	1,811.48	181.42	1,815.71	181.84	1,912.59	191.55	1,951.94	195.49	1,796.27	1,901.12
GEPCO	1,742.15	174.48	1,677.90	168.04	1,588.25	159.06	1,507.56	150.98	1,330.80	133.26	1,267.40	126.93	1,465.08	146.73	1,377.46	137.95	1,518.34	152.06	1,810.03	181.27	1,760.62	176.33	1,937.37	194.03	1,581.90	2,158.76
HESCO	1,556.43	155.88	1,735.58	173.82	1,857.16	185.99	1,716.30	171.89	1,455.95	145.81	1,239.63	124.15	1,385.96	138.80	1,552.53	155.49	1,599.32	160.17	1,780.73	178.34	1,838.88	184.16	1,683.99	168.65	1,616.87	1,943.15
IESCO	1,418.99	142.11	1,509.56	151.18	1,667.34	166.98	1,454.57	145.67	1,003.22	100.47	1,551.61	155.39	1,395.26	139.74	930.66	93.21	1,240.24	124.21	1,374.03	137.61	1,628.74	163.12	1,489.02	149.12	1,388.60	1,668.82
LESCO	3,175.36	318.01	3,485.23	349.05	3,472.01	347.72	3,258.60	326.35	2,724.12	272.82	2,811.21	281.54	2,933.65	293.81	2,966.91	297.14	2,608.88	261.28	3,070.21	307.48	3,430.27	343.54	3,504.49	350.97	3,120.08	3,749.71
MEPCO	1,934.00	193.69	2,059.99	206.31	2,167.24	217.05	2,282.36	228.58	2,248.69	225.21	2,314.78	231.83	2,531.33	253.51	2,169.12	217.24	2,220.75	222.41	1,994.75	199.77	2,792.46	279.67	2,474.01	247.77	2,265.79	2,723.03
PESCO	2,163.85	216.71	2,132.43	213.56	2,309.08	231.25	2,250.87	225.42	2,088.06	209.12	2,019.03	202.21	2,083.68	208.68	2,048.93	205.20	2,096.27	209.94	2,160.09	216.33	2,120.24	212.34	2,380.27	238.38	2,154.40	2,589.16
QESCO	839.07	84.03	890.68	89.20	801.21	80.24	842.75	84.40	888.35	88.97	836.32	83.76	819.27	82.05	839.10	84.04	842.68	84.39	797.62	79.88	898.06	89.94	880.20	88.15	847.94	1,019.06
KESC	870.00	87.13	830.00	83.12	800.00	80.12	770.00	77.12	760.00	76.11	790.00	79.12	710.00	71.11	720.00	72.11	790.00	79.12	820.00	82.12	710.00	71.11	740.00	74.11	775.83	932.40
G-Total (KW)	15,675.45	1,569.90	16,319.82	1,634.43	16,663.44	1,668.84	15,890.69	1,591.45	14,048.44	1,406.95	14,480.57	1,450.23	14,779.05	1,480.12	14,230.43	1,425.18	14,727.96	1,475.00	15,623.16	1,564.66	17,091.86	1,711.75	17,041.28	1,706.68	15,547.68	18,685.20

Managing Director NTDC

Average MDI For FY 2010-11

DISCO	MDI																								Total Amount (Rs.)	
	July-10		August-10		September-10		October-10		November-10		December-10		January-11		February-11		March-11		April-11		May-11		June-11			Total
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)		
FESCO	2,041.33	204.44	1,842.48	184.52	1,818.50	182.12	2,041.92	204.50	1,842.87	184.56	1,551.84	155.42	1,422.97	142.51	1,496.31	149.86	1,684.09	168.66	1,957.81	196.08	1,986.46	198.94	2,161.14	216.44	1,820.64	2,188.05
GEPCO	1,793.38	179.61	1,844.41	184.72	1,632.76	163.52	1,558.74	156.11	1,390.92	139.30	1,544.63	154.69	1,508.30	151.06	1,521.91	152.42	1,474.85	147.71	1,609.67	161.21	1,832.34	183.51	1,894.82	189.77	1,633.89	1,963.61
HESCO	1,805.30	180.80	1,903.50	190.64	1,877.98	188.08	1,578.40	158.08	1,585.06	158.74	1,438.41	144.06	1,496.09	149.83	1,580.16	158.25	1,621.15	162.36	1,829.80	183.25	1,756.80	175.94	1,948.40	195.13	1,701.75	2,045.17
IESCO	1,573.08	157.54	1,657.77	166.03	1,514.81	151.71	1,479.58	148.18	1,165.05	116.68	1,260.71	126.26	1,229.75	123.16	1,343.32	134.53	1,439.05	144.12	1,311.35	131.33	1,791.85	179.45	1,824.74	182.75	1,465.92	1,761.74
LESCO	3,378.91	338.40	3,578.26	358.36	3,057.19	306.18	3,010.06	301.46	2,962.72	296.72	2,947.82	295.22	2,873.61	287.79	3,047.80	305.24	3,041.48	304.60	3,245.75	325.06	3,244.77	324.96	3,020.69	302.52	3,117.42	3,746.516257
MEPCO	2,804.92	280.91	2,392.78	239.64	2,446.60	245.03	2,261.09	226.45	2,514.64	251.84	2,159.18	216.24	2,381.10	238.47	2,383.36	238.69	3,131.49	313.62	3,491.36	349.66	2,776.44	278.06	2,960.22	296.47	2,641.93	3,175.0729763
PESCO	2,152.85	215.61	2,172.68	217.59	2,304.17	230.76	2,184.39	218.77	2,047.93	205.10	2,159.42	216.27	2,250.92	225.43	2,113.22	211.64	1,992.57	199.56	2,226.57	222.99	2,404.40	240.80	2,476.81	248.05	2,207.16	2,652.56
QESCO	852.19	85.35	884.90	88.62	800.68	80.19	872.31	87.36	861.30	86.26	875.17	87.65	836.92	83.82	890.55	89.19	766.83	76.80	785.10	78.63	876.47	87.78	805.22	80.64	842.30	1,012.28
KESC	730.00	73.11	790.00	79.12	800.00	80.12	800.00	80.12	750.00	75.11	750.00	75.11	750.00	75.11	760.00	76.11	770.00	77.12	890.00	89.13	810.00	81.12	780.00	78.12	781.67	939.41
G-Total (KW)	17,131.96	1,715.77	17,066.77	1,709.24	16,252.69	1,627.71	15,786.47	1,581.01	15,120.49	1,514.32	14,687.17	1,470.92	14,749.66	1,477.18	15,136.63	1,515.93	15,921.50	1,594.54	17,347.42	1,737.34	17,479.53	1,750.57	17,872.03	1,789.88	16,212.69	19,484.41

Managing Director NTDC

Average MDI For FY 2011-12

DISCO	Jul-11		Aug-11		Sep-11		Oct-11		Nov-11		Dec-11		Jan-12		Feb-12		Mar-12		Apr-12		May-12		Jun-12		Total	Total Amount (Rs.)
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)		
FESCO	2,007.47	201.05	2,189.72	219.30	1,922.31	192.52	1,965.93	168.89	1,799.96	154.63	1,856.81	159.52	1,409.70	121.11	1,865.78	160.29	1,917.58	164.74	2,079.44	178.64	2,233.60	191.89	2,073.71	178.15	1,943.50	2,090.73
GEPCO	1,839.60	184.24	1,721.42	172.40	1,804.71	180.74	1,607.40	138.09	1,296.40	111.37	1,280.19	109.98	1,185.74	101.87	1,362.68	117.07	1,354.96	116.40	1,343.38	115.41	1,697.81	145.86	1,817.04	156.10	1,525.94	1,649.53
HESCO	884.52	88.58	987.75	98.92	968.55	97.00	860.89	73.96	916.00	78.69	857.17	73.64	843.47	72.46	737.48	63.36	872.38	74.95	1,042.71	89.58	1,200.33	103.12	1,092.13	93.82	938.61	1,008.09
SEPCO	900.15	90.15	971.60	97.31	983.30	98.48	901.25	77.43	786.13	67.54	848.60	72.90	643.36	55.27	734.22	63.08	846.99	72.77	740.54	63.62	814.98	70.01	881.48	75.73	837.72	904.27
IESCO	1,726.84	172.94	1,788.03	179.07	1,675.54	167.80	1,516.94	130.32	1,310.66	112.60	1,359.10	116.76	1,300.54	111.73	1,350.00	115.98	1,239.38	106.48	1,209.39	103.90	1,736.51	149.18	1,871.39	160.77	1,507.03	1,627.54
LESCO	3,614.74	362.02	3,379.91	338.50	3,938.03	394.39	3,712.07	318.90	3,400.98	292.18	3,546.72	304.70	3,538.44	303.99	3,286.93	282.38	3,227.64	277.29	3,144.61	270.15	3,290.59	282.69	3,455.09	296.83	3,461.31	3,724.02
MEPCO	2,848.95	285.32	2,757.40	276.15	2,769.94	277.41	2,827.83	242.94	2,467.31	211.97	2,393.03	205.59	2,576.47	221.34	2,158.18	185.41	2,195.41	188.61	2,713.82	233.14	2,722.50	233.89	2,353.18	202.16	2,565.34	2,763.95
PESCO	2,431.01	243.47	2,392.84	239.64	2,472.28	247.60	2,293.10	197.00	2,253.13	193.57	2,280.45	195.91	2,387.25	205.09	2,204.41	189.38	2,304.93	198.02	2,425.96	208.41	2,351.28	202.00	2,523.39	216.78	2,360.00	2,536.61
QESCO	820.50	82.17	800.91	80.21	710.05	71.11	829.71	71.28	765.29	65.75	824.97	70.87	889.22	76.39	839.75	72.14	784.31	67.38	794.13	68.22	873.53	75.05	837.38	71.94	814.14	872.51
KESC	800.00	80.12	790.00	79.12	820.00	82.12	740.00	63.57	850.00	73.02	830.00	71.31	760.00	65.29	740.00	63.57	770.00	66.15	760.00	65.29	800.00	68.73	710.00	61.00	780.83	839.31
G-Total (KW)	17,873.88	1,790.07	17,779.54	1,780.62	18,064.69	1,809.18	17,255.13	1,482.39	15,845.85	1,361.32	16,077.01	1,381.18	15,534.20	1,334.54	15,331.23	1,317.11	15,461.78	1,328.32	16,253.97	1,396.38	17,722.22	1,522.52	17,871.99	1,535.38	16,734.42	18,016.81

Average MDI For FY 2012-13

	July-12		August-12		September-12		October-12		November-12		December-12		January-13		February-13		March-13		April-13		May-13		June-13		Total Amount (Rs.)	Total MDI
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)		
DISCO																										
FESCO	2,102.93	180.66	2,184.95	187.71	2,137.13	183.60	1,823.17	156.63	1,806.03	155.16	1,784.87	153.34	1,450.90	124.65	1,625.45	139.64	1,601.44	137.58	1,669.50	143.43	1,972.08	169.42	2,204.57	189.39	1,921.21	1,863.58
GEPCO	1,994.47	171.35	1,813.64	155.81	1,816.00	156.01	1,501.22	128.97	1,359.34	116.78	1,086.12	93.31	1,412.40	121.34	1,401.75	120.42	1,599.74	137.43	1,657.59	142.40	1,932.35	166.01	1,924.53	165.34	1,675.17	1,624.93
HESCO	1,098.66	94.39	1,019.50	87.59	1,100.50	94.54	1,124.49	96.61	995.67	85.54	848.58	72.90	784.06	67.36	810.36	69.62	877.83	75.41	1,019.40	87.58	1,010.04	86.77	1,106.92	95.10	1,013.39	983.00
SEPCO	865.29	74.34	1,043.77	89.67	888.95	76.37	966.24	83.01	1,064.06	91.41	785.87	67.51	683.52	58.72	822.82	70.89	818.67	70.33	976.54	83.89	950.86	81.69	978.99	84.10	931.74	903.80
IESCO	1,800.78	154.70	1,783.33	153.21	1,674.86	143.89	1,227.09	105.42	1,057.60	90.86	1,147.09	98.55	1,139.43	97.89	1,300.56	111.73	1,203.08	103.36	1,338.31	114.97	1,391.19	119.52	1,690.18	145.20	1,439.29	1,396.12
LESCO	3,342.71	287.17	3,458.25	297.10	3,425.00	294.24	3,547.88	304.80	3,388.68	291.12	3,196.31	274.59	3,261.31	280.18	2,628.83	225.84	2,944.39	252.95	3,094.90	265.88	3,112.15	267.36	3,218.46	276.50	3,317.75	3,218.24
MEPCO	2,724.85	234.09	2,689.20	231.03	2,587.96	222.33	2,696.56	231.66	2,130.72	183.05	2,264.38	194.53	2,472.18	212.39	2,030.69	174.46	2,058.71	176.86	2,077.94	178.52	2,386.62	205.03	2,721.76	233.83	2,477.78	2,403.46
PESCO	2,508.29	215.49	2,525.25	216.94	2,251.19	193.40	2,287.29	196.50	2,217.03	190.46	2,334.32	200.54	2,185.84	187.79	2,113.54	181.57	2,169.62	186.39	2,202.68	189.23	2,215.44	190.33	2,595.51	222.98	2,371.63	2,300.50
QESCO	937.41	80.53	831.14	71.40	854.71	73.43	866.23	74.42	843.40	72.46	866.46	74.44	868.55	74.62	708.05	60.83	805.81	69.23	709.64	60.97	822.45	70.66	819.35	70.39	853.36	827.76
KESC	740.00	63.57	790.00	67.87	760.00	65.29	780.00	67.01	840.00	72.16	750.00	64.43	740.00	63.57	730.00	62.71	760.00	65.29	730.00	62.71	740.00	63.57	730.00	62.71	780.92	757.50
G-Total (KW)	18,115.40	1,556.29	18,139.04	1,558.32	17,496.30	1,503.11	16,820.18	1,445.02	15,702.54	1,349.00	15,064.00	1,294.15	14,998.18	1,288.49	14,172.06	1,217.52	14,839.29	1,274.84	15,476.49	1,329.59	16,533.16	1,420.36	17,990.25	1,545.54	16,782.25	16,278.91

Managing Director NTDC
PDA House Lahore.

Average MDI For FY 2013-14

Average MDI For FY 2013-14																									MDI (MW)	
DISCO	Jul-13		Aug-13		Sep-13		Oct-13		Nov-13		Dec-13		Jan-14		Feb-14		Mar-14		Apr-14		May-14		Jun-14 (P)		Total Amount (Rs.)	Average MDI (MW)
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)		
FESCO	2,155.24	185.16	2,250.78	193.36	2,221.14	190.82	2,312.24	236.84	1,911.39	195.78	1,985.60	203.38	1,871.69	191.72	1,845.48	189.03	1,715.01	175.67	2,039.56	208.912	2,420.94	247.977	2,285.70	234.124	2,452.78	2,084.56
GEPCO	2,108.85	181.17	1,951.50	167.65	1,958.12	168.22	1,463.58	149.91	1,317.07	134.91	1,419.45	145.39	1,954.19	200.17	1,261.87	129.25	1,356.04	138.90	1,387.20	142.091	1,706.12	174.758	1,995.35	204.384	1,936.82	1,656.61
HESCO	1,087.37	93.42	1,181.42	101.50	993.83	85.38	1,146.98	117.48	1,048.25	107.37	971.49	99.51	934.47	95.72	856.89	87.77	998.59	102.29	1,052.85	107.844	1,178.60	120.724	1,147.65	117.554	1,236.55	1,049.87
SEPCO	635.38	54.59	1,403.07	120.54	897.55	77.11	879.64	90.10	808.45	82.81	740.64	75.86	754.28	77.26	697.26	71.42	737.91	75.58	918.45	94.077	853.09	87.382	1,015.01	103.968	1,010.70	861.73
IESCO	1,861.35	159.91	1,892.01	162.54	1,518.36	130.44	1,488.28	152.44	1,152.48	118.05	1,188.37	121.73	1,308.28	134.01	1,486.99	152.31	1,176.26	120.48	1,368.13	140.138	1,642.42	168.233	1,752.38	179.496	1,739.78	1,486.28
LESCO	3,340.28	286.96	3,417.74	293.62	3,573.82	307.03	3,417.60	350.06	3,438.27	352.18	3,153.87	323.05	3,084.94	315.99	2,683.09	274.83	3,244.86	332.37	3,508.50	359.376	3,936.23	403.188	3,336.90	341.799	3,940.46	3,344.67
MEPCO	2,813.19	241.68	2,948.25	253.28	3,163.65	271.79	2,599.57	266.27	2,070.73	212.10	2,359.37	241.67	2,379.92	243.78	2,178.50	223.14	2,248.30	230.29	2,202.36	225.588	2,373.26	243.093	2,821.92	289.049	2,941.75	2,513.25
PESCO	2,661.98	228.69	2,616.87	224.82	2,442.66	209.85	2,385.84	244.38	2,019.18	206.82	2,185.19	223.83	2,114.68	216.61	2,188.53	224.17	2,289.06	234.47	2,240.61	229.506	2,300.94	235.685	2,691.02	275.641	2,754.47	2,344.71
QESCO	952.28	81.81	928.85	79.80	796.72	68.45	830.87	85.11	813.25	83.30	841.03	86.15	756.77	77.52	699.46	71.65	768.43	78.71	830.74	85.093	845.70	86.625	849.50	87.014	971.21	826.13
KESC	730.00	62.71	740.00	63.57	770.00	66.15	730.00	74.77	690.00	70.68	690.00	70.68	680.00	69.65	680.00	69.65	710.00	72.73	700.00	71.701	720.00	73.750	710.00	72.725	838.77	712.50
G-Total (KW)	18,345.91	1,576.10	19,330.48	1,660.68	18,335.86	1,575.23	17,254.60	1,767.39	15,269.06	1,564.01	15,535.00	1,591.25	15,839.23	1,622.41	14,578.09	1,493.23	15,244.46	1,561.49	16,248.42	1,664.326	17,977.30	1,841.41	18,605.43	1,905.75	19,823.29	16,880.32
																									17690.574	

17690.574

17,254.60 1,767.39

1,482.34
285.05

Managing Director NTPC
NTPC House Bhopal

NTDCL Wheeling Charges for FY 2014-15

Annex																										
DISCD	Jul-14		Aug-14		Sep-14		Oct-14		Nov-14		Dec-14		Jan-15		Feb-15		Mar-15		Apr-15		May-15		Jun-15		Total Amount (Rs.)	Average MDI (MW)
	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)	MDI (MW)	UoSC (Mill.Rs.)				
FESCO	2,258.69	392.28	2,358.81	409.67	2,327.76	404.27	2,423.23	420.85	2,003.14	347.89	2,080.91	361.40	1,961.53	340.67	1,934.07	335.90	1,797.33	312.15	2,137.46	371.22	2,537.14	440.64	2,395.41	416.02	4,552.96	2,184.62
GEPCO	2,210.07	383.83	2,045.17	355.19	2,052.11	356.40	1,533.83	266.39	1,380.29	239.72	1,487.58	258.36	2,047.99	355.68	1,322.44	229.67	1,421.13	246.81	1,453.79	252.49	1,788.02	310.53	2,091.13	363.18	3,618.26	1,736.13
HESCO	1,139.56	197.91	1,238.13	215.03	1,041.53	180.89	1,202.03	208.76	1,098.56	190.79	1,018.12	176.82	979.33	170.08	898.02	155.96	1,046.52	181.75	1,103.39	191.63	1,235.18	214.52	1,202.74	208.88	2,293.05	1,100.26
SEPCO	665.88	115.65	1,470.41	255.37	940.63	163.36	921.86	160.10	847.26	147.15	776.19	134.80	790.48	137.29	730.73	126.91	773.33	134.31	962.54	167.17	894.04	155.27	1,063.74	184.74	1,882.13	903.09
IESCO	1,950.69	338.79	1,982.83	344.37	1,591.24	276.36	1,559.72	270.88	1,207.80	209.76	1,245.42	216.30	1,371.08	238.12	1,558.36	270.65	1,232.72	214.09	1,433.80	249.02	1,721.26	298.94	1,836.49	318.95	3,246.22	1,557.62
LESCO	3,500.61	607.97	3,581.79	622.07	3,745.36	650.47	3,581.65	622.04	3,603.31	625.80	3,305.25	574.04	3,233.01	561.49	2,811.88	488.35	3,400.62	590.60	3,676.91	638.59	4,125.16	716.44	3,497.07	607.35	7,305.21	3,505.22
MEPCO	2,948.23	512.03	3,089.76	536.61	3,315.51	575.82	2,724.35	473.15	2,170.12	376.90	2,472.61	429.43	2,494.16	433.17	2,283.07	396.51	2,356.22	409.22	2,308.08	400.85	2,487.18	431.96	2,957.37	513.62	5,489.28	2,633.89
PESCO	2,789.76	484.51	2,742.48	476.30	2,559.91	444.59	2,500.36	434.25	2,116.10	367.51	2,290.08	397.73	2,216.19	384.90	2,293.58	398.34	2,398.93	416.63	2,348.16	407.82	2,411.38	418.80	2,820.19	489.80	5,121.17	2,457.26
QESCO	997.99	173.32	973.43	169.06	834.97	145.01	870.75	151.23	852.28	148.02	881.40	153.08	793.09	137.74	733.04	127.31	805.31	139.86	870.62	151.20	886.29	153.93	890.27	154.62	1,804.38	865.79
KESC	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	650.00	112.89	1,354.66	650.00
G-Total (KW)	19,111.47	3,319.18	20,132.83	3,496.56	19,059.02	3,310.07	17,967.78	3,120.55	15,928.86	2,766.44	16,207.56	2,814.84	16,536.87	2,872.04	15,215.19	2,642.49	15,882.11	2,758.32	16,944.74	2,942.873	18,735.65	3,253.91	19,404.41	3,370.05	36,668	17,593.87

Managing Director NTDCL
 WAPDA House Lahore.

NATIONAL TRANSMISSION & DESPATCH COMPANY LIMITED

INVESTMENT PROGRAM (PSDP)

Rs. Mln

Sr. No.	PROJECTS	PROJECT COST	2009-10 Actual	2010-11 Actual	2011-12 Actual	2012-13 Actual	2013-14 (Prov)	2014-15 (Estimated)
ON GOING PROJECTS								
1	Transmission arrangement for Power Dispersal of Ghazi Brotha							
	Local Component (LCC)	7,137.00	359.44	192.00	92.38	299.51	98.03	10.00
	Foreign Component (FCC)	6,990.00	1,240.00	-	375.05	-	21.22	-
	Total:	14,127.00	1,599.44	192.00	467.43	299.51	119.25	10.00
2	Muzaffar-Gatti							
	Local Component (LCC)	1,795.00	352.31	-	-	-	-	-
	Foreign Component (FCC)	4,976.00	-	-	-	-	-	-
	Total:	6,771.00	352.31	-	-	-	-	-
3	Up-Gratation of NPCC, Islamabad							
	Local Component (LCC)	1,015.00	65.39	922.99	317.58	34.83	12.81	173.00
	Foreign Component (FCC)	1,880.00	-	1,000.00	1,707.60	942.00	-	-
	Total:	2,895.00	65.39	1,922.99	2,025.18	976.83	12.81	173.00
4	NTDC-KESC 500/220KV interconnection facility Karachi							
	Local Component (LCC)	1,340.00	68.00	133.87	-	-	-	-
	Foreign Component (FCC)	1,749.00	-	-	-	-	-	-
	Total:	3,089.00	68.00	133.87	-	-	-	-
5	New 500KV G/S at Sahiwal alongwith 220KV System Expansion							
	Local Component (LCC)	1,161.00	254.00	19.00	45.80	-	-	-
	Foreign Component (FCC)	1,748.00	-	-	-	-	-	-
	Total:	2,909.00	254.00	19.00	45.80	-	-	-
6	New 220KV G/S at Khuzdar, 220KV Dadu Khuzdar D/C T/L							
	Local Component (LCC)	1,648.00	-	-	653.38	353.87	555.21	400.00
	Foreign Component (FCC)	1,253.00	-	-	187.10	414.22	9.72	100.00
	Total:	2,901.00	-	-	840.48	768.09	564.93	500.00
7	220KV G/S at Ghazi Road, Lahore with 220KV D/C T/L 132KV Expansion system							
	Local Component (LCC)	1,324.00	67.00	497.00	51.00	344.79	57.65	250.00
	Foreign Component (FCC)	1,267.00	-	1,177.00	-	-	221.51	500.00
	Total:	2,591.00	67.00	1,674.00	51.00	344.79	279.16	750.00
8	500KV Transmission for dispersal of power form Thar Coal							
	Local Component (LCC)	2,913.00	-	-	-	-	-	-
	Foreign Component (FCC)	2,599.00	-	-	-	-	-	-
	Total:	5,512.00	-	-	-	-	-	-
9	220KV G/S Kassowal with 132KV expansion system							
	Local Component (LCC)	1,256.00	99.00	212.00	319.75	213.32	163.32	50.00
	Foreign Component (FCC)	811.00	680.00	278.00	-	-	22.80	50.00
	Total:	2,067.00	779.00	490.00	319.75	213.32	186.12	100.00
10	Provision of secure meetring system at delivery point							
	Local Component (LCC)	496.00	193.87	37.40	149.12	117.30	66.23	20.00
	Foreign Component (FCC)	513.00	-	-	-	-	-	-
	Total:	1,009.00	193.87	37.40	149.12	117.30	66.23	20.00
11	Power System Transmission enhasement to (Preparity work)							
	Local Component (LCC)	12.10	0.05	-	0.08	-	-	-
	Foreign Component (FCC)	36.20	-	-	-	-	-	-
	Total:	48.30	0.05	-	0.08	-	-	-
12	Power Transmission enhasement project (19-Sub projects Tranch-I)							
	Local Component (LCC)	4,503.00	1,760.00	1,270.00	1,172.96	1,128.23	661.58	320.00
	Foreign Component (FCC)	8,114.00	661.00	2,702.00	1,473.44	432.47	70.08	-
	Total:	12,617.00	2,421.00	3,972.00	2,646.40	1,560.70	731.66	320.00
13	220KV T/L from Chashma to Lude-wala for interconnection of Chshnupp-II							
	Local Component (LCC)	1,045.00	1,932.00	273.00	108.96	50.53	3.78	10.00
	Foreign Component (FCC)	1,012.00	-	-	-	-	-	-
	Total:	2,057.00	1,932.00	273.00	108.96	50.53	3.78	10.00
14	Feasibility study for Dispersal of power from imported coal at Karachi							
	Local Component (LCC)	82.00	-	-	-	-	-	-
	Foreign Component (FCC)	95.00	-	-	-	-	-	-
	Total:	177.00	-	-	-	-	-	-
15	Feasibility study for Dispersal of power from imported 1000MW from Iran							
	Local Component (LCC)	75.00	-	-	-	-	-	-

M. J. Iqbal
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NATIONAL TRANSMISSION & DESPATCH COMPANY LIMITED

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Rs. Mln

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	Foreign Component (FCC)	-	-	-	-	-	-	-
	Total:	75.00	-	-	-	-	-	-
16	Feasibility Study for dispersal form Basha Hydro power project							
	Local Component (LCC)	208.00	75.00	37.00	100.00			
	Foreign Component (FCC)	75.60	-	-	-			
	Total:	283.60	75.00	-	100.00			
17	4 New projects to be financed by JBIC							
	Local Component (LCC)	2,435.00	62.60	382.81	544.37	1,190.85	1,050.49	500.00
	Foreign Component (FCC)	7,787.00	-	513.45	3,634.48	897.25	393.65	800.00
	Total:	10,222.00	62.60	896.26	4,178.85	2,088.10	1,444.14	1,300.00
18	Interconnection of 9-IPPs with National G/S							
	Local Component (LCC)	982.00	292.00	69.00	371.45	326.53	208.28	100.00
	Foreign Component (FCC)	126.00	-	-	-	-	-	-
	Total:	1,108.00	292.00	69.00	371.45	326.53	208.28	100.00
19	National Power System Expansion Plan							
	Local Component (LCC)	171.54	-	128.23	31.69	6.24	1.57	10.00
	Foreign Component (FCC)	318.94	-	-	-	-	-	-
	Total:	490.48	-	128.23	31.69	6.24	1.57	10.00
20	Power Transmission enhancement project (10-Sub projects Tranch-II)							
	Local Component (LCC)	9,275.00	533.00	300.71	720.57	999.38	1,813.50	700.00
	Foreign Component (FCC)	10,918.00	3,210.42	1,788.46	1,505.15	2,847.55	4,427.86	1,000.00
	Total:	20,193.00	3,743.42	2,089.17	2,225.72	3,846.93	6,241.36	1,700.00
21	220KV Rohri Sub Station							
	Local Component (LCC)	2,435.00	300.00	368.69	299.34	-	173.51	120.00
	Foreign Component (FCC)	2,412.00	-	-	-	-	-	-
	Total:	4,847.00	300.00	368.69	299.34	-	173.51	120.00
22	Inter connection of 6 IPPS with National Grids							
	Local Component (LCC)	1,042.36	560	519.209	-	-	9.73	5.00
	Foreign Component (FCC)	638.86	-	-	-	-	-	-
	Total:	1,681.22	560.00	519.21	-	-	9.73	5.00
23	Interconnection for dispersal power form Burgey mounted Karkey							
	Local Component (LCC)	414.00	540.00	155.51	21.78	-	-	-
	Foreign Component (FCC)	594.00	-	-	-	-	-	-
	Total:	1,008.00	540.00	155.51	21.78	-	-	-
24	220/132KV Dera Murad Jamali							
	Local Component (LCC)	390.00	-	22.67	3.41	122.29	1.38	500.00
	Foreign Component (FCC)	452.00	-	-	-	-	-	-
	Total:	842.00	-	22.67	3.41	122.29	1.38	500.00
25	Transmission for Dispersal power form Neelam Jehlum Hydro Power project							
	Local Component (LCC)	6,336.90	-	10.00	32.45	37.67	34.50	6,000.00
	Foreign Component (FCC)	4,879.48	-	-	-	-	-	-
	Total:	11,216.38	-	10.00	32.45	37.67	34.50	6,000.00
26	Imported of 100 MW Power from Iran (with 220KV G/S Gowadar and allied T/L)							
	Local Component (LCC)	1,730.00	-	24.28	2,042.42	9.75	-	300.00
	Foreign Component (FCC)	1,934.00	-	-	-	-	-	-
	Total:	3,664.00	-	24.28	2,042.42	9.75	-	300.00
27	Grid System Operation & Main: System Improvement Project (PTC)							
	Local Component (LCC)	55.70	-	-	-	0.67	1.16	10.00
	Foreign Component (FCC)	150.30	-	-	-	-	-	-
	Total:	206.00	-	-	-	0.67	1.16	10.00
28	Ext/Aug. of existing of 500&220 KV G/S of NTDC system by installation of additional T/FS							
	Local Component (LCC)	560.00	-	-	-	-	-	50.00
	Foreign Component (FCC)	1,303.20	-	-	-	-	-	-
	Total:	1,863.20	-	-	-	-	-	50.00
29	3rd 500KV Jamshoro-Moro- R.Y Khan Single Circuit T/Line.							
	Local Component (LCC)	17,400.30	-	26.00	33.85	73.03	-	500.00
	Foreign Component (FCC)	19,831.10	-	-	-	-	37.53	3,000.00
	Total:	37,231.40	-	26.00	33.85	73.03	37.53	3,500.00
30	Addition of 500/200KV Sub Station T/L Strength of NTDC System and Enhase the Transmission capacity of new 500 & 200 Sub Station Lahore (JICA-PK-61)							
	Local Component (LCC)	11,078.00	-	22.00	117.46	165.14	888.68	800.00

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NATIONAL TRANSMISSION & DESPATCH COMPANY LIMITED

INVESTMENT PROGRAM (PSDP)

Rs. Mln

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	Foreign Component (FCC)	13,454.00	-	-	397.19	1,868.80	3,825.67	1,000.00
	Total:	24,532.00	-	22.00	514.64	2,033.94	4,714.35	1,800.00

NEW PROJECTS

1	Transmission Interconnection for Dispersal of Power From UCH-II						36.84	250.00
	Local Component (LCC)	1,133.00	-	-	-	-		1,000.00
	Foreign Component (FCC)	1,197.00	-	-	-	-	36.84	1,250.00
	Total:	2,330.00	-	-	-	-		
2	Construction of 500Kv T/L for Dispersal of Power from 747 MW from Guddu							50.00
	Local Component (LCC)	3,031.40	-	-	-	-		50.00
	Foreign Component (FCC)	4,842.30	-	-	-	-		100.00
	Total:	7,873.70	-	-	-	-		
3	220Kv Sub Station Lalian							50.00
	Local Component (LCC)	646.90	-	-	-	-		50.00
	Foreign Component (FCC)	934.60	-	-	-	-		100.00
	Total:	1,581.50	-	-	-	-		
4	220Kv G/S Mansehra							200.00
	Local Component (LCC)	905.00	-	-	-	-		200.00
	Foreign Component (FCC)	-	-	-	-	-		400.00
	Total:	905.00	-	-	-	-		
5	220 Kv Nowshera S/S							50.00
	Local Component (LCC)	959.00	-	-	-	-		50.00
	Foreign Component (FCC)	916.00	-	-	-	-		100.00
	Total:	1,875.00	-	-	-	-		
6	Inter-Connection- Thar Coal Based Angro, 1200MW							50.00
	Local Component (LCC)	4,008.00	-	-	-	-		50.00
	Foreign Component (FCC)	16,045.00	-	-	-	-		100.00
	Total:	20,053.00	-	-	-	-		
7	2nd Source of Supply 200KV IlAbad University S/S							50.00
	Local Component (LCC)	1,211.00	-	-	-	-		50.00
	Foreign Component (FCC)	1,494.00	-	-	-	-		100.00
	Total:	2,705.00	-	-	-	-		
8	220KV Chakdara S/S						540.41	50.00
	Local Component (LCC)	646.00	-	-	-	-		50.00
	Foreign Component (FCC)	2,584.00	-	-	-	-	540.41	100.00
	Total:	3,230.00	-	-	-	-		
9	500KV F/Abad New (2x750)							100.00
	Local Component (LCC)	-	-	-	-	-		100.00
	Foreign Component (FCC)	-	-	-	-	-		200.00
	Total:	-	-	-	-	-		
10	220 Kv G/S & Allied T/L D.I Khan							100.00
	Local Component (LCC)	-	-	-	-	-		100.00
	Foreign Component (FCC)	-	-	-	-	-		200.00
	Total:	-	-	-	-	-		
11	132 KV Thatta Mirpur Sakro						1,385.34	50.00
	Local Component (LCC)	816.00	-	-	-	-		-
	Foreign Component (FCC)	-	-	-	-	-	1,385.34	50.00
	Total:	816.00	-	-	-	-		
12	Augmentation of 500/220KV & 220/132 KV Transformer in NTDC system						393.29	1,300.00
	Local Component (LCC)	-	-	-	-	-		-
	Foreign Component (FCC)	-	-	-	-	-	393.29	1,300.00
	Total:	-	-	-	-	-		
12	500 KV Transmission System for Dispersal of Power from Thar Coal Project.							10.00
	Local Component (LCC)	-	-	-	-	-		-
	Foreign Component (FCC)	-	-	-	-	-		10.00
	Total:	-	-	-	-	-		
12	Feasibility study for Dispersal of Power from Imported Coal at Karachi							10.00
	Local Component (LCC)	-	-	-	-	-		-
	Foreign Component (FCC)	-	-	-	-	-		10.00
	Total:	-	-	-	-	-		
12	Feasibility Study for Dispersal of Power from Imported 100MW from Iran							10.00
	Local Component (LCC)	-	-	-	-	-		-
	Foreign Component (FCC)	-	-	-	-	-		10.00
	Total:	-	-	-	-	-		

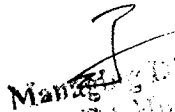
Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION & DESPATCH COMPANY LIMITED

INVESTMENT PROGRAM (PSDP)

Rs. Mln

Sr. No.	PROJECTS	PROJECT COST	2009-10 Actual	2010-11 Actual	2011-12 Actual	2012-13 Actual	2013-14 (Prov)	2014-15 (Estimated)
	Total:	-	-	-	-	-		10.00
12	Feasibility study for Despersal of Power from Basha Hydro Power Project and other Hydro Power projects on River Indu in Northern Areas							
	Local Component (LCC)							10.00
	Foreign Component (FCC)							
	Total:	-	-	-	-	-		10.00
	Evacuation of power from wind power projects at Jhimpir and Gharo Wind Clusters							
	Local Component (LCC)	7,038.20					32.06	2,959.45
	Foreign Component (FCC)	5,534.46						
	Total:	12,572.66					32.06	2,959.45
	Interconnection of Chashma Neculer (C-3&C-4)							
	Local Component (LCC)	1,260.00					182.18	1,500.00
	Foreign Component (FCC)	1,890.00						-
	Total:	3,150.00					182.18	1,500.00
	Enterprise Resource planning (ERP)							
	Local Component (LCC)	900.00						200.00
	Foreign Component (FCC)	-						-
	Total:	900.00						200.00
	Depleted Material Tranch-III (Now Replacement of Depleted Matrial at existing grid station of NTDC System) ADB Loan No. 2846-PAK							
	Local Component (LCC)	1,640.00						110.00
	Foreign Component (FCC)	2,460.00						1,000.00
	Total:	4,100.00						1,110.00
	Quaid-e-Azam Solar Park at Lal-Suhanra (Phase-II) Evacuation of 600 MW Solar (Prposed to be carried out by NTDC)							
	Local Component (LCC)	2,160.53						1,918.49
	Foreign Component (FCC)	1,905.20						-
	Total:	4,065.73						1,918.49
	Extension/Augmentation at 500/200 kV Rewat Substation							
	Local Component (LCC)	216.00						100.00
	Foreign Component (FCC)	733.00						100.00
	Total:	949.00						200.00
	500KV Islamabad West							
	Local Component (LCC)	4,018.00						10.00
	Foreign Component (FCC)	6,026.00						-
	Total:	10,044.00						10.00
	Alliot switching station and its interconnection with Suki Kinari HPP							
	Local Component (LCC)	7,603.00						10.00
	Foreign Component (FCC)	11,405.00						
	Total:	19,008.00						10.00
	Interconnection scheme for import of power from CASA-1000							
	Local Component (LCC)	15,233.00						400.00
	Foreign Component (FCC)	18,716.00						1,000.00
	Total:	33,949.00						1,400.00
13	Grand Total							
	Local Component (LCC)	92,856.20	7,513.65	5,623.38	7,229.79	5,473.93	8,371.53	20,375.94
	Foreign Component (FCC)	125,930.58	5,791.42	7,458.90	9,280.00	7,402.29	9,030.04	12,250.00
	Total:	218,786.78	13,305.07	13,082.28	16,509.79	12,876.22	17,401.57	32,625.94


 Managing Director NTDC
 WAPDA House Lahore.

Brief on
500 kV SUBSTATION AT FAISALABAD WEST

Location

Faisalabad District in Punjab Province

Objectives & Benefits

The main objective of the project is to enhance the transmission capacity of NTDC system by addition of new 500 kV substation along with allied transmission lines to meet the growing power demand of the area in the jurisdiction of FESCO along with the other benefits as follows:

- i) Reduction in overloading of existing 500/220 & 220/132 T/Fs in the area.
- ii) Improvement in reliability of NTDC and FESCO system Network.
- iii) Improvement in voltage profile around the area.
- iv) Reduction in transmission losses.

Scope of Work

Phase-I

- i) New 500 kV substation near Faisalabad with 2x750 MVA 500/220 kV & 3x250 MVA 220/132 kV transformers along with allied equipment and accessories.
- ii) 500 kV D/C T/L for In/Out of 500 kV Muzaffar Garh – Gatti S/C at Faisalabad West (2 km)
- iii) 220 kV D/C T/L from Faisalabad West to T.T Singh (45 km).

Phase-II

- i) 500 kV D/C T/L for In/Out of 500 kV Multan – Gatti S/C at Faisalabad West (30km)
- ii) 220 kV D/C T/L from 500 kV Faisalabad West to 220 kV Lalian Substation (80 km).

Estimated Cost of the Project

Cost (Rs. in million)			
	Local	FEC	Total
Phase-I	3302	4165	7467
Phase-II	2114	2575	4689
Total	5416	6740	12156

APPROVAL OF PC-I

PC-I under approval

Financing:


Project is proposed to be financed by JICA




Managing Director NTDC
WAPDA House Lahore.

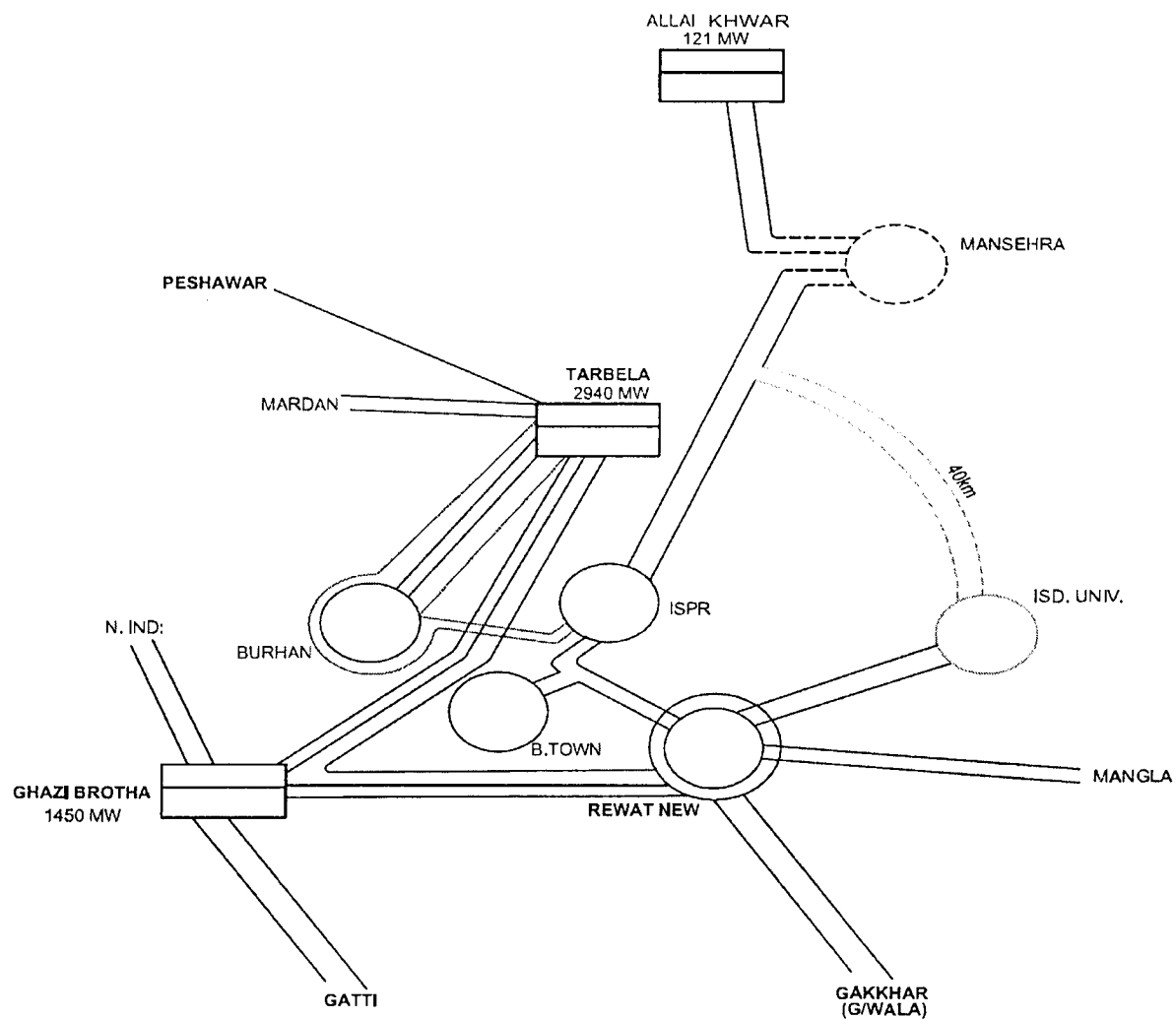
Brief on PC-I for 220 kV Transmission System Network Reinforcement in Islamabad and Burhan

1.	Name of the Project	220 kV Transmission System Network Reinforcement in Islamabad and Burhan		
2.	Brief Description	<p>In order to reduce the loading of 220 kV transmission lines in Islamabad and Burhan area following reinforcements have been planned:</p> <ul style="list-style-type: none"> i) A new 220kV Tarbela-Burhan double circuit transmission line on twin bundled Rail conductor (35.1 km). ii) Re-conductoring of 220 kV Tarbela-ISPR double circuit transmission line and increase in the capacity by converting the line from single Rail conductor to twin bundled Rail conductor (62.5 km). iii) In/Out of one circuit of Mansehra-ISPR 220 kV double circuit transmission line at Islamabad University substation (40 km). 		
3.	Estimated Cost	<p>(Rs. in million)</p> <p>Local: 1211</p> <p>FEC: 1494 = 13.744 million US\$ @ 1US\$=Rs.108.7</p> <p>Total: 2705</p>		
4.	Financial & Economic Analysis	IFRR	IERR	B/C Ratio
		11.4 %	11.61 %	2.41


 Managing Director (I) & C
 WAPDA House Lahore

5.	Justifications of Project	<p>The proposed project will ease the stress on Tarbela-Burhan-ISPR lines which will be heavily loaded in future especially with the addition of Tarbela 4th Extension Project (1410 MW). Moreover it will also facilitate the 220 kV Islamabad University grid station which is currently being fed from a single source i.e. from 500 kV Rewat substation through a 220 kV double circuit transmission line. As this substation is feeding many sensitive government offices in Islamabad therefore to improve the reliability of power supply an additional power supply link to 220 kV Islamabad University has been proposed.</p> <p>The benefits associated with the proposed project, inter-alia, are:</p> <ul style="list-style-type: none"> i. Reduction in transmission system losses. ii. Improvement in reliability of 220 kV NTDC network at/around IESCO. iii. Providing relief to Rewat 500 kV substation in future. iv. The above subprojects would also facilitate the evacuation of power from Tarbela 4th extension project in future. <p><u>In case the project don't get completed</u></p> <p>Additional generation at Tarbela would be connected to 500kV switchyard but it would also result in increase in power flow towards 220 kV bus through 500/220 kV transformers which would consequently increase stress on the Tarbela - Burhan – ISPR 220 kV lines.</p> <p>In view of these scenarios, there would be no single line contingency provision on the subject transmission lines and the tripping of any 220 kV S/C from Tarbela to Burhan would result in cascading tripping of all the remaining from Tarbela to Burhan to ISPR 220 kV lines and discontinuation of supply to Burhan and ISPR 220kV substations.</p>
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Managing Director NTDC
WAPDA House Lahore.




LEGEND

	Existing Tarbela Burhan D/C T/Line will be replaced with a new Line 35.1km
	Reconductoring of 220kV Tarbela - ISPR D/C T/Line (62.5km)
	In /Out of one circuit of 220kV Mansehra - ISPR D/C T/Line at Islamabad Univ.(40km)

Managing Director NTDC
 WAPDA House Lahore.

BRIEF ON
INTERCONNECTION SCHEME FOR IMPORT OF POWER FROM CASA-1000

1.	Name of the Project	Interconnection Scheme for import of power from CASA-1000
2.	Project Objectives	The main objective of this project is the import of power from Central Asian States during peak months. CASA-1000 is a transmission project has been designed to transmit 1300 MW of surplus electricity from existing Hydel power resources in the Central Asian countries, Tajikistan and Kyrgyz Republic through Afghanistan to Pakistan. Out of 1300 MW of exported power 300MW will be share of Afghanistan and remaining 1000 MW will come to Pakistan.
3.	Scope of work	<p>HVDC Component (for import of power from Tajikistan to Peshawar)</p> <ul style="list-style-type: none"> • \pm 500 kV HVDC bipolar transmission line from Pak – Afghan border to Peshawar (100 km) • Converter Station at Peshawar (1300 MW) • Grounding Electrode <p>HVAC Component (for dispersal of power to the load centers)</p> <ul style="list-style-type: none"> • 500 kV substation Peshawar New • 500 kV HVAC double circuit transmission line for In/out of existing 500 kV Tarbela – Peshawar S/C at Peshawar New (15 km) • Two 220 kV double circuit transmission lines for In/out of 220 kV Peshawar – Shahibagh double circuit transmission line at Peshawar New (12+12)km.
4.	Estimated cost	<p>(Rs. in million)</p> <p>Local: 15,233</p> <p>FEC: 18,716 = 173 million US\$ @ 1US\$=Rs.108</p> <p>Total: 33,949</p>
5.	Implementation Period	43 months
6.	Expected year of commissioning	2017-18
7.	Status of PC-I	Under preparation.


 Managing Director, WAPDA
 WAPDA House Lahore.

Brief on PC-I for Replacement of Depleted Material at Existing Grid Stations of NTDC System

Brief Description

The equipment installed at existing grid stations of NTDC is of very old version whose spare parts are not available in the market. Consequently the trouble shooting and maintenance of these old version equipments are inconvenient, more difficult and expensive as compared with the new equipment. Therefore, to increase reliability and stability of the NTDC network, the replacement of obsolete/depleted equipment is required at 24 nos. of 500kV and 220kV substations mentioned below:

Sr. No.	Name of Grid Stations
i)	500 kV Sheikh Muhammadi Peshawar
ii)	500 kV Rawat
iii)	500 kV Sheikhpura
iv)	500 kV Gatti
v)	500 kV New Multan
vi)	500 kV Yousafwala (Sahiwal)
vii)	500 kV Jamshoro
viii)	220 kV Burhan
ix)	220 kV Daudkhel
x)	220 kV Mardan
xi)	220 kV Islamabad, Peshawar Road (Sangjani)
xii)	220 kV Shahibagh (Peshawar)
xiii)	220 kV Islamabad University
xiv)	220 kV Bannu
xv)	220 kV Bund Road, Lahore
xvi)	220 kV Ghakhar
xvii)	220 kV Jaranwala Road
xviii)	220 kV Kala Shah Kaku
xix)	220 kV Ludewala
xx)	220 kV Nishatabad
xxi)	220 kV New Kot Lakhpat, Lahore
xxii)	220 kV Ravi
xxiii)	220 kV Sialkot (Sahowala)
xxiv)	220 kV Sammundri Road

Estimated Cost of the Project


Local	FEC	Total
493.58	1403.08	1896.66

Financing:

The project is proposed to be financed under Tranche-III of ADB (MTFF) for which the loan has been approved.

PC-I Status

PC-I under approval in Planning Commission


Managing Director NTDC
WAPDA House Lahore.

220 KV GRID STATION AT GHAZI ROAD, LAHORE

OBJECTIVE AND BENEFITS OF THE PROJECT

In order to meet the growing power demand in Lahore and the surrounding areas and to reduce overloading of 220/132 kV transformers, new 220 kV substation at Ghazi Road, Lahore is planned. It will constitute an integral component of NTDC program for strengthening and augmentation the power supply system in Lahore area. The scheme will result in:

- i) Reduction in loading of existing 220/132 kV transformers feeding LESCO Load Centre, especially at New Kot Lakhpat, Ravi, and Bund Road Substations.
- ii) Improvement in Voltage profile of Grid Stations
- iii) Reduction in transmission system losses.
- iv) Improvement in the NTDC system reliability feeding LESCO.

SCOPE OF THE PROJECT

- i) A new 220/132 kV GIS Substation at Lahore with three 220/132, 160 MVA Transformers along with three 220 kV transformer Bays, four 220 kV line bays, and eight 132 kV lines bays along with associated equipment.
- ii) Construction of 50 km long 220 kV Double Circuit T/Line for In & Out arrangement of existing 220 kV Kala Shah Kaku - Ravi S/C at Ghazi Road, Lahore.
- iii) Laying of 15 km long 220 kV Double Circuit cable for In & Out arrangement of existing 220 kV New Kot Lakhpat-Srafaraz Nagar S/C T/L at Ghazi Road, Lahore. (The original plan was the construction of 30 km long 220 kV Double Circuit T/Line for In & Out of existing 220 kV NKLP-Srafaraz Nagar S/C T/L at Ghazi Road, Lahore.

IMPLEMENTATION PERIOD


36 Months

ESTIMATED COST OF THE PROJECT

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
First year	220.68	253.28	473.96
Second year	500.88	507.55	1008.43
Third year	602.71	506.53	1109.24
Total:	1324.27	1267.36	2591.62

APPROVAL OF PC-I

PC-I approved by ECNEC on 25-02-2005


Managing Director NTDC
WAPDA House Lahore.

220 kV GRID STATION AT KASSOWAL

LOCATION

District of Sahiwal in Punjab Province

SCOPE OF THE PROJECT

- i) 220/132 kV Grid Station at Kassowal with Four Line Bays and 2x160 MVA, 220/132 KV Transformers and allied equipment.
- ii) Construction of Two Double Circuits (45+45 km) for In/out of existing 220 kV Vehari – Yousafwala D/C Transmission Line.
- iii) Construction of 132 kV Double Circuit Transmission Line (1+1km) for In & out of Mianchannu-Chichawatni 132 kV D/C at Kassowal.
- iv) Construction of 132 kV Double Circuit Transmission Line (28 km) for In & Out of Chichawatni-Sahiwal 132kV S/C at Kassowal.
- v) Two 132 kV Transformer Bays and Six 132 kV Line Bays for In & Out of Mianchannu-Chichawatni D/C and Chichawatni-Sahiwal S/C T/Lines.

TECHNICAL BENEFITS

- Reduction in the loading of 220/132kV transformers feeding MEPCO load center, especially Yousafwala, Vehari and Piranghab
- Improvement in the voltage profile of grid stations
- Reduction in transmission system losses
- Improvement in the NTDC system reliability feeding MEPCO.

FINANCIAL BENEFITS

Internal Financial Rate of Return (IRR) = 11.42%


ESTIMATED COST

(Rs. in Mln)		
Local	FEC	Total
1255.90	811.46	2067.35

FINANCING

World Bank

APPROVAL OF PC-I PC-I approved by ECNEC on 25-02-2005


Managing Director NTDC
NAPDA House Lahore

Transmission Scheme for Dispersal of Power from Neelum-Jhelum, Karot and Azad Pattan Hydro Power Projects (Revised)

Description

969 MW Neelum Jhelum Hydro Power Project is envisaged to be commissioned in Dec, 2015. For evacuation of power from Neelum Jhelum Hydro Power Plant to the respective load centers of the country a 270 km long 500 kV double circuit transmission is required to be constructed from power plant to 500 kV Gujranwala (Nokhar) Grid station.

Original PC-I for transmission project was approved by ECNEC on 28.08.2013 at an estimated cost of Rs. 22,582 million including foreign component of Rs. 13,353 million for construction of 500 kV transmission line\ s on Martin conductor.

The project was proposed to be implemented on Buyer's Credit basis through International Competitive Bidding (ICB). However, due to high bid prices quoted by the bidders and difficulty in achieving the time line of project, BoD NTDC decided for execution of project on Drake Conductor in two phases as follows:

- i. First phase shall consist of transmission line from Neelum Jhelum to Domeli (145 km).
- ii. Second phase shall comprise transmission line from Domeli to Gujranwala (Nokhar) (130 km).
- iii. Transmission line shall be constructed on Drake Conductor

In view of the above decision of BoD NTDC, revised PC-I for the subject project has been prepared to obtain the fresh approval of ECNEC.

Scope of Work

Sr. No.	Name of Projects	Scope of Work
1-	Dispersal of Power from 969 MW Neelum-Jhelum Hydro Power Project	Phase-I 500 kV quad bundle double circuit transmission line on Drake Conductor from Neelum-Jhelum HPP to Domali (145 km) Phase-II 500 kV quad bundle double circuit transmission line on Drake Conductor from Domeli to 500 kV Gujranwala Grid Station (130 km) Two line bays along with 3x37 MVA Shunt Reactors at 500 kV grid station Gujranwala.
2-	Dispersal of Power from 720 MW Karot Hydro Power Project.	500 kV quad bundle double circuit transmission line on Drake conductor for In/Out of one circuit of Neelum Jhelum – Gujranwala T/Line at Karot HPP (5 km)
3-	Dispersal of Power from 650 MW Azad Pattan Hydro Power Project.	500 kV quad bundle double circuit transmission line on Drake conductor for In/Out of one circuit of Neelum Jhelum – Gujranwala T/Line at Azad Pattan HPP (5 km)

Estimated Cost of the Project

Local	Rs. 10,425 million
Foreign	Rs. 11,272 million
Total	Rs. 21,697 million

Financing:

Transmission line component of the project is proposed to be financed through NTDC's own resources and borrowing from local banks.


The component of extension at Gujranwala grid station is proposed to be financed by ADB under Tranche-IV of MTFF.


Managing Director NTDC
WAPDA House Lahore.

BRIEF ON

3rd 500KV Jamshoro-Moro- R.Y Khan Single Circuit T/Line.

1.	Name of the Project:	3rd 500KV Jamshoro-Moro- R.Y Khan Single Circuit T/Line.																							
2.	Execution Agency:	National Transmission & Despatch Company Ltd. (NTDCL)																							
3.	Objective:	For power evacuation from 2x660 MW Coal Power Plant at Jamshoro & WPPs.																							
4.	Scope of Work:	<ul style="list-style-type: none">• 500 kV Jamshoro-Moro-R.Y.K S/C T/L (535km)• 500 kV Moro-Dadu S/C T/L (55km)• 500 kV switching station at Moro.• Extension at 500 kV Jamshoro, Dadu & R.Y.K Grid Stations.																							
5.	Estimated Cost:	Local component: Rs. 17,400 million Foreign component: Rs. 19,834 million Total Rs. 37,234 million																							
6.	Project Phases	<table border="1"><thead><tr><th>Phase-I</th><th>Phase-II</th></tr></thead><tbody><tr><td>Jamshoro-Moro-Dadu-RYK (600KM)</td><td>AES to Matiari (Not yet to be done)</td></tr></tbody></table>		Phase-I	Phase-II	Jamshoro-Moro-Dadu-RYK (600KM)	AES to Matiari (Not yet to be done)																		
Phase-I	Phase-II																								
Jamshoro-Moro-Dadu-RYK (600KM)	AES to Matiari (Not yet to be done)																								
7.	Expected Completion	2016-17 of Phase –I and Phase-II will be start after phase-I																							
8.	Packages	<table border="1"><thead><tr><th>Package-I</th><th>Package-2</th></tr></thead><tbody><tr><td>500 kV Transmission Line wit the cost of Rs. 11,000 million</td><td>500 kV Switching station with the coat of Rs. 4,000 million</td></tr></tbody></table>		Package-I	Package-2	500 kV Transmission Line wit the cost of Rs. 11,000 million	500 kV Switching station with the coat of Rs. 4,000 million																		
Package-I	Package-2																								
500 kV Transmission Line wit the cost of Rs. 11,000 million	500 kV Switching station with the coat of Rs. 4,000 million																								
9.	Financing:	Included in ADB Tranch-III																							
10.	Financial Projections (Rs. In millions) Phase-I	<table border="1"><thead><tr><th>Particulars</th><th>2013-14 (R)</th><th>2014-15</th><th>2015-16</th><th>2016-17</th></tr></thead><tbody><tr><td>LCC</td><td>1,000</td><td>500</td><td>800</td><td>209</td></tr><tr><td>FCC</td><td>500</td><td>4,000</td><td>7,470</td><td>1,900</td></tr><tr><td>Total</td><td>1,500</td><td>5,400</td><td>8,290</td><td>2,109</td></tr></tbody></table>				Particulars	2013-14 (R)	2014-15	2015-16	2016-17	LCC	1,000	500	800	209	FCC	500	4,000	7,470	1,900	Total	1,500	5,400	8,290	2,109
Particulars	2013-14 (R)	2014-15	2015-16	2016-17																					
LCC	1,000	500	800	209																					
FCC	500	4,000	7,470	1,900																					
Total	1,500	5,400	8,290	2,109																					
11.	Project Status	Rebidding in process Expected to be award on 31.03.2014																							
12.	Status of PC-I:	Approved by ECNEC on 26.08.2013																							


Managing Director, NTDCL
WAPDA House Lahore.


**Brief on PC-I for
Transmission Interconnection For Dispersal of Power From Uch-II Power Project**

1.	Name of the Project	Transmission Interconnection for Dispersal of Power from Uch-II Power Project
2.	Execution Agency	National Transmission & Despatch Company (NTDC)
3.	Objective	<p>The main objective of the project is construction of 220 kV double circuit T/line from Sibbi to Uch-II Power Plant and for In/Out of existing Uch-I power plant – Shikarpur new 220 kV single circuit transmission line at Uch-II for dispersal of power from Uch-II.</p> <p>The existing D/C 220 kV Guddu - Sibbi T/L is running away from roads, so it is subject to subsequent damage due to sabotage activity. The proposed 220 kV line will also help to overcome this problem thereby increasing the reliability of supply to Baluchistan.</p>
4.	Scope of work	<p>220 kV D/C transmission line, approx. 125 km long on twin bundled Rail Conductor, from Uch-II Power plant to 220 kV Sibbi Grid Station.</p> <p>220 kV D/C transmission line, approx. 0.5 km long on twin bundled Rail Conductor, for looping In/Out of the existing Uch-I power plant – Shikarpur New 220 kV S/C transmission line at Uch-II power plant.</p> <p>Re-conductoring of 220 kV line section, approx. 1 km long, between Uch-I and Uch-II power plant from single Rail to twin-bundled Rail conductor</p>
5.	Estimated cost	<p>Local: Rs. 1133 million</p> <p>FEC Rs. 1197 million</p> <p>Total Rs. 2330 million</p>
6.	Implementation period:	24 months
7.	Financing	Financed by ADB Tranch-III


Managing Director NTDC
WAPDA House Lahore.

Brief on
Evacuation of Power from WPPs at Jhimpir & Gharo Clusters

1.	Name of the Project	Evacuation of Power from WPPs at Jhimpir & Gharo Clusters.								
2.	Scope of work	<p>Phase-I 132 kV Jhimpir New Substation 132 kV Jhimpir New –TM Khan D/C T/L (82 km) 132 kV D/C T/L for interconnection of WPPs with 132 kV Jhimpir New (25 km)</p> <p>Phase-II Upgradation of 132 kV Jhimpir substation to 220 kV substation with 3x250MVA, 220/132 kV T/Fs 220 kV Gas Insulated Substation (GIS) at Gharo with 2x250 MVA 220/132 kV T/Fs. 220 kV D/C T/Ls from 220 kV Jhimpir to existing 220 kV T.M. Khan Road substation (70 km). 220 kV double circuit transmission line from 220 kV Gharo to 220 kV Jhimpir substation (75 km). 132 kV double circuit transmission lines for interconnection of WPPs to Gharo (20 km). 132 kV double circuit transmission lines for interconnection of WPPs to Jhimpir (65 km). Addition of 3rd 450 MVA, 500/220 kV transformer at 500 kV Jamshoro.</p> <p>Phase-III 220 kV D/C T/L for in/out of Jamshoro –KDA S/C at 2x250 MW NBT Wind Power Plants (10 km)</p>								
3.	Estimated Cost (MRs.)	<table><tr><th>Local</th><th>Foreign</th><th>Total</th></tr><tr><td>5996</td><td>5282</td><td>11278</td></tr></table>			Local	Foreign	Total	5996	5282	11278
Local	Foreign	Total								
5996	5282	11278								
4.	Status of PC-I	PC-I forwarded to Planning Commission on 12.09.2013.								
5.	Benefits of the Project	<p>The inter-alia benefits associated with the proposed project primarily include:</p> <ul style="list-style-type: none">i. A total of 1756 MW power from upcoming WPPs, i.e., 1256 MW power from Jhimpir & Gharo clusters and 500 MW from NBT WPPs can reliably be evacuated after the completion of the proposed project.ii. Improvement in voltage profile of HESCO and NTDCL Grid System.iii. Improvement in reliability of NTDCL and HESCO networks at/around Jhimpir and Gharo.iv. Reduction in the loading of 220/132 kV transformers at T.M. Khan Road 220kV substation.v. To promote alternate energy development.								


Managing Director NTDC
WAPDA House Lahore.

**Brief On Evacuation of Power from 1000 MW
Quaid-e-Azam Solar Park at Lal-Suhanra
(including MEPCO's scope of work).**

1.	Name of the Project	Evacuation of Power from 1000 MW Quaid-e-Azam Solar Park at Lal-Suhanra (including MEPCO's scope of work).
2.	Scope of work	<p>Evacuation of First 100 MW Solar Power Plants (Phase-I)</p> <ul style="list-style-type: none"> 132 kV double circuit transmission line on Rail conductor for I/O of first 2x50 MW Solar Plants with the proposed 132 kV Bahawalpur – Lal-Suhanra S/C transmission line. (4km). <p>Evacuation of 300 MW Solar Power Plants (Phase-II)</p> <ul style="list-style-type: none"> 132 kV double circuit transmission line on Rail conductor for I/O of 2x50 MW Solar Plants with proposed 132 kV Bahawalpur – Lal-Suhanra S/C at solar power plants (4km). 132 kV double circuit transmission line on Rail conductor for I/O of 4x50 MW Solar Plants with proposed 132 kV Bahawalpur Cantt. – Lal-Suhanra S/C transmission line (8km). 132 kV double circuit transmission line on Rail conductor from Bahawalpur New to Lodhran & looping In/Out of one circuit at 132 kV Baghdad-ul- Jaded Grid Station (40km) Extension at 132 kV Bahawalpur New substation (two line bays) <p>Evacuation of 600 MW Solar Power Plants (Phase-III)</p> <ul style="list-style-type: none"> 220 kV Grid Station at Lal-Suhanra with 3x250MVA, 220/132kV transformers along with allied equipment and accessories. 220 kV D/C transmission line on twin bundled Rail conductor from 220 kV Lal-Suhanra to 220kV Bahawalpur Grid Station (40km). Three 132 kV D/C transmission lines on Rail conductor from Solar projects sites to 220kV Grid Station at Lal-Suhanra (8 km each).
3.	Estimated PC-1 Cost	<p>(Rs. in million)</p> <p>Phase-I & II:</p> <p>Local: 501</p> <p>FEC: 262 = 2.49 million US\$ @ 1US\$=Rs.105</p> <p>Total: 763</p> <p>Phase-III:</p> <p>Local: 1659</p> <p>FEC: 1644 = 15.65 million US\$ @ 1US\$=Rs.105</p> <p>Total: 3303</p> <p>Total:</p> <p>Local: 2160</p> <p>FEC: 1906 = 18.15 million US\$ @ 1US\$=Rs.105</p> <p>Total: 4066</p>


Managing Director NTDC
 WAPDA House Lahore.

4.	Status of PC-I	PC-I approved by ECNEC on 12.02.2014
5.	Technical Justifications	<p>The benefits associated with this proposed project include</p> <ul style="list-style-type: none"> i. Inclusion of 1000 MW power to the National Grid thereby greatly improving the supply/deficit ratio. ii. Improvement in reliability of NTDC and MEPCO system networks. iii. Increase in the available system capacity to meet future load growth at/around proposed project. iv. Environment friendly power will be available for the country.



Managing Director NTDC
WAPDA House Lahore.

Brief on PC-I for 220 kV Substation Chakdara

Objective

The main objective of the project is to enhance the transmission capacity of NTDC system by addition of new 220 kV substation along with associated transmission lines to meet the growing power requirements of the areas including Dir, Malakand, Mardan, Swat and Dargai under the jurisdiction of Peshawar Electric Supply Company (PESCO).

Scope of Work

- i) A 220kV substation with two 220/132kV, 250 MVA transformers with allied equipment and accessories.
- ii) 220 kV D/C transmission line on twin bundle Rail conductor for In/Out of existing 220 kV Shahibagh-Mardan S/C at 220 kV Chakdara (85 km) alongwith two 220kV line bays at proposed 220kV substation Chakdara for said in/out arrangement.

Estimated Cost

Cost (Rs. in million)		
Local	FEC	Total
2480	1917	4397

Expected Completion Year

2016-17

Financing

Project is proposed to be financed under Tranche-IV of ADB Multi Tranche Financing Facility.

PC-I Status

PC-I submitted to Planning Commission on 13.09.2013


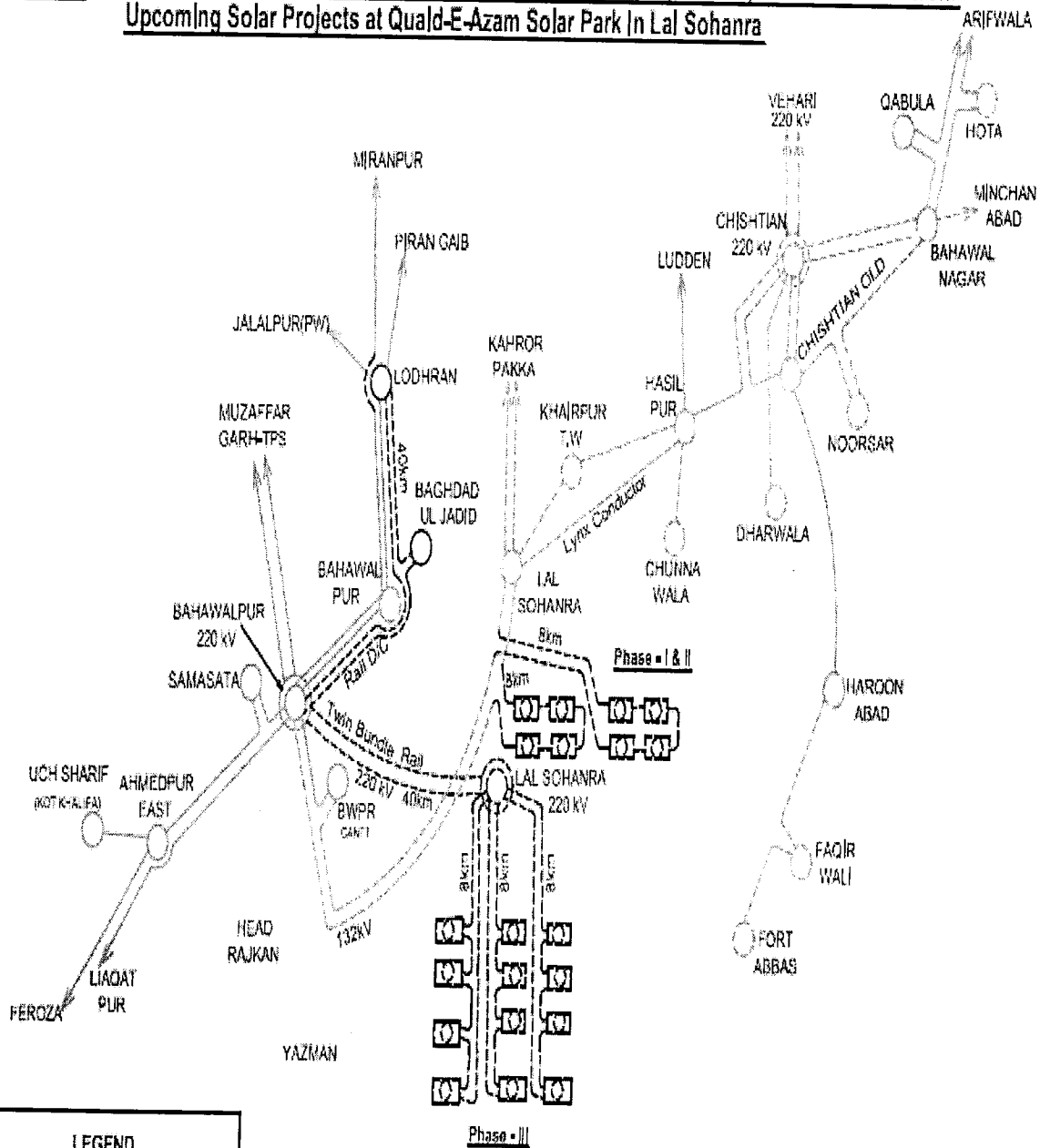

Managing Director NTDC
WAPDA House Lahore.

Figure # 1

**Proposed Interconnection Scheme for Evacuation of upto(400+600) 1000 MW Power from
Upcoming Solar Projects at Qaid-E-Azam Solar Park In Lal Sohanra**



LEGEND

	EXISTING		PROPOSED	
	GISTN	TL	GISTN	TL
220kV				
132kV				
66kV				
SOLAR PROJECTS 50 MW				

J
Managing Director NTDC
WAPDA House Lahore.

Dispersal of Power from 1200 MW Thar Coal based Power Plant with NTDC system

Objectives

1200 MW Thar Coal based Power Plant is envisaged to be commissioned in the year 2015-16. Accordingly, the scheme has been prepared for dispersal of power to the upcountry with NTDC system.

Scope of Work

Following scope of work has been assumed on the basis that 3rd 500 kV Jamshoro-Moro-R.Y.Khan transmission line and 500 kV Matiari switching station (being financed by ADB) are completed before commissioning of the Thar Coal based Power Plant:


- i) 500 kV quad bundle double circuit transmission line from Thar Coal Power Plant to Matiari switching station (250 km)
- ii) Two 500 kV Line Bays along with Shunt Reactors at Matiari switching station

Estimated Cost

(Rs. in million)			Equivalent MUS\$
Local	F.E.C.	Total	
7250.09	15055.64	22305.73	238


Approval Status

PC-I for the proposed project has been approved by ECNEC on 16.08.2012


Manager, Planning
WARDA, Islamabad


**Brief on the project for
Dispersal of Power From 747 MW Combined Cycle Power Plant At Guddu**

1.	Name of the Project	Dispersal of Power from 747 MW Power Plant at Guddu
2.	Execution Agency	National Transmission & Despatch Company Limited (NTDCL)
3.	Technical Justification	The main objective of the project is to provide transmission arrangement for power dispersal from 747 MW additional Combined Cycle Power Plant at Guddu by construction of 500 kV Transmission lines from Guddu to Muzaffargarh along with extension of 500 kV Muzaffargarh substation.
4.	Scope of work	<ul style="list-style-type: none"> • 500 kV transmission line on quad bundled Drake conductor for in/out of the existing Guddu–Multan (R.Y. Khan) 500 kV circuit at 500 kV Guddu New Substation (2+2 km). (To be carried out from Deposit Work of GENCO-II) • 500 kV Guddu New–Muzaffargarh transmission line on quad bundled Drake conductor (256 km). • 500 kV transmission lines on quad bundled Drake conductor for looping In/Out of the D.G.Khan–Multan 500kV transmission line at 500kV Muzaffargarh substation (10+10 km). • Construction of three 500 kV line bays at Muzaffargarh substation.
5.	Estimated cost	Local: Rs. 3014 million Foreign: Rs. 4842 million Total: Rs. 7856 million
6.	Approval Status	PC-I approved by ECNEC on 29.07.2011.


Managing Director NTDC
WAPDA House Lahore.

BRIEF ON BRIEF ON 220kV D.I.KHAN

1.	Name of the Project:	New 220 kV Grid Station at D.I. Khan along with 220 kV associated T/Line
2.	Execution Agency:	National Transmission & Despatch Company Ltd. (NTDCL)
3.	Objective:	New 220 kV substation at D.I.Khan has been planned to improve and enhance over all power system efficiency, reliability and power supply position in D.I. Khan area. The implementation of the project will also improve voltage profile at 132 kV substations and transmission losses would be reduced considerably.
4.	Scope of Work:	<div>i) 2x250MVA, 220/132 kV Auto transformers.</div> <div>ii) 220 kV D/C transmission line, approx 100 km long, twin bundle Rail conductor for looping In/Out of Chashma Nuclear – Ludewala 220 kV S/C at D.I. Khan New.</div> <div>iii) 132 kV D/C T/L, approximately 15 km long on Rail conductor from D.I. Khan New to D.I. Khan II</div> <div>iv) 132 kV D/C T/L approximately 25 km long on Rail conductor from D.I. Khan to D.I.Khan Ind.(Gomal University)</div> <div>v) 132 kV D/C T/L approximately 30 km long on rail conductor from D.I. khan New to Pezu.</div> <div>Note: Above new 132 kV T/L will be constructed by PESCO at their own cost.</div>
5.	Estimated Cost:	<div>Local component: Rs. 2332 million</div> <div>Foreign component Rs. 1412 million</div> <div>Total Rs. 3744 million</div>
6.	Financing:	ADB Tranch-IV
7.	Status of PC-I:	PC-I approved by ECNEC ON 09-12-2010.


Managing Director NTDC
WAPDA House Lahore.

Brief on 500 kV Grid Station Islamabad West

Brief Description and Justification:

Main source of Power supply to IESCO system is 500 kV Rewat Grid station which is further connected with 220 kV Islamabad University and Islamabad Peshawar Road Grid stations for feeding of 132 kV Grid stations of IESCO area.

At present 500 kV Rewat grid station and associated 220 kV Grid stations in the vicinity of Rewat Grid station become overloaded due to increase in power demand of the area. Therefore necessary arrangements are required to be made to overcome the situation.

To cater for the growing power demand of IESCO area and to provide relief to the existing 500 kV Rewat grid station a new 500 kV Islamabad Grid station has been proposed which will also serve for power evacuation from Hydel Power Plants in Northern areas including Dasu and Basha etc.

Project Benefits:

Envisaged benefits associated with the project are as follows:

- i. Power supply position of IESCO system will be improved to meet the power demand of the area.
- ii. Will provide relief to existing 500/220 kV T/Fs at 500 Rewat and 220/132 kV T/Fs at 220 kV Islamabad University, Islamabad Peshawar Road and Burhan Grid stations.
- iii. Improvement in voltage profile.
- iv. Reduction in transmission system losses.

Scope of Work:


- i. 500 kV Grid Station with 2x750 MVA 500/220 kV T/Fs and 2x250 MVA 220/132 kV T/Fs along with allied equipment and accessories.
- ii. 500 kV double circuit transmission line for looping in/out of existing 500 kV Tarbela- Rewat S/C at 500 kV Islamabad West (40 km).
- iii. 500 kV double circuit transmission line for looping in/out of existing 500 kV Ghazi Barotha - Rewat S/C at 500 kV Islamabad West (50 km).
- iv. 220 kV double circuit transmission line for looping in/out of existing 220 kV Tarbela- ISPR D/C at 500 kV Islamabad West (25 km).
- v. Two 220 kV double circuit transmission line for looping in/out of existing 220 kV Mansehra-Islamabad University-ISPR D/C at 500 kV Islamabad West (10 km).

Estimated Cost (in million US\$):

Local	Foreign	Total
4,018	6,026	10,044

Implementation Period : 48 months

Required Year of Commissioning: 2017-18


Managing Director NTDC
WAPDA House Lahore.

Brief on
220 kV Substation at Lalian

Objectives

The main objective of the project is to enhance the transmission capacity of NTDC system by addition of new 220 kV substation along with allied transmission lines to meet the growing power demand of FESCO area.

Scope of Work

- i) Installation of 220 kV substation with 3x250 MVA 220/132 kV transformers along with allied equipment and accessories.
- ii) Two 220 kV D/C transmission lines for In/out of existing 220 kV Gatti-Ludewala D/C T/L at 220 kV Lalian substation (8+8 km)

Estimated Cost

(Rs. in million)		
Local	F.E.C.	Total
646.87	934.59	1581.47

Mode of Financing

Proposed in ADB Tranch-IV.

PC-I Status:

PC-I is approved by ECNEC on 11.11.2011.


Managing Director NTDC
WAPDA House Lahore.

**220 kV Grid Station at Okara along with In/Out of 220 kV Yousafwala - Sarfraznagar D/C Twin
Bundle Transmission Line at Okara**

LOCATION

District of Sahiwal in Punjab Province

OBJECTIVE AND BENEFITS OF THE PROJECT

The proposed scheme is one of integral constituents of the overall augmentation and strengthening plan of NTDC for supplying efficient and stable power.

The execution of the scheme will result in:

- a) Relief in 220/132kV transformers loading at Yousafwala & sarfaraz Nagar Grid Stations
- b) Reduction in system transmission line losses.
- c) Improvement in the voltage profiles.

SCOPE OF THE PROJECT

- 220 kV Grid Station with 3x160 MVA, 220/132 kV transformers and allied equipment at Okara.
- Construction of 10 km long two double circuits for In & out arrangement of 220 kV Yousafwala - Sarfraznagar Double Circuit Transmission Line at 220 kV Okara Grid Station.
- Construction of four 220 kV Line Bays at 220 kV Okara Grid Station.

IMPLEMENTATION PERIOD 36 Months

ESTIMATED COST OF THE PROJECT

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
First year	100.00	200.00	300.00
Second year	250.00	450.00	700.00
Third year	213.00	382.00	595.00
Total:	563.00	1032.00	1595.00


APPROVAL OF PC-I

PC-I is under preparation for submission to GOP for obtaining the approval of competent forum.

**220 kV Grid Station at Wapda Town, Lahore along with I/O of 220 kV Bund Road-NKLP Double
Circuit Twin Bundle Transmission Line at Wapda Town**

LOCATION

Distt: Lahore in Punjab Province.


Managing Director NTDC
WAPDA House Lahore.

OBJECTIVE AND BENEFITS OF THE PROJECT

The proposed scheme is one of integral constituents of the overall augmentation and strengthening plan of NTDC for supplying efficient and stable power.

The execution of the scheme will result in:

- d) Relief in 220/132kV transformers loading at Bunda Road & K.L.P Grid Stations
- a) Reduction in system transmission line losses.
- b) Improvement in the voltage profiles.

SCOPE OF THE PROJECT

- 220 kV Grid Station with 2x160 MVA, 220/132 kV transformers and allied equipment at Wapda Town Lahore.
- Construction of 1km long two double circuits for In & out arrangement of Bunda Road – N.Kotlakhpat Double Circuit Transmission line at 220 kV Wapda Town.
- Construction of four 220 kV Line Bays at 220 kV at Wapda Town Grid Station.

IMPLEMENTATION PERIOD


36 Months

ESTIMATED COST OF THE PROJECT

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
First year	47.20	119.00	166.20
Second year	106.20	267.75	373.95
Third year	82.60	208.25	290.85
Total:	236.00	595.00	831.00

APPROVAL OF PC-I

PC-I is under preparation for submission to GOP for obtaining the approval of competent forum.


Managing Director NTDC
WAPDA House Lahore.

**500 KV GRID STATION
AT D.G KHAN ALONGWITH ASSOCIATED TRANSMISSION LINES**

LOCATION

Districts of Muzaffargarh and D.G. Khan in Punjab Province

OBJECTIVE AND BENEFITS OF THE PROJECT

The proposed scheme is one of the integral constituents of the overall augmentation and strengthening plan of NTDC for supplying efficient and stable power.

The execution of the scheme will result in: -

- Relief in existing 500/220 kV transformers loading at Multan & Guddu Grid Station.
- Relief in 220/132kV transformers loading at Muzaffargarh, Sibbi & Loralai Grid Stations
- Reduction in system transmission line losses.
- Improvement in voltage profiles.

SCOPE OF THE PROJECT

- 500 kV Grid Station at D.G Khan consisting of 1x600 MVA 500/220 kV, 2x160 MVA 220/132 & 1x13 MVA 132/11 kV Transformers along with allied equipment.
- In/out of 500 kV Guddu-Multan S/C (about 5+5 km long)
- In/out of 132 kV D. G. Khan-Sakhi sarwar D/C & 132 kV DG Khan-Cement factory S/C (about 10 km long)

IMPLEMENTATION PERIOD

36 Months

ESTIMATED COST OF THE PROJECT

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
2006-07	450.80	593.20	1044.00
2007-08	450.80	593.20	1044.00
2008-09	225.40	296.60	522.00
Total:	1127.00	1483.00	2610.00

APPROVAL OF PC-I

PC-I is under preparation for submission to GOP for obtaining the approval of competent forum.


500 KV SUB STATION AT SAHIWAL

LOCATION

Dist: Sahiwal in Punjab Province.

OBJECTIVE & BENEFITS OF THE PROJECT

Originally it was a component of 500 kV Jamshoro-Guddu-Lahore Transmission Line Project (Second Circuit) which stands completed less this substation at Sahiwal which was deferred. The


Managing Director NTDC
WAPDA House Lahore.

need for its construction is now established. It is in the revised PC-I of Second 500 kV circuit from Jamshoro to Lahore. It is required to meet the ever-increasing demand of power of this area & to improve the reliability of supply.

Further this will result in:

- Relief in existing 500/220 kV transformers loading at Lahore & Gatti Grid Station.
- Reduction in system transmission line losses.
- Improvement in voltage profiles.

SCOPE OF THE PROJECT

New 500 kV Substation at Sahiwal with two 500 kV line bays alongwith shunt reactors and two 3x200 MVA 500/220 kV Power Transformers with one spare unit alongwith 220 kV associated equipment. The existing 500 kV Lahore – Multan Transmission Line which is passing by will be made In/Out at this station.


IMPLEMENTATION PERIOD

36 Months

ESTIMATED COST OF THE PROJECT & YEARLY PHASING

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
First year	152.79	262.26	415.05
Second year	451.99	699.21	1151.20
Third year	535.15	611.74	1146.89
Fourth year	21.07	174.79	195.86
Total:	1161.00	1748.00	2909.00

APPROVAL OF PC-I PC-I approved by ECNEC on 07.01.2004


Managing Director NTDC
WAPDA House Lahore.

PROVISION OF SECURED METERING SYSTEM AT DELIVERY POINTS BETWEEN ELECTRIC SUPPLY COMPANIES

LOCATION

All over the country except KESC area

OBJECTIVES & BENEFITS OF THE PROJECT

WAPDA has recently been unbundled into Generation, Transmission and Distribution Companies. *National Transmission & Despatch Company (NTDC)* has to purchase Power from Generation Companies as well as *Independent Power Producers (IPPs)* for supply of Power to Distribution Entities. At present, the metering systems at the *IPPs* have been installed with due care regarding security of the system. However, at other Delivery points, the existing CTs/PTs and the control room instrumentation fed there from is such located that the newly inserted revenue metering system cannot be fully secured due to operational problems. Separate secured metering systems are therefore, required to account for the energy delivered to Distribution Entities for the purpose of accurate billing. The installation of accurate and secured metering systems at the delivery points is the fundamental requirement of the energy transfer deals between the participating companies.

SCOPE OF THE PROJECT

To install accurate and secured metering system with dedicated CTs/PTs of 0.2 accuracy class at all Metering Delivery Point located at various grid stations and power stations in separate air-conditioned rooms, with provision for remote meter reading/data collection through the Public Switched Telephone Network (PSTN) and or SCADA.

IMPLEMENTATION PERIOD


24 Months

ESTIMATED COST OF THE PROJECT

YEAR	Cost (Rs. in million)		
	Local	FEC	Total
First year	43.71	51.32	95.03
Second year	360.71	410.55	771.26
Third year	91.43	51.32	142.75
Total:	495.95	513.19	1009.05

APPROVAL OF PC-I

PC-I approved by ECNEC on 04.08.2005


Managing Director NTDC
WAPDA House Lahore.

Brief on
220 kV GRID STATION AT KHUZDAR
ALONGWITH 220 KV DADU – KHUZDAR DOUBLE CIRCUIT TRANSMISSION LINE

LOCATION

District of Dadu and Khuzdar in Sindh and Baluchistan Provinces.

OBJECTIVES & BENEFITS OF THE PROJECT

The scheme is proposed to meet power demand of the various development activities in Khuzdar and surrounding areas. At present extreme low voltage is being experienced in the area. The execution of the project will augment as well as strengthen power supply presently fed through 132 kV line from Quetta. This will result in:

- i) Improvement in voltage profile of the area.
- ii) Reduction in losses.
- iii) Provision of an alternate route for the power supply to the QESCO area.

SCOPE OF THE PROJECT

- i) 220 kV Grid Station with 2x160 MVA 220/132 kV Transformers and allied equipment at Khuzdar.
- ii) Double Circuit 220 kV Transmission Line from Dadu to Khuzdar (300 KM)
- iii) Extension of Dadu Grid Station (Two Line Bays)

ESTIMATED COST OF THE PROJECT

Cost (Rs. in million)		
Local	FEC	Total
1647.00	1253.00	2900.00

APPROVAL OF PC-I

PC-I approved by ECNEC on 27-7-2004

Financing:

JICA


Managing Director NTDC
WAPDA House Lahore.

ADDITION OF FOUR 500 & 220 KV SUBSTATIONS & ASSOCIATED T/LINES IN THE NTDC SYSTEM

LOCATION

Districts of R. Y. Khan, Chishtian, Gujrat, and Lahore in Punjab Province

OBJECTIVES OF THE PROJECT

The main objective of the project is enhancement in the capacity of the transmission system by addition of new 500 kV & 220 kV substations along with associated transmission lines, to meet the growing power demand of the country, particularly in MEPCO, GEPCO & LESCO areas.

SCOPE OF THE PROJECT


SR. NO.	NAME OF SUBSTATION	SCOPE OF WORK
1-	500 kV R. Y. Khan	2x600 MVA, 500/220 kV T/Fs , 2x250 MVA 220/132 kV T/Fs and other associated equipment along with 500 kV S/C T/Line (30+30 km) for In/Out of 500 kV Guddu – Multan 3 rd Circuit at R. Y. Khan
2-	220 kV Gujrat.	3x250 MVA, 220/132 kV T/Fs and other associated equipment along with 220 kV D/C T/line (2+2 km) for In/out of 220 kV Mangla-Ghakkar D/C T/Line at Gujrat
3-	220 kV GIS Shalamar, Lahore	3x160 MVA, 220/132 kV T/F and other associated equipment along with 220 kV D/C T/Line for In/out of one circuit of Ravi- K.S.K T/Line at Shalamar. (9km long overhead T/Line & (3+3 km) cable)
4-	220 kV Chishtian	2x250 MVA, 220/132 kV T/Fs and other associated equipment along with 65 km long 220 kV Chishtian–Vehari Double Circuit T/Line

ESTIMATED COST OF THE PROJECT

Cost of the project has been estimated as Rs. 12894 million including FEC of Rs. 7787 million.

FINANCING ARRANGMENTS

JBIC has offered to finance the project.


Managing Director NTDC
WAPDA House Lahore.

Brief on
500 kV GRID STATION AT RAHIM YAR KHAN

LOCATION

District of Rahim Yar Khan in Punjab Province.

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by addition of new 500 kV substation at Rahim Yar Khan along with associated transmission lines to meet the growing power demand of the area and to provide relief to existing 132 kV Grid stations in the vicinity of Rahim Yar Khan. Execution of the project will result in:

- i) Improvement in voltage profile of the area.
- ii) Improvement in system reliability specially at/around Rahim Yar Khan
- iii) Provide relief to overloaded transformers at 220 kV Bahawalpur, Guddu Grid Stations
- iv) Reduction in losses.

SCOPE OF THE PROJECT

- i) 500 kV Grid Station with 2x600 MVA 500/220 kV and 2x250 MVA 220/132 kV T/Fs and allied equipment.
- ii) 500 kV S/C T/Line for In/out of 500 kV Guddu – Multan 3rd circuit at Rahim Yar Khan (30+30 km)

ESTIMATED COST OF THE PROJECT


Cost (Rs. in million)		
Local	FEC	Total
4380	4160	8540

APPROVAL OF PC-I

PC-I approved by ECNEC on 22-10-2007

Financing:

JICA


Managing Director NTDC
WAPDA House Lahore.

Brief on
220 kV SUBSTATION AT CHISHTIAN

LOCATION

Chishtian in Punjab Province.

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by addition of new 220 kV substation at Chishtian along with associated transmission lines to remove the overloading problem of existing 220/132 kV Transformers at 220kV New Vehari substation and to meet the growing power demand of MEPCO area.

- i) Removal of 132kV transmission bottlenecks in MEPCO network feeding Chishtian and surrounding areas.
- ii) Reduction in loading of transformers at 220kV New Vehari.
- iii) Improvement in voltage profile of the area.
- iv) Reduction in transmission line losses

SCOPE OF THE PROJECT

- i) 220 kV Grid Station with 220/132 kV 2x250 MVA T/Fs and allied equipment.
- ii) 220 kV Chishtian – Vehari double circuit T/Line (65km).

ESTIMATED COST OF THE PROJECT


Cost (Rs. in million)		
Local	FEC	Total
1481	1152	2633

APPROVAL OF PC-I

PC-I approved by ECNEC on 22-10-2007

Financing:

JICA


Managing Director NTDC
WAPDA House Lahore.

Brief on
220 kV GAS INSULATED SUBSTATION AT SHALAMAR LAHORE

LOCATION

Lahore in Punjab Province.

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by addition of new 220 kV substation at Shalamar Lahore along with associated transmission lines to remove the overloading problem of existing 220/132 kV Transformers at NTDC substations feeding LESCO and to meet the growing demand of LESCO area.

- i) Improvement in voltage profile of the area.
- ii) Provide relief to overloaded transformers at 220 kV Ravi, Ghazi Road Bund Road, K.S.K Kot Lakhpat Guddu Grid Stations
- iii) Reduction in loading of 132 kV T/Lines in LESCO network.
- iv) Reduction in transmission line losses

SCOPE OF THE PROJECT

- i) 220 kV Grid Station with 220/132 kV 3x160 MVA T/Fs and allied equipment.
- ii) 220 kV double circuit T/Line for In/out of one circuit of 220 kV Ravi-K.S.K T/L at Shalamar (9 km).

ESTIMATED COST OF THE PROJECT


Cost (Rs. in million)		
Local	FEC	Total
1158	2459	3617

APPROVAL OF PC-I

PC-I approved by ECNEC on 22-10-2007

Financing:

JICA


Managing Director
WAPDA House Lahore.

Brief on
500 kV NEW SUBSTATION AT SHIKARPUR

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by upgradation of 220kV substation at Shikarpur to 500kV along with associated transmission lines to improve and enhance the overall power system efficiency, increasing its capacity to meet the economic growth targets and to evacuate the power from New IPPs including Uch-II, Engro and Fauji Fertilizer Power Plants. Implementation of the project will also help to meet the power demand of HESCO area.

Scope of the Project

- i) 2x600MVA, 500/220 kV T/Fs with allied equipment.
- ii) Two 500 kV S/C T/Lines for In/Out of 500 kV Dadu – Guddu circuit-1 at 500kV Shikarpur. (20+20 km)
- iii) Two 500 kV S/C T/Lines for In/Out of 500 kV Dadu – Guddu circuit-2 at 500kV Shikarpur. (22+22 km)
- iv) 220 kV D/C T/Line for In/Out of 220 kV Guddu – Sibbi S/C at 500kV Shikarpur. (50 km)

Estimated Cost of the Project

Cost (Rs. in million)		
Local	FEC	Total
3159	4926	8085

APPROVAL OF PC-I

PC-I approved by ECNEC on 09-12-2010

Financing:

JICA


Managing Director NTDC
WAPDA House Lahore.

Brief on
500 kV NEW SUBSTATION AT LAHORE

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by addition of new 500 kV substation at Lahore along with associated transmission lines to meet the growing power demand of the area and to provide the additional source of power supply to the LESCO area as existing 500 kV Lahore grid station is expected to be fully loaded by mid 2013 even with the available capacity of 2400 MVA as no further addition therein is possible/feasible.

Scope of the Project

- i) 2x750MVA, 500/220 kV T/Fs with allied equipment.
- ii) Two 500 kV S/C T/Lines for In/Out of 500 kV Sahiwal – Lahore S/C at New Lahore. (15+15 km)
- iii) Two 500 kV S/C T/Lines for In/Out of 500 kV LHR – Gujranwala S/C at New Lahore. (50+50 km)
- iv) 220 kV D/C T/Line for In/Out of 220 kV NKLP – Ghazi Rd. (50 km)
- v) 220 kV D/C T/Line for In/Out of 220 kV Wapda Town – NKLP (45 km)

Estimated Cost of the Project


Cost (Rs. in million)		
Local	FEC	Total
5569	7095	12664

APPROVAL OF PC-I

PC-I approved by ECNEC on 09-12-2010

Financing:

JICA


Managing Director NTDC
WAPDA House Lahore.

Brief on
220 kV SUBSTATION AT GUJRAT

LOCATION

Gujrat in Punjab Province.

OBJECTIVES & BENEFITS OF THE PROJECT

Enhancement in the capacity of the transmission system by addition of new 220 kV substation at Gujrat along with associated transmission lines to provide relief to existing 220/132kV transformers at 220kV Mangla and Ghakkar substations and to meet the growing power demand of GEPCO area.

- i) Improvement in voltage profile of the area.
- ii) Removal of 132kV transmission bottlenecks in GEPCO network.
- iii) Reduction in loading of transformers at 220kV/132kV transformers at Mangla, Ghakkar, Sialkot and Gujranwala substations.
- iv) Reduction in loading of 132kV transmission line feeding GEPCO.

SCOPE OF THE PROJECT

- i) 220 kV Grid Station with 220/132 kV 3x250 MVA T/Fs and allied equipment.
- ii) 220 kV D/C transmission line for In/out of existing Mangla – Ghakkar D/C T/L at 220kV Gujrat New (2+2 km).

ESTIMATED COST OF THE PROJECT

Cost (Rs. in million)		
Local	FEC	Total
1092	874	1966

APPROVAL OF PC-I

PC-I approved by ECNEC on 22-10-2007

Financing:

JICA


Managing Director NDC
WAPDA House Lahore.

IMPORT OF POWER FROM IRAN FOR GWADAR

LOCATION

District Gwadar (Balochistan)

OBJECTIVE AND BENEFITS OF THE PROJECT

The main objective of the project is supply of power to Gwadar from Iran to meet the growing power demand of Gwadar and other areas in Mekran Division of Baluchistan by construction of 220 kV double circuit transmission line from Pak – Iran border to Gwadar and 220 kV GIS substation at Gwadar.

Scope of work (on Pakistan side)

- Construction of 100 km long 220 kV double circuit twin bundle transmission line on "Greeley" Conductor from Pak-Iran border to Gwadar with OPGW.
- New Gwadar GIS substation will have following arrangements:

220 kV side will have outlets for:

- i) Two transformer bays for two 160MVA, 220/132 kV transformers.
- ii) Two 220 kV line bays with duplicate bus single breaker scheme.
- iii) One 220 kV bus coupler.

132 kV side:

- i) Two transformer bays for 160 MVA 220/132 kV transformers.
- ii) Seven 132 kV line bays.
- iii) One 132 kV bus coupler.

IMPLEMENTATION PERIOD


22 Months

ESTIMATED COST OF THE PROJECT

Sr. No.	Description	Amount. (Rs. in million)
1-	Local Component	1730.00
2-	F.E.C	1934.00
	Total Cost	3664.00

APPROVAL OF PC-I

Approved by ECNEC on 19-09-2007


Manager, Planning
WAPDA Gwadar

Brief on PC-I for

Augmentation of 500/220 kV & 220/132 kV transformers in NTDC system.

Objectives

In order to provide relief to the overloaded transformers feeding DISCOs and to improve power supply position as an immediate possible measure, the augmentation in the capacity of 500/220 kV & 220/132 kV transformers in NTDC network has been proposed.

Scope of Work

Sr. No.	Substation	Voltage (kV)	Proposed Capacity (MVA)
1-	500 kV Rewat	500/220	1x750
2-	500 kV Sh. Muhammadi	220/132	4x250
3-	220 kV Mardan	220/132	2x250
4-	220 kV Burhan	220/132	4x250
5-	220 kV Bund Road.	220/132	4x250
6-	220 kV Bahawalpur	220/132	2x250
7-	220 kV Quetta Ind.	220/132	2x250

Project Benefits:

Sr. No.	Name of Grid Station	Financial Rate of Return (IFRR)	Economic Rate of Return (IEER)	Loss reduction (MW)
1-	500 kV Rewat	25.41%	32.03%	0.55
2-	500 kV Sh. Muhammadi	46.35%	56.62%	3.45
3-	220 kV Mardan	47.31%	57.61%	1.68
4-	220 kV Burhan	43.43%	52.45%	0.44
5-	220 kV Bund Road.	41.22%	51.09%	3.7
6-	220 kV Bahawalpur	43.04%	65.66%	2.08
7-	220 kV Quetta Ind.	42.29%	70.76%	2.93
				14.83

IMPLEMENTATION PERIOD

36 Months

ESTIMATED COST OF THE PROJECT


Local: 771.52
FEC: 3128.80
Total: 3900.32

Financing:

NTDCL own resources.


Approval Status

PC-I cleared by CDWP on 07.04.2011.


Managing Director NTDC
WAPDA House Lahore.

Rs .Mln

Description	Actual 2008-09	Actual 2009-10	Actual 2010-11	Actual 2011-12	Total
Return after Adj of KESC Loans	8,894	9,401	10,290	11,125	39,710
Return if Adjustment of KESC Loans not adjusted	6,633	7,453	8,564	10,089	32,739
Difference (A)	2,262	1,949	1,726	1,035	6,971
Accuude Mark-up Expense out (B)	1,824	1,964	1,964	1,964	7,716
Net (Benefit) /Loss to NTDCL (A-B)	437	(15)	(238)	(928)	(745)


 Managing Director
 NTDCL

NATIONAL TRANSMISSION AND DESPATCH COMPANY
ESTIMATION OF EQUITY BASE AND ALLOWABLE RETURN

Rs. Mln

Description		Actual 2008-09	Actual 2009-10	Actual 2010-11	Actual 2011-12
A	Fixed Assets				
	a) Original Cost of Fixed Assets in Operations	85,148.64	98,659	106,512	109,470
	Less: Consumers Capital Contribution	570.46	64	61	58
	Accumulated Depreciation	32,753.86	36,531	40,170	43,887
	Assets written /Disposed off			-	-
	Net Fixed Assets in operation	51,824.33	62,064	66,282	65,525
	b) Capitan Work in Progress	28,513.66	27,962	36,541	54,556
	Total - A	80,338	90,026	102,823	120,082
B	Current Assets				
	a) Store & Spare (3% of the gross fixed assets in operation)	2,554	2,960	3,195	3,284
	b) Accounts Receivables (equal to 30 no of days outstanding of annual billing)	1,445.88	1,536	1,600	1,481
	c) Cash & Bank Balance (1/6th of annula operation expenses other than non-cash items)	466.54	1,121	1,673	1,735
	Total - B	4,467	5,617	6,468	6,500
C	Total A + B	84,805	95,643	109,292	126,582
D	Less:				
	a) Foreign Loan - Direct				
	b) Foreign Loan - Relent	17,895.27	21,651.96	26,300.69	31,838.10
	c) Federal Government Loan	-			
	d) Borrowing from Government's approved Organizations/ institutions	6,543.72	5,801.81	4,843.11	3,884.39
	e) Government's approved Bonds/ Instruments etc. issued by the Licensee	0	-	-	-
	f) Other long term liabilities (Security deposit by consumers)		6	82	69
	g) Employees Retirement Benefits	5,366.53	5,986	6,585	7,325
	h) Creditors, accrued and other current liabilities (equal to 2/3rd of current assets)	2,977.92	3,745	4,312	4,334
	Total - D	32,783	37,191	42,123	47,450
E	Equity base (C-D)	52,021	58,452	67,169	79,132
F	Rate of Return	12.75%	12.75%	12.75%	12.75%
	Return on Equity (E * F)	6,633	7,453	8,564	10,089



Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
ESTIMATION OF EQUITY BASE AND ALLOWABLE RETURN

Rs. Mln

Description		Actual 2008-09	Actual 2009-10	Actual 2010-11	Actual 2011-12
A	Fixed Assets				
	a) Original Cost of Fixed Assets in Operations	85,148.64	98,659	106,512	109,470
	Less: Consumers Capital Contribution	570.46	64	61	58
	Accumulated Depreciation	32,753.86	36,531	40,170	43,887
	Assets written /Disposed off			-	-
	Net Fixed Assets in operation	51,824.33	62,064	66,282	65,525
	b) Capitan Work in Progress	28,513.66	27,962	36,956	52,278
	Total - A	80,338	90,026	103,238	117,803
B	Current Assets				
	a) Store & Spare (3% of the gross fixed assets in operation)	2,554	2,960	3,195	3,284
	b) Accounts Receivables (equal to 30 no of days outstanding of annual billing)	1,445.88	1,536	1,600	1,481
	c) Cash & Bank Balance (1/6th of annula operation expenses other than non-cash items)	466.54	1,121	1,673	1,735
	Total - B	4,467	5,617	6,468	6,500
C	Total A + B	84,805	95,643	109,706	124,304
D	Less:				
	a) Foreign Loan - Direct				
	b) Foreign Loan - Relent	157.74	6,321.13	13,180.95	21,438.74
	c) Federal Government Loan	-			
	d) Borrowing from Government's approved Organizations/ institutions	6,543.72	5,848.35	4,843.11	3,884.39
	e) Government's approved Bonds/ Instruments etc. issued by the Licensee		-	-	-
	f) Other long term liabilities (Security deposit by consumers)		6	82	69
	g) Employees Retirement Benefits	5,366.53	5,986	6,585	7,325
	h) Creditors, accrued and other current liabilities (equal to 2/3rd of current assets)	2,977.92	3,745	4,312	4,334
	Total - D	15,046	21,906	29,003	37,051
E	Equity base (C-D)	69,759	73,736	80,703	87,253
F	Rate of Return	12.75%	12.75%	12.75%	12.75%
	Return on Equity (E * F)	8,894	9,401	10,290	11,125


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION & DESPATCH COMPANY LTD.

Telephone: 99201330
PBX 99202211 / 2257
Fax: 99204236



Office of the
Company Secretary NTDC,
Room # 407-WAPDA House, Lahore

No.C.S/NTDC/ 2220-24

Dated: 22/08/2014

NOTIFICATION

Approval for Filling of Tariff Petition for FY-2014-15 before NEPRA for determination of wheeling charges / use of System Charges

1. The Board of Directors through Resolution by Circulation No. 262 has unanimously resolved and approved the submission of Tariff Petition FY-2014-15 before NEPRA and authorized the following officers of NTDCL Management to sign and file Tariff Petition individually or jointly and submission of other necessary documents, payment of filing fee, appear and present / defend the matter before NEPRA as and when required and to do any / all necessary acts for completion and processing of the Tariff Proceedings on behalf of NTDCL.

- i- Managing Director
- ii- General Manager GSO
- iii- General Manager Planning (P)
- iv- General Manager (SO), NPCC
- v- Finance Director


Abdul Majid Khan
Company Secretary

Copy to:

1. Managing Director.
2. G.M (GSO), Planning & SO NPCC.
3. Finance Director.
4. Master File.


Managing Director NTDC
WAPDA House Lahore.

TRANSMISSION BUSINESS

Business of transmission of electric power carried out on or to be carried on by the Licensee (NTDC) in planning, development, construction, maintenance and operation of transmission system for transmission and dispatch of electric power.



Managing Director NTDC
WAPDA House Lahore.

List of CDPs

IESCO

SR. No.	Grid Station	Meters	Meter (Line)	Meter (ID)	Generator	Type	Location	From	To
1	132 kV G/S Mangla	1	11 kV Wapda Colony Feeder	41512021	Grid		IESCO	IESCO	WAPDA
2	AEL Pindi Ghep	2	66 kV AEL 1	41509888	Gen	IPP-1994	IESCO	NTDC	IESCO
			66 kV AEL 2	41507139			IESCO	NTDC	IESCO
3	AGL TPS	2	132 kV BAHRIA Line	41505060	Gen	IPP-2002	IESCO	IPP	IESCO
			132 kV REPCO Line	41504977			IESCO	IPP	IESCO
4	Attok G/S	1	11 kV Ghazi Barotha HPS Feeder	41512025	Grid		IESCO	IESCO	WAPDA
5	Bahria Town Rawalpindi	1	220 kV Bahria	41509817	Grid		IESCO	NTDC	IESCO
6	Bilawal G/S	1	11 kV Sakesar Feeder	41512030	Grid		IESCO	IESCO	FESCO
7	Burhan	7	132 kV Line	41505178	Grid		IESCO	IESCO	PESCO
			132 kV Line	41505196			IESCO	IESCO	PESCO
			132 kV Line	41504927			IESCO	IESCO	PESCO
			220/132 kV T1	41505223			IESCO	NTDC	IESCO
			220/132 kV T2	41504912			IESCO	NTDC	IESCO
			220/132 kV T3	41504951			IESCO	NTDC	IESCO
			220/132 kV T4	41509875			IESCO	NTDC	IESCO
8	Ghazi Barotha HPS	8	220 kv Mardan Line	41509846	Gen	Hydel	IESCO	WAPDA	NTDC
			220 kv Sheikh Muhammadi Line	41507163			IESCO	WAPDA	NTDC
			500 kV Gatti-1 Line	41507193			IESCO	WAPDA	NTDC
			500 kV Gatti-2 Line	41512032			IESCO	WAPDA	NTDC
			500 kV Rawat-1 Line	41512000			IESCO	WAPDA	NTDC
			500 kV Rawat-2 Line	41509912			IESCO	WAPDA	NTDC
			500 kV Tarbela-2 Line	41507126			IESCO	WAPDA	NTDC
			550 kV Tarbela-1 Line	41511989			IESCO	WAPDA	NTDC
9	Gondal G/S	1	132 kV Jahangira Line	41504926	Grid		IESCO	IESCO	PESCO
10	Islamabad University G/S	2	220/132 kV T1	41504880	Grid		IESCO	NTDC	IESCO
			220/132 kV T2	41505242			IESCO	NTDC	IESCO
11	ISPR G/S	3	220/132 kV T1	41505238	Grid		IESCO	NTDC	IESCO
			220/132 kV T2	41505218			IESCO	NTDC	IESCO
			220/132 kV T3	41504945			IESCO	NTDC	IESCO
12	Kamra G/S	1	132 kV Line 1	41507182	Grid		IESCO	IESCO	PESCO
			132 kV Mangla - Bong Escape E5Q1	41504903			IESCO	WAPDA	GEPCO
			132 kV Mangla - Bong Escape E6Q1	41509830			IESCO	WAPDA	GEPCO
			132 kV Mangla - Gojar Khan	41504918			IESCO	WAPDA	IESCO
			132 kV Mangla - Kallar Syedan	41507121			IESCO	WAPDA	IESCO
			132 kV Mangla - Khathalan Sheikhan	41504906			IESCO	WAPDA	IESCO
			132 kV Mangla - Mirpur Circuit	41504953			IESCO	WAPDA	IESCO
			132 kV Mangla - New Rawat	41505246			IESCO	WAPDA	IESCO
			132 kV Mangla - Rajarh	41505248			IESCO	WAPDA	IESCO
			132 kV Mangla - Right Bank	41504874			IESCO	WAPDA	IESCO


Managing Director NTDC
WAPDA House Lahore.

IESCO

SR. No.	Grid Station	Meters	Meter (Line)	Meter (ID)	Generator	Type	Location	From	To
13	Mangla HPS	19	132 kV Mangla - Scarp Ding	41505236	Gen	Hydel	IESCO	WAPDA	GEPCO
			220 kV Mangla - Ghakhar - I	41504940			IESCO	WAPDA	NTDC
			220 kV Mangla - Ghakhar - II	41504958			IESCO	WAPDA	NTDC
			220 kV Mangla - Kala Shah Kakoo - I	41504939			IESCO	WAPDA	NTDC
			220 kV Mangla - Kala Shah Kakoo - II	41504961			IESCO	WAPDA	NTDC
			220 kV Mangla - Kala Shah Kakoo - III	41504899			IESCO	WAPDA	NTDC
			220 kV Mangla - New Ghakhar (Nokhar)	41504883			IESCO	WAPDA	NTDC
			220 kV Mangla - New Rawat - I	41504917			IESCO	WAPDA	NTDC
			220 kV Mangla - New Rawat - II	41504885			IESCO	WAPDA	NTDC
14			132 kV Mangla - Dudyal	41505221			IESCO	WAPDA	NTDC
15	Murree G/S	1	11 kV Lora Feeder	41512048	Grid		IESCO	IESCO	PESCO
16	NEW WAH G/S	6	11 kV Khanpur Feeder	41509915	Grid		IESCO	IESCO	PESCO
			132 kV Mustahkam Cement Line	41509847			IESCO	IESCO	PESCO
			132 kV Haripur Line	41505193			IESCO	IESCO	PESCO
			132 kV Nishat Line	41504881			IESCO	IESCO	PESCO
			132 kV RB Terbel Line	41505233			IESCO	IESCO	PESCO
			66 kV Haripur Line	41504928			IESCO	IESCO	PESCO
17	Noorpur Sethi G/S	1	11 kV Padhrar Feeder	41507165	Grid		IESCO	IESCO	FESCO
18	RAWAT G/S	4	220/132 kV T3	41507205	Grid		IESCO	NTDC	IESCO
			220/132 kV T4	41504910			IESCO	NTDC	IESCO
			220/132 kV T5	41505235			IESCO	NTDC	IESCO
			220/132 kV T6	41504925			IESCO	NTDC	IESCO

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Managing Director NTDC
WAPDA House Lahore.


PESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Bannu G/S	220/132 kV T/F T1		PESCO	NTDC	PESCO
		220/132 kV T/F T2		PESCO	NTDC	PESCO
		220/132 kV T/F T3		PESCO	NTDC	PESCO
2	Chashma HPS	132 kV Chashma CLBC Line	Hydel	PESCO	NTDC	NTDC
		132 kV DI Khan Line		PESCO	NTDC	PESCO
		132 kV Wan Bachran Line-1		PESCO	NTDC	FESCO
		132 kV Wan Bachran Line-2		PESCO	NTDC	FESCO
3	Dargai HPS	Dargai - M1	Hydel	PESCO	WAPDA	PESCO
4	Jabban HPS	132 kV Jabban - M1	Hydel	PESCO	WAPDA	PESCO
		132 kV Jabban - M2		PESCO	WAPDA	PESCO
5	Khawar HPS Projects	220 kV L1	Hydel	PESCO	WAPDA	PESCO
		220 kV L2		PESCO	WAPDA	PESCO
6	Malakand III HPS	132 kV Line 1	Shydo	PESCO	IPP	PESCO
		132 kV Line 2		PESCO	IPP	PESCO
7	Mardan G/S	220/132 kV T1		PESCO	NTDC	PESCO
		220/132 kV T2		PESCO	NTDC	PESCO
		220/132 kV T3		PESCO	NTDC	PESCO
8	Pehur Hydro Power	132 kV Line	Shydo	PESCO	IPP	PESCO
9	Peshawar University G/S	132 kV Bara Line		PESCO	PESCO	TESCO
10	Shahi Bagh G/S	220/132 kV T1		PESCO	NTDC	PESCO
		220/132 kV T2		PESCO	NTDC	PESCO
		220/132 kV T3		PESCO	NTDC	PESCO
11	Sheikh Muhammadi G/S	220/132 kV T4		PESCO	NTDC	PESCO
		220/132 kV T5		PESCO	NTDC	PESCO
		220/132 kV T8		PESCO	NTDC	PESCO
12	Tarbela HPS	500 kV Barotha 1 Line		PESCO	WAPDA	NTDC
		500 kV Peshawar Line		PESCO	WAPDA	NTDC
		220 kV Burhan 1 Line		PESCO	WAPDA	NTDC
		220 kV Burhan 2 Line		PESCO	WAPDA	NTDC
		220 kV Burhan 3 Line		PESCO	WAPDA	NTDC
		220 kV ISPR (Sangjani) Line		PESCO	WAPDA	NTDC
		220 kV Mardan 1 Line		PESCO	WAPDA	NTDC
		220 kV Mardan 2 Line		PESCO	WAPDA	NTDC
		500 kV Barotha 2 Line		PESCO	WAPDA	NTDC
		500 kV Rawat Line	Hydel	PESCO	NTDC	PESCO
13	Warsak HPS	132 kV Jamrood Line	Hydel	PESCO	WAPDA	PESCO
		132 kV Peshawar Cantt Line		PESCO	WAPDA	PESCO
		132 kV Sakhi Chashma Line		PESCO	WAPDA	PESCO
		132 kV Shahi Bagh Line		PESCO	WAPDA	PESCO


Managing Director NTDC
WAPDA House Lahore.


SEPCO

SR. No.	Grid Station	Meters	Meter (Line)	Type	Location	From	To
1	Al-Noor Sugar Mill TPS	1	11 kV Al-Noor Sugar Mill - M1	SPP	SEPCO	SPP	SEPCO
2	Dadu G/S	4	132 kV Hesco Line		SEPCO	SEPCO	HESCO
			220/132 kV T1		SEPCO	NTDC	SEPCO
			220/132 kV T2		SEPCO	NTDC	SEPCO
			220/132 kV T3		SEPCO	NTDC	SEPCO
3	Dahrki G/S Temporary	2	132 kV Sadiqabad 1		SEPCO	NTDC	MEPCO
			132 kV Sadiqabad 2		SEPCO	NTDC	MEPCO
4	Dhahrki Sugar Mill TPS	1	11 kV Dhahrki Sugar Mill - M1	SPP	SEPCO	SPP	SEPCO
5	Engro Power TPS	2	220 kV ENGRO POWER - GT	IPP-2002	SEPCO	IPP-2002	NTDC
			220 kV ENGRO POWER - ST		SEPCO	IPP-2002	NTDC
6	Foundation Power co TPS	2	220 kV Line 1	IPP-2002	SEPCO	IPP-2002	NTDC
			220 kV Line 2		SEPCO	IPP-2002	NTDC
7	Ghotaki Sugar Mill TPS	1	11 kV Ghotaki Sugar Mill - M1	SPP	SEPCO	SPP	SEPCO
8	Guddu TPS	12	220 kV Shikarpur Line	GENCO	SEPCO	GENCO	NTDC
			220 kV Sibbi Line		SEPCO	GENCO	NTDC
			220 kV Uch Line		SEPCO	GENCO	NTDC
			220/500 kV T1		SEPCO	GENCO	NTDC
			220/500 kV T2		SEPCO	GENCO	NTDC
			220/500 kV T3		SEPCO	GENCO	NTDC
			132 kV Hyderabad-1 Line		SEPCO	GENCO	SEPCO
			132 kV Hyderabad-2 Line		SEPCO	GENCO	SEPCO
			132 kV Larkana Line		SEPCO	GENCO	SEPCO
			132 kV Multan-1 Line		SEPCO	GENCO	MEPCO
			132 kV Multan-2 Line		SEPCO	GENCO	MEPCO
			132 kV Rojhan Line		SEPCO	GENCO	MEPCO
9	Guddu TPS (747 MW)	3	500 kV T1	GENCO	SEPCO	GENCO	SEPCO
			500 kV T2		SEPCO	GENCO	SEPCO
			500 kV T3		SEPCO	GENCO	SEPCO
10	Jacob Abad G/S	1	66 kv DM jamali Line		SEPCO	SEPCO	QESCO
11	Kashmore G/S	1	33 kV Dera Bhugti Line		SEPCO	SEPCO	QESCO
12	Liberty Power TPS	2	132 kV M1	IPP-1994	SEPCO	IPP-1994	SEPCO
			132 kV M2		SEPCO	IPP-1994	SEPCO
13	Rohri G/S	1	220/132 kV T1		SEPCO	NTDC	SEPCO
14	Shahdad Kot G/S	1	66 kV Usta Muhammad Line		SEPCO	SEPCO	QESCO
15	Shikarpur G/S	3	220/132 kV T1		SEPCO	NTDC	SEPCO
			220/132 kV T2		SEPCO	NTDC	SEPCO
			220/132 kV T3		SEPCO	NTDC	SEPCO
16	Shikarpur Power Station	1	11 kV Shikarpur Power House - M1	SPP	SEPCO	SPP	SEPCO
17	Thull G/S	1	132 kV Sohbatpur Line		SEPCO	SEPCO	QESCO


 Manager
 WAPDA House Lahore.

HESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Agar Textile Mills TPS	11 kV Agar Feeder	SPP	HESCO	SPP	HESCO
2	Anoud Textile Mills TPS	11 kV Anoud Textile Mills - M1	SPP	HESCO	SPP	HESCO
3	Bhan Saeed Abad G/S	11 kV Bhan Saeed Abad - M2		HESCO	HESCO	SEPCO
		132 kV Bhan Saeed Abad - M1		HESCO	HESCO	SEPCO
4	FFC Jhampir WP	132 kV Jhampir Line	Wind	HESCO	WIND	HESCO
		132 kV Nooriabad Line		HESCO	WIND	HESCO
5	Hala Road G/S	220/132 kV T3		HESCO	NTDC	HESCO
		220/132 kV T1		HESCO	NTDC	HESCO
		220/132 kV T2		HESCO	NTDC	HESCO
6	Hi-Tech Power TPS	11 kV Hi-Tech Power - M1	SPP	HESCO	SPP	HESCO
7	Jamshoro G/S	220/132KV 160 MVA T/F T-3		HESCO	NTDC	HESCO
		220/132KV 160 MVA T/F T-7		HESCO	NTDC	HESCO
8	Jamshoro TPS	220 kV Circuit 1 to 500 kV G/S		HESCO	GENCO	NTDC
		220 kV Circuit 2 to 500 kV G/S		HESCO	GENCO	NTDC
		220 kV Circuit 3 to 500 kV G/S		HESCO	GENCO	NTDC
		220 kV Circuit 4 to 500 kV G/S		HESCO	GENCO	NTDC
		Starting T/F (132/66 kV) T-6 for TPS JAMSHORO		HESCO	GENCO	HESCO
		Starting T/F (220/66 kV) T-4 for TPS JAMSHORO		HESCO	GENCO	NTDC
		Starting T/F (220/66 kV) T-5 for TPS JAMSHORO	GENCO	HESCO	GENCO	NTDC
9	KDA	Jamshoro - 1		HESCO	NTDC	KESC
		Jamshoro - 2		HESCO	NTDC	KESC
10	Kotri TPS	132 kV Jhampir Line		HESCO	NTDC	HESCO
		11 kV Auxillary Feeder		HESCO	NTDC	HESCO
		132 kV Gulshan e Shahbaz		HESCO	NTDC	HESCO
		132 kV Kotri Line		HESCO	NTDC	HESCO
		132 kV NTPS Line		HESCO	NTDC	HESCO
		500 kV Jamshoro Line	GENCO	HESCO	GENCO	HESCO
11	Lakhra TPS	132 kV JAMSHORO - I		HESCO	GENCO	HESCO
		132 kV JAMSHORO - II		HESCO	GENCO	HESCO
		132 kV KHANOT	GENCO	HESCO	GENCO	HESCO
12	Lucky Cement TPS	11 kV M1	SPP	HESCO	SPP	HESCO
13	NKI G/S	220 kV Line 1		HESCO	NTDC	KESC
		220 kV Line 2		HESCO	NTDC	KESC
14	Omni Power Matli	11 kV Feeder 1		HESCO	SPP	HESCO
		11 kV Feeder 2		HESCO	SPP	HESCO
		11 kV Feeder 3	SPP	HESCO	SPP	HESCO
15	Qazi Ahmad G/S	132 kV Daulatpur Line		HESCO	HESCO	SEPCO
16	Tando Allah Yar TPS	11 kv Mirwah Gorchani Feeder	SPP	HESCO	SPP	HESCO
17	Thatha Cement Factory	Thatha Cement Factory	SPP	HESCO	SPP	HESCO
18	TMK Hyderabad G/S	220/132 kV T1		HESCO	NTDC	HESCO
		220/132 kV T2		HESCO	NTDC	HESCO
19	Zorlu WPH	M-1	Wind	HESCO	WIND	HESCO
		M-2		HESCO	WIND	HESCO


 Manager
 WARDAN
 22/11/2019

FESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Ahmadpur Sial G/S	132 kV Kot Addu Line		FESCO	FESCO	MEPCO
		11 kV Feeder 1		FESCO	FESCO	GEPCO
2	Bhabra G/S	11 kV Feeder 2		FESCO	FESCO	GEPCO
3	Bhoon Sugar Mill TPS	11 kV Bhoon Sugar - M1	SPP	FESCO	SPP	FESCO
4	Chashma G/S	11 kV Bilot Feeder		FESCO	FESCO	PESCO
5		220 kV Chashnup T/L1		FESCO	IPP-1994	NTDC
6	Chashnup Mianwali TPS	220 kV Chashnup T/L1	IPP-1994	FESCO	IPP-1994	NTDC
7	Chiniot Road G/S	11 kV GHATTI G/S Feeder		FESCO	FESCO	NTDC
		132 kV KOHAT Line-1		FESCO	NTDC	FESCO
		132 kV KOHAT Line-2		FESCO	NTDC	FESCO
		220/132 kV T1		FESCO	FESCO	PESCO
8	Daud Kheil G/S	220/132 kV T2		FESCO	FESCO	PESCO
9	Davis Energon TPS	11 kV Davis - M1	SPP	FESCO	SPP	FESCO
10	Galaxy TPS	11 kv Line	SPP	FESCO	SPP	FESCO
		132 kV Circuit 1		FESCO	GENCO	FESCO
		132 kV Circuit 2		FESCO	GENCO	FESCO
		132 kV Circuit 3		FESCO	GENCO	FESCO
11	GTPS Faisalabad	132 kV Circuit 4	GENCO	FESCO	GENCO	FESCO
		11 kV Feeder 1		FESCO	FESCO	GEPCO
		11 kV Feeder 2		FESCO	FESCO	GEPCO
		11 kV Feeder 3		FESCO	FESCO	GEPCO
		11 kV Feeder 4		FESCO	FESCO	GEPCO
12	Head Faqirian G/S	132 kV Dandot Line		FESCO	FESCO	IESCO
13	Jaranwala G/S	132 kV Bucheki (Orient Power) Line		FESCO	FESCO	LESCO
		220/132 kV T1		FESCO	FESCO	MEPCO
		220/132 kV T2		FESCO	NTDC	FESCO
		220/132 kV T3		FESCO	NTDC	FESCO
		220/132 kV T4		FESCO	NTDC	FESCO
14	Jaranwala Road G/S	132 kV Sahiwal Line		FESCO	NTDC	FESCO
		132 kV Daud Khel T/L1		FESCO	WAPDA	FESCO
15	Jinnah HPS	132 kV Daud Khel T/L2	Hydel	FESCO	WAPDA	FESCO
		132 kV T1		FESCO	IPP	FESCO
		132 kV T2		FESCO	IPP	FESCO


Managing Director NTDC
 WAPDA House Lahore.

FESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
16	Liberty Power Tech TPS	132 kV T3	IPP-2002	FESCO	IPP	FESCO
		132 kV T4		FESCO	IPP	FESCO
17	Luddewala G/S	220/132 kV T1		FESCO	NTDC	FESCO
		220/132 kV T2		FESCO	NTDC	FESCO
		220/132 kV T3		FESCO	NTDC	FESCO
18	Mankera G/S	66 kV Choubara Line		FESCO	FESCO	MEPCO
19	Mian Wali G/S	66 kV DS Bilawal Line		FESCO	FESCO	IESCO
20	Nishatabad G/S	220/132 kV T2		FESCO	FESCO	LESCO
		220/132 kV T3		FESCO	FESCO	LESCO
		220/132 kV T4		FESCO	NTDC	FESCO
		220/132 kV T5		FESCO	NTDC	FESCO
		220/132 kV T1		FESCO	NTDC	FESCO
		66 kV Sangla Hill-1 Line		FESCO	NTDC	FESCO
		66 kV Sangla Hill-2 Line		FESCO	NTDC	FESCO
21	Nishatabad New G/S	11 kV Feeder to 220 kV G/S		FESCO	FESCO	NTDC
22	Ramzan Sugar Mills TPS	11 kV RAMZAN SUGAR MILLS - M1	SPP	FESCO	SPP	FESCO
23	Shakar Ganj TPS	11 kV Feeder 1	SPP	FESCO	SPP	FESCO
		11 kV Feeder 2		FESCO	SPP	FESCO
24	Sitara Energy TPS	11 kV Feeder 1	SPP	FESCO	SPP	FESCO
		11 kV Feeder 2		FESCO	SPP	FESCO
		11 kV Feeder 3		FESCO	SPP	FESCO
		11 kV Feeder 4		FESCO	SPP	FESCO
		11 kV Feeder 5		FESCO	SPP	FESCO
		11 kV Feeder 6		FESCO	SPP	FESCO
25	SPS Faisalabad	132 kV Line 1	GENCO	FESCO	GENCO	FESCO
		132 kV Line 2		FESCO	GENCO	FESCO
26	Summandri Road Faisalabad G/S	220/132 kV T1		FESCO	NTDC	FESCO
		220/132 kV T2		FESCO	NTDC	FESCO
		220/132 kV T3		FESCO	NTDC	FESCO
27	Tandlianwala G/S	132 kV Sahiwal Line		FESCO	FESCO	MEPCO
28	Trug G/S	66 kV Taja Zai Line		FESCO	FESCO	PESCO


Managing Director NTDC
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MEPCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Ashraf Sugar Mill Bahawalpur	11 kV Ashraf Sugar Mill - M1	SPP	MEPCO	SPP	MEPCO
2	Bahawalpur G/S	220/132 kV T1		MEPCO	NTDC	MEPCO
		220/132 kV T2		MEPCO	NTDC	MEPCO
		220/132 kV T3		MEPCO	NTDC	MEPCO
		11 kV Auxillary Supply		MEPCO	MEPCO	NTDC
3	Bonga Hayat	132 kV Haveli Line		MEPCO	MEPCO	LESCO
		11 kV Army Feeder		MEPCO	MEPCO	LESCO
4	Chichawatni G/S	132 kV kamalia Line		MEPCO	MEPCO	FESCO
		132 kV Muridwala Line		MEPCO	MEPCO	FESCO
		66 kV TT Singh Line		MEPCO	MEPCO	FESCO
5	Choubara G/S	66 kV Garh Maharaja Line		MEPCO	MEPCO	FESCO
6	Chowk Azam G/S	132 kV Bhakkar Line		MEPCO	MEPCO	FESCO
7	Fauji Kabir Wala TPS	132 kV Fauji - L1	IPP-1994	MEPCO	IPP-1994	MEPCO
		132 kV Fauji - L2		MEPCO	IPP-1994	MEPCO
8	Hamza Sugar Mills TPS	11 kV Feeder	SPP	MEPCO	SPP	MEPCO
9	Head Sandhnai Grid G/S	132 kV Shorkot Line		MEPCO	MEPCO	FESCO
10	Indus Sugar Mill Rajan Pur TPS	11 kV Indus Sugar Mill - M1	SPP	MEPCO	SPP	MEPCO
11	JWD TPS	11 kV JWD Sugar Mill - M1	SPP	MEPCO	SPP	MEPCO
12	KAPCO TPS	132 kV T/L KAP-4	IPP-1994	MEPCO	IPP-1994	MEPCO
		132 kV T/L KAP-5		MEPCO	IPP-1994	MEPCO
		132 kV T/L KAP-6		MEPCO	IPP-1994	MEPCO
		132 kV T/L KAP-7		MEPCO	IPP-1994	MEPCO
		132 kV T/L KAP-8		MEPCO	IPP-1994	MEPCO
		132 kV T/L KAP-9		MEPCO	IPP-1994	MEPCO
		220 kV T/L KAP-1		MEPCO	IPP-1994	MEPCO
		220 kV T/L KAP-10		MEPCO	IPP-1994	NTDC
		220 kV T/L KAP-11		MEPCO	IPP-1994	NTDC
		220 kV T/L KAP-12		MEPCO	IPP-1994	NTDC
		220 kV T/L KAP-13		MEPCO	IPP-1994	NTDC
		220 kV T/L KAP-2		MEPCO	IPP-1994	NTDC
13	Lalpir Power TPS	220 kV Muzaffar Garh L1	IPP-1994	MEPCO	IPP-1994	NTDC
		220 kV Muzaffar Garh L2		MEPCO	IPP-1994	NTDC
14	Layya Sugar TPS	11 kV LAYYA SUGAR	SPP	MEPCO	SPP	MEPCO
15	Multan G/S	132/11 kV T6		MEPCO	NTDC	MEPCO
		220/132 kV T3		MEPCO	NTDC	MEPCO
		220/132 kV T4		MEPCO	NTDC	MEPCO
		220/132 kV T5		MEPCO	MEPCO	NTDC
16	Muzaffar Garh G/S	132/11 kV Auxillary		MEPCO	NTDC	MEPCO
		220/132 kV T1		MEPCO	NTDC	MEPCO
		220/132 kV T2		MEPCO	NTDC	MEPCO
17	Muzaffar Garh TPS (Phase 1)	220 kV BAHAWALPUR-1	GENCO	MEPCO	GENCO	NTDC
		220 kV BAHAWALPUR-2		MEPCO	GENCO	NTDC
		220 kV KAPCO-2		MEPCO	GENCO	NTDC
		220 kV MUZAFFAR GARH		MEPCO	GENCO	NTDC
		220 kV NEW MULTAN-1		MEPCO	GENCO	NTDC
		220 kV NEW MULTAN-4		MEPCO	GENCO	NTDC
		220 kV PARCO-1		MEPCO	GENCO	MEPCO
		220 kV LALPIR-1		MEPCO	GENCO	NTDC


 Manager
 WAPDA House Lahore.


MEPCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
18	Muzaffar Garh TPS (Phase-2)	220 kV LALPIR-2	GENCO	MEPCO	GENCO	NTDC
		220 kV MUZAFFARGARH ATB-2		MEPCO	GENCO	NTDC
		220 kV NEW MULTAN-2		MEPCO	GENCO	NTDC
		220 kV NEW MULTAN-3		MEPCO	GENCO	NTDC
		220 kV PAKGEN-1		MEPCO	GENCO	NTDC
		220 kV PARCO-2		MEPCO	GENCO	MEPCO
19	NGPS Multan	132 kV INDUSTRIAL ESTATE MULTAN	GENCO	MEPCO	NTDC	MEPCO
		132 kV JAHANIAN		MEPCO	NTDC	MEPCO
		132 kV KABIR WALA		MEPCO	NTDC	MEPCO
		132 kV KHANEWAL		MEPCO	NTDC	MEPCO
		132 kV KHANEWAL ROAD-1		MEPCO	NTDC	MEPCO
		132 kV KHANEWAL ROAD-2		MEPCO	NTDC	MEPCO
		132 kV LAR		MEPCO	NTDC	MEPCO
		132 kV LODHRAN		MEPCO	NTDC	MEPCO
		132 kV M/RASHEED		MEPCO	NTDC	MEPCO
		132 kV NEW MULTAN		MEPCO	NTDC	MEPCO
		132 kV VEhari		MEPCO	NTDC	MEPCO
		220 kV Line 1 from NEW MULTAN		MEPCO	NTDC	NTDC
		220 kV Line 2 from NEW MULTAN		MEPCO	NTDC	NTDC
20	Noor Ahmad Wali	T1		MEPCO	MEPCO	LESCO
21	Pak Gen TPS	220 kV Line 1	IPP-1994	MEPCO	IPP-1994	NTDC
		220 kV Line 2		MEPCO	IPP-1994	NTDC
22	Qadirabad G/S	132 kV Line 3		MEPCO	MEPCO	LESCO
		132 kV Line 4		MEPCO	MEPCO	LESCO
		132 kV Line 1		MEPCO	MEPCO	LESCO
		132 kV Line 2		MEPCO	MEPCO	LESCO
23	Roomi Fabrics TPS	11 kV Feeder 1	SPP	MEPCO	SPP	MEPCO
		11 kV Feeder 2		MEPCO	SPP	MEPCO
24	Rousch TPS	500 kV Gatti Line	IPP-1994	MEPCO	IPP-1994	NTDC
		500 kV Multan Line		MEPCO	IPP-1994	NTDC
25	RYK Sugar Mill TPS	11 kV RYK Sugar Mill - M1	SPP	MEPCO	SPP	MEPCO
26	Saif G/S	132 kV Line 1		MEPCO	MEPCO	LESCO
		132 kV Line 2		MEPCO	MEPCO	LESCO
27	Saif TPS	132 kV GT1	IPP-2002	MEPCO	IPP-2002	MEPCO
		132 kV GT2		MEPCO	IPP-2002	MEPCO
		132 kV ST		MEPCO	IPP-2002	MEPCO
28	Sakhi Sarwar	132 kV Rakni Line		MEPCO	MEPCO	QESCO
29	Taunsa	T1		MEPCO	MEPCO	PESCO
30	Vehari G/S	220/132 kV T1		MEPCO	NTDC	MEPCO
		220/132 kV T2		MEPCO	NTDC	MEPCO
		220/132 kV T3		MEPCO	NTDC	MEPCO
		11 kV Auxillary Supply		MEPCO	MEPCO	NTDC
31	Yousafwala G/S	220/132 kV T3		MEPCO	NTDC	MEPCO
		220/132 kV T4		MEPCO	NTDC	MEPCO
		220/132 kV T5		MEPCO	NTDC	MEPCO
		132/11 kV T6		MEPCO	MEPCO	NTDC
		220/132 kV T7		MEPCO	NTDC	MEPCO


Managing Director NTDC
WAPDA House Lahore.


GEPCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Bong Escape HPS	132 kV Line 1	IPP-2002	GEPCO	WAPDA	GEPCO
		132 kV Line 2		GEPCO	WAPDA	GEPCO
		132 kV Line 3		GEPCO	WAPDA	GEPCO
		132 kV Line 4		GEPCO	WAPDA	GEPCO
2	Ghakkhar G/S	220/132 kV - T1		GEPCO	NTDC	GEPCO
		220/132 kV - T2		GEPCO	NTDC	GEPCO
		220/132 kV - T3		GEPCO	NTDC	GEPCO
		220/132 kV - T4		GEPCO	NTDC	GEPCO
3	Hub Narowal TPS	132 kV HUB NAROWAL T - 1	IPP-2002	GEPCO	IPP	GEPCO
		132 kV HUB NAROWAL T - 2		GEPCO	IPP	GEPCO
		132 kV HUB NAROWAL T - 3		GEPCO	IPP	GEPCO
		132 kV HUB NAROWAL T - 4		GEPCO	IPP	GEPCO
4	Kharian G/S	132 kV Rajar		GEPCO	GEPCO	IESCO
5	Kutiala Shekhan G/S	132 kV Bhalwal		GEPCO	GEPCO	FESCO
6	Malik Wal G/S	66 kV Ghareebwal Line		GEPCO	GEPCO	FESCO
		66 kV Head Faqirian Line		GEPCO	GEPCO	IESCO
		66 kV Pinawal Dandot Line		GEPCO	GEPCO	IESCO
7	Mandi Bahauddin G/S	132 kV Head Faqirain Line		GEPCO	GEPCO	FESCO
8	Nandipur 425 MW	T1	GENCO	GEPCO	GENCO	GEPCO
		T2		GEPCO	GENCO	GEPCO
		T3		GEPCO	GENCO	GEPCO
		T4		GEPCO	GENCO	GEPCO
9	Nandipur HPS	11 kV NANDIPUR - T3	Hydel	GEPCO	WAPDA	GEPCO
		66 kV NANDIPUR - T1		GEPCO	WAPDA	GEPCO
		66 kV NANDIPUR - T2		GEPCO	WAPDA	GEPCO
10	Nokhar G/S	220/132 kV T4		GEPCO	NTDC	GEPCO
		220/132 kV T5		GEPCO	NTDC	GEPCO
		220/132 kV T6		GEPCO	NTDC	GEPCO
11	Rasul HPS	11 kV DARARPUR Feeder	Hydel	GEPCO	WAPDA	GEPCO
		11 kV SUBSIDRIES Feeder		GEPCO	WAPDA	GEPCO
		132 kV Kharian 1 Line		GEPCO	WAPDA	GEPCO
		132 kV Kharian 2 Line		GEPCO	WAPDA	GEPCO
		66 kV Malikwal 2 Line		GEPCO	WAPDA	GEPCO
		66 kV Malikwal Line		GEPCO	WAPDA	GEPCO
12	Shadiwal HPS	11 kV Feeder		GEPCO	WAPDA	GEPCO
		132 kV Gujrat 1 Line		GEPCO	WAPDA	GEPCO
13	Sialkot G/S	220/132 kV T1		GEPCO	NTDC	GEPCO
		220/132 kV T2		GEPCO	NTDC	GEPCO
		220/132 kV T3		GEPCO	NTDC	GEPCO
14	Sukheki G/S	11 kV DHABAN SINGH Feeder 1		GEPCO	GEPCO	LESCO
		11 kV DHABAN SINGH Feeder 2		GEPCO	GEPCO	LESCO
		66 kV Sangle Hill 1 Line		GEPCO	GEPCO	LESCO
		66 kV Sangle Hill 2 Line		GEPCO	GEPCO	LESCO


Managing Director NTDC
WAPDA House Lahore.


LESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Atlas Power TPS	220 kV L1	IPP-2002	LESCO	IPP	NTDC
		220 kV L2		LESCO	IPP	NTDC
2	Bucheki G/S	132 kV Chak RB 103 Line		LESCO	LESCO	FESCO
3	Bund Road G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
		220/132 kV T4		LESCO	NTDC	LESCO
4	Chicho Ki Malian HPS	66 kV Ataabad Line	Hydel	LESCO	WAPDA	LESCO
		66 kV Shekhupura Line		LESCO	WAPDA	LESCO
		11 kV Feeder 1		LESCO	WAPDA	LESCO
		11 kV Feeder 3		LESCO	WAPDA	LESCO
		11 kV Feeder 2		LESCO	WAPDA	LESCO
5	Halmore Power TPS	132 kV Line 1	IPP-2002	LESCO	IPP	LESCO
		132 kV Line 2		LESCO	IPP	LESCO
		132 kV Line 3		LESCO	IPP	LESCO
6	Japan Power TPS	132 kV Wapda Town Line 1	IPP-1994	LESCO	IPP	LESCO
		132 kV Wapda Town Line 2		LESCO	IPP	LESCO
7	Kala Shah Kaku G/S	132 kV Kamonki Line		LESCO	NTDC	LESCO
		132 kV Theri Sansi Line		LESCO	NTDC	LESCO
		220/132 T1		LESCO	NTDC	LESCO
		220/132 T2		LESCO	LESCO	GEPSCO
		220/132 T3		LESCO	LESCO	GEPSCO
		132 kV Badomalhi Line		LESCO	LESCO	GEPSCO
8	KEL TPS	132 kV Chak 65 Line 1	IPP-1994	LESCO	IPP	LESCO
		132 kV Chak 65 Line 2		LESCO	IPP	LESCO
9	Khanqah Dogran G/S	132 kV Sukheki Line		LESCO	LESCO	GEPSCO
10	Kot Lakhpat G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
11	Narang G/S	132 kV Narowal Line		LESCO	LESCO	GEPSCO
12	Nishat Chunian TPS	132 kV T1	IPP-2002	LESCO	IPP	LESCO
		132 kV T2		LESCO	IPP	LESCO
		132 kV T3		LESCO	IPP	LESCO
		132 kV T4		LESCO	IPP	LESCO
13	Nishat Power TPS	132 kV T1	IPP-2002	LESCO	IPP	LESCO
		132 kV T2		LESCO	IPP	LESCO
		132 kV T3		LESCO	IPP	LESCO
		132 kV T4		LESCO	IPP	LESCO


 Managing Director NTDC
 WAPDA House Lahore.

LESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
14	Orient TPS	132 kV GT1	IPP-2002	LESCO	IPP	LESCO
		132 kV GT2		LESCO	IPP	LESCO
		132 kV ST		LESCO	IPP	LESCO
15	Ravi G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
16	Renala HPS	11 kV Renala Hydel - M1	Hydel	LESCO	WAPDA	LESCO
17	SABA TPS	132 kV Farooqabd 1 Line	IPP-1994	LESCO	IPP	LESCO
		132 kV Farooqabd 2 Line		LESCO	IPP	LESCO
18	Sapphire TPS	132 kV GTG-1	IPP-2002	LESCO	IPP	LESCO
		132 kV GTG-2		LESCO	IPP	LESCO
		132 kV STG		LESCO	IPP	LESCO
19	Sarfaraz Nagar G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
20	SEPCOL TPS	132 kV Raiwaind 1 Line	IPP-1994	LESCO	IPP	LESCO
		132 kV Raiwaind 2 Line		LESCO	IPP	LESCO
21	Shahkot G/S	11 kV ANJUM MILLS Feeder		LESCO	LESCO	FESCO
		11 kV BILAL MILLS Feeder		LESCO	LESCO	FESCO
		11 kV KOHIST Feeder		LESCO	LESCO	FESCO
		11 kV MAIMA COTTON Feeder		LESCO	LESCO	FESCO
		11 kV MARI Feeder		LESCO	LESCO	FESCO
		11 kV RAFI MILLS		LESCO	LESCO	FESCO
		132 kV Bandala Line		LESCO	LESCO	FESCO
22	Shalamar	T1		LESCO	NTDC	LESCO
		T2		LESCO	NTDC	LESCO
		T3		LESCO	NTDC	LESCO
23	Sheikhupura G/S	220/132 kV T5		LESCO	NTDC	LESCO
		220/132 kV T6		LESCO	NTDC	LESCO
		220/132 kV T7		LESCO	NTDC	LESCO
24	Sheikhupura Industrial G/S	11 kV Baig Pur Feeder		LESCO	LESCO	GEPSCO
		11 kV Depay Pur Feeder		LESCO	LESCO	GEPSCO
		11 kV Mallan Virkan Feeder		LESCO	LESCO	GEPSCO
25	Wapda Town G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO


 Manager
 WAPDA
 Rawalpindi


LESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Atlas Power TPS	220 kV L1	IPP-2002	LESCO	IPP	NTDC
		220 kV L2		LESCO	IPP	NTDC
2	Bucheki G/S	132 kV Chak RB 103 Line		LESCO	LESCO	FESCO
3	Bund Road G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
		220/132 kV T4		LESCO	NTDC	LESCO
4	Chicho Ki Malian HPS	66 kV Ataabad Line	Hydel	LESCO	WAPDA	LESCO
		66 kV Shekhupura Line		LESCO	WAPDA	LESCO
		11 kV Feeder 1		LESCO	WAPDA	LESCO
		11 kV Feeder 3		LESCO	WAPDA	LESCO
		11 kV Feeder 2		LESCO	WAPDA	LESCO
5	Halmore Power TPS	132 kV Line 1	IPP-2002	LESCO	IPP	LESCO
		132 kV Line 2		LESCO	IPP	LESCO
		132 kV Line 3		LESCO	IPP	LESCO
6	Japan Power TPS	132 kV Wapda Town Line 1	IPP-1994	LESCO	IPP	LESCO
		132 kV Wapda Town Line 2		LESCO	IPP	LESCO
7	Kala Shah Kaku G/S	132 kV Kamonki Line		LESCO	NTDC	LESCO
		132 kV Theri Sansi Line		LESCO	NTDC	LESCO
		220/132 T1		LESCO	NTDC	LESCO
		220/132 T2		LESCO	LESCO	GEPCO
		220/132 T3		LESCO	LESCO	GEPCO
		132 kV Badomalhi Line		LESCO	LESCO	GEPCO
8	KEL TPS	132 kV Chak 65 Line 1	IPP-1994	LESCO	IPP	LESCO
		132 kV Chak 65 Line 2		LESCO	IPP	LESCO
9	Khanqah Dogran G/S	132 kV Sukheki Line		LESCO	LESCO	GEPCO
10	Kot Lakhpat G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
11	Narang G/S	132 kV Narowal Line		LESCO	LESCO	GEPCO
12	Nishat Chunian TPS	132 kV T1	IPP-2002	LESCO	IPP	LESCO
		132 kV T2		LESCO	IPP	LESCO
		132 kV T3		LESCO	IPP	LESCO
		132 kV T4		LESCO	IPP	LESCO
13	Nishat Power TPS	132 kV T1	IPP-2002	LESCO	IPP	LESCO
		132 kV T2		LESCO	IPP	LESCO
		132 kV T3		LESCO	IPP	LESCO
		132 kV T4		LESCO	IPP	LESCO


Managing Director NTDC
 WAPDA House Lahore.


LESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
14	Orient TPS	132 kV GT1	IPP-2002	LESCO	IPP	LESCO
		132 kV GT2		LESCO	IPP	LESCO
		132 kV ST		LESCO	IPP	LESCO
15	Ravi G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
16	Renala HPS	11 kV Renala Hydel - M1	Hydel	LESCO	WAPDA	LESCO
17	SABA TPS	132 kV Farooqabd 1 Line	IPP-1994	LESCO	IPP	LESCO
		132 kV Farooqabd 2 Line		LESCO	IPP	LESCO
18	Sapphire TPS	132 kV GTG-1	IPP-2002	LESCO	IPP	LESCO
		132 kV GTG-2		LESCO	IPP	LESCO
		132 kV STG		LESCO	IPP	LESCO
19	Sarfaraz Nagar G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO
20	SEPCOL TPS	132 kV Raiwaind 1 Line	IPP-1994	LESCO	IPP	LESCO
		132 kV Raiwaind 2 Line		LESCO	IPP	LESCO
21	Shahkot G/S	11 kV ANJUM MILLS Feeder		LESCO	LESCO	FESCO
		11 kV BILAL MILLS Feeder		LESCO	LESCO	FESCO
		11 kV KOHIST Feeder		LESCO	LESCO	FESCO
		11 kV MAIMA COTTON Feeder		LESCO	LESCO	FESCO
		11 kV MARI Feeder		LESCO	LESCO	FESCO
		11 kV RAFI MILLS		LESCO	LESCO	FESCO
		132 kV Bandala Line		LESCO	LESCO	FESCO
22	Shalamar	T1		LESCO	NTDC	LESCO
		T2		LESCO	NTDC	LESCO
		T3		LESCO	NTDC	LESCO
23	Sheikhupura G/S	220/132 kV T5		LESCO	NTDC	LESCO
		220/132 kV T6		LESCO	NTDC	LESCO
		220/132 kV T7		LESCO	NTDC	LESCO
24	Sheikhupura Industrial G/S	11 kV Baig Pur Feeder		LESCO	LESCO	GEPCO
		11 kV Depay Pur Feeder		LESCO	LESCO	GEPCO
		11 kV Mallan Virkan Feeder		LESCO	LESCO	GEPCO
25	Wapda Town G/S	220/132 kV T1		LESCO	NTDC	LESCO
		220/132 kV T2		LESCO	NTDC	LESCO
		220/132 kV T3		LESCO	NTDC	LESCO


Managing Director NTDC
WAPDA House Lahore.

QESCO

SR. No.	Grid Station	Meter (Line)	Type	Location	From	To
1	Habib Ullah Coastal TPS	132 kV Sheikh Manda Line 1	IPP-1994	QESCO	IPP	QESCO
		132 kV Sheikh Manda Line 2		QESCO	IPP	QESCO
2	HUBCO Karachi	500 kV Jamshoro Line	IPP-1994	QESCO	IPP	NTDC
		500 kV NKL Line		QESCO	IPP	NTDC
3	Khuzdar	220/132 kV T1		QESCO	NTDC	QESCO
4	Quetta Industrial G/S	220/132 kV T1		QESCO	NTDC	QESCO
		220/132 kV T2		QESCO	NTDC	QESCO
		220/132 kV T3		QESCO	NTDC	QESCO
5	Quetta TPS	132 Kv M1	GENCO	QESCO	GENCO	QESCO
6	Sibbi G/S	220/132 kV T1		QESCO	NTDC	QESCO
		220/132 kV T2		QESCO	NTDC	QESCO
7	Uch TPS 1	220 kV M1	IPP-1994	QESCO	IPP	NTDC
		220 kV M2		QESCO	IPP	NTDC
8	Uch TPS 2	220 kV GT 1	IPP-2002	QESCO	IPP	NTDC
		220 kV GT 2		QESCO	IPP	NTDC
		220 kV GT 3		QESCO	IPP	NTDC


 Managing Director, IPPSC
 WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

CALCULATION OF BULK SUPPLY TARIFF FOR DISCOS

			(Rs. Mln)	
Description			Demand Charges Million Rs.	Energy Charges Rs. Million
A	Generation Cost			
	a) Thermal Gencos - (Ex WAPDA)		20,922	143,672
	b) WAPDA Hydel		37,992	1,869
	c) IPPs		127,738	491,995
	Others		-	11,668
	Total (a+b+c)		186,652	649,203
B	Transmission Costs		18,017	
C	Maximum System Demand MW			
D	Demand Charges Rs. /kW/Month		925	
	a) Generation (A/C/12)			
	b) Transmission (B/C/12)			
E	Units Received at Bus Bar GWh		89,768	
F	Energy Charges at Bus Bar (A/E) Rs./kWh		7.23	
G	Transmission Losses		2,559	
H	Energy Charges per unit Transmitted {F/(1-G)} Rs./kWh		7.44	

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Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

CALCULATION OF BULK SUPPLY TARIFF FOR DISCOS (2012-13)

(Rs. Mln)

Description			Demand Charges Million Rs.	Energy Charges Rs. Million
A	Generation Cost			
	a) Thermal Gencos - (Ex WAPDA)		14,291	188,708
	b) WAPDA Hydel		44,003	2,308
	c) IPPs		140,046	551,069
	Others		12,813	11,616
	Total (a+b+c)		211,152	753,700
B	Transmission Costs		19,578	
C	Maximum System Demand MW			
D	Demand Charges Rs. /kW/Month		1,037	
	a) Generation (A/C/12)		-	
	b) Transmission (B/C/12)		-	
E	Units Received at Bus Bar GWh		95,148	
F	Energy Charges at Bus Bar (A/E) Rs./kWh		7.92	
G	Transmission Losses		2,314	
H	Energy Charges per unit Transmitted {F/(1-G)} Rs./kWh		8.12	



**Managing Director NTDC
WAPDA House Lahore.**

FORM - T3(a)

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges For FY 2009-10

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	212	1,440	2,133	3,573
Habibullah	129	947	490	1,437
Fauji	151	968	1,263	2,231
Uch (C.C	551	4,948	4,414	9,362
Kapco	1,345	12,335	1,713	14,048
Rousch	395	3,429	2,435	5,864
Hubco	1,200	8,508	1,964	10,472
KEL	124	740	256	996
SEPCOL	110	453	537	990
Japan	107	384	61	445
Saba	126	902	491	1,393
AES Lalpir	347	2,615	1,140	3,755
AES Pak Gen	349	2,611	2,407	5,018
Altern	26	220	88	308
CHESHNUP-I	300	3,785	3,666	7,451
CHESHNUP-II	300	-	-	-
Total	5,772	44,284	23,060	67,344


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges For FY 2010-11

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	212	1,516	1,116	2,632
Habibullah	129	957	428	1,385
Fauji	151	978	960	1,938
Uch (C.C	551	5,238	4,204	9,442
Kapco	1,345	13,059	1,587	14,646
Rousch	395	3,630	1,751	5,381
Hubco	1,200	8,972	1,805	10,777
KEL	124	785	51	836
SEPCOL	110	731	676	1,407
Japan	107	524	44	568
Saba	126	955	459	1,414
AES Lalpir	347	1,664	677	2,341
AES Pak Gen	349	2,077	907	2,984
Altern	26	279	60	339
CHESHNUP-I	300	4,628	3,773	8,401
CHESHNUP-II	300	571	571	1,142
Total	5,772	46,563	19,070	65,633

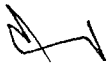

Managing Director NTDC
WAPDA House Lahore.

FORM - T3(a)

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges For FY_ 2011-12

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	212	1,586	2,121	3,707
Habibullah	129	1,001	456	1,457
Fauji	151	1,039	357	1,396
Uch (C.C)	551	5,480	4,078	9,558
Kapco	1,345	13,659	1,401	15,060
Rousch	395	3,798	1,780	5,578
Hubco	1,200	9,960	1,674	11,634
KEL	124	821	36	857
SEPCOL	110	694	432	1,126
Japan	107	679	27	706
Saba	126	845	299	1,144
AES Lalpir	347	2,914	1,140	4,054
AES Pak Gen	349	2,903	1,214	4,117
Altern	26	256	58	314
CHESHNUP-I	300	4,791	3,587	8,378
CHESHNUP-II	300	3,774	10,973	14,747
Total	5,772	54,201	29,634	83,834


 Managing Director NTDC
 WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges For FY_ 2012-13

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Escalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	211.85	426	636	1,062
Habibullah	129.15	811	655	1,466
Fauji	151.00	1,125	125	1,250
Uch (C.C)	551.25	6,041	3,182	9,223
Kapco	1,345.00	15,079	1,153	16,232
Rousch	395.00	4,192	1,922	6,114
Hubco	1,200.00	11,092	1,502	12,594
KEL	124.00	905	42	947
SEPCOL	110.17	129	67	196
Japan	107.00	152	6	158
Saba	125.55	187	30	217
AES Lalpir	347.30	3,207	988	4,195
AES Pak Gen	348.60	3,210	1,140	4,350
Davis	10.00	-	-	-
Altern	26.40	293	64	357
CHESHNUP-I	300.00	5,357	3,567	8,924
CHESHNUP-II	300.00	3,569	8,544	12,113
Total	5,782.27	55,776	23,624	79,399


 Manager
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FORM - T3(a)

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges For FY_ 2013-14

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Escalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	211.85	1,257	1,608	2,865
Habibullah	129.15	1,189	536	1,725
Fauji	151.00	1,222	-	1,222
Uch (C.C)	551.25	6,664	2,198	8,862
Kapco	1,345.00	16,637	1,053	17,690
Rousch	395.00	4,225	1,739	5,964
Hubco	1,200.00	11,836	1,357	13,193
KEL	124.00	999	36	1,035
SEPCOL	110.17	-	-	-
Japan	107.00	-	-	-
Saba	125.55	322	45	367
AES Lalpir	347.30	3,547	526	4,074
AES Pak Gen	348.60	3,543	633	4,176
Davis	10.00	10	10	20
Altern	26.40	330	74	404
CHESHNUP-I	300.00	5,353	3,419	8,772
CHESHNUP-II	300.00	4,715	9,470	14,185
Total	5,782.27	61,849	22,705	84,554


Managing Director NTDC

Islamabad, Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges
Financial Year 2014-15

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	211.85	1,977	2,276	4,253
Habibullah	129.15	1,231	498	1,729
Fauji	151.00	1,256	-	1,256
Uch (C.C)	551.25	6,737	1,797	8,534
Kapco	1,345.00	17,844	801	18,646
Rousch	395.00	4,671	1,463	6,134
Hubco	1,200.00	13,993	1,185	15,178
KEL	124.00	1,010	38	1,047
SEPCOL	110.17	-	-	-
Japan	107.00	-	-	-
Saba	125.55	1,257	180	1,438
AES Lalpir	347.30	3,561	73	3,634
AES Pak Gen	348.60	3,574	79	3,653
*Altern-Phase 1		188	-	188
*Altern-Phase 2	26.40	233	37	270
Davis Energen	10.28	118	108	226
CHESHNUP-I	300.00	6,126	3,322	9,448
CHESHNUP-II	300.00	5,265	9,548	14,813
Total	5,782.54	69,039	21,406	90,445


Managing Director NTDC
WAPDA House Lahore

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

**Capacity Charges
Financial Year 2015-16**


Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	211.85	2,182	14	2,195
Habibullah	129.15	1,317	511	1,828
Fauji	151.00	1,373	-	1,373
Uch (C.C)	551.25	7,174	1,769	8,944
Kapco	1,345.00	18,748	726	19,473
Rousch	395.00	4,997	-	4,997
Hubco	1,200.00	17,671	557	18,228
KEL	124.00	1,080	38	1,117
SEPCOL	110.17	-	-	-
Japan	107.00	-	-	-
Saba	125.55	1,345	180	1,525
AES Lalpir	347.30	3,809	73	3,882
AES Pak Gen	348.60	3,823	79	3,902
*Altern-Phase 1		208	-	208
*Altern-Phase 2	26.40	257	35	292
Davis Energen	10.28	130	99	228
CHESHNUP-I	300.00	6,773	3,414	10,187
CHESHNUP-II	300.00	5,821	10,053	15,874
Total	5,782.54	76,708	17,546	94,254


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Capacity Charges
Financial Year 2016-17

Name of Power Producer	Capacity MW	Capacity Charges Escalable Rs. Million	Capacity Charges Non-Scalable Rs. Million	Total Capacity Charges Rs. Million
Liberty (C.C)	211.85	2,354	14	2,369
Habibullah	129.15	1,427	550	1,977
Fauji	151.00	1,480	-	1,480
Uch (C.C)	551.25	7,810	1,775	9,586
Kapco	1,345.00	19,697	648	20,345
Rousch	395.00	5,395	-	5,395
Hubco	1,200.00	21,424	6	21,430
KEL	124.00	1,211	28	1,239
SEPCOL	110.17	-	-	-
Japan	107.00	-	-	-
Saba	125.55	1,457	180	1,637
AES Lalpir	347.30	4,126	55	4,181
AES Pak Gen	348.60	4,141	59	4,200
*Altern-Phase 1		230	-	230
*Altern-Phase 2	26.40	284	28	311
Davis Energen	10.28	143	89	232
CHESHNUP-I	300.00	7,446	3,419	10,865
CHESHNUP-II	300.00	6,399	10,527	16,926
Total	5,782.54	85,025	17,379	102,404


Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

FY 2009-2010

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INDEPENDENT POWER PRODUCERS (IPPs)
Capacity Charges Escalable Component
 FY 2010-2011

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Rec: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	212	141.124	30.03		35.4616		85.35			111.2167		591.3389	752
Habibullah	129	180.794	30.03		34.7875		85.35			111.2167		612.2005	474
Fauji	151	138.408	30.03		35.039		84.793			111.2167		543.178	487
Uch (C.C)	551	185.5806	30.03		34.9586		85.35			111.2167		785.0673	2596
Kapco	1,345	231.07	34.25										6477
Rousch	395	181.2006	30.03										1800
Hubco	1,200		30.03										4367
KEL	124	124.83	30.03		31.1559		84.793			111.2167		522.9923	390
SPECO	110	122.6838	30.03		32.0412		84.8167			111.2167		514.0775	375
Japan	107	128.334	30.03		34.4556			0.3261		111.2167		537.5293	223
Saba	126	149.97	30.03		34.7875		85.35			111.2167		628.4064	474
AES Lalpir	347	157.242	30.03		31.1055		80.5833			111.2167		658.6109	260
AES Pak Gen	349	157.242	30.03		34.4556		84.4			111.2167		658.6109	679
Altern	26	0.3713	30.03		35.3106		85.35			111.2167			160
CHASNNUP-I	300	583.5839	30.03										2274
CHASNNUP-II	300												0
January - June													
Liberty (C.C)	212	141.124	30.03		30.03		85.7113			111.8167		601.5639	764
Habibullah	129	180.794	30.03		34.7875		85.7029			111.8167		622.7177	482
Fauji	151	138.408	30.03		35.039		85.6779			111.8167		552.4311	490
Uch (C.C)	551	185.5806	30.03		34.9586		85.7029			111.8167		798.5639	2642
Kapco	1,345	231.07	34.25										6582
Rousch	395	181.2006	30.03										1830
Hubco	1,200		30.03										4604
KEL	124	124.83	30.03		31.1559		85.6779			111.8167		531.9015	396
SPECO	110	122.6838	30.03		32.0412		85.7029			111.8167		522.9091	356
Japan	107	128.334	30.03		34.4556			0.3261		111.8167		546.7196	301
Saba	126	149.97	30.03		34.7875		85.7029			111.8167		639.2097	482
AES Lalpir	347	157.242	30.03		31.1055		85.6779			111.8167		669.8304	1404
AES Pak Gen	349	157.242	30.03		34.4556		85.6779			111.2167		669.8304	1398
Altern	26	0.3713	30.03		35.3106		84.709			111.8167			120
CHASNNUP-I	300	583.5839	30.03										2353
CHASNNUP-II	300												571

Managing Director NTDC
 WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

FY 2011-2012

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Rec: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	212	141.124	30.03		35.4616		85.9653			113.9333		611.2442	776
Habibullah	129	180.794	30.03		34.7875		85.9653			113.9333		632.8001	490
Fauji	151	138.408	30.03		35.039		85.6367			113.9333		561.194	510
Uch (C.C)	551	185.5806	30.03		34.9586		85.9653			113.9333		811.4936	2684
Kapco	1,345	231.07	34.25										6693
Rousch	395	181.2006	30.03										1860
Hubco	1,200		30.03										4772
KEL	124	124.83	30.03		31.1559		85.3667			113.9333		540.3387	402
SPECO	110	122.6838	30.03		32.0412		85.4218			113.9333		531.3756	327
Japan	107	128.334	30.03		34.4556			0.3261		113.9333		555.392	356
Saba	126	149.97	30.03		34.7875		85.97			113.9333		649.5593	490
AES Lalpur	347	157.242	30.03		31.1055		80.5833			113.9333		680.4555	1428
AES Pak Gen	349	157.242	30.03		34.4556		84.4			113.9333		681.7832	1422
Altern	26	0.3713	30.03		35.3106		85.9635			113.9333		1.6082	137
CHASNNUP-I	300	583.5839	30.03										2132
CHASNNUP-II	300												1892
January - June													
Liberty (C.C)	212	141.124	30.03		30.03		87.5437			115.8667		611.2442	810
Habibullah	129	180.794	30.03		34.7875		87.5437			115.8		632.8001	510
Fauji	151	138.403	30.03		35.039		87.4917			115.8667		561.194	530
Uch (C.C)	551	185.5806	30.03		34.9586		87.5437			115.8667		811.4936	2796
Kapco	1,345	231.07	34.25										6965
Rousch	395	181.2006	30.03										1938
Hubco	1,200		30.03										5188
KEL	124	124.83	30.03		31.1559		87.4917			115.8718		540.3387	418
SPECO	110	122.6838	30.03		32.0412		87.5437			115.8667		531.3756	366
Japan	107	128.334	30.03		34.4556			0.3261		115.8667		555.392	323
Saba	126	149.97	30.03		34.7875		87.5437			115.8667		649.5593	356
AES Lalpur	347	157.242	30.03		31.1055		87.5437			115.8667		680.4555	1486
AES Pak Gen	349	157.242	30.03		34.4556		87.5437			115.8667		681.7832	1482
Altern	26	0.3713	30.03		35.3106		85.4726			115.8667		1.6082	120
CHASNNUP-I	300	583.5839	30.03										2660
CHASNNUP-II	300												1882

Managing Director
WAPDA House

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

FY 2012-2013

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Rec: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	212	141.424	30.03		35.4616		91.275			116.8833	2.5739109	731.9348	426
Habibullah	129	144.7152	30.03		34.7875		91.275			116.8833	2.6237873	757.7467	391
Fauji	151	125.268	30.03		35.039		91.1583			116.8833	2.6016239	649.699	556
Uch (C.C)	551	100.3458	30.03		34.9586		91.1583			116.8833	2.6076073	971.7233	2937
Kapco	1,345	231.07	34.25				91.275			116.8833		994.9586	7346
Rousch	395	181.2006	30.03										2040
Hubco	1,200		30.03										5291.5
KEL	124	124.83	30.03		31.1559		91.275			116.8833	2.9296217	647.4272	440
SEPCOL	110	122.6838	30.03		32.0412		85.2726			118.6667	2.6613423	582.1414	129
Japan	107	128.334	30.03		34.4556								152
Saba	126	149.97	30.03		34.7875		91.275			116.8833	2.6237873	815.313	187
AES Lalpir	347	157.242	30.03		31.1055		91.275			116.8833	2.9343685	704.0312	1562
AES Pak Gen	349	157.242	30.03		34.4556		91.275			116.8833	2.6490614	704.0312	1560
Altern	26	0.3713	30.03		35.3106		91.275			116.8833	2.5849178	1.9257	169
CHASNNUP-I	300	583.5839	30.03										2665.5
CHASNNUP-II	300												1897
													27749
January - June													
Liberty (C.C)	212	141.124	30.03		30.03		91.3500			116.8833	3.041958	785.8297	0
Habibullah	129	180.794	30.03		34.7875		95.5167			116.8833	2.745719	813.543	420
Fauji	151	138.408	30.03		35.039		95.5167			116.8833	2.726011	697.5389	569
Uch (C.C)	551	185.5806	30.03		34.9586		95.5167			116.8833	2.7322805	1043.2753	3105
Kapco	1,345	231.07	34.25										7733.25
Rousch	395	181.2006	30.03										2152
Hubco	1,200		30.03										5800.25
KEL	124	124.83	30.03		31.1559		95.5167			117.9333	3.065766	695.0999	465
SEPCOL	110	122.6838	30.03		32.0412		95.5167			111.8167	2.9810588	582.1414	0
Japan	107	128.334	30.03		34.4556								0
Saba	126	149.97	30.03		34.7875		95.5167			116.8833	2.745719	875.3481	0
AES Lalpir	347	157.242	30.03		31.1055		95.5167			117.9333	3.0707335	875.3481	1645
AES Pak Gen	349	157.242	30.03		34.4556		95.5167			117.9333	2.7721677	875.3481	1650.25
Altern	26	0.3713	30.03		35.3106		95.5167			110.55	2.7050432	2.0675	124
Davis	10												0
CHASNNUP-I	300	583.5839	30.03										2691.25
CHASNNUP-II	300												1672
													28027

Managing Director NEDC
 KPDA House Lahore

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

FY 2013-2014

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Rec: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	212	316.9708	30.03		35.4616		98.2667			118.6667	2.7710735	731.9348	759.4881
Habibullah	129	144.7152	30.03		34.7875		98.2667			118.6667	2.8247704	757.7467	587.17792
Fauji	151	125.268	30.03		35.039		98.2667			118.6667	2.804495	649.699	589.40659
Uch (C.C)	551	100.3458	30.03		34.9586		98.2667			118.6667	2.8109449	971.7233	3213.9738
Kapco	1,345	231.07	34.25				98.2667			118.6667		994.9586	8015.5858
Rousch	395	181.2006	30.03										2227.603
Hubco	1,200		30.03										5630.625
KEL	124	124.83	30.03		31.1559		98.2667			118.6667	3.1540318	647.4272	481.68565
SEPCOL	110	122.6838	30.03		32.0412		98.2667			118.6667	3.0668858	582.1414	0
Japan	107	128.334	30.03		34.4556								0
Saba	126	149.97	30.03		34.7875		98.2667			118.6667	2.8247704	815.313	102.36255
AES Lalpir	347	157.242	30.03		31.1055		98.2667			118.6667	3.1591423	704.0312	1710.3545
AES Pak Gen	349	157.242	30.03		34.4556		98.2667			118.6667	2.8519805	704.0312	1708.0844
Altern	26	0.3713	30.03		35.3106		98.2667			118.6667	2.7829235	1.9257	195.60685
CHASNNUP-I	300	583.5839	30.03										2786.4386
CHASNNUP-II	300												2420.435
January - June													30428.828
Liberty (C.C)	212	141.124	30.03		30.03		104.6500			119.6333	3.4848485	785.8297	497.2345
Habibullah	129	180.794	30.03		34.7875		104.6500			119.6333	3.0082645	813.543	601.59011
Fauji	151	138.408	30.03		35.039		104.6500			119.6333	2.986672	697.5389	633.09281
Uch (C.C)	551	185.5806	30.03		34.9586		104.6500			119.6333	2.9935409	1043.2753	3449.6727
Kapco	1,345	231.07	34.25										8621.3474
Rousch	395	181.2006	30.03										1997.47
Hubco	1,200		30.03										6205.8631
KEL	124	124.83	30.03		31.1559		104.6500			119.6333	3.3589144	695.0999	517.38771
SEPCOL	110	122.6838	30.03		32.0412		104.6500			119.6333	3.2661074	582.1414	0
Japan	107	128.334	30.03		34.4556								0
Saba	126	149.97	30.03		34.7875		104.6500			119.6333	3.0082645	875.3481	219.79991
AES Lalpir	347	157.242	30.03		31.1055		104.6500			119.6333	3.3643568	875.3481	1837.1243
AES Pak Gen	349	157.242	30.03		34.4556		104.6500			119.6333	3.0372421	875.3481	1834.6858
Altern	26	0.3713	30.03		35.3106		104.6500			119.6333	2.9636993	2.0675	134.77503
Davis	10												9.855998
CHASNNUP-I	300	583.5839	30.03										2566.4971
CHASNNUP-II	300												2294.2258
													31420.622

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

Financial Year 2014-15

Name of Power Producer	Capacity MW	Ref: Capaicity Charges Rs./kW/Month	Ref: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Indexed Capacity Charges Rs./kW/Month	Capcity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	211	141.1240	30.0300				100.5749		67.0278	108.0167	5.3972	761.6774	96
Habibullah	129	144.7152	30.0300				100.5749		66.4200	108.0167	5.4466	788.2069	61
Fauji	151	125.2680	30.0300				100.5749		67.0600	108.0167	5.3946	675.7741	61
Uch (C.C)	551	185.5806	30.0300				100.5749		66.4200	108.0167	5.4466	1010.7847	3,34
Kapco	1,345	231.0700	34.2500				107.2663		66.4200	122.6187	4.8574		8,81
Rousch	395	181.2006	30.0300				100.5749		67.0278	108.0167	5.3972	977.9793	2,31
Hubco	1,200		30.0300										
KEL	124	124.83	30.0300				100.5749		67.0600	108.0167	5.3946	673.4113	50
SEPCOL	110	122.6838	30.0300										
Japan	107	100.0830	30.0300										
Saba	126	157.2000	30.0300										
AES Lalpir	347	157.242	30.0300				100.5749		67.0600	108.0167	5.3946	848.0354	63
AES Pak Gen	349	157.242	30.0300				100.5749		67.0800	108.0167	5.3930	848.0090	1,76
*Altern-Phase 1	9,975,800	0.3007	30.0300				100.5749		67.0800	108.0167	5.3930	848.0090	1,77
*Altern-Phase 2	9,975,800	0.3713	30.0300				100.5749		67.0278	108.0167	5.3972	1.6229	9
Davis Energen	10.2795	172.1870	30.0300				100.5749		67.0278	108.0167	5.3972	2.0040	12
CHASNNUP-I	300		0				100.5749		67.0278	108.0167	5.3972	929.3313	5
CHASNNUP-II	300	1.2297	0										301
													259
January - June													
Liberty (C.C)	211	141.124	30.03				103.089		67.0278	110.7171	5.6705	800.2374	1,01
Habibullah	129	144.715	30.03				100.200		66.4200	110.0586	5.5289	800.1138	62
Fauji	151	129.6480	30.03				100.200		67.0300	110.0586	5.4786	710.2867	64
Uch (C.C)	551	185.5806	30.03				100.200		66.4200	110.0586	5.5289	1026.0553	3,39
Kapco	1,345	231.07	34.25				109.948		79.0600	125.6842	5.1033		9,03
Rousch	395	181.2006	30.03				100.200		67.0278	110.0586	5.4788	992.7542	2,35
Hubco	1,200		30.03										
KEL	124	124.83	30.03				100.200		67.0700	110.0586	5.4753	683.4830	50
SEPCOL	110	122.6838	30.03										
Japan	107	100.0830	30.03										
Saba	126	149.97	30.03				100.200		67.0679	110.0586	5.4755	821.1580	61
AES Lalpir	347	157.242	30.03				100.200		67.0900	110.0586	5.4737	860.6921	1,79
AES Pak Gen	349	157.242	30.03				100.200		67.0900	110.0586	5.4737	860.6921	1,80
*Altern-Phase 1	9,975,800	0.3007	30.03				103.089		74.89	110.7171	5.0752	1.5261	91
*Altern-Phase 2	9,975,800	0.3713	30.03				103.089		74.89	110.7171	5.0752	1.8844	11
Davis Energen	10.2795	172.1870	30.0300				103.089		67.0278	110.7171	5.6705	976.38	60
CHASNNUP-I	300		0										311
CHASNNUP-II	300	1.2297	0										267
													27,82
													55,04

Altern Take & Pay Basis. Therefore Capacity is linked *with energy

INDEPENDENT POWER PRODUCERS (IPPs)
Capacity Charges Escalable Component
 Financial Year 2015-16

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Ref: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Indexed Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	211	141.1240	30.0300				105.66653		67.0278	113.4850	5.9575	840.7495	1,064
Habibullah	129	144.7152	30.0300				102.7314		66.4200	111.7198	5.7541	832.7093	645
Fauji	151	129.6480	30.0300				102.7314		67.0600	111.7198	5.6992	738.8911	669
Uch (C.C)	551	185.5806	30.0300				102.7314		66.4200	111.7198	5.7541	1067.8539	3,532
Kapco	1,345	231.0700	34.2500				107.2663		79.0600	122.6187	4.8574		9,258
Rousch	395	181.2006	30.0300				102.7314		67.0278	111.7198	5.7019	1033.1962	2,449
Hubco	1,200		30.0300										
KEL	124	124.83	30.0300				102.7314		67.0900	111.7198	5.6967	711.1142	529
SEPCOL	110	122.6838	30.0300										
Japan	107	100.0830	30.0300				102.7314		67.0600	111.7198	5.6992	895.9157	67
Saba	126	157.2000	30.0300				102.7314		67.0900	111.7198	5.6967	895.7543	1,86
AES Lalpir	347	157.242	30.0300				102.7314		67.0900	111.7198	5.6967	895.7543	1,87
AES Pak Gen	349	157.242	30.0300				105.6665		67.0278	113.4850	5.9575	1,7914	10
*Altern-Phase 1	9,975,800	0.3007	30.0300				105.6665		67.0278	113.4850	5.9575	2,2120	13
*Altern-Phase 2	9,975,800	0.3713	30.0300				105.6665		67.0278	113.4850	5.9575	1025.8080	6
Davis Energen	10.2795	172.1870	30.0300										33
CHASNNUP-I	300		0										28
CHASNNUP-II	300	1.2297	0										29,04
January - June													
Liberty (C.C)	211	141.124	30.03				108.3082		67.0278	116.3222	6.2591	883.3124	1,11
Habibullah	129	144.715	30.03				105.3266		66.3900	113.4062	5.9912	867.0220	67
Fauji	151	129.6480	30.03				105.3266		66.3900	113.4062	5.9912	776.7520	70
Uch (C.C)	551	185.5806	30.03				105.3266		67.0300	113.4062	5.9340	1101.2416	3,64
Kapco	1,345	231.07	34.25				109.9479		79.0600	125.6842	5.1033		9,48
Rousch	395	181.2006	30.03				105.3266		67.0278	113.4062	5.9342	1075.2858	2,54
Hubco	1,200		30.03										
KEL	124	124.83	30.03				105.3266		67.0700	113.4062	5.9305	740.3037	59
SEPCOL	110	122.6838	30.03										
Japan	107	100.0830	30.03				105.3266		67.0679	113.4062	5.9307	889.4242	6
Saba	126	149.97	30.03				105.3266		67.0900	113.4062	5.9287	932.2449	1,9
AES Lalpir	347	157.242	30.03				105.3266		67.0900	113.4062	5.9287	932.2449	1,9
AES Pak Gen	349	157.242	30.03				108.3082		74.89	116.3222	5.6020	1.6845	1
*Altern-Phase 1	9,975,800	0.3007	30.03				108.3082		74.89	116.3222	5.6020	2.0800	1
*Altern-Phase 2	9,975,800	0.3713	30.03				108.3082		67.0278	116.3222	6.2591	1,077.74	34
Davis Energen	10.2795	172.1870	30.0300										29
CHASNNUP-I	300		0										29,9
CHASNNUP-II	300	1.2297	0										59,0

Managing Director NTDC
WAPDA House, Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Escalable Component

Financial Year 2016-17

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Ref: Exchange Rate		Exchange Rate at Financial Close		Current Exchange Rate		US CPI		Escalation Factor Current	Indexed Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Rs./\$	Rs./Yen	Base	Current			
July - December													
Liberty (C.C)	211	141.1240	30.0300				111.0159		67.0278	119.2303	6.5760	928.0305	1,174
Habibullah	129	144.7152	30.0300				107.9873		66.3900	115.1179	6.2353	902.3433	699
Fauji	151	129.6480	30.0300				107.9873		67.0300	115.1179	6.1758	800.6762	725
Uch (C.C)	551	185.5806	30.0300				107.9873		66.3900	115.1179	6.2353	1157.1516	3,827
Kapco	1,345	231.0700	34.2500				107.2663		79.0600	122.6187	4.8574		9,727
Rousch	395	181.2006	30.0300				107.2663		67.0278	115.1179	6.1347	1111.6174	2,635
Hubco	1,200		30.0300										
KEL	124	124.83	30.0300				107.2663		67.0700	115.1179	6.1309	765.3169	569
SEPCOL	110	122.6838	30.0300										
Japan	107	100.0830	30.0300										
Saba	126	157.2000	30.0300				107.9873		67.0679	115.1179	6.1723	970.2824	731
AES Lalpir	347	157.242	30.0300				107.9873		67.0900	115.1179	6.1702	970.2220	2,022
AES Pak Gen	349	157.242	30.0300				107.9873		67.0900	115.1179	6.1702	970.2220	2,029
*Altern-Phase 1	9,975,800	0.3007	30.0300				111.0159		67.0278	119.2303	6.5760	1.9774	118
*Altern-Phase 2	9,975,800	0.3713	30.0300				111.0159		67.0278	119.2303	6.5760	2.4417	146
Davis Energen	10.2795	172.1870	30.0300				111.0159		67.0278	119.2303	6.5760	1132.3006	70
CHASNNUP-I	300		0										366
CHASNNUP-II	300		0										314
January - June													
Liberty (C.C)	211	141.124	30.03				113.7913		67.0278	116.8555	6.6061	932.2853	1,180
Habibullah	129	144.715	30.03				110.7153		66.3900	116.8555	6.4893	939.1010	728
Fauji	151	129.6480	30.03				110.7153		67.0300	116.8555	6.4274	833.2936	758
Uch (C.C)	551	185.5806	30.03				110.7153		66.3900	116.8555	6.4893	1204.2907	3,983
Kapco	1,345	231.07	34.25				109.9479		79.0600	125.6842	5.1033		9,970
Rousch	395	181.2006	30.03				110.7153		67.0278	116.8555	6.4276	1164.6786	2,760
Hubco	1,200		30.03										
KEL	124	124.83	30.03				110.7153		67.0700	125.6842	6.9088	862.4293	64
SEPCOL	110	122.6838	30.03										
Japan	107	100.0830	30.03										
Saba	126	149.97	30.03				110.7153		67.0679	116.8555	6.4237	963.3656	72
AES Lalpir	347	157.242	30.03				110.7153		67.0900	116.8555	6.4216	1009.7461	2,10
AES Pak Gen	349	157.242	30.03				110.7153		67.0900	116.8555	6.4216	1009.7461	2,11
*Altern-Phase 1	9,975,800	0.3007	30.03				113.7913		74.8900	122.2110	6.1836	1.8594	11
*Altern-Phase 2	9,975,800	0.3713	30.03				113.7913		74.8900	122.2110	6.1836	2.2960	13
Davis Energen	10.2795	172.1870	30.0300				113.7913		67.0278	122.2110	6.9089	1,189.62	7
CHASNNUP-I	300		0										37
CHASNNUP-II	300	1.2297											32
													32,31
													63,60

Altern Take & Pay Basis. Therefore Capacity is linked *with energy

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable

FY 2009-10

Name of Power Producer	Capacity MW	Ref. Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	212	355.6586	30.03		81.3		2.7072927	815.3903	871
Habibullah	129	217.6632	34.7875		81.3		2.3370464	508.6889	438
Fauji	151	248.97	35.039		80.8833		2.3083792	571.717415	505
Uch (C.C)	551	300.2052	34.9586		81.3		2.325608	698.1596	2357
Kapco	1,345	108.8723			80.2917				3443
Rousch	395	264.99	35.03		81.3		2.3208678		1648
Hubco	1,200				81.3			108.8772	2529
KEL	124	129.0348	31.1559		80.8833		2.5960829	139.02	301
SPECO	110	227.455	32.0412		79.7		2.4874224	592.3	206
Japan	107	74.46	34.4556			0.3261	1.0267	76.4497	185
Saba	126	152.5484	34.7875		81.3			356.5127	353
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.4292	922
AES Pak Gen	349	294.2593	34.4556		80.5833		2.3387577	688.2015	1352
Altern	26	0.0731	35.3106		81.3		2.3024248	0.168307	77
CHASNNUP	300	737.846							1905
17092									
October - December									
Liberty (C.C)	212	355.6586	30.03		83.17		2.7695638	834.1451	883
Habibullah	129	217.6632	34.7875		83.17		2.3908013	268.0813	324
Fauji	151	248.97	35.039		83.12		2.3722138	590.610072	512
Uch (C.C)	551	300.2052	34.9586		83.17		2.3790998	714.2181	2294
Kapco	1,345	108.8723							3431
Rousch	395	264.99						703.7962	1581
Hubco	1,200								2544
KEL	124	129.0348	31.1559		83.12		2.6678735	129.348	226
SPECO	110	227.455	32.0412		80.8833		2.524353	676.11	0
Japan	107	74.46	34.4556			0.3261	1.02672	76.4497	61
Saba	126	152.5484	34.7875		83.17		2.3908013	364.71299	357
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.4292	922
AES Pak Gen	349	294.2593	34.4556		82.51		2.3943858	704.5792	1365
Altern	26	0.0731	35.3106		83.17		2.3553834	0.172239	65
CHASNNUP	300	737.846							1989
16553									
January - March									
Liberty (C.C)	212	355.6586	30.03		84.25		2.8055278	844.9769	910
Habibullah	129	217.6632	34.7875		84.25		2.4218469	271.5625	337
Fauji	151	248.97	35.039		83.057		2.3704158	801.7665	604
Uch (C.C)	551	300.2052	34.9586		84.25		2.4099935	656.6523	2357
Kapco	1,345	108.8723						104.11	3578
Rousch	395	264.99						362.8812	1318
Hubco	1,200		34.7875		84.25		2.4218469	133.78	2680
KEL	124	129.0348	31.1559		83.12		2.6678735	129.0348	237
SPECO	110	227.455	32.0412		83.81		2.6156948	622.844	400
Japan	107	74.46	34.4556			0.3261	1.02672	78.4925	86
Saba	126	152.5484	34.7875		84.25		2.4218469	271.9458	342
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.4292	955
AES Pak Gen	349	294.2593	34.4556		82.9767		2.408221	708.64119	1329
Altern	26	0.0731	35.3106		83.17		2.3553834	0.172239	38
CHASNNUP	300	737.846							2081
17253									
April - June									
Liberty (C.C)	212	355.6586	30.03		84.0878		2.8001265	843.35	909
Habibullah	129	217.6632	34.7875		84.0878		2.4171843	271.397	337
Fauji	151	248.97	35.039		84.6016		2.4144981	816.6807	610
Uch (C.C)	551	300.2052	34.9586		84.0878		2.4053538	816.68	2355
Kapco	1,345	108.8723						104.1182	3597
Rousch	395	264.99	34.7875		84.0878		2.4171843	367.9191	1317
Hubco	1,200								2718
KEL	124	129.0348	31.1559		83.12		2.6678735	129.0348	232
SPECO	110	227.455	32.0412		84.6016		2.6404005	550.518	383
Japan	107	74.46	34.4556		84.0878		2.4404683	53.9645	113
Saba	126	152.5484	34.7875			0.3261	1	291.7803	342
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.4292	956
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.2593	974
Altern	26	0.0731	35.3106		84.09		2.3814379	0.174144	126
CHASNNUP	300	737.846							1478
16446									

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

FORM - T3(a2)

Capacity Charges Non-Escalable
FY 2010-2011

Name of Power Producer	Capacity MW	Ref. Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Revised Capacity Charges Rs./kW/Month	Capcity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	212	355.6586	30.03		85.35		2.8421578	493.8668	843
Habibullah	129	217.6632	34.7875		85.35		2.4534675	275.1081	344
Fauji	151	248.97	35.039		85.793		2.4485002	818.5274	604
Uch (C.C)	551	300.2052	34.9586		85.35		2.4414593	664.8206	2397
Kapco	1,345	108.8723							3652
Rousch	395	264.99	34.7875		85.3500		2.4534675	373.4417	1343
Hubco	1,200								2635
KEL	124	129.0348	31.1559		84.793		2.7215712	35.5656	208
SPECO	110	227.455	32.0412		84.8167		2.6471137	551.9174	386
Japan	107	74.46	34.4556			0.3261	1		116
Saba	126	152.5484	34.7875		85.35		2.4534675	53.9645	348
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	367
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	373
Altern	26	0.0731	35.3106		85.35		2.4171212	0.1768	119
CHASNNUP	300	737.846							2059
									15794
October - December									
Liberty (C.C)	212	355.6586	30.03		85.35		2.8421578	493.8668	593
Habibullah	129	217.6632	34.7875		86.2000		2.4779015	277.8479	345
Fauji	151	248.97	35.039		85.6371		2.4440509	826.67	621
Uch (C.C)	551	300.2052	34.9586		86.2		2.4657738	671.44	2356
Kapco	1,345	108.8723							3638
Rousch	395	264.99			85.35				1345
Hubco	1,200								2640
KEL	124	129.0348	31.1559		85.6371		2.748664	35.56	208
SPECO	110	227.455	32.0412		84.6167		2.6408718	557.58	386
Japan	107	74.46	34.4556			0.3261	1		130
Saba	126	152.5484	34.7875		86.2		2.4779015	298.5	349
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	0
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	606
Altern	26	0.0731	35.3106		85.35		2.4171212	0.1768	79
CHASNNUP	300	737.846							2155
									15451
January - March									
Liberty (C.C)	212	355.6586	30.03		85.6367		2.851705	339.8	598
Habibullah	129	217.6632	34.7875		85.6367		2.4617089	276.03	348
Fauji	151	248.97	35.039		85.7187		2.4463797	250.44	365
Uch (C.C)	551	300.2052	34.9586		85.6367		2.4496605	620.16	2347
Kapco	1,345	108.8723							3669
Rousch	395	264.99			85.6367			365.56	1348
Hubco	1,200								2718
KEL	124	129.0348	31.1559		85.6371		2.748664	35.56	211
SPECO	110	227.455	32.0412		85.72		2.6753055	557.78	359
Japan	107	74.46	34.4556			1			137
Saba	126	152.5484	34.7875		85.6367		2.4617089	53.9645	359
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	987
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	1003
Altern	26	0.0731	35.3106		85.35		2.4171212	0.1768	37
CHASNNUP	300	737.846							2046
									16529
April - June									
Liberty (C.C)	212	355.6586	30.03		85.22		2.8378288	338.14	597
Habibullah	129	217.6632	34.7875		85.22		2.4497305	274.68	347
Fauji	151	248.97	35.039		85.6367		2.4440395	250.44	348
Uch (C.C)	551	300.2052	34.9586		85.22		2.4377406	617.1482	2342
Kapco	1,345	108.8723							3687
Rousch	395	264.99			85.22			363.79	1346
Hubco	1,200							124.48	2782
KEL	124	129.0348	31.1559		85.6371		2.748664	35.56	210
SPECO	110	227.455	32.0412		85.72		2.6753055	306.2275	275
Japan	107	74.46	34.4556			1		53.96	186
Saba	126	152.5484	34.7875		85.22		2.4497305	312.06	359
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	987
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.24	1003
Altern	26	0.0731	35.3106		85.22		2.4134396	0.5914	106
CHASNNUP-I	300	737.846							2140
CHASNNUP-II	300								1142
									17860

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable

FY 2011-2012

Name of Power Producer	Capacity MW	Ref. Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Revised Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	212	355.6586	35.4616		85.9653		2.42418	341.1	690
Habibullah	129	217.6632	34.7875		85.9653		2.4711549	277.09	353
Fauji	151	248.97	35.039		85.6367		2.4440395	250.44	369
Uch (C.C)	551	300.2052	34.9586		85.9653		2.4590601	622.54	2372
Kapco	1,345	108.8723							3712
Rousch	395	264.99	34.7875		85.9653		2.4711549	366.97	1365
Hubco	1,200								2816.5
KEL	124	129.0348	31.1559		85.3667		2.739985	25.2288	210
SPECO	110	227.455	32.0412		85.4218		2.6659988	305.86	277
Japan	107	74.46	34.4556			0.3261	1	22.48	185
Saba	126	152.5484	34.7875		85.97		2.47129	314.8	364
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	999
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	1015
Altern	26	0.0731	35.3106		85.9653		2.4345466	0.5966	100
CHASNNUP-I	300	737.846							1852.5
CHASNNUP-II	300								3297
19977									
October - December									
Liberty (C.C)	212	355.6586	35.4616		87.4		2.4646378	934.21	982
Habibullah	129	217.6632	34.7875		87.4		2.5123967	293.016	359
Fauji	151	248.97	35.039		85.6367		2.4440395	250.44	360
Uch (C.C)	551	300.2052	34.9586		85.9653		2.4590601	622.5455	2344
Kapco	1,345	108.8723							3699
Rousch	395	264.99	34.7875		85.9653		2.4711549	366.971	1371
Hubco	1,200							118.44	2815
KEL	124	129.0348	31.1559		85.3667		2.739985	25.2288	210
SPECO	110	227.455	32.0412		85.4726		2.6675842	311.39	280
Japan	107	74.46	34.4556			0.3261	0	22.48	185
Saba	126	152.5484	34.7875		87.4		2.5123967	320.12	366
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	999
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	1015
Altern	26	0.0731	35.3106		87.4		2.4751774	0.4506	71
CHASNNUP-I	300	737.846							1884
CHASNNUP-II	300								3917
20857									
January - March									
Liberty (C.C)	212	355.6586	35.4616		89.7		2.5294967	958.8	1014
Habibullah	129	217.6632	34.7875		89.7		2.5785124	300.7736	372
Fauji	151	248.97	35.039		85.6367		2.4440395	152.1716	334
Uch (C.C)	551	300.2052	34.9586		89.7		2.5658922	615.42	2416
Kapco	1,345	108.8723						84.99	3814
Rousch	395	264.99	34.7875		87.4		2.5123967	379.2527	1419
Hubco	1,200							113.117	3001
KEL	124	129.0348	31.1559		85.3667		2.739985	25.2228	218
SPECO	110	227.455	32.0412		88.1207		2.750231	315.5277	286
Japan	107	74.46	34.4556			0.3261	1	22.48	185
Saba	126	152.5484	34.7875		84.9		2.4405318	119.68	312
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	1028
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	1045
Altern	26	0.0731	35.3106		87.4		2.4751774	0.4506	37
CHASNNUP-I	300	737.846							2323
CHASNNUP-II	300								3875
21679									
April - June									
Liberty (C.C)	212	355.6586	35.4616		89.7		2.5294967	958.8	1020
Habibullah	129	217.6632	34.7875		90.6		2.6043838	303.79	373
Fauji	151	248.97	35.039		85.6367		2.4440395	152.1719	334
Uch (C.C)	551	300.2052	34.9586		89.7		2.5658922	615.425	2427
Kapco	1,345	108.8723						84.99	3833
Rousch	395	264.99	34.7875		89.7		2.5785124	379.527	1423
Hubco	1,200							113.117	3001
KEL	124	129.0348	31.1559		85.3667		2.739985	25.2288	218
SPECO	110	227.455	32.0412		87.5437		2.7322229	297.75	282
Japan	107	74.46	34.4556			0.3261	1	22.48	151
Saba	126	152.5484	34.7875		84.9		2.4405318	119.68	104
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	273.42	1028
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	294.25	1045
Altern	26	0.0731	35.3106		89.7		2.5403137	0.4671	107
CHASNNUP-I	300	737.846							2319
CHASNNUP-II	300								3658
21322									

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable

FY 2012-2013

FORM - 10(a2)


Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Revised Capacity Charges Rs./kW/Month	Capcity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	212	355.6586	35.4616		93.6		2.6394748	935.0026	636
Habibullah	129	217.6632	34.7875		93.6		2.6906216	331.2686	220
Fauji	151	248.97	35.039		85.6367		2.4440395		69
Uch (C.C)	551	300.2052	34.9586		94.2		2.6946159	419.7636	1068.5
Kapco	1,345	108.8723							297
Rousch	395	264.99	34.7875		93.6		2.6906216	417.3387	469
Hubco	1,200								385
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	15
SPECO	110	227.455	32.0412						67
Japan	107	74.46	34.4556				1		6
Saba	126	152.5484	34.7875		85.22		2.4497305	119.688	30
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	165.6739	285
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	178.2951	304
Altern	26	0.0731	35.3106		85.22		2.4134396	0.3719	13
CHASNNUP-I	300	737.846							883
CHASNNUP-II	300								2276.5
									7024
October - December									
Liberty (C.C)	212	355.6586	35.4616		87.4		2.4646378	943.0037	636
Habibullah	129	217.6632	34.7875		94.7		2.7222422	336.9	220
Fauji	151	248.97	35.039		85.6367		2.4440395	0	69
Uch (C.C)	551	300.2052	34.9586		94.7		2.7089185	302.829115	1068.5
Kapco	1,345	108.8723							297
Rousch	395	264.99	34.7875		94.7		2.7222422	417.3387	469
Hubco	1,200								385
KEL	124	129.0348	31.1559		85.3667		2.739985	25.2288	15
SPECO	110	227.455	32.0412		85.4726		2.6675842		67
Japan	107	74.46	34.4556				0		6
Saba	126	152.5484	34.7875		87.4		2.5123967	119.688	30
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	165.67	285
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	169.38	304
Altern	26	0.0731	35.3106		94.7		2.6819142	0.327762	13
CHASNNUP-I	300	737.846							883
CHASNNUP-II	300								2276.5
									7024
January - March									
Liberty (C.C)	212	355.6586	35.4616		93.6		2.6394748	943.0037	0
Habibullah	129	217.6632	34.7875		94.7		2.7222422	336.9	137
Fauji	151	248.97	35.039		93.6		2.6713091	0	0
Uch (C.C)	551	300.2052	34.9586		97.1		2.7775712	299.09751	682
Kapco	1,345	108.8723							280
Rousch	395	264.99	34.7875		95		2.730866	383.3084	486
Hubco	1,200								366
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9
SPECO	110	227.455	32.0412		85.72		2.6753055	304.068	0
Japan	107	74.46	34.4556				1		0
Saba	126	152.5484	34.7875		85.22		2.4497305	119.688	0
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	165.6739	285
AES Pak Gen	349	294.2593	34.4556		84.4		2.4495292	178.2951	304
Altern	26	0.0731	35.3106		84.25		2.3859691	0.3238	8
CHASNNUP-I	300	737.846							793
CHASNNUP-II	300								2276
									5626
April - June									
Liberty (C.C)	212	355.6586	35.4616		93.6		2.6394748	875.0625	0
Habibullah	129	217.6632	34.7875		98.3		2.8257276	312.6313	128
Fauji	151	248.97	35.039		93.6		2.6713091	0	0
Uch (C.C)	551	300.2052	34.9586		98.3		2.8118975	281.01387	691
Kapco	1,345	108.8723							281
Rousch	395	264.99	34.7875		98.3		2.8257276	360.1333	491.5
Hubco	1,200								366
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9
SPECO	110	227.455	32.0412		85.72		2.6753055	304.689	0
Japan	107	74.46	34.4556				1		0
Saba	126	152.5484	34.7875		85.22	0.3261	2.4497305	119.688	0
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	17.514	173
AES Pak Gen	349	294.2593	34.4556		92.1		2.6730053	18.84	229
Altern	26	0.0731	35.3106		84.25		2.3859691	0.3042	20
Davis	10							952.019	0
CHASNNUP-I	300	737.846							987
CHASNNUP-II	300								1714
									5089

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable
FY 2013-2014

Name of Power Producer	Capacity MW	Ref. Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Revised Capacity Charges Rs./kW/Month	Capcity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	212	355.6586	35.4616		98.8		2.7861123	935.0026	656.75801
Habibullah	129	217.6632	34.7875		98.8		2.8401006	331.2686	126.99829
Fauji	151	248.97	35.039		93.6		2.6713091		0
Uch (C.C)	551	300.2052	34.9586		98.8		2.8262001	419.7636	694.18406
Kapco	1,345	108.8723							271.82172
Rousch	395	264.99	34.7875		98.8		2.8401006	417.3387	494.54645
Hubco	1,200								341.97002
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9.082368
SPECO	110	227.455	32.0412						0
Japan	107	74.46	34.4556				1		0
Saba	126	152.5484	34.7875		95.22		2.7371901	119.688	0
AES Lalpir	347	273.4292	31.1055		98.8		3.1762872	165.6739	172.61564
AES Pak Gen	349	294.2593	34.4556		98.8		2.8674584	178.2951	183.94706
Altern	26	0.0731	35.3106		98.8		2.7980267	0.3719	24.71656
CHASNNUP-I	300	737.846							892.14232
CHASNNUP-II	300								2364.768
6233.5505									
October - December									
Liberty (C.C)	212	355.6586	35.4616		98.8		2.7861123	943.0037	397.79102
Habibullah	129	217.6632	34.7875		98.8		2.8401006	336.9	130.53229
Fauji	151	248.97	35.039		93.6		2.6713091	0	0
Uch (C.C)	551	300.2052	34.9586		98.2667		2.8109449	302.829115	544.7579
Kapco	1,345	108.8723							270.12331
Rousch	395	264.99	34.7875		98.8		2.8401006	417.3387	513.41766
Hubco	1,200								341.97002
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9.082368
SPECO	110	227.455	32.0412		85.4726		2.6675842		0
Japan	107	74.46	34.4556				0		0
Saba	126	152.5484	34.7875		85.22		2.4497305	119.688	15.026841
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	165.67	172.61564
AES Pak Gen	349	294.2593	34.4556		98.8		2.8674584	169.38	183.94706
Altern	26	0.0731	35.3106		98.8		2.7980267	0.327762	17.979511
CHASNNUP-I	300	737.846							892.22701
CHASNNUP-II	300								2364.768
5854.2386									
January - March									
Liberty (C.C)	212	355.6586	35.4616		98.8		2.7861123	943.0037	0
Habibullah	129	217.6632	34.7875		98.8		2.8401006	336.9	150.54211
Fauji	151	248.97	35.039		104.65		2.986672	0	0
Uch (C.C)	551	300.2052	34.9586		104.2		2.9806686	299.09751	494.94913
Kapco	1,345	108.8723							255.99856
Rousch	395	264.99	34.7875		104.2		2.9953288	383.3084	304.26668
Hubco	1,200								348.77023
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9.08237
SPECO	110	227.455	32.0412		85.72		2.6753055	304.068	0
Japan	107	74.46	34.4556				1		0
Saba	126	152.5484	34.7875		84.9		2.4405318	119.688	15.026842
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	165.6739	162.65617
AES Pak Gen	349	294.2593	34.4556		98.8		2.8674584	178.2951	183.94706
Altern	26	0.0731	35.3106		104.2		2.9509552	0.3238	7.074937
CHASNNUP-I	300	737.846							819.1368
CHASNNUP-II	300								2327.4662
5078.9171									
April - June									
Liberty (C.C)	212	355.6586	35.4616		98.8		2.7861123	875.0625	553.70247
Habibullah	129	217.6632	34.7875		98.8		2.8401006	312.6313	128.33509
Fauji	151	248.97	35.039		93.6		2.6713091	0	0
Uch (C.C)	551	300.2052	34.9586		97.9		2.8004554	281.01387	464.04949
Kapco	1,345	108.8723							255.16434
Rousch	395	264.99	34.7875		98.8		2.8401006	360.1333	426.75798
Hubco	1,200								324
KEL	124	129.0348	31.1559		92.2		2.9593111	25.2288	9.082369
SPECO	110	227.455	32.0412		85.72		2.6753055	304.689	0
Japan	107	74.46	34.4556				1		0
Saba	126	152.5484	34.7875		85.22		2.4497305	119.688	15.026842
AES Lalpir	347	273.4292	31.1055		80.5833		2.5906447	17.514	18.243876
AES Pak Gen	349	294.2593	34.4556		98.8		2.8674584	18.84	81.35223
Altern	26	0.0731	35.3106		104.2		2.9509552	0.3042	24.056327
Davis	10							952.019	9.786279
CHASNNUP-I	300	737.846							815.12509
CHASNNUP-II	300								2413
5537.8652									


 Managing Director
 WAPDA

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable
Financial Year 2014-15

FORM - 13(a2)

Name of Power Producer	Capacity MW	Ref. Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Indexed Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	210.92	281.3490	35.4616		98.75		1.1266	882.6693	559
Habibullah	129.15	111.0895	34.7875		98.75		2.8387	315.3456	122
Fauji	151.00								
Uch (C.C)	548.84	100.3458	34.9586		98.75		2.8248	283.4538	467
Kapco	1,345	51.194							207
Rousch	395		34.7875		100.35				502
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SEPCOL	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altcm-Phase 1	9,975,800	-	0.0000		98.7500			0.0000	-
*Altcm-Phase 2	9,975,800	0.0977	35.3106		98.7500		1.1231	0.3069	9
Davis Energen	10.28	875.3870						875.3870	27
CHASNNUP-I	300	0							837
CHASNNUP-II	300	0							2406
									5,228
October - December									
Liberty (C.C)	210.92	281.3490	35.4616		99.984		1.1266	893.7027	565
Habibullah	129.15	111.0895	34.7875		99.984		2.8741	319.2874	124
Fauji	151.00								
Uch (C.C)	548.84	92.9874	34.9586		99.984		2.8601	265.9514	438
Kapco	1,345	51.194							205
Rousch	395		0		102.8562				501
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altcm-Phase 1	9,975,800	-	0.0000		99.98			0.0000	-
*Altcm-Phase 2	9,975,800	0.0977	35.3106		99.98		1.1231	0.3107	9
Davis Energen	10	875.3870						875.3870	27
CHASNNUP-I	300	0							837
CHASNNUP-II	300	0							2406
									5,205
January - March									
Liberty (C.C)	210.92	281.3490	35.4616		101.23		1.1266	904.8740	573
Habibullah	129.15	111.0895	34.7875		101.24		2.9103733	323.3118	125
Fauji	151.00								
Uch (C.C)	548.84	92.9874	34.9586		101.24		2.8961288	269.3035	443
Kapco	1,345	48.452							194
Rousch	395		0		105.43				460
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	18
AES Pak Gen	348.60	18.8442					1.0000	18.8442	20
*Altcm-Phase 1	9,975,800	-	0.0000		101.23			0.0000	-
*Altcm-Phase 2	9,975,800	0.0977	35.3106		101.23		1.1231	0.3146	9
Davis Energen	10	875.3870						875.3870	27
CHASNNUP-I	300	0							819
CHASNNUP-II	300	0							2354
									5,097
April - June									
Liberty (C.C)	210.92	281.3490	35.4616		102.50		1.1266	916.1849	580
Habibullah	129.15	111.0894	34.7875		102.52		2.9469047	327.3699	127
Fauji	151.00								
Uch (C.C)	548.84	92.9874	34.9586		102.52		2.9324815	272.6838	449
Kapco	1,345	48.452							195
Rousch	395.00	114.3446	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	18
AES Pak Gen	348.60	18.8442					1.0000	18.8442	20
*Altcm-Phase 1	9,975,800	-	0.0000		102.52			0.0000	-
*Altcm-Phase 2	9,975,800	0.0977	35.3106		102.52		1.1231	0.3186	10
Davis Energen	10	875.3870						875.3870	27
CHASNNUP-I	300	0							828
CHASNNUP-II	300	0							2380
									4,688

Altern Take & Pay Basis. Therefore Capacity is linked *with energy


Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable

Financial Year 2015-16

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Indexed Capacity Charges Rs./kW/Month	Capacity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	210.92	1.5990	35.4616		103.78125		1.1266	5.2721	3
Habibullah	129.15	111.0895	34.7875		103.78		2.9833	331.4122	128
Fauji	151.00								
Uch (C.C)	548.84	92.9874	34.9586		103.78		2.9687	276.0508	455
Kapco	1,345.00	46.4790							188
Rousch	395.00	127.9687	34.7875				0.0000	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SEPCOL	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		103.7813			0.0000	-
*Altern-Phase 2	9,975,800	0.0868	35.3106		103.7813		1.1231	0.2865	9
Davis Energen	10.28	798.7020						798.7020	25
CHASNNUP-I	300	0							858
CHASNNUP-II	300	0							2527
									4,284
October - December									
Liberty (C.C)	210.92	1.5990	35.4616		105.08		1.1266	5.3380	3
Habibullah	129.15	111.0895	34.7875		105.08		3.0206	335.5549	130
Fauji	151.00								
Uch (C.C)	548.84	90.4470	34.9586		105.08		3.0058	271.8655	448
Kapco	1,345	0					0	0.0000	186
Rousch	395.00	127.9687	34.7875						
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		105.08			0.0000	-
*Altern-Phase 2	9,975,800	0.0868	35.3106		105.08		1.1231	0.2901	9
Davis Energen	10	798.7020						798.7020	25
CHASNNUP-I	300	0							858
CHASNNUP-II	300	0							2527
									4,278
January - March									
Liberty (C.C)	210.92	1.5990	35.4616		106.392		1.1266	5.4047	3
Habibullah	129.15	111.0895	34.7875		101.24		2.9103733	323.3118	125
Fauji	151.00								
Uch (C.C)	548.25	90.4470	34.9586		101.24		2.8961288	261.9462	431
Kapco	1,345	43.774							176
Rousch	395.00	114.3446	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	18
AES Pak Gen	348.60	18.8442					1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		106.39			0.0000	-
*Altern-Phase 2	9,975,800	0.0868	35.3106		106.39		1.1231	0.2937	9
Davis Energen	10	798.7020						798.7020	25
CHASNNUP-I	300	0							849
CHASNNUP-II	300	0							2499
									4,209
April - June									
Liberty (C.C)	210.92	1.5990	35.4616		107.7219		1.1266	5.4723	3
Habibullah	129.15	111.0894	34.7875		102.52		2.9469047	327.3699	127
Fauji	151.00								
Uch (C.C)	548.25	90.4470	34.9586		102.52		2.9324815	265.2342	436
Kapco	1,345	0							176
Rousch	395.00	114.3446	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	18
AES Pak Gen	348.60	18.8442					1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		107.72			0.0000	-
*Altern-Phase 2	9,975,800	0.0868	35.3106		107.72		1.1231	0.2974	9
Davis Energen	10	798.7020						798.7020	25
CHASNNUP-I	300	0							849
CHASNNUP-II	300	0							2500
									4,217

Altern Take & Pay Basis. Therefore Capacity is linked *with energy

Managing Director NTD
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Capacity Charges Non-Escalable
Financial Year 2016-17

FORM - 13(a2)

Name of Power Producer	Capacity MW	Ref: Capacity Charges Rs./kW/Month	Exchange Rate at Financial Close		Current Exchange Rate		Escalation Factor	Indexed Capacity Charges Rs./kW/Month	Capcity Charges Rs. Million
			Rs./\$	Rs./Yen	Rs./\$	Rs./Yen			
July - September									
Liberty (C.C)	210.92	1.5990	35.4616		109.0665		1.1266	5.5406	4
Habibullah	129.15	111.0895	34.7875		109.11		3.1366	348.4383	135
Fauji	151.00								
Uch (C.C)	548.84	90.4470	34.9586		109.11		3.1212	282.3036	465
Kapco	1,345	41.764							169
Rousch	395.00	127.9687	34.7875				0.0000	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SEPCOL	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		109.0665			0.0000	-
*Altern-Phase 2	9,975,800	0.0651	35.3106		109.0665		1.1231	0.2258	7
Davis Energen	10.28	722.0170						722.0170	22
CHASNNUP-I	300	0							858
CHASNNUP-II	300	0							2653
									4,404
October - December									
Liberty (C.C)	210.92	1.5990	35.4616		110.43		1.1266	5.6098	4
Habibullah	129.15	111.0895	34.7875		110.48		3.1759	352.8120	137
Fauji	151.00								
Uch (C.C)	548.25	83.0000	34.9586		110.48		3.1604	262.3118	431
Kapco	1,345	0							167
Rousch	395.00	127.9687	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288	31.1559				1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102	31.1055				1.0000	17.5102	18
AES Pak Gen	348.60	18.8442	34.4556				1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		110.43			0.0000	-
*Altern-Phase 2	9,975,800	0.0651	35.3106		110.43		1.1231	0.2287	7
Davis Energen	10	722.0170						722.0170	22
CHASNNUP-I	300	0							858
CHASNNUP-II	300	0							2653
									4,372
January - March									
Liberty (C.C)	210.92	1.5990	35.4616		111.81		1.1266	5.6800	4
Habibullah	129.15	111.0895	34.7875		111.87		3.2157917	357.2406	138
Fauji	151.00								
Uch (C.C)	548.25	83.0000	34.9586		111.87		3.2000525	265.6044	437
Kapco	1,345	39.096							157
Rousch	395.00	114.3446	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	9
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	18
AES Pak Gen	348.60	18.8442					1.0000	18.8442	20
*Altern-Phase 1	9,975,800	-	0.0000		111.81			0.0000	-
*Altern-Phase 2	9,975,800	0.0651	35.3106		111.81		1.1231	0.2315	7
Davis Energen	10	722.0170						722.0170	22
CHASNNUP-I	300	0							839
CHASNNUP-II	300	0							2595
									4,292
April - June									
Liberty (C.C)	210.92	1.5990	35.4616		113.20783		1.1266	5.7510	4
Habibullah	129.15	111.0894	34.7875		113.27		3.2561568	361.7246	140
Fauji	151.00								
Uch (C.C)	548.25	83.0000	34.9586		113.27		3.24022	268.9383	442
Kapco	1,345	0							156
Rousch	395.00	114.3446	34.7875				0	0.0000	
Hubco	1,200.00								
KEL	124.00	25.2288					1.0000	25.2288	
SPECO	110.17								
Japan	107.00								
Saba	125.55	119.6881	34.7875				0.0000	119.6881	45
AES Lalpir	347.30	17.5102					1.0000	17.5102	
AES Pak Gen	348.60	18.8442					1.0000	18.8442	
*Altern-Phase 1	9,975,800	-	0.0000		113.21			0.0000	-
*Altern-Phase 2	9,975,800	0.0651	35.3106		113.21		1.1231	0.2344	7
Davis Energen	10	722.0170						722.0170	22
CHASNNUP-I	300	0							864
CHASNNUP-II	300	0							2624
									4,304

Altern Take & Pay Basis. Therefore Capacity is linked *with energy

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE FUEL WISE COST AT BUS BAR

FY 2009-2010

Rs. Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	TOTAL
KHNOT	Coal													
Liberty (C.C)	Gas	571	556	384	585	600	618	940	418	934	853	858	806	8,123
Habibullah	Gas	178	186	188	139	194	195	235	211	227	215	215	197	2,380
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	237	255	253	194	221	252	260	258	282	263	275	262	3,012
Uch (C.C)	Gas	765	772	774	809	367	591	863	798	865	755	601	725	8,685
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	220	112	27	0	0	0	0	0	0	52	543	520	1,474
Altern	Gas	41	38	29	37	38	1			54	63	62	59	422
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	654	647	652	700	416	704	864	766	716	757	785	731	8,392
Hubco	F.O	5421	5277	6939	5978	5710	8081	8003	6579	6411	7100	8217	7457	81,172
KEL	F.O	615	574	608	726	577	745	737	683	689	696	694	715	8,059
SEPCO	F.O	5	153	223	26	6	8	569	477	594	610	571	469	3,711
Japan	F.O	3	3	2	1				345	400	417	354	378	1,903
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 2	F.O	1196	1606	1688	1364	1797	2016	1174	17	0	393	1999	1803	15,053
KAPCO - 1	F.O	2604	3709	2405	2597	2183	4264	4425	4435	3377	4131	4224	3615	41,969
Saba	F.O	597	751	620	345	557	507	599	391	513	456	466	359	6,161
AES Lalpir	F.O	1846	34	1524	1751	1311	1843	1766	2127	2618	2449	2224	1829	21,322
AES Pak Gen	F.O	1527	1447	1120	607	1901	2005	2056	1835	1536	2174	2103	1664	19,975
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
Kapco HSD		1025	637	841	974	334	1037	2080	827	1015	1185	37	1	
IRAN		102	101	98	91	74	69	72	65	90	95	97	93	1,047
Chasma Nuclear		67	65	67	72	69	106	112	103	114	37	0	54	866
Total		17674	16923	18442	16996	16355	23042	24756	20335	20435	22700	24324	21738	233,726

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR

FY _____ 2010-2011

Rs. Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	TOTAL
KHNOT	Coal													
Liberty (C.C)	Gas	935	994	740	1029	928	1035	973	451	441	621	987	925	10,059
Habibullah	Gas	216	227	231	171	221	218	152	85	129	188	211	148	2,197
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	267	254	255	181	244	256	250	236	284	257	299	289	3,072
Uch (C.C)	Gas	801	809	800	844	525	870	738	661	868	830	843	784	9,373
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	531	416	334	0	0	0	0	0	0	0	0	0	1,281
Altern	Gas	62	60	60	67	63				60	56	64	57	549
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	750	767	733	811	504	836	809	491	646	633	766	717	8,463
Hubco	F.O	5847	7294	6530	5983	3960	8011	8528	7604	8950	11026	11315	10923	95,970
KEL	F.O	680	622	696	684	653	809	865	738	978	893	943	1012	9,573
SEPCO	F.O	502	450	512	425	216	528	610	158	411	229	407	388	4,836
Japan	F.O	378	299	341	353	320	283	358	133	312	418	503	408	4,106
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	1782	1322	1281	1316	1228	1990	2070	2074	2678	2111	2365	2493	22,710
KAPCO - 2	F.O	3453	833	1942	2449	457	2144	1786	1571	3840	3621	4886	5418	32,400
Saba	F.O	386	349	262		183	407	210	196	141	271	163	218	2,786
AES Lalpir	F.O	1071	0				530	2522	2521	1161	2672	1678	2628	14,784
AES Pak Gen	F.O	1982	0			911	2011	1970	1029	2372	603	2348	2622	15,848
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
Kapco	HSD	0	0	0	0	0	174	451	41	4	0	169	108	
Iran	Oth	102	101	99	101	106	88	86	79	97	98	101	186	1,244
Chasma Nuclear-I	Nuc	108	110	99	241	242	245	249	193	250	227	241	220	2,425
Chasma Nuclear-II	Nuc										108	179	187	474
Total		19852	14906.5	14915	14655	10762	20435	22626	18260	23622	24862	28469	29732	242,150

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE COST AT BUS BAR
 FY _____ 2011-2012

Rs. Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	TOTAL
KHNOT	Coal													
Liberty (C.C)	Gas	1327	1210	1148	1334	1268	1265	1449	799	1202	1320	1340	1373	15,035
Habibullah	Gas	112	117	234	192	156	157	50	110	332	356	318	338	2,472
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	302	304	207	231	322	339	372	325	369	352	366	340	3,829
Uch (C.C)	Gas	822	830	811	858	518	811	951	686	931	771	890	850	9,729
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	0	0	0	263	52	0	0	0	0	355	566	367	1,603
Altern	Gas	61	65	65	75	74				102	98	97	89	726
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	771	869	846	926	709	893	1312	1120	1276	141		860	9,723
Hubco	F.O	9447	12052	7089	8469	7800	9417	13541	9861	9560	11084	11357	12633	122,310
KEL	F.O	877	1070	962	923	597	618	629	693	1224	1132	988	900	10,614
SEPCO	F.O	411	433	492	436	287	346	299	217	69	305	156	50	3,501
Japan	F.O	321	618	426	495	451	263	400	323	277	17	211	311	4,113
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	2662	2659	925	1882	2192	2675	2976	3128	2718	3117	3112	2190	30,236
KAPCO - 2	F.O	3456	4529	3323	5034	4262	3270	2831	2221	4120	6389	6447	4263	50,145
Saba	F.O	238	232	267	232	5	328	34	84	144	86	25	140	1,815
AES Lalpir	F.O	2750	2374	2178	3160	609	1605	2238	1937	3026	2324	3629	2937	28,767
AES Pak Gen	F.O	3162	3123	2671	2280	2126	2108	1197			3824	3110	3293	26,894
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
KAPCO	HSD	32	209	0	107	0	0	0	0	0	0	0	0	348
Iran	Oth	206	195	195	199	196	191	187	184	221	261	308	317	2,661
Chasma Nuclear-I	Nuc	240	17	0	198	212	252	326	302	326	313	320	312	2,819
Chasma Nuclear-II	Nuc	224	161	198	194	201	145	201	201	211	57	177	173	2,143
Total		27421	31066	22038	27490	22037	24683	28993	22192	26106	32303	33419	31736	329482.6

Managing Director NTDC
WAPDA House Lahore

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR
FY 2012-2013

Rs. Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
KHNOT	Coal													
Liberty (C.C)	Gas	1552.782	1278.701	1276.389	1441.6497	1496.655	1470.842	1482.207	728.2928		5.261667	716.8463	693.8516	12,143
Habibullah	Gas	325.4743	337.454	331.3528	256.669613	389.3553	247.7133	0.028653	14.20246	284.0683	226.9147	279.5841	364.0074	3,057
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	349.1143	362.9701	329.1615	30.906404	165.2717	406.2832	399.5529	338.5391	372.0081	356.5795	368.0995	353.4551	3,832
Uch (C.C)	Gas	848.8637	909.6808	760.6448	909.784098	396.0487	428.3677	963.9121	893.5588	973.3523	925.7026	876.0239	928.65	9,815
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	384.026	337.0706	94.75991										816
Altern	Gas	90.93556	103.4363	106.9863	106.785401	105.7538	47.21968		16.59292	85.51746	94.1888	89.35043	81.81885	929
Rousch	Gas	1337.502	1350.869	1154.318	1416.51114	1354.495	719.5787	479.7645	422.6958	382.8182	643.3683	1001.827	1128.207	11,392
DavisGen	Gas													0
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Hubco	F.O	12359.66	11993.41	9616.751	8966.81851	9867.426	9599.385	12184.78	9159.159	11785.3	8454.614	8757.904	8256.478	121,002
KEL	F.O	1015.885	1098.986	719.9143	942.021818	685.6224	869.2441	889.2678	714.1187	844.2616	888.1782	962.79	1017.764	10,648
SEPCO	F.O	662.3599	605.2787	80.79735	10.898954	11.87464	10.5137	8.047412						1,390
Japan	F.O	704.1663	410.5999	249.0824	71.523338	9.467975	8.639875	12.28552						1,466
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	2681.395	3012.209	2791.625	3339.48174	1988.594	2918.306	2401.948	2856.957	2554.589	2791.515	2479.581	2220.912	32,037
KAPCO - 2	F.O	6319.769	4951.75	3979.442	3777.99457	476.3034	1881.373	2534.669	2380.438	3431.414	4581.598	3985.614	4001.411	42,302
Saba	F.O	868.2978	246.6132	64.76033	85.461066	16.91768	25.32586							1,307
AES Lalpir	F.O	3024.289	2889.265	2088.852	1240.76346		2652.305	2176.286	2379.205	2173.616	1678.459	2662.287	3445.601	26,411
AES Pak Gen	F.O	3037.948	2584.226	2679.218	1993.64942	3035.003	3632.123	2737.838		2602.703	2397.384	3228.06	3119.702	31,048
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
KAPCO	HSD					78.98675	330.8523	1737.91			386.793	62.35277	4.346407	2,601
Iran	Oth	347.4568	357.4697	312.1769	311.884554	276.3167	232.5556	262.2216	226.2996	292.7172	290.4237	371.0163	376.1423	3,657
Chasma Nuclear-I	Nuc	249.1066	305.6239	311.1393	323.437551	313.8787	222.8835		100.4446	324.129	313.4542	274.9754	268.4685	3,008
Chasma Nuclear-II	Nuc	132.7538	104.6312	173.6635	173.866457	176.0508	109.1349	68.52034			5.952841	107.583	302.4924	1,355
Total		36291.78	33240.25	27121	25400	20844.02	25812.65	28339.24	20231	26106.5	24040	26224	26563.31	320213.673

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR

FY _____ 2013-2014

Rs.Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
KHNOT	Coal													
Liberty (C.C)	Gas	1479.958	1473.819	1601.95	1462.038	946.4242	0	0	0		1173.7	1520.392	1638.597	11,297
Habibullah	Gas	373.213	351.537	352.034	297.8458	381.3127	265.6634	0	0					2,022
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	359.831	357.098	381.26	377.257	262.2341	370.5094	392.0538	290.366	377.7513	353.9944	363.3421	374.2858	4,260
Uch (C.C)	Gas	962.905	956.202	946.283	776.1728	764.9246	991.608	1129.593	978.9532	883.6901	968.8759	1020.565	962.7657	11,343
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	0	0	0	0	0.688247	128.2287	0	0	0	0	593.5401	751.2019	1,474
Altern	Gas	91.895	93.04	88.284	94.92867	95.17918	97.71605	18.37235	8.714877	63.07944	95.32447	95.23624	106.842	949
Rousch	Gas	1130.328	1178.647	1114.424	940.8912	1014.387	730.9586	0	556.5759	1558.53	1398.34	1409.19	1316.553	12,349
DavisGen	Gas			17.0098		76.89583	18.65593	15.09152	5.145025	35.52953	33.62821	35.20425	42.45639	280
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Hubco	F.O	8745.681	8733.891	9493.67	9769.005	7638.824	10215.72	13247.66	7993.915	9665.837	10849.7	7946.199	9040.116	113,340
KEL	F.O	1085.705	1126.658	953.4492	1045.896	999.6884	1126.938	1307.491	1020.605	1236.454	1129.693	1085.109	1153.289	13,271
SEPCO	F.O	0	0											0
Japan	F.O	0	0											0
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	2656.131	2810.493	2945.005	2695.037		989.933	2732.809	3057.897	2553.785	2853.201	2422.876	2235.606	27,953
KAPCO - 2	F.O	6005.149	5837.709	3171.956	4518.503	5177.469	8249.078	4911.288	3764.559	3627.631	3914.953	4608.359	5893.576	59,680
Saba	F.O	0	0				445.3878	474.8543		266.7703	220.7956	401.6716	294.0133	2,103
AES Lalpir	F.O	3192.576	3199.013	1441.003	2891.208	2973.77	3357.896	3434.787	1875.65	2277.105	3098.04	2871.613	3414.404	34,027
AES Pak Gen	F.O	3249.48	2163.303	3286.772	4070.188	2396.071	3315.289	3778.211	1726.713	2992.85	0	3227.683	3321.404	33,528
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
KAPCO	HSD	409.7541	418.6253	158.3124	326.2385	0	0	99.98158	0	0	0	545.9493	1074.166	3,033
Iran	Oth	421.5146	389.1357	409.3632	39.29875	297.686	302.7998	327.3614	296.4318	307.5738	366.5337	338.8339	416.0026	3,913
Chasma Nuclear-I	Nuc	207.6783	271.8408	260.3903	279.6115	270.3129	277.9696	281.8383	236.0208	222.266	201.6407	0	243.621	2,753
Chasma Nuclear-II	Nuc	269.5492	297.2777	302.7488	298.1244	278.9449	295.8794	316.5611	285.9834	240.1425	264.2263	210.0124	173	3,232
Total		30641.35	29658.29	26924	29882	23574.81	31180.23	32467.96	22098	26308.99	26923	28696	32451.9	340805.6

Managing Director NTDC
 (Signature)

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE FUEL WISE POWER ACQUISITION AT BUS BAR

FY_2009-10

														GWh
NAME OF POWER STATION	FUEL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT	Coal													
Liberty (C.C)	Gas	138	134	87	142	149	149.25	146.25	47	145	133.25	132.25	124	152
Habibullah	Gas	77	81	82	61	84	85	87	78	84	79	80	73	95
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	92	100	97	74	85	96	100	92	101	94	98	94	112
Uch (C.C)	Gas	365	368	369	389	107	411	402	367	403	344	261	332	411
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	88.9	44.7	10.7	0	0.006	0	0	0	0	18.16	182.76	176.11	521.33
Altern	Gas	16	14	11	15	15				18	20	20	19	14
GTPS FAISLABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	277	274	276	296	176	298	310	275	257	272	282	263	325
Hubco	F.O	655	612	743	640	602	792	786	630	626	700	780	772	833
KEL	F.O	81	74	73	85	66	80	78	70	72	73	71	76	89
SEPCO	F.O	1	19	26	3	1	1	61	49	62	64	58	50	39
Japan	F.O	1	1						35	41	43	35	42	19
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO -2	F.O	170.36	218.26	214.73	173.29	228.265	237.537	136.479	1.97		45.78	225.73	214.93	1867.33
KAPCO -1	F.O	338.34	459.32	278.66	300.98	253.618	455.971	469.38	457.373	356.59	435.68	434.49	392.12	4632.52
Saba	F.O	70	85	65	36	56	49	58	37	49	44	43	36	62
AES Lalpir	F.O	219	4	164	191	135	180	170	204	250	238	208	190	215
AES Pak Gen	F.O	180	166	121	66	194	198	198	175	147	211	196	167	201
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total Gas WAPDA & IPPs														
Chasma Nuclear		210	202	210	224	217	207	220	202	223	72	0	106	209
Total														34867.1


Managing Director NTD
WAPDA House Lahore.


NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE POWER ACQUISITION AT BUS BAR
 FY _____ 2010-2011

NAME OF POWER STATION	FUEL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL	GWh
KHANOT	Coal														
Liberty (C.C)	Gas	130	140	101	146	132	147	138	46		82	140	133	13	
Habibullah	Gas	80	84	85	63	82	81	56	31	48	69	78	55	8	
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	95	90	90	64	87	91	89	84	100	91	106	102	10	
Uch (C.C)	Gas	362	367	362	386	216	400	328	287	397	377	384	353	42	
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas	180	148	117	0									4	
Altern	Gas	20	19	21	22	21				19	18	21	19	1	
GTPS FAISLABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	269	275	263	291	181	300	291	176	232	228	275	258	30	
Hubco	F.O	611	738	662	605	388	740	760	638	657	779	768	765	81	
KEL	F.O	75	69	75	76	68	80	84	68	80	69	69	75	8	
SEPCO	F.O	56	49	55	46	23	53	59	15	34	18	30	28	4	
Japan	F.O	41	31	37	37	32	27	34	12	25	30	35	30	3	
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO -2	F.O	220	162	152	157	141	217	220	210	242	179	190	202	22	
KAPCO -1	F.O	388	92	208	266	48	214	174	144	313	279	357	400	28	
Saba	F.O	39	35	26		17	37	19	16	11	19	11	15	2	
AES Lalpir	F.O	109					55	224	156	83	187	113	178	11	
AES Pak Gen	F.O	203				100	186	173	88	185	43	158	176	13	
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total Gas WAPDA & IPPs															
Chasma Nuclear		212	215	195	215	216	219	223	173	223	203	215	197	25	
Total											97	160	168	4	
															317


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE POWER ACQUISITION AT BUS BAR
FY 2011-12

															GWh
NAME OF POWER STATION	FUEL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL	
HYDEL															
Tarbela		2,046	2,392	2,283	1,158	1,178	870	416	870	364	435	695	1,351	14,057	
Mangla		289	243	462	463	571	435	151	436	255	335	510	516	4,666	
Brotha		737	723	693	624	606	545	293	642	344	404	650	718	6,979	
Warsak		133	129	106	62	51	38	43	41	53	104	116	114	991	
Small Hydels		49	38	38	40	32	20	13	20	24	52	68	53	447	
Chashma Low Head		117	115	126	96	82	66	56	85	46	87	105	84	1,067	
Total - Hydel		3,371	3,640	3,708	2,445	2,520	1,974	972	2,094	1,085	1,417	2,144	2,836	28,207	
KHANOT															
Liberty (C.C)	Coal	10	13	0	-	6	5	-	13	1	3	3	11	64	
Habibullah	Gas	138	124	119	139	133	130	138	70	110	126	125	132	1,484	
GUDDU COMBINES CYCLE	Gas	41	38	76	62	51	51	14	27	80	86	77	82	685	
Fauji	Gas	456	482	420	480	442	536	523	479	521	412	384	377	5,512	
Uch (C.C)	Gas	107	107	71	79	110	115	115	100	114	109	110	102	1,237	
GUDDU - Steam (1-1)	Gas	371	376	365	391	211	366	418	285	409	329	388	369	4,278	
MUZAFFARGARH	Gas	94	107	107	101	141	112	130	141	174	176	170	136	1,588	
JAMSHORO	Gas	2	2	2	2	1	1	2	2	3	2	2	2	24	
SPS FAISALABAD	Gas	24	2	34	-	4	-	3	-	-	-	-	-	67	
NGPS Multan	Gas	-	-	-	-	-	-	-	-	0	-	-	-	0	
KAPCO	Gas	-	-	-	-	-	-	-	-	-	-	-	-	0	
Altern	Gas	0	0	0	78	15	0	0	0	0	92	146	83	414	
GTPS FAISLABAD	Gas	20	19	19	21	21	0	0	0	22	21	21	19	182	
KOTRI	Gas	(0)	5	(0)	(0)	(0)	(0)	(0)	(0)	(0)	16	10	9	36	
Total Gas WAPDA & IPPs	Gas	24	16	30	9	9	(0)	4	(0)	9	47	58	53	259	
Roush	F.O	1,287	1,290	1,243	1,362	1,144	1,315	1,348	1,117	1,441	1,416	1,495	1,373	15,631	
Hubco	F.O	277	281	268	293	224	283	308	263	300	33	1	202	2,733	
KEL	F.O	654	824	489	587	524	604	862	585	556	633	668	784	7,769	
SEPCO	F.O	65	78	71	67	43	43	43	45	78	71	63	61	727	
Japan	F.O	30	31	36	32	21	24	21	14	4	19	9	3	245	
JAMSHORO	F.O	23	44	30	36	33	18	27	22	17	1	11	19	281	
MUZAFFARGARH	F.O	157	205	78	117	90	157	152	89	103	82	82	66	1,378	
GUDDU - Steam (1-1)	F.O	345	292	214	274	261	247	342	179	349	288	225	238	3,255	
KAPCO -2	F.O	40	50	22	11	14	7	13	5	3	0	-	-	165	
KAPCO -1	F.O	254	329	242	367	311	227	191	146	259	390	400	273	3,390	
Saba	F.O	214	212	73	151	175	205	222	226	188	209	212	154	2,239	
AES Lalpir	F.O	16	15	18	16	0	21	2	5	8	5	1	8	116	
AES Pak Gen	F.O	185	157	145	211	41	104	141	113	172	130	209	180	1,787	
SPS FAISALABAD	F.O	213	207	177	152	139	133	75	0	0	215	180	199	1,689	
NGPS Multan	F.O	31	27	6	27	-	-	-	-	8	34	10	-	144	
Total Gas WAPDA & IPPs	F.O	9	6	1	5	(0)	(0)	(0)	(0)	1	18	8	(0)	45	
KAPCO	HSD	2,511	2,759	1,870	2,345	1,875	2,072	2,398	1,692	2,046	2,127	2,080	2,187	25,962	
Chasma Nuclear		2	14	-	6	-	-	-	-	-	-	-	-	22	
Total		415	184	208	382	401	378	436	419	446	275	440	430	4,413	
Total		7,587	7,887	7,029	6,539	5,939	5,739	5,154	5,321	5,018	5,235	6,159	6,827	74,435	


 Managing Director NTD
 WAPDA House Lahore

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE POWER ACQUISITION AT BUS BAR
FY 2012-2013

NAME OF POWER STATION	FUEL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT	Coal													
Liberty (C.C)	Gas	133	105	107	121	129	124	128	41	0	3	0	0	8
Habibullah	Gas	71	74	73	56	85	54	0	3	59	47	58	56	6
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	104	105	95	9	48	114	112	99	109	105	106	102	11
Uch (C.C)	Gas	348	377	305	377	47	116	388	355	393	370	347	392	38
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
Altern	Gas	19	20	18	20	20	15	0	3	19	21	20	18	1
GTPS FAISLABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	285	288	246	302	289	153	97	103	94	157	245	276	25
Hubco	F.O	834	759	578	538	636	629	786	569	724	533	558	529	76
KEL	F.O	73	77	47	61	46	59	61	47	55	60	67	71	7
SEPCO	F.O	45	43	6	1	1	1	1	0	0	0	0	0	0
Japan	F.O	47	29	18	5	1	1	1	0	0	0	0	0	1
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO	GAS/F.O	736	643	473	477	176	368	442	371	407	529	462	437	55
Saba	F.O	57	16	4	5	1	1	0	0	0	0	0	0	0
AES Lalpir	F.O	197	182	123	73	0	167	137	144	130	104	170	217	16
AES Pak Gen	F.O	198	162	158	117	191	231	171	0	158	149	205	196	19
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Davis Energn														
Total Gas WAPDA & IPPs														
Chasma Nuclear-I		171	210	213	222	215	153	0	69	222	215	219	213	21
Chasma Nuclear-II		164	129	215	215	218	135	85	0	0	7	133	218	15
Tanwir of Iran		37	38	33	33	29	24	26	23	29	29	37	38	3
Total	0	3519	3257	2712	2632	2132	2345	2435	1827	2399	2329	2627	2763	309

[Signature]
 Managing Director
 National Transmission and Despatch Company Limited

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE POWER ACQUISITION AT BUS BAR
FY 2013-14

NAME OF POWER STATION	FUEL	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL	GWh
HYDEL															
Tarbela		2,567	2,648	2,480	1,281	972	710	346	742	471	448	919	1,554	15,138	
Mangla		728	730	749	701	621	488	241	556	410	368	653	692	6,937	
Brotha		273	266	524	657	628	518	152	474	388	511	666	667	5,725	
Warsak		126	115	113	75	50	14	28	32	52	85	92	87	870	
Small Hydels		91	64	117	116	91	64	47	82	80	99	113	59	1,024	
Chashma Low Head		-	-	-	18	13	10	9	10	42	172	90	69	434	
Total - Hydel		3,785	3,823	3,983	2,849	2,374	1,805	824	1,896	1,444	1,683	2,533	3,129	30,129	
KHANOT															
Coal		11	13	6	14	6	0	7	10	12	16	6	12	112	
Liberty (C.C)	Gas	126	125	141	124	74	0	0	0	10	90	120	134	943	
Habibullah	Gas	78	73	73	62	80	55	0	5	43	49	73	79	670	
GUDDU COMBINES CYCLE	Gas	303	341	370	420	358	362	289	263	236	89	3	130	3,166	
Fauji	Gas	104	103	101	109	76	107	111	82	107	97	99	96	1,191	
Uch (C.C)	Gas	380	377	372	294	289	393	429	363	322	359	381	357	4,314	
GUDDU - Steam (1-1)	Gas	103	73	68	115	113	116	113	89	94	95	122	91	1,192	
MUZAFFARGARH	Gas	113	124	124	154	118	113	156	62	(1)	67	100	136	1,266	
JAMSHORO	Gas	0	299	308	288	147	183	289	105	229	242	296	253	2,637	
SPS FAISALABAD	Gas	-	-	-	-	-	-	-	-	-	-	10	35	45	
NGPS Multan	Gas	-	-	-	-	-	-	-	-	-	-	-	-	0	
KAPCO	Gas	-	-	19	-	0	30	-	-	-	-	114	144	306	
Altern	Gas	20	21	20	21	21	22	4	2	14	21	21	20	205	
GTPS FAISLABAD	Gas	-	-	-	-	-	-	-	-	-	-	58	72	130	
KOTRI	Gas	-	17	-	15	15	1	-	-	18	2	51	51	170	
Total Gas WAPDA & IPPs		1,237	1,565	1,602	1,615	1,297	1,382	1,398	982	1,083	1,125	1,454	1,609	16,348	
Rousch	Gas	276	281	268	293	248	283	308	263	300	33	1	202	2,756	
Hubco	F.O	552	554	585	574	447	599	794	494	595	749	556	588	7,086	
KEL	F.O	75	79	65	69	65	72	84	66	80	78	77	80	890	
SEPCO	F.O	0	0	0	0	0	0	0	0	0	0	0	0	0	
Japan	F.O	0	0	0	0	0	0	0	0	0	0	0	0	0	
JAMSHORO	F.O	-	-	-	-	-	-	-	-	-	-	5	10	15	
MUZAFFARGARH	F.O	345	336	390	310	281	257	485	270	172	246	331	426	3,850	
GUDDU - Steam (1-1)	F.O	-	-	-	-	-	-	-	-	-	-	-	-	0	
KAPCO -2	F.O	405	393	214	286	326	530	314	247	238	276	391	491	4,112	
KAPCO -1	F.O	602	601	417	473	326	587	506	468	426	499	542	579	6,026	
Saba	F.O	0	0	0	0	0	26	28	0	16	14	26	19	129	
AES Lalpir	F.O	199	199	88	169	174	196	204	112	139	199	189	213	2,081	
AES Pak Gen	F.O	202	134	195	240	141	191	225	104	180	0	211	209	2,031	
SPS FAISALABAD	F.O	-	-	-	-	-	-	-	-	-	-	-	-	0	
NGPS Multan	F.O	-	-	-	-	-	-	-	-	-	-	-	-	0	
Total Gas WAPDA & IPPs		2,657	2,577	2,221	2,412	2,008	2,741	2,949	2,025	2,147	2,093	2,330	2,818	28,977	
KAPCO	HSD	19	20	7	15	-	-	5	-	-	-	26	54	146	
Chasma Nuclear		360	431	431	437	416	434	452	394	350	351	152	194	4,402	
Total		8,058	8,415	8,244	7,328	6,095	6,362	5,627	5,297	5,024	5,253	6,495	7,804	80,002	

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR

FY _____ 2009-2010

Rs. Million

NAME OF POWER STATION	Fuel	Ref. Unit Cost	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
KHNOT	Coal														
Liberty (C.C)	Gas	0.075	571	556	384	585	600	618	940	418	934	853	858	806	677
Habibullah	Gas	0.541	178	186	188	139	194	195	235	211	227	215	215	197	198
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	0.542	237	255	253	194	221	252	260	258	282	263	275	262	251
Uch (C.C)	Gas	0.0414	765	772	774	809	367	591	863	798	865	755	601	725	724
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas	0.05592	220	112	27	0	0	0	0	0	0	52	543	520	123
Altern	Gas	0.521	41	38	29	37	38	1			54	63	62	59	35
GTPS FAISALABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	0.557	654	647	652	700	416	704	864	766	716	757	785	731	699
Hubco	F.O	0.5133	5421	5277	6939	5978	5710	8081	8003	6579	6411	7100	8217	7457	6,764
KEL	F.O	0.59	615	574	608	726	577	745	737	683	689	696	694	715	672
SEPCO	F.O	0.5946	5	153	223	26	6	8	569	477	594	610	571	469	309
Japan	F.O	0.6	3	3	2	1				345	400	417	354	378	159
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO - 1	F.O	0.6077	1196	1606	1688	1364	1797	2016	1174	17	0	393	1999	1803	1,254
KAPCO - 2	F.O	0.667	2604	3709	2405	2597	2183	4264	4425	4435	3377	4131	4224	3615	3,497
Saba	F.O	0.645	597	751	620	345	557	507	599	391	513	456	466	359	513
AES Lalpir	F.O	0.653	1846	34	1524	1751	1311	1843	1766	2127	2618	2449	2224	1829	1,777
AES Pak Gen	F.O	0.653	1527	1447	1120	607	1901	2005	2056	1835	1536	2174	2103	1664	1,665
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total F.O WAPDA & IPPs															
Kapco HSD			1025	637	841	974	334	1037	2080	827	1015	1185	37	1	833
IRAN			102	101	98	91	74	69	72	65	90	95	97	93	87
Chasma Nuclear			67	65	67	72	69	106	112	103	114	37	0	54	72
Total			17674	16923	18442	16996	16355	23042	24756	20335	20435	22700	24324	21738	20,310

Managing Director NTDC 

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE FUEL WISE COST AT BUS BAR

FY _____ 2010-2011

Rs.Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
KHNOT	Coal													
Liberty (C.C)	Gas	935	994	740	1029	928	1035	973	451	441	621	987	925	838
Habibullah	Gas	216	227	231	171	221	218	152	85	129	188	211	148	183
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	267	254	255	181	244	256	250	236	284	257	299	289	256
Uch (C.C)	Gas	801	809	800	844	525	870	738	661	868	830	843	784	781
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	531	416	334	0	0	0	0	0	0	0	0	0	107
Altern	Gas	62	60	60	67	63				60	56	64	57	46
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	750	767	733	811	504	836	809	491	646	633	766	717	705
Hubco	F.O	5847	7294	6530	5983	3960	8011	8528	7604	8950	11026	11315	10923	7,997
KEL	F.O	680	622	696	684	653	809	865	738	978	893	943	1012	798
SEPCO	F.O	502	450	512	425	216	528	610	158	411	229	407	388	403
Japan	F.O	378	299	341	353	320	283	358	133	312	418	503	408	342
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	1782	1322	1281	1316	1228	1990	2070	2074	2678	2111	2365	2493	1,893
KAPCO - 2	F.O	3453	833	1942	2449	457	2144	1786	1571	3840	3621	4886	5418	2,700
Saba	F.O	386	349	262		183	407	210	196	141	271	163	218	232
AES Lalpir	F.O	1071	0				530	2522	2521	1161	2672	1678	2628	1,232
AES Pak Gen	F.O	1982	0			911	2011	1970	1029	2372	603	2348	2622	1,321
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
Kapco	HSD	0	0	0	0	0	174	451	41	4	0	169	108	79
Iran	Oth	102	101	99	101	106	88	86	79	97	98	101	186	104
Chasma Nuclear-I	Nuc	108	110	99	241	242	245	249	193	250	227	241	220	202
Chasma Nuclear-II	Nuc	0	0	0	0	0	0	0	0	0	108	179	187	40
Total		19852	14906.5	14915	14655	10762	20435	22626	18260	23622	24862	28469	29732	20,258

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE COST AT BUS BAR
 FY _____ 2011-2012

Rs. Million

NAME OF POWER STATION	Fuel	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
KHNOT	Coal													
Liberty (C.C)	Gas	1327	1210	1148	1334	1268	1265	1449	799	1202	1320	1340	1373	1,253
Habibullah	Gas	112	117	234	192	156	157	50	110	332	356	318	338	206
GUDDU COMBINES CYCLE	Gas													
Fauji	Gas	302	304	207	231	322	339	372	325	369	352	366	340	319
Uch (C.C)	Gas	822	830	811	858	518	811	951	686	931	771	890	850	811
GUDDU - Steam (1-1)	Gas													
MUZAFFARGARH	Gas													
JAMSHORO	Gas													
SPS FAISALABAD	Gas													
NGPS Multan	Gas													
KAPCO	Gas	0	0	0	263	52	0	0	0	0	355	566	367	134
Altern	Gas	61	65	65	75	74				102	98	97	89	61
GTPS FAISALABAD	Gas													
KOTRI	Gas													
Total Gas WAPDA & IPPs														
Rousch	F.O	771	869	846	926	709	893	1312	1120	1276	141		860	810
Hubco	F.O	9447	12052	7089	8469	7800	9417	13541	9861	9560	11084	11357	12633	10,193
KEL	F.O	877	1070	962	923	597	618	629	693	1224	1132	988	900	884
SEPCO	F.O	411	433	492	436	287	346	299	217	69	305	156	50	292
Japan	F.O	321	618	426	495	451	263	400	323	277	17	211	311	343
JAMSHORO	F.O													
MUZAFFARGARH	F.O													
GUDDU - Steam (1-1)	F.O													
KAPCO - 1	F.O	2662	2659	925	1882	2192	2675	2976	3128	2718	3117	3112	2190	2,520
KAPCO - 2	F.O	3456	4529	3323	5034	4262	3270	2831	2221	4120	6389	6447	4263	4,179
Saba	F.O	238	232	267	232	5	328	34	84	144	86	25	140	151
AES Lalpir	F.O	2750	2374	2178	3160	609	1605	2238	1937	3026	2324	3629	2937	2,397
AES Pak Gen	F.O	3162	3123	2671	2280	2126	2108	1197			3824	3110	3293	2,241
SPS FAISALABAD	F.O													
NGPS Multan	F.O													
Total F.O WAPDA & IPPs														
KAPCO	HSD	32	209	0	107	0	0	0	0	0	0	0	0	29
Iran	Oth	206	195	195	199	196	191	187	184	221	261	308	317	222
Chasma Nuclear-I	Nuc	240	17	0	198	212	252	326	302	326	313	320	312	235
Chasma Nuclear-II	Nuc	224	161	198	194	201	145	201	201	211	57	177	173	179
Total		27421	31066	22038	27490	22037	24683	28993	22192	26106	32303	33419	31736	27,457

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE FUEL WISE COST AT BUS BAR

FY 2012-2013

Rs. Million

NAME OF POWER STATION	Fuel	Ref. Unit Cost	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
KHNOT	Coal														
Liberty (C.C)	Gas	0.058	1553	1279	1276	1442	1497	1471	1482	728	0	5	717	694	1,012
Habibullah	Gas	0.088	325.5	337	331	257	389	248	0	14	284	227	280	364	255
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	0.1316	349.1	363	329	31	165	406	400	339	372	357	368	353	319
Uch (C.C)	Gas	0.0414	848.9	910	761	910	396	428	964	894	973	926	876	929	818
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas	0.05592	384	337	95	0		0	0	0	0	0	0	0	68
Altern	Gas	0.12	90.94	103	107	107	106	47	0	17	86	94	89	82	77
GTPS FAISALABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	0.049	1338	1351	1154	1417	1354	720	480	423	383	643	1002	1128	949
Hubco	F.O	0.0372	12360	11993	9617	8967	9867	9599	12185	9159	11785	8455	8758	8256	10,083
KEL	F.O	0.1047	1016	1099	720	942	686	869	889	714	844	888	963	1018	887
SEPCO	F.O	0.1673	662.4	605	81	11	12	11	8	0	0	0	0	0	116
Japan	F.O	0.1	704.2	411	249	72	9	9	12	0	0	0	0	0	122
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO - 1	F.O	0.097	2681	3012	2792	3339	1989	2918	2402	2857	2555	2792	2480	2221	2,670
KAPCO - 2	F.O	0.1365	6320	4952	3979	3778	476	1881	2535	2380	3431	4582	3986	4001	3,525
Saba	F.O	0.03	868.3	247	65	85	17	25	0	0	0	0	0	0	109
AES Lalpir	F.O	0.03	3024	2889	2089	1241	0	2652	2176	2379	2174	1678	2662	3446	2,201
AES Pak Gen	F.O	0.03	3038	2584	2679	1994	3035	3632	2738	0	2603	2397	3228	3120	2,587
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total F.O WAPDA & IPPs															
KAPCO	HSD	0.05623	0	0	0	0	79	331	1738	0	0	387	62	4	217
Iran	Oth		347	357	312	312	276	233	262	226	293	290	371	376	305
Chasma Nuclear-I	Nuc		249	306	311	323	314	223	0	100	324	313	275	268	251
Chasma Nuclear-II	Nuc		133	105	174	174	176	109	69	0	0	6	108	302	113
Total			36292	33240	27121	25400	20844	25813	28339	20231	26106	24040	26224	26563	26,684

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR
 Financial Year 2014-15

Rs. Million

NAME OF POWER STATION	Fuel	Ref. Unit Cost	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Average
KHNOT	Coal														
Liberty (C.C)	Gas	0.058	1,682	1,535	994	-	-	-	-	1,232	1,596	1,721	11,862	-	1,718
Habibullah	Gas	0.541	277	277	270	280	272	282	283	257	286	277	288	280	277
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	0.1316	383	381	392	402	279	395	456	337	439	411	405	403	390
Uch (C.C)	Gas	0.0414	1,011	1,004	994	815	803	1,041	1,186	1,028	928	1,017	1,072	1,011	992
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas		311	312	313	315	316	317	319	320	321	323	324	325	318
Altern	Gas	0.12	96	98	93	100	100	103	19	9	66	100	100	112	83
GTPS FAISALABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	0.557	884	884	855	884	855	884	928	838	928	898	928	898	888
Hubco	F.O	0.037													0
KEL	F.O	0.105	1139.99	1182.99	1001.12	1098.19	1049.67	1183.28	1372.87	1071.64	1298.28	1186.18	1139.36	1210.95	1,161
SEPCOL	F.O	0.595													0
Japan	F.O	0.100													0
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO - 1	F.O		2551.67	2562.39	2573.15	2584	2594.81	2605.71	2616.65	2627.64	2639	2649.76	2661	2672.07	2,849
KAPCO - 2	F.O		4993.89	5014.86	5035.92	5057	5078.31	5099.64	5121.06	5142.57	5164	5185.86	5208	5229.51	5,111
Saba	F.O	0.645	912	916	890	923	897	931	935	848	943	916	951	924	915
AES Lalpir	F.O	0.030	3352.2	3358.96	1513.05	3035.77	3122.46	3525.79	3606.53	1969.43	2390.96	3252.94	3015.19	3585.12	2,977
AES Pak Gen	F.O	0.030	3411.95	2271.47	3451.11	4273.7	2515.87	3481.05	3967.12	1813.05	3142.49	0	3389.07	3487.47	2,934
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total F.O WAPDA & IPPs															
FO, Gas & HSD															
KAPCO															
Iran															
Chasma Nuclear-I															
Chasma Nuclear-II															
Total			22139.3	20932.3	19488	20905	19001.7	20990.4	21954.1	18572	21289.4	19065	32493	21269.4	21,508

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FUEL WISE COST AT BUS BAR
Financial Year 2015-16

Rs.Million															
NAME OF POWER STATION	Fuel	Ref. Unit Cost	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Average
KHNOT	Coal														
Liberty (C.C)	Gas	0.058	1,766	1,612	1,043	-	-	-	-	1,294	1,676	1,807	12,455	-	1,804
Habibullah	Gas	0.541	291	291	282	293	285	295	297	269	299	291	302	293	291
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	0.1316	402	400	411	422	293	415	478	354	461	431	426	423	410
Uch (C.C)	Gas	0.0414	1,062	1,054	1,043	856	843	1,093	1,245	1,079	974	1,068	1,125	1,061	1,042
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas		327	328	330	331	332	334	335	336	338	339	341	342	334
Altern	Gas	0.12	101	103	97	105	105	108	20	10	70	105	105	118	87
GTPS FAISALABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	0.557	974	974	943	974	943	974	1,023	957	1,023	990	1,023	990	982
Hubco	F.O	0.037													0
KEL	F.O	0.105	1196.99	1242.14	1051.18	1153.1	1102.16	1242.45	1441.51	1125.22	1363.19	1245.49	1196.33	1271.5	1,219
SEPCOL	F.O	0.595													0
Japan	F.O	0.100													0
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO - 1	F.O		2683.29	2694.56	2705.88	2717	2728.65	2740.11	2751.62	2763.18	2775	2786.44	2798	2809.89	2,996
KAPCO - 2	F.O		5251.47	5273.53	5295.68	5318	5340.26	5362.69	5385.21	5407.83	5431	5453.35	5476	5499.25	5,374
Saba	F.O	0.645	958	962	935	970	943	978	982	891	991	963	999	971	962
AES Lalpir	F.O	0.030	3519.81	3526.91	1588.71	3187.56	3278.58	3702.08	3786.85	2067.9	2510.51	3415.59	3165.95	3764.38	3,126
AES Pak Gen	F.O	0.030	3582.55	2385.04	3623.67	4487.38	2641.67	3655.11	4165.48	1903.7	3299.62	0	3558.52	3661.85	3,080
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total F.O WAPDA & IPPs															
FO, Gas & HSD															
KAPCO															
Iran															
Chasma Nuclear-I															
Chasma Nuclear-II															
Total			23445.5	22178.2	20656	22150	20145.2	22239.4	23253.6	19746	22555.8	20214	34320	22529	22,786

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FUEL WISE COST AT BUS BAR
Financial Year 2016-17

Rs. Million

NAME OF POWER STATION	Fuel	Ref. Unit Cost	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Average
KHNOT	Coal														
Liberty (C.C)	Gas	0.058	1,854	1,692	1,096	-	-	-	-	1,359	1,760	1,897	13,078	-	1,895
Habibullah	Gas	0.541	304	304	296	307	298	309	311	282	313	304	316	307	304
GUDDU COMBINES CYCLE	Gas														
Fauji	Gas	0.1316	423	420	432	443	308	435	502	372	484	453	447	445	430
Uch (C.C)	Gas	0.0414	1,115	1,107	1,095	899	885	1,148	1,308	1,133	1,023	1,122	1,181	1,115	1,094
GUDDU - Steam (1-1)	Gas														
MUZAFFARGARH	Gas														
JAMSHORO	Gas														
SPS FAISALABAD	Gas														
NGPS Multan	Gas														
KAPCO	Gas		344	345	347	348	349	351	352	354	355	357	358	360	352
Altern	Gas	0.12	106	108	102	110	110	113	21	10	73	110	110	124	92
GTPS FAISALABAD	Gas														
KOTRI	Gas														
Total Gas WAPDA & IPPs															
Rousch	F.O	0.557	1,074	1,074	1,039	1,074	1,039	1,074	1,128	1,018	1,128	1,091	1,128	1,091	1,080
Hubco	F.O	0.037													0
KEL	F.O	0.105	1,257	1,304	1,104	1,211	1,157	1,305	1,514	1,181	1,431	1,308	1,256	1,335	1,280
SEPCOL	F.O	0.595													0
Japan	F.O	0.100													0
JAMSHORO	F.O														
MUZAFFARGARH	F.O														
GUDDU - Steam (1-1)	F.O														
KAPCO - 1	F.O		2821.7	2833.55	2845.45	2857	2869.4	2881.45	2893.55	2905.71	2918	2930.16	2942	2954.83	3,150
KAPCO - 2	F.O		5522.35	5545.54	5568.83	5592	5615.71	5639.3	5662.98	5686.77	5711	5734.64	5759	5782.91	5,652
Saba	F.O	0.645	986	990	962	998	970	1,007	1,011	917	1,019	991	1,028	999	990
AES Lalpir	F.O	0.030	3695.81	3703.26	1668.14	3346.93	3442.51	3887.18	3976.2	2171.3	2636.03	3586.37	3324.25	3952.6	3,283
AES Pak Gen	F.O	0.030	3761.68	2504.29	3804.85	4711.75	2773.75	3837.86	4373.75	1998.89	3464.6	0	3736.45	3844.94	3,234
SPS FAISALABAD	F.O														
NGPS Multan	F.O														
Total F.O WAPDA & IPPs															
FO, Gas & HSD	HSD		470.239	472.214	474	476	478.189	480.197	482.214	484.239	486.273	488.315	490	492.426	481
KAPCO															0
Iran	Oth														0
Chasma Nuclear-I	Nuc	2.2714	519	519	502	519	502	519	519	469	519	502	519	502	509
Chasma Nuclear-II	Nuc	1.2558	572	572	553	572	553	572	572	517	572	553	572	553	561
Total			24825.3	23494.7	21890	23465	21353.1	23558.6	24626	20858	23893.2	21427	36245	23858.1	24,125

Managing Director NDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

AVAILABILITY of Plant - MW

FY 2009-2010

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT													
Liberty (C.C)	210	200	129	203	213	201	206	69	208	206	202	196	2,243
Habibullah	121	126	124	86	120	115	119	118	119	120	124	113	1,404
GUDDU COMBINES CYCLE													-
Fauji	141	150	137	99	113	129	130	132	136	136	139	138	1,581
Uch (C.C)	543	551	548	532	115	546	541	538	551	487	257	477	5,688
GUDDU - Steam (1-1)													-
MUZAFFARGARH													-
JAMSHORO													-
SPS FAISALABAD													-
NGPS Multan													-
KAPCO -3	1,161	1,248	997	851	1,028	1,230	1,035	879	663	885	1,241	1,270	12,489
KAPCO -2													-
KAPCO -1													-
Altern													-
GTPS FAISLABAD	390	381	393	395	235	375	385	385	342	395	395	383	4,452
KOTRI	941	912	1,126	876	1,171	1,186	1,104	963	855	989	1,123	1,198	12,444
Rousch	115	108	113	114	113	114	110	107	100	98	107	124	1,323
Hubco	1	25	37	5	-	-	-	-	-	-	-	-	68
KEL	1	1	0	0	-	-	-	53	56	56	56	60	283
SEPCO	97	126	105	47	-	-	-	-	-	-	-	-	375
Japan	340	13	279	277	288	298	320	343	348	349	312	349	3,514
Saba	277	266	224	93	348	319	298	289	206	311	298	300	3,230
AES Lalpir	98	4	80	80	83	86	92	98	100	100	89	100	1,009
AES Pak Gen	80	76	64	27	100	92	86	83	59	89	86	86	928
Chasma Nuclear													
Total													

Managing Director NTDC

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

AVAILABILITY of Plant - MW

FY 2011-12

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT													
Liberty (C.C)	207	185	181	200	195	180	183	100	156	193	186	-	1,967
Habibullah	62	62	116	88	71	68	18	38	112	126	120	-	880
GUDDU COMBINES CYCLE													-
Fauji	151	150	101	106	149	150	150	137	148	150	151	-	1,542
Uch (C.C)	543	549	540	547	296	486	550	397	550	470	545	-	5,474
GUDDU - Steam (1-1)													-
MUZAFFARGARH													-
JAMSHORO													-
SPS FAISALABAD													-
NGPS Multan													-
KAPCO -3	727	890	517	864	707	570	525	678	752	1,004	1,133	-	8,366
KAPCO -2													-
KAPCO -1													-
Altern													-
GTPS FAISLABAD	388	390	378	393	304	355	386	355	391	46	4	-	3,390
KOTRI	917	1,172	875	874	826	881	1,181	866	760	901	947	-	10,201
Rousch	90	109	108	94	63	60	58	67	110	99	85	-	944
Hubco	41	45	53	44	33	37	30	21	6	27	13	-	350
KEL	32	60	43	49	49	26	36	33	23	1	14	-	367
SEPCO	26	23	35	29	0	44	4	13	14	7	2	-	195
Japan	299	273	251	331	112	188	232	202	257	204	296	-	2,646
Saba	323	349	318	243	253	220	109	0	0	317	236	-	2,367
AES Lalpir	85.44	78.38	71.73	94.81	31.97	53.86	66.38	57.90	73.52	58.50	84.73		757
AES Pak Gen	92.66	100.00	91.18	69.68	72.60	63.17	31.20	0.00	0.00	90.97	77.87		881
Chasma Nuclear													
Total													

Managing Director
WAPDA House Lahore

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

AVAILABILITY of Plant - MW

FY 2012-2013

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KAPCO	83.08	70.75	53.05	49.14	18.24	37.42	42.4	45.69	41.97	56.83	51.93	52	602.5
HUBCO	96.04	88.01	71.68	64.84	80.43	74.52	91.28	90.18	86.48	82.74	72.2	67.05	965.45
KEL	80.65	86.3	49.73	68.77	57.03	66.28	72.07	68.47	63.48	67.55	75.07	89.16	844.56
AES Lalpir	99.86	81.98	60.62	36.51	0	71.84	63.58	87.48	73.45	44.35	71.68	98.27	789.62
Pak Gen Power	99.85	76.79	79.26	57.08	87.33	98.54	76.43	0	78.89	67.95	87.82	100	909.94
SEPCOL	57.81	55.44	7.26	0.9	1.14	0.94	0.76	0	0.05				124.3
Habibullah	87.03	87.84	83.78	61.48	93.16	52.8	0	3.12	64.94	51.82	69.1	94.25	749.32
FKPCL	99.64	98.92	92.23	8.12	41.39	98.15	97.08	97.87	96.68	98.39	98.53	99.85	1026.85
Rousch	99.99	99.88	86.78	99.18	96.53	48.26	30.43	35.96	30.53	54.44	84.98	99.89	866.85
SABA	70.72	21.94	6.35	6.66	0.46	2.87							109
Japan Power	60.63	35.62	23.02	6.33	0.77	0.69	0.98	0	41.94				169.98
Uch Power	94.23	99.38	82.58	94.47	10.78	28.77	93.14	96	96.33	94.48	91.86	93.7	975.72
Altern Power *													0
Liberty Power	96.01	75.57	77.13	82.97	88.18	80.59	80.99	29.48		0		0.04	610.96
Chasnupp-I	76.5	93.9	98.7	99.3	99.6	68.5		34.2	99.6	99.5	97.9	98.8	966.5
Chasnupp-II	73.5	58	99.4	96.3	100.8	60.5	38			3.4	59.6	101.1	690.6
Iran	67.1	68.3	61.7	59.1	53.8	43.8	90.4	45.5	53.2	54.5	67.4	71.5	736.3
Total													

* Altern is on take & pay Basis.

Managing Director NTDC
WAPDA House Lahore.

Availability of Plants -MW
Financial Year 2014-15

Sr. No.	Plant Name	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Total
1	KAPCO	1,078	1,193	774	799	692	1,017	914	933	820	918	1,070	1,221	11,429
2	HUBCO	919	929	1,158	1,119	1,083	1,116	1,108	1,144	1,133	1,148	861	860	12,580
3	KEL	108	107	92	95	107	113	117	108	112	114	110	-	1,182
4	Lalpir Power (Pvt.) Limited	329	344	152	246	347	350	322	233	218	346	298	-	3,186
5	Pak Gen Power Limited	338	231	332	346	261	347	350	224	280	-	344	-	3,053
6	SEPCOL	0	0	0	0	0	-	0	0	0	0	0	-	0
7	Habibullah Coastal	122	113	85	90	112	73	-	5	59	73	108	-	840
8	FKPCL	151	148	149	149	102	145	148	149	151	145	149	-	1,587
9	Rousch	383	393	381	305	317	394	395	367	395	381	384	-	4,095
10	Saba													-
11	Japan Power	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Uch Power	549	542	551	407	405	516	551	523	425	523	541	-	5,533
13	Altern Energy													-
14	Liberty Power	183	179	209	177	103	0	0	0	13	127	173	-	1,164
15	CHASNUPP-I													-
16	CHASNUPP-II													-

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Plant Factor %
FY_2009-10_____

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT													
Liberty (C.C)	87	84	57	90	97	94	92	33	92	87	83	81	81
Habibullah	80	84	88	63	91	88	90	90	87	85	83	78	84
GUDDU COMBINES CYCLE													
Fauji	82	89	89	66	78	86	89	91	90	87	87	86	85
Uch (C.C)	89	90	93	95	27	100	98	99	98	87	64	84	85
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO -3	69	77	59	55	53	78	76	58	43	60	84	81	66
KAPCO -2													
KAPCO -1													
Altern	79	71	57	75	80	1	0	0	91	107	103	101	64
GTPS FAISLABAD													
KOTRI													
Rousch	94	93	97	101	62	101	106	104	88	96	96	92	94
Hubco	73	68	86	72	70	89	88	78	70	81	87	89	79
KEL	88	80	82	92	74	87	85	84	78	81	77	85	83
SEPCO	1	21	30	3	1	1	69	61	70	74	66	58	38
Japan	1	1	0	0	0	0	0	72	85	92	73	89	34
Saba	75	91	72	39	62	52	62	44	52	49	47	39	57
AES Lalpir	84	2	65	74	54	70	66	87	97	94	80	76	71
AES Pak Gen	70	64	48	26	77	77	76	75	57	84	76	66	
Chasma Nuclear	94	90	97	100	101	93	99	100	100	33	49	49	
Total													

Managing Director NEDC
WAPDA House Lahore

NATIONAL TRANSMISSION COMPANY

Plant Factor %

FY 2010-11

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT													
Liberty (C.C)	82	89	66	93	86	93	87	32	0	54	89	87	72
Habibullah	83	87	92	66	88	84	58	36	50	75	81	59	71
GUDDU COMBINES CYCLE													
Fauji	85	80	83	57	79	81	79	82	89	83	94	94	82
Uch (C.C)	88	90	91	94	54	97	80	78	97	95	94	89	87
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO -3	79	40	49	42	20	45	43	40	56	47	56	63	48
KAPCO -2													
KAPCO -1													
Altern	102	99	108	110	108	0	0	0	98	96	105	97	77
GTPS FAISLABAD													
KOTRI													
Rousch	92	94	93	99	64	102	99	66	79	80	94	91	88
Hubco	68	83	77	68	45	83	85	79	74	90	86	89	77
KEL	82	74	83	82	76	87	91	82	87	77	75	84	82
SEPCO	63	55	64	52	27	59	66	18	38	22	36	36	45
Japan	85	65	79	77	58	48	59	23	44	40	43	38	52
Saba	42	37	28	0	19	40	20	19	11	21	12	16	22
AES Lalpir	42	0	0	0	0	21	86	66	32	74	44	70	36
AES Pak Gen	78	0	0	0	40	72	67	37	71	17	61	71	43
Chasma Nuclear-I	95	96	90	96	100	98	100	86	100	94	96	91	95
Chasma Nuclear-I	0	0	0	0	0	0	0	0	0	45	72	78	65

Managing Director NTDC
APDA House Lahore.

NATIONAL TRANSMISSION COMPANY

Plant Factor %

FY_2011-12

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
KHANOT													
Liberty (C.C)	87	78	78	88	87	83	88	48	70	82	80	87	80
Habibullah	43	40	82	65	55	53	15	30	84	93	80	88	60
GUDDU COMBINES CYCLE													
Fauji	95	95	65	70	101	103	102	95	101	100	97	93	93
Uch (C.C)	91	92	92	95	53	89	102	74	100	83	95	93	88
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO -3	47	55	33	60	52	43	42	40	45	71	76	53	51
KAPCO -2													
KAPCO -1													
Altern	101	96	97	108	110	0	0	0	110	109	105	99	78
GTPS FAISLABAD													
KOTRI													
Rousch	94	96	94	100	79	96	105	96	102	12	0	71	79
Hubco	73	92	57	66	61	68	97	70	62	73	75	91	74
KEL	70	85	79	73	48	47	47	52	84	79	68	68	67
SEPCO	36	38	45	38	26	29	25	19	5	24	12	4	25
Japan	29	56	39	45	42	23	34	29	22	1	14	25	30
Saba	17	16	20	17	0	22	2	6	9	5	1	9	10
AES Lalpir	71	60	58	81	16	40	54	47	66	51	80	71	58
AES Pak Gen	82	80	71	59	55	51	29	0	0	86	69	79	55
Chasma Nuclear-I	96	7	0	79	88	101	100	100	100	100	99	99	81
Chasma Nuclear-II	90	76	96	92	93	69	95	101	99	28	99	100	86

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Plant Factor %

FY 2012-2013

NAME OF POWER STATION	Capacity MW	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
On Gas													
Altern Power	26.4	97.9	98.6	90.9	101.6	103.9	76	0	17.6	93.6	106.4	97.7	92.6
FKPCL	151	92.9	93.2	87.3	7.9	43.8	101	99.3	97.7	97	96.1	94.2	93.5
HCPC	129.15	74.2	77	78.1	58.5	91.8	56.5		3.4	61.7	50.9	60.7	81.7
Liberty Power	211.85	84.2	66.7	70.3	77.1	84.8	78.9	81	29	0	1.8	0	0
Rousch	395	97	98	86.5	102.7	101.5	52.2	33.1	38.9	31.8	55.3	83.3	97
Uch Power	551.25	84.8	92	76.9	92	11.9	28.4	94.7	95.9	95.7	93.3	84.6	93.7
ON FO													
Lalpir	347	75.7	70	48.7	28	0	64	52.6	61.2	49.9	41.2	65.2	86.1
Pakgen	349	75.9	62.1	62.8	45	76	88.6	65.8	0	60.7	59	78.7	77.7
HUBCO	1200	93.4	85	66.9	60.2	73.6	70.5	88	70.6	81.1	61.7	62.5	61.3
Japan Power	107	59.7	36.6	22.9	6.4	0.8	0.7	1					
KEL	124	79.5	83.4	52.5	66.35	51.1	64.5	65.6	56.7	59.7	66.8	73.1	79.9
Saba	126	17.4	4.6	5.6	1.1	1.6	0	0		0	0	0	0
Sepcol	110	54.9	52.7	7.2	0.9	1.1	0.9	0.7					
Mix													
KAPCO	1345	73.6	64.2	48.8	47.7	18.2	37	44.5	41.4	40.8	54.6	46.2	45.1
On Others													
Chasnupp-I	300	76.5	939	98.7	99.3	99.6	68.5	0	34.2	99.6	99.5	97.9	98.8
Chasnupp-II	300	73.5	58	99.4	96.3	100.8	60.5	38	0	0	3	59.6	101.1

NATIONAL TRANSMISSION COMPANY

Plant Factor %

FY 2013-2014

NAME OF POWER STATION	Capacity MW	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
On Gas													
Altern Power	26.4	100.5	102	99.9	103.8	107.5	106.9	18.5	10.8	71.1	107.5	104	100
FKPCL	151	92.1	91.4	92.9	96.6	69.4	94.8	98.8	81	95.2	88.7	88.1	88.2
HCPC	129.15	81	76.3	79	64.7	85.6	57.7		5.4	44.6	52.2	75.9	84.9
Liberty Power	211.85	79.7	79.3	92.2	78.8	48.8				6.2	58.9	76.3	87.7
Rousch	395	94	98.1	95.8	78.3	87.2	60.8		42.5	107.6	99.8	97.3	93.9
Uch Power	551.25	92.6	91.8	93.8	71.7	72.7	95.8	104.5	98	78.4	90.4	92.9	89.9
ON FO													
Lalpir	347	76.4	76.3	34.8	64.8	68.9	75.3	78.4	47.7	53.5	79	72.6	84.6
Pakgen	349	77.6	51.3	77.5	92	55.8	73.4	76.5	44.2	69.1		81	82.9
HUBCO	1200	61.8	62	67.7	64.2	51.8	67.1	88.9	61.3	66.6	86.6	62.3	68.1
Japan Power	107												
KEL	124	81.4	85.2	72.7	74.8	72.4	78.3	90.6	79.2	87.3	87.4	83	89.9
Saba	126						27.9	30.2		17.2	15.6	27.7	20.6
Sepcol	110												
Mix													
KAPCO	1345	62	62.1	45.7	48.7	33.8	62	51.4	52.1	42.8	51.5	68.3	80.2
On Others													
Chasnupp-I	300	74	96.8	98.4	99.6	99.5	99	100.4	93.1	79.2	74.2		89.6
Chasnupp-II	300	87.1	96.1	101.1	96.4	93.2	95.7	102.3	102.4	77.6	88.3	67.9	---
Total													

Managing Director NTDC
WAPDA House Lahore.

Plant Factor

Financial Year 2014-15

(In %)

Sr. No.	Plant Name	Capacity MW	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
ON GAS														
1	Altern Energy	26.40	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	FKPCL	151.00	93%	93%	97%	93%	97%	93%	89%	99%	89%	92%	89%	92%
3	Habibullah Coastal	129.15	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
4	Liberty Power	211.85	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	Rousch	395.00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Uch Power	551.25	95%	93%	93%	73%	76%	98%	105%	100%	78%	91%	93%	91%
ON FO														
1	LalPir	347	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	PakGen	349	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	HUBCO	1,200	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	Japan Power	107	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	KEL	124	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Saba	126	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
7	SEPCOL	110	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ON HSD, RFO, Gas														
1	KAPCO	1,345	65%	65%	65%	65%	65%	23%	65%	65%	65%	65%	65%	65%
ON OTHERS														
1	CHASNUPP-I	300	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
2	CHASNUPP-II	300	32%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Total			70.4	70.8	57.8	71.4	58.8	63.0	70.2	57.8	64.4	65.9	71.3	74.5


Managing Director NTDC
WAPDA House Lahore.

Plant Factor

Financial Year 2015-16

(In %)


Sr. No.	Plant Name	Capacity MW	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
ON GAS														
1	Altern Energy	26.40	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	FKPCL	151.00	93%	93%	97%	93%	97%	93%	89%	95%	89%	92%	89%	92%
3	Habibullah Coastal	129.15	60%	60%	60%	60%	60%	60%	60%	58%	60%	60%	60%	60%
4	Liberty Power	211.85	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	Rousch	395.00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Uch Power	551.25	95%	93%	93%	73%	76%	98%	105%	96%	78%	91%	93%	91%
ON FO														
1	LalPir	347	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	PakGen	349	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	HUBCO	1,200	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	Japan Power	107	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	KEL	124	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Saba	126	60%	60%	60%	60%	60%	60%	60%	58%	60%	60%	60%	60%
7	SEPCOL	110	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ON HSD, RFO, Gas														
1	KAPCO	1,345	65%	65%	65%	65%	65%	23%	65%	63%	65%	65%	65%	65%
ON OTHERS														
1	CHASNUPP-I	300	95%	95%	95%	95%	95%	95%	95%	92%	95%	95%	95%	95%
2	CHASNUPP-II	300	32%	85%	85%	85%	85%	85%	85%	82%	85%	85%	85%	85%
Total			70.4	70.8	57.8	71.4	58.8	63.0	70.2	57.8	64.4	65.9	71.3	74.5

Managing Director NTDC
WAPDA House Lahore.

Plant Factor
Financial Year 2016-17

(In %)

Sr. No.	Plant Name	Capacity MW	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
ON GAS														
1	Altern Energy	26.40	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	FKPCL	151.00	93%	93%	97%	93%	97%	93%	89%	99%	89%	92%	89%	92%
3	Habibullah Coastal	129.15	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
4	Liberty Power	211.85	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	Rousch	395.00	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Uch Power	551.25	95%	93%	93%	73%	76%	98%	105%	100%	78%	91%	93%	91%
ON FO														
1	LalPir	347	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2	PakGen	349	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
3	HUBCO	1,200	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
4	Japan Power	107	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
5	KEL	124	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
6	Saba	126	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%
7	SEPCOL	110	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
ON HSD, RFO, Gas														
1	KAPCO	1,345	65%	65%	65%	65%	65%	23%	65%	65%	65%	65%	65%	65%
ON OTHERS														
1	CHASNUPP-I	300	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%
2	CHASNUPP-II	300	32%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
Total			70.4	70.8	57.8	71.4	58.8	63.0	70.2	57.8	64.4	65.9	71.3	74.5


 Managing Director NTDC
 WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY

Plant Factor %
FY 2013-14

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
Tarbela	99%	102%	99%	50%	39%	27%	13%	32%	18%	18%	35%	62%	50%
Mangla	67%	68%	72%	65%	59%	45%	22%	57%	38%	35%	61%	66%	55%
Brotha	37%	36%	73%	88%	87%	70%	20%	70%	52%	71%	89%	93%	65%
Warsak	70%	64%	64%	42%	28%	8%	15%	20%	29%	49%	51%	50%	41%
Chashma Low Head	67%	47%	88%	85%	68%	47%	35%	66%	59%	75%	83%	45%	64%
Allai Khwar	0%	0%	0%	20%	15%	11%	10%	12%	47%	197%	100%	80%	41%
Jinnah	25%	7%	21%	12%	26%	22%	3%	19%	24%	23%	25%	23%	18%
Khan Khwar	48%	56%	34%	15%	16%	10%	10%	14%	48%	87%	87%	62%	41%
Small Hydels	34%	31%	30%	25%	21%	16%	7%	14%	23%	39%	47%	51%	28%
KHANOT	47%	57%	28%	59%	27%	0%	29%	48%	50%	70%	26%	51%	41%
GUDDU COMBINES CYCLE	44%	50%	54%	61%	52%	53%	42%	38%	35%	13%	0%	19%	39%
GUDDU - Steam (1-1)	15%	11%	10%	17%	17%	17%	17%	14%	14%	14%	18%	14%	15%
MUZAFFARGARH	53%	54%	56%	49%	44%	34%	71%	34%	28%	47%	52%	69%	49%
JAMSHORO	69%	41%	23%	23%	19%	31%	31%	19%	20%	17%	16%	14%	24%
SPS FAISALABAD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	14%	50%	5%
NGPS Multan	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
GTPS FAISLABAD	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	40%	52%	8%
KOTRI	0%	18%	0%	16%	17%	1%	0%	0%	20%	2%	56%	57%	16%



Managing Director
National Transmission Company

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

Heat Rates - BTUs

NAME OF POWER STATION	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
KHANOT												
GUDDU COMBINES CYCLE												
GUDDU - Steam (1-1)												
MUZAFFARGARH												
JAMSHORO												
SPS FAISALABAD												
NGPS Multan												
KAPCO -3	8614	8614	8614	8614	8614	8614	8614	8614	8614	8614	8614	8614
KAPCO -2	8329	8329	8329	8329	8329	8329	8329	8329	8329	8329	8329	8329
KAPCO -1	7589	7589	7589	7589	7589	7589	7589	7589	7589	7589	7589	7589
GTPS FAISLABAD												
KOTRI												



Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE CALORIFIC VALUE OF GAS

NAME OF POWER STATION		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
KHNOT														
Liberty (C.C)		870	870	870	870	870	870	870	870	870	870	870	870	870
Habibullah		930	930	930	930	930	930	930	930	930	930	930	930	930
GUDDU COMBINES CYCLE														
Fauji	PLQ	930	930	930	930	930	930	930	930	930	930	930	930	930
	LBTU	228	228	228	228	228	228	228	228	228	228	228	228	228
Uch (C.C)		455	455	455	455	455	455	455	455	455	455	455	455	455
GUDDU - Steam (1-1)														
MUZAFFARGARH														
JAMSHORO														
SPS FAISALABAD														
NGPS Multan														
KAPCO		971	971	971	971	971	971	971	971	971	971	971	971	971
Altern		980	980	980	980	980	980	980	980	980	980	980	980	980
GTPS FAISALABAD														
KOTRI														
Total														


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs

FY 2009-2010

NAME OF POWER STATION	Ref. Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Liberty (C.C) - Fixed		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
- Variable													
Habibullah		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
GUDDU COMBINES CYCLE													
Fauji - Fixed		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
Uch (C.C) - Fixed		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
- Variable													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
Altern		281.88	281.88	281.88	281.88	281.88	281.88	332.36	332.36	332.36	332.36	332.36	332.36
GTPS FAISALABAD													
KOTRI													

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs
FY _____ 2010-2011

NAME OF POWER STATION	Ref. Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Liberty (C.C) - Fixed	281.63	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
- Variable													
Habibullah		332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
GUDDU COMBINES CYCLE													
Fauji - Fixed		332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
Uch (C.C) - Fixed		332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
- Variable													
- Variable													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
Altern		332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36	332.36
GTPS FAISALABAD													
KOTRI													



Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY

POWER STATION WISE GAS PRICES Rs. /MMBTUs

FY _____ 2011-2012 _____

NAME OF POWER STATION	Ref. Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Liberty (C.C) - Fixed		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
- Variable													
- Variable													
Habibullah		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
GUDDU COMBINES CYCLE													
Fauji - Fixed		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
- Variable													
Uch (C.C) - Fixed		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
- Variable													
- Variable													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
Altern		377.39	377.39	377.39	377.39	377.39	377.39	437.86	507.86	507.86	507.86	507.86	507.86
GTPS FAISALABAD													
KOTRI													




Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs
FY 2012-2013

NAME OF POWER STATION	Ref. Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Liberty (C.C) - Fixed	66.4	560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
- Variable													
- Variable													
Habibullah	66.4	560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
GUDDU COMBINES CYCLE													
Fauji - Fixed		560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
- Variable													
Uch (C.C) - Fixed	66.4	560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
- Variable													
- Variable													
GUDDU - Steam (1-1)	33.77												
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD	33.77												
NGPS Multan													
KAPCO		560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
Altern	33.77	560	560	560	560	560	560	588.23	588.23	588.23	588.23	588.23	588.23
GTPS FAISALABAD													
KOTRI													




Managing Director NTD
PDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs

FY _____ 2013-2014 _____

NAME OF POWER STATION	Ref. Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Liberty (C.C) - Fixed	66.4	588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	488.23
- Variable													
- Variable													
Habibullah	66.4	588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	588.23
GUDDU COMBINES CYCLE													
Fauji - Fixed		588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	588.23
- Variable	66.4												
Uch (C.C) - Fixed		588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	588.23
- Variable													
- Variable													
GUDDU - Steam (1-1)	33.77												
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD	33.77												
NGPS Multan													
KAPCO		588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	588.23
Altern	33.77	588.23	588.23	588.23	588.23	588.23	588.23	588.23	488.23	488.23	488.23	488.23	588.23
GTPS FAISALABAD													
KOTRI													


 Managing Director
 National Transmission and Despatch Company Limited

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs
Financial Year 2014-15

NAME OF POWER STATION	Ref. Fuel Price	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15
Liberty (C.C) - Fixed													
- Variable													
- Variable													
Habibullah	66	590	590	593	595	598	600	603	605	608	610	613	616
GUDDU COMBINES CYCLE													
Fauji	66	590	590	593	595	598	600	603	605	608	610	613	616
Uch (C.C)													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		590.7006	593.1815	595.6729	598.1747	600.687	603.2099	605.7434	608.2875	610.8423	613.4079	615.9842	618.5713
Altern													
GTPS FAISALABAD													
Roush		512.6415	512.6415	512.6415	512.6415	512.6415	512.6415	538.2736	538.2736	538.2736	538.2736	538.2736	538.2736
KOTRI													

Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs
Financial Year 2015-16

NAME OF POWER STATION	Ref: Fuel Price	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
Liberty (C.C) - Fixed													
- Variable													
- Variable													
Habibullah	66	619	619	621	624	626	629	632	634	637	639	642	645
GUDDU COMBINES CYCLE													
Fauji - Fixed													
Uch (C.C) - Fixed													
- Variable													
- Variable													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		621.1693	623.7782	626.3981	629.029	631.6709	634.3239	636.9881	639.6634	642.35	645.0479	647.7571	650.4776
Altern													
GTPS FAISALABAD													
Rousch		565.1873	565.19	565.19	565.19	565.19	565.19	593.4495	593.45	593.45	593.45	593.45	593.45
KOTRI													




Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE GAS PRICES Rs. /MMBTUs
Financial Year 2016-17

NAME OF POWER STATION	Ref: Fuel Price	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17
Liberty (C.C) - Fixed	66	648	648	650	653	656	659	661	664	667	670	672	675
- Variable													
- Variable													
Habibullah													
GUDDU COMBINES CYCLE													
Fauji - Fixed													
- Variable													
Uch (C.C) - Fixed													
- Variable													
- Variable													
GUDDU - Steam (1-1)													
MUZAFFARGARH													
JAMSHORO													
SPS FAISALABAD													
NGPS Multan													
KAPCO		653.2097	655.9531	658.7081	661.4747	664.2529	667.0428	669.8443	672.6577	675.4829	678.3199	681.1688	684.029
Altern		623.1225	623.12	623.12	623.12	623.12	623.12	654.276	654.28	654.28	654.28	654.28	654.2
Rousch													
GTPS FAISALABAD													
KOTRI													



Managing Director NTPC
PDA House, Islamabad

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)

FY 2009-2010

Rs./M.Ton

NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco		36152.17	37311.22	39952.79	39749.43	42259.89	43722.46	42942.56	45102.62	44011.26	42796.35	45294.13	40432.26	41643.928
KEL		37830.71	38979.26	41658.01	41009.15	43942.76	45218.26	44835.89	46481.08	46372.39	45033.29	47707.87	42550.5	43468.264
SEPCO		37830.71	38979.26	41658.01	41009.15	43942.76	45218.26	44835.89	46481.08	46372.39	45033.29	47707.87	42550.5	43468.264
Japan		37830.71	38979.26	41658.01	41009.15	43942.76	45218.26	44835.89	46481.08	46372.39	45033.29	47707.87	42550.5	43468.264
JAMSHORO														C
MUZAFFARGARH														C
GUDDU - Steam (1-1)														C
KAPCO		38055.33	39222.33	42302.33	41570.67	44241	45653.33	45056	47050	46413.73	45182.07	47701.8	42815.37	43771.997
Saba		37933.12	39087.59	41766.34	41122.27	44054.62	45330.12	44953.71	46596.76	46491.61	45150.47	47828.69	42674.84	43582.512
AES Lalpir		37043.2	38079.2	40851	40291.8	43163	44476.4	44022	45885.8	45516	44242	46813.8	41647.6	42669.317
AES Pak Gen		37043.2	38079.2	40851	40291.8	43163	44476.4	44022	45885.8	45516	44242	46813.8	41647.6	42669.317
SPS FAISALABAD														C
NGPS Multan														C

J

Managing Director
WAPDA

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)2010-2011
 FY _____ 2010-2011

Rs./M.Ton

NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco	2350	41443.33	42094.15	41867.15	41948.61	44513.27	46741.97	47713.97	50516.7	57658.54	59618.08	63276.8	59794.97	49765.628
KEL	2843.5	43855.23	44460.23	43818.71	44064.96	46722.27	48331.7	50309.7	53111.95	60173.45	62311.29	65296.49	63801.46	52188.12
SEPCO	2843.5	43855.23	44460.23	43818.71	44064.96	46722.27	48331.7	50309.7	53111.95	60173.45	62311.29	65296.49	63801.46	52188.12
Japan		43855.23	44460.23	43818.71	44064.96	46722.27	48331.7	50309.7	53111.95	60173.45	62311.29	65296.49	63801.46	52188.12
JAMSHORO														
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO	3195	43860.25	44550.75	44182.41	44424	46983.6	49075.6	50511.48	53415.81	60513.48	62697.23	66077.82	63478.72	52480.929
Saba	2843.5	43978.45	44579.34	43939.12	44187.01	46843.51	48457.65	50435.65	53237.9	60299.4	62441.28	65437.6	63989.94	52318.904
AES Lalpir	2843.5	42913.4	43607.2	43020.6	43202.4	45890.8	47535.8	49412.6	52356.6	59471	61533.2	64806.35	62328	51339.829
AES Pak Gen	2843.5	42913.4	43607.2	43020.6	43202.4	45890.8	47535.8	49412.6	52356.6	59471	61533.2	64806.35	62328	51339.829
SPS FAISALABAD														
NGPS Multan														




For
 Manager

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
 FY _____ 2011-12


Rs./M.Ton

NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco		61551.79	63219.85	60796.74	61662.16	63285.46	66787.87	65157.27	72028.13	72875.21	74343.19	72444.4	74746.2	67408.189
KEL		64611.96	67281.58	65057.58	65863.93	67377.56	70163.31	68606.69	75184.44	76346.42	78100.92	76277.92	71996.42	70572.394
SEPCO		64611.96	67281.58	65057.58	65863.93	67377.56	70163.31	68606.69	75184.44	76346.42	78100.92	76277.92	71996.42	70572.394
Japan		64611.96	67281.58	65057.58	65863.93	67377.56	70163.31	68606.69	75184.44	76346.42	78100.92	76277.92	71996.42	70572.394
JAMSHORO														
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO		64855.7	66931.27	64516.94	65508.59	67121.51	69889.51	68630.69	75338.36	76736.5	78365.16	76424.06	73015.06	70611.113
Saba		64797.13	67464.67	65240.67	66047.47	67562.76	70348.51	68796.73	75374.48	76541.31	78295.81	76476.49	72136.73	70756.897
AES Lalpir		63612.2	65874.4	63559.8	64360.4	65912.8	68861.8	67413	74137	74991.8	76607.8	74746.2	70971.25	69254.038
AES Pak Gen		63612.2	65874.4	63559.8	64360.4	65912.8	68861.8	67413	74137	74991.8	76607.8	74746.2	70971.25	69254.038
SPS FAISALABAD														
NGPS Multan														


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
 FY _____ 2013-14

Rs./M.Ton														
NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco	2350	66734.79	67713.62	71701.95	73423.72	72927.06	71817.47	69635.08	69213.08	72309.44	63318.53	60947.17	66547.81	68857.477
KEL	2843.5	69417.7	70604.03	73410.7	75339.58	75831.15	75518.86	74632.53	74287.2	74770.53	68263.87	67226.3	70201.09	72458.628
SEPCO	2843.5	69782.37	70927.02	74043.11	75934.24	76209.13	75691.1	74489.85	74125.35	75262.85	68156.35	66650.14	70298.73	72630.853
Japan	2843.5	69782.37	70927.02	74043.11	75934.24	76209.13	75691.1	74489.85	74125.35	75262.85	68156.35	66650.14	70298.73	72630.853
JAMSHORO														
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO	3195	70109.78	71102.37	74471.63	76234.24	76209.88	75385.25	73802.92	73278.25	75372.59	67677.59	65902.18	70486.98	72502.81
Saba	2843.5	70074.16	71222.22	74343.04	76238.07	76520.3	76001.94	74800.69	74328.11	75465.61	68359.10	66849.94	70494.96	72891.51
AES Lalpir	2843.5	68379.8	69454.4	72285	74180.4	74435.8	74004.8	72962	72506.20	73417.4	66685.80	65519.4	68922	71062.75
AES Pak Gen	2843.5	68379.8	69454.4	72285	74180.4	74435.8	74004.8	72962	72506.20	73417.4	66685.80	65519.4	68922	71062.75
SPS FAISALABAD														
NGPS Multan														


Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION COMPANY
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
FY 2012-13

Rs./M.Ton														
NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco	2350	62784.86	70162.07	70762.29	70828.2	65009.27	65052.25	65741.82	69899.53	67869.53	66631.17	68829.59	67109.59	67556.681
KEL	2843.5	67184.81	72625.45	75826.62	73311.48	69516.79	69410.72	70121.52	74271.99	72075.6	70633.93	70780.34	70131.51	71324.23
SEPCO	2843.5	67096.57	73259.2	75690.49	73782.57	69502.12	69426.82	70107.57	74259.9	72098.63	70706.88	71361.16	70426.5	71476.534
Japan	2843.5	67096.57	73259.2	75690.49	73782.57	69502.12	69426.82	70107.57	74259.9	72098.63	70706.88	71361.16	70426.5	71476.534
JAMSHORO														
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO	3195	66713.03	73234.17	74957.31	73815.86	68737.38	68743.67	69413.82	73529.34	71682.37	70630.04	71830.94	70574.89	71155.24
Saba	2843.5	67380.14	73549.94	75999.33	74085.62	69808.01	69732.23	70407.44	74560.32	72397.63	71005.88	71659.15	70720.58	71775.52
AES Lalpir	2843.5	65509	71825.8	73667.2	72248.4	67598.8	67549.8	68301	72844.80	70727.2	69365.40	70340.2	69010.4	69915.667
AES Pak Gen	2843.5	65509	71825.8	73667.2	72248.4	67598.8	67549.8	68301	72844.80	70727.2	69365.40	70340.2	69010.4	69915.667
SPS FAISALABAD														
NGPS Multan														


 Managing Director NTDC
 WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
Financial Year 2014-15

NAME OF POWER STATION	Ref: Fuel Price	Rs./M.Ton												
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco	2843.5	65,493	65,766	66,040	66,315	66,591	66,869	67,147	67,427	67,708	67,990	68,274	68,558	67014.924
KEL	2843.5	66,929	67,208	67,488	67,769	68,051	68,335	68,619	68,905	69,192	69,481	69,770	70,061	68483.952
SEPCOL	2843.5	67,820	68,102	68,386	68,671	68,957	69,244	69,533	69,822	70,113	70,406	70,699	70,993	69395.487
Japan	2843.5	67,820	68,102	68,386	68,671	68,957	69,244	69,533	69,822	70,113	70,406	70,699	70,993	69395.487
JAMSHORO	2843.5													
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO		69,199	69,489	69,781	70,074	70,369	70,664	70,961	71,259	71,558	71,859	72,161	72,464	70,820
Saba	2843.5	66,052	66,327	66,604	66,881	67,160	67,440	67,721	68,003	68,286	68,571	68,856	69,143	67,587
AES Lalpir	2843.5	66,445	66,722	67,000	67,279	67,560	67,841	68,124	68,408	68,693	68,979	69,266	69,555	67989.455
AES Pak Gen	2843.5	66,445	66,722	67,000	67,279	67,560	67,841	68,124	68,408	68,693	68,979	69,266	69,555	67989.455
SPS FAISALABAD														
NGPS Multan														


 Managing Director
 National Transmission and Despatch Company Limited

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
Financial Year 2015-16

Rs./M.Ton


NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco		68,844	69,131	69,419	69,708	69,998	70,290	70,583	70,877	71,172	71,469	71,767	72,066	70,444
KEL		70,353	70,646	70,940	71,236	71,533	71,831	72,130	72,431	72,732	73,035	73,340	73,645	71,988
SEPCOL		71,289	71,586	71,885	72,184	72,485	72,787	73,090	73,395	73,701	74,008	74,316	74,626	72,946
Japan		71,289	71,586	71,885	72,184	72,485	72,787	73,090	73,395	73,701	74,008	74,316	74,626	72,946
JAMSHORO		-												
MUZAFFARGARH		-												
GUDDU - Steam (1-1)		-												
KAPCO		71,117	71,416	71,716	72,017	72,319	72,623	72,928	73,235	73,542	73,851	74,161	74,473	72,783
Saba	2843.5	69,431	69,720	70,011	70,303	70,596	70,890	71,185	71,482	71,779	72,079	72,379	72,680	71,045
AES Lalpir		69,845	70,136	70,428	70,722	71,016	71,312	71,609	71,908	72,207	72,508	72,810	73,114	71,468
AES Pak Gen		69,845	70,136	70,428	70,722	71,016	71,312	71,609	71,908	72,207	72,508	72,810	73,114	71,468
SPS FAISALABAD														
NGPS Multan														


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE FURNACE OIL (Ex- GST and Inland Freight)
Financial Year 2016-17

Rs./M.Ton

NAME OF POWER STATION	Ref: Fuel Price	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Average
Rousch														
Hubco		72,366	72,667	72,970	73,274	73,580	73,886	74,194	74,503	74,814	75,125	75,438	75,753	74,048
KEL		73,952	74,260	74,570	74,881	75,193	75,506	75,820	76,136	76,454	76,772	77,092	77,413	75,671
SEPCOL		74,937	75,249	75,562	75,877	76,193	76,511	76,830	77,150	77,471	77,794	78,118	78,444	76,678
Japan		74,937	75,249	75,562	75,877	76,193	76,511	76,830	77,150	77,471	77,794	78,118	78,444	76,678
JAMSHORO														
MUZAFFARGARH														
GUDDU - Steam (1-1)														
KAPCO		73,089	73,396	73,704	74,014	74,325	74,637	74,950	75,265	75,581	75,898	76,217	76,537	74,801
Saba	2843.5	71,341	71,638	71,937	72,237	72,537	72,840	73,143	73,448	73,754	74,061	74,370	74,680	72,999
AES Lalpir		73,418	73,724	74,031	74,340	74,650	74,961	75,273	75,587	75,902	76,218	76,535	76,854	75,124
AES Pak Gen		73,418	73,724	74,031	74,340	74,650	74,961	75,273	75,587	75,902	76,218	76,535	76,854	75,124
SPS FAISALABAD														
NGPS Multan														


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNANCE OIL
 FY _____ 2009-2010

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch	0	0	0	0	0	0	0	0	0	0	0	0
Hubco	986.17	1009.22	1006.79	1010.43	1011.64	1013.46	1022.56	1028.62	1032.26	1021.35	1020.13	1032.26
KEL	2376.96	2514.51	2514.51	2625.4	2596.26	2596.26	2734.64	2687.33	2767.14	2719.54	2804.12	2886
SEPCO	2376.96	2514.51	2514.51	2625.4	2596.26	2596.26	2734.64	2687.33	2767.14	2719.54	2804.12	2886
Japan	2376.96	2514.51	2514.51	2625.4	2596.26	2596.26	2734.64	2687.33	2767.14	2719.54	2804.12	2886
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	1841.67	1925	1925	2043.33	2043.33	2043.33	2143.33	2210	2210	2243.4	2243.4	2273.7
Saba	2479.37	2622.84	2622.84	2738.52	2708.12	2708.12	2852.46	2803.01	2886.36	2836.72	2924.94	3010.34
AES Lalpir	1647	1647	1747	1837	1837	1837	1957	2036	2036	2036	2036	2036
AES Pak Gen	1647	1647	1747	1837	1837	1837	1957	2036	2036	2036	2036	2036
SPS FAISALABAD												
NGPS Multan												


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE INLAND FREIGHT OF FURNACE OIL

FY _____ 2010-2011

Rs./M.Ton

NAME OF POWER STATION	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	1038.33	1040.15	1040.15	1045.61	1042.27	1041.97	1041.97	1040.75	1039.54	1034.08	1026.8	1041.97
KEL	2859.73	2759.93	2794.71	2832.71	2814.02	2923.2	2923.2	2923.2	2923.2	3017.04	3274.99	4374.71
SEPCO	2859.73	2759.93	2794.71	2832.71	2814.02	2923.2	2923.2	2923.2	2923.2	3017.04	3274.99	4374.71
Japan	2859.73	2759.93	2794.71	2832.71	2814.02	2923.2	2923.2	2923.2	2923.2	3017.04	3274.99	4374.71
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	2268.92	2250.75	2257.08	2330.67	2363.93	2383.67	2400.48	2553.81	2553.81	2637.23	2777.15	3372.05
Saba	2982.95	2878.84	2915.12	2954.76	2935.26	3049.15	3049.15	3049.15	3049.15	3147.03	3416.1	4563.19
AES Lalpir	2036	2036	2036	2036	2070	2069	2169	2337	2347	2417	2528.15	3001.8
AES Pak Gen	2036	2036	2036	2036	2070	2069	2169	2337	2347	2417	2528.15	3001.8
SPS FAISALABAD												
NGPS Multan												

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Managing Director NTDC
APDA House Lahore

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNACE OIL
 FY _____ 2011-2012

Rs./M.Ton

NAME OF POWER STATION	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	3358.03	1049.85	1057.74	1060.16	1050.46	1069.87	1089.27	1094.13	1100.19	1100.19	1100.19	1140.22
KEL	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
SEPCO	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
Japan	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	3358.03	3349.27	3349.27	3351.59	3358.18	3358.18	3378.69	3378.69	3675.83	3675.83	3691.39	3686.02
Saba	4482.88	4432.67	4432.67	4445.97	4483.76	4483.76	4601.23	4601.23	4718.56	4718.56	4807.74	3985.66
AES Lalpir	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3584
AES Pak Gen	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3584
SPS FAISALABAD												
NGPS Multan												



Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED

POWER STATION WISE INLAND FREIGHT OF FURNACE OIL


FY _____ 2013-2014

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	3358.03	1049.85	1057.74	1060.16	1050.46	1069.87	1089.27	1094.13	1100.19	1100.19	1100.19	1140.22
KEL	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
SEPCO	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
Japan	4297.71	4249.58	4249.58	4262.33	4298.56	4298.56	4411.19	4411.19	4523.67	4523.67	4609.17	3720.66
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	3358.03	3349.27	3349.27	3351.59	3358.18	3358.18	3378.69	3378.69	3675.83	3675.83	3691.39	3686.02
Saba	4482.88	4432.67	4432.67	4445.97	4483.76	4483.76	4601.23	4601.23	4718.56	4718.56	4807.74	3985.66
AES Lalpir	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3584
AES Pak Gen	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3584
SPS FAISALABAD												
NGPS Multan												

Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNANCE OIL
FY 2012-2013

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	1142.65	1148.711	1145.679	1146.285	1162.054	1170.545	1177.823	1183.888	1189.953	1192.379	1192.986	1194.199
KEL	4432.66	4372.81	4250.16	4411.75	4419.12	4412.05	4332.19	4339.99	4319.6	4319.6	4305.34	4248.51
SEPCO	3170.44	3127.63	3244.93	3368.3	3373.93	3368.53	3307.56	3313.52	3297.94	3297.94	3287.06	3243.67
Japan	4432.66	3127.63	3244.93	3368.3	3373.93	3368.53	3307.56	3313.52	3297.94	3297.94	3287.06	3243.67
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	3659.26	3648.36	3678.22	3709.61	3711.05	3709.67	3694.16	3695.67	3691.71	3691.71	3688.94	3677.89
Saba	4623.63	3411.2	3539.13	3673.68	3679.83	3673.94	3607.43	3613.93	3596.95	3596.95	3585.08	3537.76
AES Lalpir	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3400.8	3400.8	3400.8	3400.8
AES Pak Gen	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3001.8	3400.8	3400.8	3400.8	3400.8
SPS FAISALABAD												
NGPS Multan												


 Managing Director NTDG
 WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNANCE OIL
Financial Year 2014-15

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	1,198	1,203	1,208	1,213	1,218	1,223	1,228	1,233	1,238	1,244	1,249	1,254
KEL	4,323	4,341	4,359	4,377	4,395	4,414	4,432	4,450	4,469	4,488	4,506	4,525
SEPCO	3,496	3,510	3,525	3,539	3,554	3,569	3,584	3,599	3,614	3,629	3,644	3,659
Japan	3,496	3,510	3,525	3,539	3,554	3,569	3,584	3,599	3,614	3,629	3,644	3,659
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	3,893	3910	3926	3943	3959	3976	3993	4009	4026	4043	4060	4077
Saba	5,681	5,704	5,728	5,752	5,776	5,800	5,824	5,848	5,873	5,897	5,922	5,947
AES Lalpir	4,514	4,533	4,552	4,571	4,590	4,609	4,628	4,648	4,667	4,686	4,706	4,725
AES Pak Gen	4,514	4,533	4,552	4,571	4,590	4,609	4,628	4,648	4,667	4,686	4,706	4,725
SPS FAISALABAD												
NGPS Multan												


Manager
WARD

FORM - T3(b1.11)

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNANCE OIL
 Financial Year 2015-16

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	1,259	1,264	1,270	1,275	1,280	1,286	1,291	1,296	1,302	1,307	1,313	1,318
KEL	4,544	4,563	4,582	4,601	4,620	4,639	4,659	4,678	4,698	4,717	4,737	4,757
SEPCO	3,674	3,690	3,705	3,720	3,736	3,752	3,767	3,783	3,799	3,814	3,830	3,846
Japan	3,674	3,690	3,705	3,720	3,736	3,752	3,767	3,783	3,799	3,814	3,830	3,846
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	4,094	4,111	4,129	4,146	4,164	4,181	4,199	4,216	4,234	4,252	4,270	4,287
Saba	5,947	5,972	5,997	6,022	6,047	6,072	6,097	6,123	6,148	6,174	6,199	6,225
AES Lalpir	4,745	4,765	4,785	4,805	4,825	4,845	4,865	4,885	4,906	4,926	4,947	4,967
AES Pak Gen	4,745	4,765	4,785	4,805	4,825	4,845	4,865	4,885	4,906	4,926	4,947	4,967
SPS FAISALABAD												
NGPS Multan												


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY LIMITED
POWER STATION WISE INLAND FREIGHT OF FURNACE OIL
Financial Year 2016-17

NAME OF POWER STATION	Rs./M.Ton											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Rousch												
Hubco	1,324	1,329	1,335	1,340	1,346	1,351	1,357	1,363	1,368	1,374	1,380	1,385
KEL	4,776	4,796	4,816	4,836	4,856	4,877	4,897	4,917	4,938	4,959	4,979	5,000
SEPCO	3,862	3,878	3,895	3,911	3,927	3,944	3,960	3,976	3,993	4,010	4,026	4,043
Japan	3,862	3,878	3,895	3,911	3,927	3,944	3,960	3,976	3,993	4,010	4,026	4,043
JAMSHORO												
MUZAFFARGARH												
GUDDU - Steam (1-1)												
KAPCO	4,305	4,324	4,342	4,360	4,378	4,397	4,415	4,434	4,452	4,471	4,490	4,509
Saba	6,225	6,251	6,277	6,303	6,329	6,356	6,382	6,409	6,436	6,462	6,489	6,516
AES Lalpir	4,988	5,009	5,030	5,051	5,072	5,093	5,114	5,135	5,157	5,178	5,200	5,221
AES Pak Gen	4,988	5,009	5,030	5,051	5,072	5,093	5,114	5,135	5,157	5,178	5,200	5,221
SPS FAISALABAD												
NGPS Multan												


Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Variable O&M Cost for FY _____ 2009-2010

NAME OF POWER STATION	Ref: Var. O&M Ps./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Ps./KwH
Liberty (C.C)	0.058	30.03	74.8701	80.2917	108.6667	0.22508
Habibullah	0.078	30.03	74.16	80.2917	108.6667	0.3056
Fauji	0.1316	30.03	74.16	80.2917	108.6667	0.51064
Uch (C.C)	0.414	30.03	74.16	80.2917	108.6667	0.1622
Rousch	0.49	30.03	74.86	80.2917	108.6667	0.19018
HUBCO	0.0372					0.11793
KEL	0.1047	30.03	74.86	80.2833	108.6667	0.40615
SEPCO	0.1673	30.03	74.86	80.2917	108.6667	0.6493
Japan	1	30.03	74.87	80.2833	108.6667	0.38802
Saba	0.03	30.03	74.87	80.2833	108.6667	0.1164
AES Lalpir	0.03	30.03	74.89	80.2833	108.6667	0.11638
AES Pak Gen	0.03	30.03	74.89	80.2833	108.6667	0.11638
Chashnup						
Davis						
Altern	0.12	30.03	74.87	80.2917	108.6667	0.46568
Northern						
Total						



Managing Director
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Variable O&M Cost for FY____2010-11_____


NAME OF POWER STATION	Ref: Var. O&M Ps./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY____ Rs./US\$	US CIP FY____	Revised Var. O&M Ps./KwH
Liberty (C.C)	0.058	30.03	74.8701	84.709	108.6667	0.24303
Habibullah	0.078	30.03	74.16	84.71	108.6667	0.33
Fauji	0.1316	30.03	74.16	84.7973	108.6667	0.551356
Uch (C.C)	0.414	30.03	74.16	84.709	108.6667	0.1751
Rousch	0.049	30.03	74.86	84.709	108.6667	0.20535
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	84.6973	108.6667	0.43866
SEPCO	0.1673	30.03	74.86	84.709	108.6667	0.70104
Japan	1	30.03	74.87	84.6973	108.6667	0.41885
Saba	0.03	30.03	74.87	84.71	108.6667	0.1257
AES Lalpir	0.03	30.03	74.89	84.6983	108.6667	0.12566
AES Pak Gen	0.03	30.03	74.89	84.6983	108.6667	0.12566
Chashnup						
Davis						
Altern	0.12	30.03	74.87	84.709	108.6667	0.5028
Northern						
Total						

Managing Director NTDC
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)

Variable O&M Cost for FY____2011-2012____

NAME OF POWER STATION	Ref: Var. O&M Ps./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY____ Rs./US\$	US CIP FY____	Revised Var. O&M Ps./KwH
Liberty (C.C)	0.058	30.03	74.8701	85.4726	113.9333	0.25121
Habibullah	0.078	30.03	74.16	85.4726	113.9333	0.3848
Fauji	0.1316	30.03	74.16	85.42	113.9333	0.569643
Uch (C.C)	0.414	30.03	74.16	85.4726	113.9333	0.181
Rousch	0.49	30.03	74.86	85.4726	113.9333	0.21226
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	85.42	113.9333	0.4532
SEPCO	0.1673	30.03	74.86	85.4726	113.9333	0.72464
Japan	1	30.03	74.87	85.42	113.9333	0.43274
Saba	0.03	30.03	74.87	85.4726	113.9333	0.1299
AES Lalpir	0.03	30.03	74.89	85.42	113.9333	0.12982
AES Pak Gen	0.03	30.03	74.89	85.42	113.9333	0.12982
Chashnup						
Davis						
Altern	0.12	30.03	74.87	85.4726	113.9333	0.5198
Northern						
Total						


Managing Director NTD
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)


Variable O&M Cost for FY 2012-2013

Jul-Dec

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Indexed Rate Var. O&M Rs./Kwh
Liberty (C.C)	0.058	30.03	74.8701	85.4726	116.8833	0.27543
Habibullah	0.088	30.03	74.16	85.4726	116.8833	0.4216
Fauji	0.1316	30.03	74.16	85.42	116.8833	0.623651
Uch (C.C)	0.414	30.03	74.16	85.4726	116.8833	0.1981
Rousch	0.49	30.03	74.86	85.4726	116.8833	0.23273
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	85.42	116.8833	0.49617
SEPCO	0.1523	30.03	74.86	85.4726	116.8833	0.79387
Japan	1	30.03	74.87	85.42	116.8833	0.47377
Saba	0.03	30.03	74.87	85.4726	116.8833	0.1424
AES Lalpir	0.03	30.03	74.89	85.42	116.8833	0.14213
AES Pak Gen	0.03	30.03	74.89	85.42	118.6667	0.1421
Chashnup						
Davis						
Altern	0.12	30.03	74.87	85.4726	116.8833	0.5699
Northern						
Total						

Jan-Jun

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Indexed Rate Var. O&M Rs./Kwh
Liberty (C.C)	0.058	30.03	74.8701	85.4726	117.9333	0.2906
Habibullah	0.088	30.03	74.16	85.4726	117.9333	0.3945
Fauji	0.1316	30.03	74.16	85.42	117.9333	0.6592223
Uch (C.C)	0.414	30.03	74.16	85.4726	117.9333	0.2094
Rousch	0.49	30.03	74.86	85.4726	117.9333	0.24553
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	85.42	117.9333	0.52447
SEPCO	0.1523	30.03	74.86	85.4726	117.9333	0.83823
Japan	1	30.03	74.87	85.42	117.9333	0.5008
Saba	0.03	30.03	74.87	85.4726	116.8833	0.1424
AES Lalpir	0.03	30.03	74.89	85.42	117.9333	0.15024
AES Pak Gen	0.03	30.03	74.89	85.42	117.9333	0.15024
Chashnup						
Davis						
Altern	0.12	30.03	74.87	85.4726	117.9333	0.6012
Northern						
Total						


 Managing Director WAPDA
 WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)


Variable O&M Cost for FY ____ 2013-2014 ____

Jul-Dec

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY ____ Rs./US\$	US CIP FY ____	Indexed Rate Var. O&M Rs./KwH
Liberty (C.C)	0.058	30.03	74.8701	85.4726	118.6667	0.30081
Habibullah	0.088	30.03	74.16	85.4726	118.6667	0.46078
Fauji	0.1316	30.03	74.16	85.42	118.6667	0.682541
Uch (C.C)	0.414	30.03	74.16	85.4726	118.6667	0.2168
Rousch	0.49	30.03	74.86	85.4726	118.6667	0.25417
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	85.42	118.6667	0.54302
SEPCO	0.1523	30.03	74.86	85.4726	118.6667	0.83823
Japan	1	30.03	74.87	85.42	118.6667	0.5008
Saba	0.03	30.03	74.87	85.4726	118.6667	0.1556
AES Lalpir	0.03	30.03	74.89	85.42	118.6667	0.15555
AES Pak Gen	0.03	30.03	74.89	85.42	118.6667	0.15555
Chashnup						
Davis						
Altern	0.12	30.03	74.87	85.4726	118.6667	0.6224
Northern						
Total						

Jan-Jun

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY ____ Rs./US\$	US CIP FY ____	Indexed Rate Var. O&M Rs./KwH
Liberty (C.C)	0.058	30.03	74.8701	85.4726	119.6333	0.32297
Habibullah	0.088	30.03	74.16	85.4726	119.6333	0.43849
Fauji	0.1316	30.03	74.16	85.42	119.6333	0.732798
Uch (C.C)	0.414	30.03	74.16	85.4726	119.6333	0.2327
Rousch	0.49	30.03	74.86	85.4726	119.6333	0.27441
HUBCO	0.0372					
KEL	0.1047	30.03	74.86	85.42	119.6333	0.58301
SEPCO	0.1523	30.03	74.86	85.4726	119.6333	0.93414
Japan	1	30.03	74.87	85.42	119.6333	0
Saba	0.03	30.03	74.87	85.4726	119.6333	0.1675
AES Lalpir	0.03	30.03	74.89	85.42	119.6333	0.16701
AES Pak Gen	0.03	30.03	74.89	85.42	119.6333	0.16701
Chashnup						
Davis						
Altern	0.12	30.03	74.87	85.4726	119.6333	0.6682
Northern						
Total						


Managing Director NTDC
WAPDA House Lahore.


INDEPENDENT POWER PRODUCERS (IPPs)Variable O&M Cost
Financial Year 2014-15

July - December

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	100.5749	108.0167	0.3130
Habibullah	0.0880	30.03	66.42	100.5749	108.0167	0.4793
Fauji	0.1316	30.03	67.06	100.5749	108.0167	0.7099
Uch (C.C)	0.4140	30.03	66.42	100.5749	108.0167	2.2549
Rousch	0.4900	30.03	67.03	100.5749	108.0167	2.6446
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	100.5749	108.0167	0.5648
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.06	100.5749	108.0167	0.1618
AES Lalpir	0.0300	30.03	67.08	100.5749	108.0167	0.1618
AES Pak Gen	0.0300	30.03	67.08	100.5749	108.0167	0.1618
Chashnup						
Davis	0.0900	30.03	67.03	100.5749	108.0167	0.4857
Altern	0.1200	30.03	67.03	100.5749	108.0167	0.6477
Northern						
Total						

Jan- Jun

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	100.2001	132.2427	0.3818
Habibullah	0.0880	30.03	66.42	100.2001	110.06	0.4865
Fauji	0.1316	30.03	67.03	100.2001	110.06	0.7210
Uch (C.C)	0.4140	30.03	66.42	100.2001	110.06	2.2890
Rousch	0.4900	30.03	67.03	100.2001	110.06	2.6846
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	100.2001	110.06	0.5734
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.07	100.2001	110.06	0.1643
AES Lalpir	0.0300	30.03	67.08	100.2001	110.06	0.1642
AES Pak Gen	0.0300	30.03	67.08	100.2001	110.06	0.1642
Chashnup						
Davis	0.0900	30.03	67.03	100.2001	132.2427	0.5925
Altern	0.1200	30.03	67.03	100.2001	132.2427	0.7900
Northern						
Total						


Managing Director NTDC
WAPDA House Lahore

INDEPENDENT POWER PRODUCERS (IPPs)


Variable O&M Cost
Financial Year 2015-16

July - December

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	102.7314	111.7198	0.3307
Habibullah	0.0880	30.03	66.42	102.7314	111.7198	0.5064
Fauji	0.1316	30.03	67.06	102.7314	111.7198	0.7500
Uch (C.C)	0.4140	30.03	66.42	102.7314	111.7198	2.3822
Rousch	0.4900	30.03	67.03	102.7314	111.7198	2.7940
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	102.7314	111.7198	0.5967
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.06	102.7314	111.7198	0.1710
AES Lalpir	0.0300	30.03	67.08	102.7314	111.7198	0.1709
AES Pak Gen	0.0300	30.03	67.08	102.7314	111.7198	0.1709
Chashnup						
Davis	0.0900	30.03	67.03	102.7314	111.7198	0.5132
Altern	0.1200	30.03	67.03	102.7314	111.7198	0.6842
Northern						
Total						

Jan- Jun

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	105.3266	113.4062	0.3442
Habibullah	0.0880	30.03	66.42	105.3266	113.4062	0.5270
Fauji	0.1316	30.03	67.03	105.3266	113.4062	0.7809
Uch (C.C)	0.4140	30.03	66.42	105.3266	113.4062	2.4793
Rousch	0.4900	30.03	67.03	105.3266	113.4062	2.9078
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	105.3266	113.4062	0.6210
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.07	105.3266	113.4062	0.1779
AES Lalpir	0.0300	30.03	67.08	105.3266	113.4062	0.1779
AES Pak Gen	0.0300	30.03	67.08	105.3266	113.4062	0.1779
Chashnup						
Davis	0.0900	30.03	67.03	105.3266	113.4062	0.5341
Altern	0.1200	30.03	67.03	105.3266	113.4062	0.7121
Northern						
Total						


Managing Director
WAPDA House Lahore.

INDEPENDENT POWER PRODUCERS (IPPs)


Variable O&M Cost
Financial Year 2016-17

July - December

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	107.9873	115.1179	0.3814
Habibullah	0.0880	30.03	66.42	107.9873	115.1179	0.5485
Fauji	0.1316	30.03	67.06	107.9873	115.1179	0.8124
Uch (C.C)	0.4140	30.03	66.42	107.9873	115.1179	2.5803
Rousch	0.4900	30.03	67.03	107.9873	115.1179	3.0262
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	107.9873	115.1179	0.6463
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.06	107.9873	115.1179	0.1852
AES Lalpir	0.0300	30.03	67.08	107.9873	115.1179	0.1851
AES Pak Gen	0.0300	30.03	67.08	107.9873	115.1179	0.1851
Chashnup						
Davis	0.0900	30.03	67.03	111.0159	119.2303	0.5918
Altern	0.1200	30.03	67.03	111.0159	119.2303	0.7891
Northern						
Total						


Jan- Jun

NAME OF POWER STATION	Ref: Var. O&M Rs./kWh	Ref: Exch Rate Rs./kWh	Ref: US CPI	Exch Rate for FY _____ Rs./US\$	US CIP FY _____	Revised Var. O&M Rs./Kwh
Liberty (C.C)	0.0580	30.03	67.03	113.7913	116.8555	0.4007
Habibullah	0.0880	30.03	66.42	110.7153	116.8555	0.5708
Fauji	0.1316	30.03	67.03	110.7153	116.8555	0.8458
Uch (C.C)	0.4140	30.03	66.42	110.7153	116.8555	2.6854
Rousch	0.4900	30.03	67.03	110.7153	116.8555	3.1495
HUBCO	0.0372					
KEL	0.1047	30.03	67.06	110.7153	116.8555	0.6726
SEPCO	0.1673	30.03				
Japan	1.0000	30.03				
Saba	0.0300	30.03	67.07	110.7153	116.8555	0.1927
AES Lalpir	0.0300	30.03	67.08	110.7153	116.8555	0.1927
AES Pak Gen	0.0300	30.03	67.08	110.7153	116.8555	0.1927
Chashnup						
Davis	0.0900	30.03	67.03	113.7913	122.2110	0.6218
Altern	0.1200	30.03	67.03	113.7913	122.2110	0.7422
Northern						
Total						


Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION AND DESPATCH COMPANY
Local Loans (Others)

Sr. No.	Loan	Interet Rate	Remaining Years	First Half of FY 2012-13				Second Half of FY 2012-13			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	Sahiwal Sub Station (SSS)(UBL)	KIBOR+2%	5	930,257,072.00	-	84,568,879.00	845,688,193.00	845,688,193.00	-	84,568,879.00	761,119,314.00
2	Eight Grid Station (ESS) (UBL)	KIBOR+2.15%	5	539,332,784.00	-	41,487,137.00	497,845,647.00	497,845,647.00	-	41,487,137.00	456,358,510.00
3	KESC Interconnection (HBL)	KIBOR+1.90%	5	797,391,223.00	-	98,300,000.00	699,091,223.00	699,091,223.00	-	98,300,000.00	600,791,223.00
4	Muzaffar Gar Chatti (MGT) (HBL)	KIBOR+2.15%	5	2,575,995,683.00	-	255,000,000.00	2,320,995,683.00	2,320,995,683.00	-	318,234,778.00	2,002,760,905.00
	TOTAL			4,842,976,762.00	-	479,356,016.00	4,363,620,746.00	4,363,620,746.00	-	542,590,794.00	3,821,029,952.00


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
INTEREST ON LOCAL LOANS (Other)

Sr. No.	Loans	FY 2013-14		
		1st Half	2nd Half	Total
1	Sahiwal Sub Station (SSS)(UBL)	42,684,528.00	40,107,863.00	82,792,391.00
2	Eight Grid Station (ESS) (UBL)	23,652,260.00	23,617,832.00	47,270,092.00
3	KESC Interconnection (HBL)	30,317,134.41	29,602,945.35	59,920,079.76
4	Muzaffar Gar Ghatti (MGT) (HBL)	96,947,224.00	98,230,391.00	195,177,615.00
5	Short Term Laon	-	-	-
	TOTAL	193,601,146.41	191,559,031.35	385,160,177.76


 Managing Director, NTD
 WAPDA Head Office, Islamabad

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NATIONAL TRANSMISSION AND DESPATCH COMPANY
INTEREST ON LOCAL LOANS (Other)


Sr. No.	Loans	FY 2014-15		
		1st Half	2nd Half	Total
1	Sahiwal Sub Station (SSS)(UBL)	38,330,805.75	32,854,970.84	71,185,776.59
2	Eight Grid Station (ESS) (UBL)	23,709,898.99	21,075,465.79	44,785,364.77
3	KESC Interconnection (HBL)	26,272,429.50	19,882,929.50	46,155,358.99
4	Muzaffar Gar Ghatti (MGT) (HBL)	103,522,968.76	86,024,382.90	189,547,351.66
5	Neelum Jehlum Loan	75,000,000.00	284,375,000.00	359,375,000.00
	TOTAL	266,836,102.99	444,212,749.01	711,048,852.01



Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
Local Loans (Others) & TFCs

Sr. No.	Loan	Interest Rate	Remaining Years	First Half of FY 2013-14				Second Half of FY 2013-14			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	Sahiwal Sub Station (SSS)(UBL)	KIBOR+2%	4	761,119,314.00	-	84,568,879.00	676,550,435.00	676,550,435.00	-	84,568,879.00	591,981,556.00
2	Eight Grid Station (ESS) (UBL)	KIBOR+2.15%	4	456,358,510.00	-	41,487,137.00	414,871,373.00	414,871,373.00	-	41,487,137.00	373,384,236.00
3	KESC Interconnection (HBL)	KIBOR+1.90%	4	600,791,223.00	-	98,300,000.00	502,491,223.00	502,491,223.00	-	98,300,000.00	404,191,223.00
4	Muzaffar Gar Ghatti (MGT) (HBL)	KIBOR+2.15%	4	2,002,760,905.00	-	255,000,000.00	1,747,760,905.00	1,747,760,905.00	-	255,000,000.00	1,492,760,905.00
5	Short Term Loan	KIBOR+2%		-	-	-	-	-	-	-	-
	TOTAL			3,821,029,952.00	-	479,356,016.00	3,341,673,936.00	3,341,673,936.00	-	479,356,016.00	2,862,317,920.00


Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION AND DESPATCH COMPANY
Local Loans (Others)

Sr. No.	Loan	Interest Rate	Remaining Years	First Half of FY 2014-15				Second Half of FY 2014-15			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	Sahiwal Sub Station (SSS)(UBL)	KIBOR+2%	3	591,981,556.00	-	84,568,879.00	507,412,677.00	507,412,677.00	-	84,568,879.00	422,843,798.00
2	Eight Grid Station (ESS) (UBL)	KIBOR+2.15%	3	373,384,236.00	-	41,487,137.00	331,897,099.00	331,897,099.00	-	41,487,137.00	290,409,962.00
3	KESC Interconnection (HBL)	KIBOR+1.90%	3	404,191,223.00	-	98,300,000.00	305,891,223.00	305,891,223.00	-	98,300,000.00	207,591,223.00
4	Muzaffar Gar Ghatti (MGT) (HBL)	KIBOR+2.15%	3	1,492,760,905.00	-	255,000,000.00	1,237,760,905.00	1,237,760,905.00	-	255,000,000.00	982,760,905.00
5	Short Term Laon	KIBOR+1.85%	12	-	2,500,000,000.00	-	2,500,000,000.00	2,500,000,000.00	3,500,000,000.00	-	6,000,000,000.00
	TOTAL			2,862,317,920.00	2,500,000,000.00	479,356,016.00	4,882,961,904.00	4,882,961,904.00	3,500,000,000.00	479,356,016.00	7,903,605,888.00


Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION AND DESPATCH COMPANY
GOP RELENT LOANS TO NTDC

Sr. No.	Loan	Interest Rate	Remaining Years	First Half of FY 2012-13				Second Half of FY 2012-13			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	ADB-2289-PAK	12.00%	9	4,522,423,361	323,067,697	-	4,845,491,058	4,845,491,058	-	288,021,852	4,557,469,206
2	ADB-2290-PAK	7.50%	9	167,630,448	53,541,489	-	221,171,937	221,171,937	8,529,044	6,436,416	223,264,565
3	ADB-2396-PAK	17.00%	11	6,475,275,071	1,468,670,842	-	7,943,945,913	7,943,945,913	1,378,883,283	382,317,143	8,940,512,053
4	ADB-2846-PAK	15.00%	19	-	16,963,735	-	16,963,735	16,963,735	17,932,497	-	34,896,232
5	PK-P-54	11.07%	11	2,438,210,001	92,398,260	-	2,530,608,261	2,530,608,261	788,319,741	60,889,515	3,258,038,488
6	PK-P-56	17.00%	10	1,167,278,239	388,017,849	-	1,555,296,088	1,555,296,088	2,687,227	81,681,683	1,476,301,632
7	PK-P-58	17.00%	11	4,269,215,036	610,236,455	-	4,879,451,491	4,879,451,491	287,009,743	48,825,820	5,117,635,414
8	PK-P-61	15.00%	11	412,321,009	889,089,416	-	1,301,410,425	1,301,410,425	979,725,967	1,164,266	2,279,972,126
9	Kuwait Fund-548	17.00%	6	121,344,228	40,494,680	-	161,838,908	161,838,908	5,069,752	13,117,777	153,790,883
10	BMZ 200365882	12.50%	7	484,240,721	-	-	484,240,721	484,240,721	-	53,804,525	430,436,197
11	World bank Loan No. 7565-PK, 4463-PK & 4464-PK	17.00%	10	1,344,008,197	48,314,874	-	1,392,323,071	1,392,323,071	137,754,689	77,389,365	1,452,688,395
12	EDCF Loan No. PAK-2	KIBDR+2%	10	1,133,039,055	-	-	1,133,039,055	1,133,039,055	-	90,518,196	1,042,520,859
13	EDCF Loan No. PAK-5 (SP)	15.00%	10	-	77,010,193	-	77,010,193	77,010,193	616,888,801	-	693,898,994
14	KFW Frankfurt am Main	17.00%	11	7,742,476	-	-	7,742,476	7,742,476	-	520,605	7,221,871
	Total			22,542,727,842	4,007,805,490	-	26,550,533,332	26,550,533,332	4,222,800,745	1,104,687,162	29,668,646,915


Managing Director NTDC
WAPDA House Lahore.


NATIONAL TRANSMISSION AND DESPATCH COMPANY
INTEREST ON GOP RELENT LOANS TO NTDC

Sr. No.	Loans	FY 2013-14				
		1st Half		2nd Half		Total
		Interest	Ex.Risk	Interest	Ex.Risk	
1	ADB-2289-PAK	-	-	248,041,743	248,041,743	496,083,487
2	ADB-2290-PAK	-	-	3,652,899	14,611,597	18,264,497
3	ADB-2396-PAK	-	-	1,196,128,378	652,433,660	1,848,562,038
4	ADB-2846-PAK	-	-	4,555,109	3,777,407	8,332,516
5	PK-P-54	-	-	154,225,265	182,515,107	336,740,372
6	PK-P-56	-	-	152,336,206	83,092,476	235,428,682
7	PK-P-58	-	-	542,240,244	295,767,406	838,007,650
8	PK-P-61	-	-	306,615,490	254,266,504	560,881,993
9	Kuwait Fund-548	-	-	17,550,957	9,573,249	27,124,206
10	BMZ 200365882	-	-	24,481,059	22,597,900	47,078,959
11	World bank Loan No.7565-PK, 4463-PK & 4464-PK	-	-	148,181,053	80,826,029	229,007,082
12	EDCF Loan No.PAK-2	-	-	58,347,862	65,071,965	123,419,827
13	EDCF Loan No.PAK-5 (SP)	-	-	62,363,021	51,715,676	114,078,698
14	KFW Frankfurt am Main	-	-	1,280,394	698,397	1,978,791
	Total	-	-	2,919,999,680	1,964,989,117	4,884,988,797


 Managing Director
 WAPDA House, Islamabad


NATIONAL TRANSMISSION AND DESPATCH COMPANY
GOP RELENT LOANS TO NTDC

Sr. No.	Loan	Interet Rate	Remaining Years	First Half of FY 2013-14				Second Half of FY 2013-14			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	ADB-2289-PAK	12.00%	8	4,557,469,206	-	-	4,557,469,206	4,557,469,206	-	423,440,150	4,134,029,056
2	ADB-2290-PAK	7.50%	8	223,264,565	48,096,628	-	271,361,193	271,361,193	21,979,021	16,119,403	277,220,811
3	ADB-2396-PAK	17.00%	10	8,940,512,053	2,821,617,868	-	11,762,129,921	11,762,129,921	1,606,243,017	507,746,493	12,860,626,445
4	ADB-2846-PAK	15.00%	18	34,896,232	19,256,697	-	54,152,929	54,152,929	18,272,952	-	72,425,881
5	PK-P-54	11.07%	10	3,258,038,488	-	-	3,258,038,488	3,258,038,488	-	216,120,044	3,041,918,444
6	PK-P-56	17.00%	9	1,476,301,632	8,549,873	-	1,484,851,505	1,484,851,505	1,174,923	98,690,596	1,387,335,832
7	PK-P-58	17.00%	10	5,117,635,414	168,132,254	-	5,285,767,668	5,285,767,668	225,517,581	351,699,101	5,159,586,148
8	PK-P-61	15.00%	10	2,279,972,126	909,777,766	-	3,189,749,892	3,189,749,892	2,915,889,059	34,263,061	6,071,375,890
9	Kuwait Fund-548	17.00%	5	153,790,883	21,224,192	-	175,015,075	175,015,075	-	15,460,921	159,554,154
10	BMZ 200365882	12.50%	6	430,436,197	-	-	430,436,197	430,436,197	-	53,804,525	376,631,672
11	World bank Loan No.7565-PK, 4463-PK & 4464-PK	17.00%	9	1,452,688,395	-	-	1,452,688,395	1,452,688,395	22,796,127	115,147,166	1,360,337,356
12	EDCF Loan No.PAK-2	KIBOR+2%	9	1,042,520,859	136,786,516	-	1,179,307,375	1,179,307,375	-	94,774,624	1,084,532,752
13	EDCF Loan No.PAK-5 (SP)	15.00%	9	693,898,994	79,212,915	-	773,111,909	773,111,909	-	-	773,111,909
14	KFW Frankfurt am Main	17.00%	10	7,221,871	5,521,531	-	12,743,402	12,743,402	-	601,822	12,141,580
	Total			29,668,646,915	4,218,176,239	-	33,886,823,154	33,886,823,154	4,811,872,680	1,927,867,905	36,770,827,929


 Manager
 VAPPA

NATIONAL TRANSMISSION AND DESPATCH COMPANY
INTEREST ON GOP RELENT LOANS TO NTDC

Sr. No.	Loans	FY 2013-14				
		1st Half		2nd Half		Total
		Interest	Ex.Risk	Interest	Ex.Risk	
1	ADB-2289-PAK	-	-	248,041,743	248,041,743	496,083,487
2	ADB-2290-PAK	-	-	3,652,899	14,611,597	18,264,497
3	ADB-2396-PAK	-	-	1,196,128,378	652,433,660	1,848,562,038
4	ADB-2846-PAK	-	-	4,555,109	3,777,407	8,332,516
5	PK-P-54	-	-	154,225,265	182,515,107	336,740,372
6	PK-P-56	-	-	152,336,206	83,092,476	235,428,682
7	PK-P-58	-	-	542,240,244	295,767,406	838,007,650
8	PK-P-61	-	-	306,615,490	254,266,504	560,881,993
9	Kuwait Fund-548	-	-	17,550,957	9,573,249	27,124,206
10	BMZ 200365882	-	-	24,481,059	22,597,900	47,078,959
11	World bank Loan No.7565-PK, 4463-PK & 4464-PK	-	-	148,181,053	80,826,029	229,007,082
12	EDCF Loan No.PAK-2	-	-	58,347,862	65,071,965	123,419,827
13	EDCF Loan No.PAK-5 (SP)	-	-	62,363,021	51,715,676	114,078,698
14	KFW Frankfurt am Main	-	-	1,280,394	698,397	1,978,791
	Total	-	-	2,919,999,680	1,964,989,117	4,884,988,797


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
GOP RELENT LOANS TO NTDC

T-4(d-i)

Sr. No.	Loan	Interest Rate	Remaining Years	First Half of FY 2014-15				Second Half of FY 2014-15			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	ADB-2289-PAK	12.00%	7	4,134,029,056	-	-	4,134,029,056	4,134,029,056	-	918,673,124	3,215,355,932
2	ADB-2290-PAK	7.50%	7	277,220,811	50,003,253	-	327,224,064	327,224,064	62,540,123	54,791,714	334,972,473
3	ADB-2396-PAK	17.00%	9	12,860,626,445	1,000,000,000	-	13,860,626,445	13,860,626,445	-	1,185,115,452	12,675,510,993
4	ADB-2846-PAK	15.00%	17	72,425,881	1,200,250,123	-	1,272,676,004	1,272,676,004	3,588,428,240	-	4,861,104,244
5	ADB-T-IV	15.00%	20	-	50,000,000	-	50,000,000	50,000,000	2,550,000,000	-	2,600,000,000
6	PK-P-54	11.07%	9	3,041,918,444	-	-	3,041,918,444	3,041,918,444	-	608,383,689	2,433,534,755
7	PK-P-56	17.00%	8	1,387,335,832	40,000,250	-	1,427,336,082	1,427,336,082	60,250,000	276,602,740	1,210,983,342
8	PK-P-58	17.00%	9	5,159,586,148	480,000,000	-	5,639,586,148	5,639,586,148	320,000,000	880,898,859	5,078,687,290
9	PK-P-61	15.00%	9	6,071,375,890	600,000,000	-	6,671,375,890	6,671,375,890	400,000,000	416,877,422	6,654,498,469
10	Kuwait Fund-548	17.00%	4	159,554,154	-	-	159,554,154	159,554,154	-	50,354,826	109,199,328
11	BMZ 200365882	12.50%	5	376,631,672	-	-	376,631,672	376,631,672	-	107,609,049	269,022,623
12	World bank Loan No. 7565-PK, 4463-PK & 4464-PK	17.00%	8	1,360,337,356	50,523,005	-	1,410,860,361	1,410,860,361	-	270,041,149	1,140,819,212
13	EDCF Loan No. PAK-2	KIBOR+2%	8	1,084,532,752	-	-	1,084,532,752	1,084,532,752	-	204,747,749	879,785,003
14	EDCF Loan No. PAK-5 (SP)	15.00%	8	773,111,909	-	-	773,111,909	773,111,909	-	147,581,234	625,530,675
15	KFW Frankfurt am Main	17.00%	9	12,141,580	598,005,006	-	610,146,586	610,146,586	200,000,000	1,755,798	808,390,787
	Total			36,770,827,929	4,068,781,637	-	40,839,609,566	40,839,609,566	7,181,218,363	5,123,432,804	42,897,395,125

New Relent Loans

Sr. No.	Loan	Interest Rate	Remaining Years	First Half of FY 2014-15				Second Half of FY 2014-15			
				O/Bal	Disbursement	Repayment	C/Bal	O/Bal	Disbursement	Repayment	C/Bal
1	CASA-1000	15.00%	15	-	75,000,000	-	75,000,000	75,000,000	925,000,000	-	1,000,000,000
	Total			-	75,000,000	-	75,000,000	75,000,000	925,000,000	-	1,000,000,000


Managing Director NTDC
WAPDA House Lahore.

NATIONAL TRANSMISSION AND DESPATCH COMPANY
INTEREST ON GOP RELENT LOANS TO NTDC

Sr. No.	Loans	FY 2014-15				
		1st Half		2nd Half		Total
		Interest	Ex.Risk	Interest	Ex.Risk	
1	ADB-2289-PAK	-	-	220,041,743	220,041,743	440,083,487
2	ADB-2290-PAK	-	-	4,108,361	16,633,444	20,741,805
3	ADB-2396-PAK	-	-	1,517,668,909	828,637,587	2,346,306,496
4	ADB-2846-PAK	-	-	217,484,990	181,548,528	399,033,519
5	ADB-T-IV	-	-	106,650,000	88,100,000	194,750,000
6	PK-P-54	-	-	138,225,265	164,515,107	302,740,372
7	PK-P-56	-	-	160,320,719	87,447,665	247,768,384
8	PK-P-58	-	-	569,954,476	310,975,169	880,929,645
9	PK-P-61	-	-	444,452,823	369,253,561	813,706,384
10	Kuwait Fund-548	-	-	17,550,957	9,573,249	27,124,206
11	BMZ 200365882	-	-	24,481,059	22,597,900	47,078,959
12	World bank Loan No.7565-PK, 4463-PK & 4464-PK	-	-	155,194,640	84,651,622	239,846,261
13	EDCF Loan No.PAK-2	-	-	68,931,686	51,748,227	120,679,913
14	EDCF Loan No.PAK-5 (SP)	-	-	57,395,177	47,571,610	104,966,786
15	KFW Frankfurt am Main	-	-	39,916,124	12,608,795	52,524,920
	Total	-	-	3,742,376,929	2,495,904,207	6,238,281,135

New Relent Loans

Sr. No.	Loans	FY 2014-15				
		1st Half		2nd Half		Total
		Interest	Ex.Risk	Interest	Ex.Risk	
1	CASA-1000	-	-	44,075,000	36,550,000	80,625,000
	Total	-	-	44,075,000	36,550,000	80,625,000


Managing Director NTDC
WAPDA House Lahore.