National Electric Power Regulatory Authority
Islamic Republic of Pakistan

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No. NEPRA/TRF-365/NTDC-2016/7235-7237
May 4, 2018

Subject: **Decision of the Authority in the matter of Reconsideration Request filed by Ministry of Energy (Power Division) against Decision dated September 25, 2017 with respect to Transfer/Wheeling Charges –** [Case No. NEPRA/TRF-365/NTDC-2016]

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (15 pages) in Case No. NEPRA/TRF-365/NTDC-2016.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997) and Rule 16(11) of the National Electric Power Regulatory Authority Tariff (Standards and Procedure) Rules, 1998.

3. The Order Part of the Decision is to be notified in the Official Gazette.

Enclosure: As above

4/5/18

(Iftikhar Ali Khan)

Secretary
Ministry of Energy (Power Division)
'A' Block, Pak Secretariat
Islamabad

CC:

1. Secretary, Cabinet Division, Cabinet Secretariat, Islamabad.
2. Secretary, Ministry of Finance, 'Q' Block, Pak Secretariat, Islamabad.

DECISION OF THE AUTHORITY IN THE MATTER OF RECONSIDERATION REQUEST FILED BY MINISTRY OF ENERGY (POWER DIVISION) DECISION DATED SEPTEMBER 25, 2017 WITH RESPECT TO TRANSFER / WHEELING CHARGES

1. The Authority issued the tariff determination of National Transmission and Dispatch Company (Pvt) Ltd (herein after referred as "NTDCL" or the "Petitioner") vide letter Ref No. 5043 dated Apr 11, 2017. Being aggrieved from certain components of the referred tariff determination, NTDCL filed motion for leave for review on Apr 21, 2017. After conducting proceedings, the decision of the Authority on the review motion was issued on Sep 25, 2017.

2. Subsequently the Ministry of Energy (Power Division) Government of Pakistan (herein after referred as "MOE GoP") has filed the reconsideration of the tariff determination of NTDCL for the FY 2015-16 and FY 2016-17 on Oct 11, 2017 as per Rule 16(12) of Tariff (Standards & Procedure) Rules, 1998. The Authority admitted the reconsideration request filed by GOP and decided to provide an opportunity of hearing. Accordingly, the hearing was held on Nov 02, 2017 at NEPRA Head Office, which was attended by the representatives of Ministry of Energy (Power Division) and NTDCL.

3. Grounds for Reconsideration:

3.1 Following are the grounds requested by GOP to be reconsidered by the Authority in tariff determined for NTDCL for the FY 2015-16 and 2016-17:

i) Under-Assessment of Commercial Risks
ii) Actual Cost of Debt to be Considered
iii) Overstated Amount of Loans in Tariff
iv) Allowed level of Transmission & Transformation Losses Target to be Enhanced
v) Basis of MDI Calculation directed by the Authority

4. Intervener submissions:

4.1 All Pakistan Textile Mills Association (herein after referred as "APTMA") being the intervener vide their letter dated Oct 25, 2017 provided their comments on this reconsideration request filed by GOP.

5. Submissions of the Applicant & Decision

5.1 In view of the reconsideration request submitted by GoP, the Authority has closely considered the submissions, evidence submitted, comments of intervener and the rationale submitted by NTDCL in response thereof. All these grounds as reconsidered have been incorporated in relevant sections below.

6. Under Assessment of Commercial Risk

6.1 The Authority in the tariff determination dated April 11, 2017 had worked out WACC based on a 70:30 debt-equity structure with a beta factor of 0.8621 based on the commercial risk associated with NTDCL. Being aggrieved from the decision, GoP

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submitted that the Company is engaged in the transmission business and is equally, exposed to the same commercial risk, including terrorism etc. GoP has also submitted that there is a correlation between Ex-WAPDA Distribution Companies (DISCO's) and NTDCs invoicing and DISCO's revenue collection. Therefore, NTDCL's Beta factor should be the same 1.1 as in the case of DISCOS, since it is equally placed. The GoP in the reconsideration request has asked for the return of 16.6% to be allowed to NTDCL.

6.2 APTMA being the intervener has expressed that NTDCL is engaged in transmission business and not in revenue collection business from consumers like Ex-WAPDA DISCOs. There is no commercial risk to NTDCL. The areas exposed to commercial risk including terrorism are located mostly in KPK & Balochistan and there is no 500 Kv & 220Kv system in these two provinces. CPPA-G submits invoices to DISCOs and DISCOS disburse the invoiced amount. Therefore, DISCOS 132KV Transmission and Distribution system is exposed to risk and not NTDCL. APTMA therefore referred that the argument of GOP is not valid for claiming higher commercial risk for NTDCL.

6.3 In response to APTMA comments, NTDCL has submitted that the commercial risk assessment of NTDCL should be at par with XWDISCOS since the revenue collection of NTDCL is directly proportional to recovery of XWDISCOS, hence revenue collected from consumers is then passed on to NTDCL and generation companies. Therefore low collection on part of XWDISCOS has a direct impact on the whole power sector. NTDCL also submitted that it has 220kV and 500kV grid-stations in all provinces with various under construction, especially in KPK and Balochistan. There are several transmission lines and grid stations that have been exposed to terrorist attacks. NTDCL also referred to one recent example of Sheikh-Muhammadi Grid Station located in Peshawar which was hit by terrorists along with its associated Transmission Lines/ Towers. NTDC therefore expressed that it is equally exposed to commercial and security risks including terrorism as of XWDISCOS.

6.4 The Authority has considered the submissions and observed that NTDCL is a separate legal and commercial entity from DISCOS. Moreover the financial and commercial risk of NTDCL has substantially reduced after the segregation of power purchase business delegated to CPPA(G) Ltd. The Authority also noted that globally the risk associated with the distribution is considered higher than the transmission business. Moreover the issues related to diverse service provision and collections etc. are far complex more in distribution business. Therefore the rationale to place NTDCL at equal level with DISCOS does not merit reconsideration.

6.5 However, the Authority has also considered that in the present scenario with various power generation plants being constructed, NTDCL's role is more important to ensure transmission lines are timely available for respective new generation sources. Likewise Non availability of the transmission line will result in non-evacuation of the power from

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efficient power plants which will result in idle capacity payments. Thus the end-consumer will bear additional burden. The Authority therefore decided that at this stage considering specific prevailing risks, a return of 16% is allowed for the tariff years under consideration. This however should not be construed as an acceptance to higher business risk but is actually the associated evacuation risks in the sector. The Authority also considered that this is likely to have holistically a saving for the consumers with more funds available with NTDCL to be reinvested for projects to be completed timely for power evacuation from cheaper and efficient sources. The Authority while approving the return of 16% also directed that this return being allowed in this tariff is only at this important juncture and thus should translate into robust transmission network along with timely completion of in-progress projects by NTDCL.

7. <u>Actual cost of debt</u>

7.1 According to the MOE (GoP), the Authority in the tariff determination assessed the cost of debt as 12% based on the average 6-month KIBOR rate over the last six years (9.49%) plus 2.5% spread. GoP submitted that the NTDC is an infrastructure based company, which mostly manages its investment program through relent loans from GOP following the GOP Re-lent Loan Policy whereas comparative lesser debt is financed through local financial institutions. GoP submitted that most of the equipment involved in NTDC projects is procured from foreign vendors, therefore procurement involves large sums of foreign exchange. The loans, which have been presently obtained by NTDC, through GOP Policy, carries a cost of 15% approximately, which is to be allowed by the Authority. Therefore GoP submitted that while determining the Cost of Debt for NTDC, it is required to be considered that large Investment Program makes foreign loans inevitable for the Company, which have already been obtained and serviced by NTDC.

7.2 On this issue, APTMA has submitted that at this time NTDCL obtains loans and invests in its system, the system must improve and the losses & interruptions should reduce and voltage profile should also improve. These improvements in losses, interruptions and voltage profile are expected to bring savings to NTDCL on which it should retrieve the benefits from investments done on these three aspects instead of hiding its inefficiencies. ECC does not allow continuing with the inefficiencies despite huge debts obtained for betterment of the system. APTMA therefore expressed that GOP is approaching NEPRA for help of NTDCL without concrete reasons and its request may be declined.

7.3 In response to APTMA's comments on cost of debt, NTDCL has submitted that the interveners comments under the heading of Actual Cost of Debt such as savings through improvement in losses, interruptions and voltage profile has no relation with the matter under discussion i.e., Actual Cost of Debt, hence there is no scope for comments in this regard.

7.4 The Authority after considering the submissions has noted that NTDCL has been allowed

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all cost to be incurred on account of debt. This amount being considered relates to the notional treatment as debt over the allowed threshold of debt:quity ratio of 70:30. The Authority also noted that this amount over and above actual debt has also been provided adequate return based and thus needs no further enhancement reconsideration.

8. <u>Overstated Account of Loans</u>

8.1 Ministry of Energy (GoP) have submitted that the Authority in the tariff determination has allowed Return on Equity based on the amount net of loan of Rs. 80,849 million and Rs. 113,107 for FY 2015-16 and FY 2016-17 respectively. Being aggrieved from the aforesaid decision of the Authority it was submitted that while calculating Return on Equity (ROE), net long-term loans of NTDC were to be taken into account instead of gross loans. Hence, leaving out the impact of repayments in calculation of ROE. It was also submitted that the Authority has ignored the position that the amount of current maturity of the loans in the audited accounts of NTDC also includes an extraordinary adjustment against receivables from K-Electric made in pursuance of the decision of Economic Co-ordination Committee (ECC) dated April 04, 2009 (the "Decision"). In pursuance of that decision, an amount of Rs. 24.6 Billion has been held by NTDC as receivable from Government of Pakistan (GOP) in lieu of K-Electric, payables to NTDCL, this amount was to be therefore swapped against debt service, including a principal of Rs. 21.628 Billion (which lies in current maturity) and markup of Rs. 2.972 Billion (which lies in accrued mark-up). It was also submitted that two adjustments from GOP have been received so far by NTDC, out of which Rs. 1.636 Billion have been received during the FY 2015-16 and adjusted against the markup and Rs. 2.688 Billion (including Rs.2.349 billion against principal and Rs. 339 million against mark-up) is to be adjusted in the subsequent year. Hence, in giving effect to the Decision, necessary adjustments have been duly made in accounts of Federal Government as well as NTDC, which is reflected from the documents attached forwarded.

8.2 Considering this long outstanding adjustment since 2009, based on which NTDCL had earlier asked for different treatment to be given to its payable loans in tariff calculations, the Authority during the hearing dated Nov 02, 2017 directed the Ministry of Energy to provide supportive evidence with respect to the settlement of those loans against receivable of K-Electric. Later the NTDCL provided the following information;

i) Summary approved by ECC in its meeting April 04, 2009 submitted by MoWP.
ii) Claim of Rs. 24.6 billion for NTDCL submitted to Federal MoF through MoWP for issuance of non-cash sanction letter.
iii) Auditory latest accounts for the FY 2015-16 incorporating additional note by NTDCL Management.
iv) Finance Division response on requested adjustment vide their letters dated Apr 25, 2017 and Dec 26, 2017.

8.3 On this claimed treatment, APTMA submitted that consumers have not benefited from the re-lent loan of NTDC and facing low voltage and power supply interruptions due to

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over loading of 500KV system in Sheikhupura. APTMA also submitted that NTDCL proposed investment program of Rs. 42.33 billion in 2015-16 and Rs. 74.7 billion in 2016-17 is unrealistic and impossible to be implemented. In support of its comments, APTMA expressed following reasons;

a) Investment program reveals NTDCL to spend Rs. 117.063 Billion in 24 months starting from 1st July, 2015 to June 30, 2017 out of which 15 months have lapsed. The projects categories can be defined as follows:

- Completed Projects still need money for unfinished work
- Ongoing Projects
- PC-1 Approved Projects
- PC-1 Under Process

Project category wise investment program of the NTDCL as summarized by APTMA is as under:

Projects Category	Investment Program '	Donors		Self-Financing	Local Bank Not Named	GoP Financing	Total
		Identified	Not Identified				
Completed Projects	2015-16	890	0	150	0	0	1,040
	2016-17	488	0	30	0	0	518
	Sub-Total	1,378.	0	180	0	0	1,558
Ongoing Projects	2015-16	10,427	0	205	0	0	10,632
	2016-17	6,036	0	370	0	0	6,406
	Sub-Total	16,463	0	575	0	0	17,038
PC-1 Approved	2015-16	13,238	251	6,690	8,602	1,240	30,021
	2016-17	20,913	6,811	5,968	18,953	328	52,973
	Sub-Total	34,151	7,062	12,658	27,555	1,568	82,994
PC -1 Under Process	2015-16	628	42	0	0	0	670
	2016-17	13,335	1,469	0	0	0	14,804
	Sub-Total	13,963	1,511	0	0	0	15,474
Grand Total	2015-16	25,183	293	7,045	8,602	1,240	42,363
	2016-17	40,771	8,280	6,368	18,953	328	74,700
	Grand Total	65,954	8,573	13,413	27,555	1,568	117,063

b) As per above table Projects worth Rs. 8.573 billion though have been identified but would not be possible to be implemented since the donors for financing these projects have not yet been identified.

c) APTMA also stated that projects worth Rs. 27.555 billion though identified but their financing by the local banks have not yet been identified. Therefore, the likelihood of having such a mega size financing deal finalized to enable the petitioner implement these projects in the remaining months of the investment program period is next to impossible.

d) It was also submitted that projects identified worth Rs. 13,963 Billion and PC-1 preparation were under preparation when NTDCL filed petition for determination. PC-1 preparation and approval process takes time, therefore,

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inclusion of these projects in NTDCL's program shows the element of non-seriousness and its urge to earn 15.5% return by including it in the rate base.

e) APTMA also submitted the estimates of WIP for 2014-15, 2015-16 & 2016-17 are almost 43% of the rate base, which is too high as shown below;

Description	2014-15	2015-16	2016-17
Operating Assets	93,767	116,125	157,255
WIP	70,148	89,346	116,926
Total Rate Base	**163,915**	**205,471**	**274,181**
	43%	**43%**	**43%**

f) It was stated by APTMA that NTDCL has dumped Capital expenditure in the WIP just to earn return on it which is against the fundamental principle that the investments made must be used and useful to enable a return on it.

g) APTMA argued that cost benefit details of the projects are missing. Even targets with regards to existing transmission capability and new transmission capability after implementation of the investment program are missing in the petition of NTDCL.

8.4 In view of the above cited observations, APTMA expressed that NTDCL will hardly be able to spend about Rs. 20.164 Billion as against its requested amount. Therefore, the size of its investment program to be included in the rate base to earn a legitimate return, as decided by NEPRA, should not exceed Rs. 20.164 Billion and the amount of WIP should not be included in the rate base. Furthermore, APTMA also expressed that non-recovery of receivables and mark-up amounts from K-Electric is a fault and inefficiency on the part of NTDCL. GoP/ECC has never stopped NTDCL from recovery of receivables from K-Electric. APTMA therefore expressed that no latitude is required to be given to NTDCL on this account as the plea adopted by GoP is not justified.

8.5 In response to APTMA's comments, NTDCL submitted that it appears that the intervener has not considered the transactional modalities pertaining to the loans in question adjusted by GoP in lieu of K-Electric's (KE) receivables and has perceived it as non-recovery of receivables and mark-up amounts from KE. NTDCL in its response also expressed that;

i) Difference of Rs. 31 billion between marginal cost basis and DISCO average rate from 6/2006 to 7/2008 is KE's liability.

ii) Set-aside amount of Rs. 31 billion will be settled by GoP against GoP's own outstanding debts against NTDCL.

iii) Upon ECC decision the transaction regarding accounts receivable has been settled between NTDCL and KE, hence the question of inefficiency does not arise.

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8.6 The Authority considered the submissions of the MOE along with recent correspondence provided in support thereof. The Authority also considered the latest available audited financial statements of NTDCL for the FY 2015-16 and the relevant disclosure made therein. The Authority noted that the latest Audited Accounts have not adjusted the amount of receivables against KE dues with the loan amount payable to GoP by NTDCL. Likewise the Audited accounts for the FY 2015-16 also reflected that the current maturity of long term loans still has the GoP loan amount disclosed and incorporated as unsettled.

8.7 The Authority also considered that the MOE has justified this adjustment to be made for tariff purposes based on the Ministry of Finance letter dated April 25, 2017 which had simply stated the matter to be taken up with budget wing. The Authority further noted that the letter dated Dec 26, 2017 has acknowledged the pending non-cash adjustment, however at the same time has also expressed;

> *"Further, due to fiscal constraint, as no allocation could be made on this account in the budget during 2016-17 and 2017-18, therefore, necessary adjustment of balance amount of Rs. 20.276 billion will be made in due course through a non-cash sanction letter by MoF."*

8.8 In view of above factual position, the Authority considered that there have been efforts made by NTDCL recently, however no settlement has been made till to-date for these loans, therefore, the stance of the MOE is not substantially supported and the new evidence also does not provide required level of assurance based on which the Authority should set aside these loans in the tariff computations. The Authority therefore decided that no change is to be made in the earlier decision on the matter. The GoP and NTDCL should resolve this long outstanding issue as per the spirit of ECC decision taken in April 2009. The issue when resolved will be accordingly addressed in tariff computation.

9. <u>Allowed level of T&T Losses Target</u>

9.1 The Petitioner submitted that the Authority in tariff determination has reduced the capped level of 3% Transmission & Transformation (T&T) losses allowed to 2.8%. The Authority in tariff determination dated Apr 11, 2017 and review motion decision dated Sep 25, 2017 had allowed losses of 2.8%. Being aggrieved from the said decision of the Authority, the petitioner submitted that keeping in view the Generation, Transmission and Utilization trend due to emerging technologies, fixation of losses at 2.80% is not justified at this point in time.

9.2 The petitioner submitted that the present limit of T&T Losses allowed for NTDC doesn't allow margin for Harmonic losses, Low Power Factor and losses induced in NTDC System due to DISCOS load. Due to the anticipation of unprecedented increased generation being added to Power System (with more and more generation being added to 500kV System which has high corona loss component), losses of NTDC are bound to increase from Corona losses and loading conditions. Hence, additional losses be allowed for the

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same.

9.3 The Petitioner therefore submitted that NTDCL Margin for T&T Losses be fixed as following:

NTDC Maximum Losses Limit = 2.8% + [DISCO Harmonics Margin] + [DISCO Low Power Factor Margin] + [DISCO Load Shedding Margin] + [Corona Losses Margin]

9.4 The petitioner submitted that keeping in view the realistic facts & figures, the maximum cap level for T&T losses of NTDCL may please be fixed to at-least 3%. However, for future Authority may ask for independent third party study on the matter.

9.5 On the issue of T&T losses, APTMA has stated that NTDCL has recovered extra power transmitted cost since the T&T loss target determined by NEPRA has always been higher than the actual T&T loss of NTDCL for the same period as reported in Power Distribution Statistics Booklet issued by PEPCO as reproduced in table below:

Description	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
NEPRA Determined NTDCL	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
NTDCL 500/220 kV Actual*	3.0%	2.8%	N/A	2.7%	2.7%	2.6%
DISCOS 132/66kV Actual*	2.9%	2.9%	3.2%	3.2%	3.2%	2.1%

9.6 APTMA also submitted that DISCO's transmission network that comprises of 132/66 kV transmission voltages was 2.1% in 2015-16 whereas NTDCL transmission loss was 2.6%. Although NTDCL transmission network comprises of high voltage transmission lines such as 500/200 kV and its transmission loss should have been less than the DISCOS transmission loss but it is the other way around i.e. 0.5% higher than the DISCOS. APTMA expressed that in view of the above facts, realties and the technical consideration that transmission loss on high voltage transmission is always less than comparatively lower voltage level transmission. APTMA was therefore of the view that NTDCL T&T loss targets should be determined as or below 2.3% and 2.1% for 2015-16 and 2016-17 respectively.

9.7 NTDCL while responding to APTMA's comments on the T&T losses submitted that the T&T Losses stated by APTMA extracted from PEPCO documents are not based on NTDC's 500kV & 220kV System Metering Data therefore the same do not reflect true T&T losses of 500 KV & 220 KV system. The previous limit of 3% for T&T losses for NTDC had been determined on the results of Monthly Energy Purchase & Sale Data reported by CPPA. As per NEPRA's directions, NTDC has now started calculation of T&T Losses based on 500 & 220kV System only. The actual T&T Losses of NTDC's 500kV & 220kV System are around 3% therefore NTDCL is claiming 3% losses to be allowed for

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500 kV & 220 KV system.

9.8 The Authority considered the submitted actual T&T losses of NTDC's 500 kV and 220 kV system for the months of September and October, 2017 as reflected below;

September, 2017

Description	Energy Received	Energy Transmitted
Generation Points (kWh)	10,255,975,490	1,266,806,569
Distribution Points (kWh)	33,422,859	8,757,631,510
Total Energy (kWh)	10,289,398,349	10,024,438,079
T&T Losses		264,960,269
T&T Losses (%age)		2.6%

October, 2017

Description	Energy Received	Energy Transmitted
Generation Points (kWh)	8,697,266,127	741,612,827
Distribution Points (kWh)	32,312,029	7,739,289,000
Total Energy (kWh)	8,729,578,157	8,480,901,827
T&T Losses		248,676,330
T&T Losses (%age)		2.849%

9.9 The Authority observed that the actual losses of September 2017 were 2.6% whereas for Oct 2017 the losses were slightly over allowed T&T losses of 2.8%. The Authority also considered that setting the annual losses based on actual metering at CDPs data for only two months is not adequate. The Authority noted that the actual losses will vary over the period according to power flow trends. In certain months the technical losses over the 500/220 kV system will be significantly lower than 2.8% whereas in certain months such losses can be higher. In view of comments made by APTMA the Authority reconsidered the trend by reviewing the monthly data for the whole FY 2016-17 submitted by CPPA-G as part of its Fuel Cost Adjustment;

Jul, 16	Aug, 16	Sep, 16	Oct, 16	Nov, 16	Dec, 16	Jan, 17	Feb, 17	Mar, 17	Apr, 17	May, 17	Jun, 17
2.56%	**3.01%**	**1.71%**	**1.99%**	**1.21%**	**2.95%**	**3.89%**	**2.36%**	**2.76%**	**2.48%**	**1.11%**	**2.04%**

9.10 The Authority noted that these losses should be reduced further due to investment being allowed in improvement and expansion of existing system of NTDCL. Moreover positioning of new plants near load centers should also minimize the existing losses in near future which will be considered in subsequent tariffs.

9.11 Considering above aspects, the Authority noted that NTDCL's claim that T&T losses to be allowed up to 3% based on data for two (02) months cannot be justified. In view thereof, the Authority has decided to maintain its earlier decision.

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10. Basis for MDI calculation

10.1 The Authority vide its determination dated April 11, 2017 had directed NTDCL to file the next tariff petition i.e. for the FY 2017-18 on the basis of calculation of MDI on co-incidental basis and had also directed to share the latest progress on the implementation of system for recording of MDI on coincidental with the Authority.

10.2 In this regard the MoE (GoP) submitted that adaptation of co-incidental approach needs to be deliberated amongst all the stakeholders of the sector to ensure uniformity and, thereafter, any decision in this respect should be taken.

10.3 On the MDI based calculations, APTMA has submitted that basis & methodology of NTDCL's estimate of 17,175 MW in 2016-17 have not been provided in its petition. NTDCL has acknowledged in the petition that it is just a number to fulfill compliance to NEPRA's direction to submit the UoSC calculation based on the coincident demand basis. This has no effect on the revenue requirement of NTDCL. Total Capacity Availability as per PPA provisions in June 2016 as displayed on CPPA website was 21,612 MW. Considering the additional new generation coming on time in 2016-17, APTMA is of the opinion that the coincident demand stated as 17,175 MW in 2016-17 in the instant petition is understated. Therefore the GOP's stance on the issue carries no weight and may be rejected by Authority.

10.4 With respect to APTMA's comments on MDI calculations NTDCL submitted that calculation of MDI on Co-incidental basis is impractical at this stage due to the following reasons:

i) Sectorial harmony

Complete Power Sector, ranging from Generation Stations to Consumers of DISCOS, presently uses non co-incidental MDI for all billing purpose.

ii) Reliability of Non Co-incidental MDI metering data

At present, all stakeholders including Generators, NTDC & DISCOS rely on Non-coincidental MDI Metering Data jointly signed by respective Metering Committees, which is in all respects more reliable than indirectly ascertained Co-incidental MDI.

iii) Merging of DISCO'S 132KV system with NTDC

As per NEPRA directions vide NEPRA / SA(Tech)/LAT-01/17193-205 dated 18-10-2017, a steering committee has been formed to look into merging of 132 kV System of DISCOS with NTDCL. This step will completely redefine Common Delivery Metering Points of NTDC and efforts for coincidental MDI calculation will go wasted if taken up at this stage. Below is the head-wise summary of each of the grounds.

10.5 The submissions of NTDCL on this particular issue was considered by the Authority and it was noted that in its decision on NTDCL's review motion dated Sep 09, 2017, the Authority has already directed NTDCL to ensure calculation of MDI on coincidental basis with inclusive

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participation from DICSO's also. The MDI calculation on co-incidental basis has no impact on the revenue requirement of NTDCL. The Authority has therefore decided to maintain its earlier decision and NTDCL is directed to submit the next tariff petition on the basis of co-incidental demands.

11. Based on the above, NTDCL's tariff has been adjusted on account of fixed assets and loan repayments made during the period. In addition to the above the adjustment in tariff has been made on account of ROE. Accordingly the claimed and allowed tariff is as under:

Description	Claimed		Allowed	
	FY-16	FY-17	FY-16	FY-17
Revenue Requirement	39,499	48,336	30,754	34,251
Avg. MDI	19,190	19.442	19,243	19,243
Rs. /kW/Month	**171.52**	**207.18**	**133.18**	**148.33**

12. <u>**Revenue Requirement**</u>

12.1 Based on the assessment decisions referred in the preceding paragraphs, the revenue requirement for FY 2015-16 and FY 2016-17 has been assessed as under;

	Description	FY 2015-16	FY 2016-17
	Revenue Requirement	**30,754**	**34,251**
	Avg. MDI – MW	19,243	19,243
	Rs. /kW/M	**133.18**	**148.33**
A.	**General Establishment Costs – Rs. in Million**	**5,008**	**5,580**
	Pay & Allowances & Other Benefits (Rs. in Million)	3,754	4,031
	Pay & Allowances - Vacant posts (Rs. in Million)	69	245
	Employer's Share in Fund Contributions (Rs. in Million)	928	1,021
	Wages of Contractual Labour (Rs. in Million)	258	284
B.	**Administrative Costs** (Rs. in Million)	**393**	**411**
	Rent Rate & Taxes (Rs. in Million)	61	68
	Power Light etc. (Rs. in Million)	90	93
	Communication (Rs. in Million)	17	17
	Office Supplies & Other Expenses (Rs. in Million)	24	27
	Travelling Expenses (Rs. in Million)	164	169
	Professional Fee (Rs. in Million)	13	13
	Management Fees (Rs. in Million)	6	6

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	General Misc. Expenses (Rs. in Million)	17	18
C.	**Repair & Maintenance** (Rs. in Million)	**1,024**	**1,133**
	R&M of Fixed Assets (Rs. in Million)	856	959
	Vehicle Maintenance & Running Expenses (Rs. in Million)	168	174
D.	**Insurance** (Rs. in Million)	121	121
E.	**Depreciation** (Rs. in Million)	5,477	**5,944**
F.	**Finance Charges** (Rs. in Million)	1,498	**3,208**
G.	**Return on Equity** (Rs. in Million)	**13,410**	**15,324**
H.	**Prior Year Adjustment** (Rs. in Million)	5,104	**4,830**
I.	**Less: other income** (Rs. in Million)	1,282	2,353

13. ORDER

The Authority in accordance with the provisions of section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997 and Tariff (Standards & Procedure) Rules – 1998 hereby determines the tariff of NTDCL afresh and NTDCL is allowed to charge following tariff with terms and conditions as provided hereunder;

13.1 Use of System Charges

13.1.1 The FY 2015-16 has already lapsed, therefore, the Authority has incorporated the impact of difference in the tariff determined for the FY 2015-16 of 133.18/kW/Month and the tariff actually charged by the Petitioner during this period of Rs. 102.43/kW/Month till December 2015 and Rs. 126.75 /kW/Month till June 2016, in the assessed revenue requirement for the FY 2016-17 as Prior Year Adjustment (PYA).

13.1.2 The NTDCL shall pay Rs.117.79 million to CPPA-G on account of market Operation fee of CPPA-G for the FY 2015-16, which has been included in the revenue requirement of NTDCL while working out the PYA for the FY 2015-16.

13.1.3 Accordingly, NTDCL shall charge its users for provision of transmission and allied services the following two-part tariff i.e. a fixed and variable charge for the FY 2016-17:

Fixed charge (USCF) = **Rs.148.33/kW/Month**
Variable charge (USCV) = **Rs.0.163363/kWh x LAL Factor**
Where:

LAL Factor is a factor for Adjustment of Losses and Load imposed on the transmission system by user. LAL Factor of unity will be applied till benchmarks are defined by NEPRA.

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13.1.4 For DISCOS, the charge by NTDCL shall be only the fixed charges i.e. Rs. 148.33/kW/Month for the FY 2016-17. The variable charge shall only be applicable to the energy in kilowatt-hours (kWh) transmitted / delivered during the billing period. Recording of the maximum demand in kW and energy delivered in kWh shall be carried out at meters installed at the common delivery metering points i.e. inter-connection point between:

(a) NTDCL transmission system (NTDCL System), other licensees or a Bulk Power Consumers.

(b) NTDCL system and the transmission system of another country connected under an arrangement approved by the Federal Government.

13.2 **Terms and Conditions:**

Definitions:

13.2.1 Bulk Power Consumer (BPC) means a Bulk Power Consumer as defined in NEPRA Act, 1997.

13.2.2 Billing Period means a period determined by NEPRA for the purpose of charging the transfer charge to DISCOS or BPC or any other user of transmission system in respect of power delivered. The billing period for the purpose of applying a transfer charge shall be on a one month basis (starting 00:00 hrs of the 1st day of the month and ending 24:00 hrs on the last day of the month) till a shorter billing period is specified by NEPRA through a Competitive Trading Arrangement Transitional Order.

13.2.3 Competitive Market Operation Date means the date Defined under article 7(2) of the License granted to NTDCL.

13.2.4 CPPA-G means Central Power Purchasing Agency Guarantee Limited as defined in the Commercial Code.

13.2.5 Delivery metering point means the interconnection point at the grid stations where power is delivered by NTDCL to DISCOS, BPCs connected directly to the transmission system or other users of the transmission system and where relevant meters are installed to measure such power delivered.

13.2.6 IPPs means Independent Power Producers established under the Federal Government's Power Policy of 1994 or under any other relevant policy.

13.2.7 System Peak Demand means "The highest system peak demand recorded during a billing period measured over successive periods of 30 minute interval at the receiving metering point of the DISCOS or user of the transmission system. Maximum demand measuring apparatus used for recording the maximum system peak demand during a billing period shall be based on a 30 minutes interval reset basis."

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13.2.8 Month means a calendar month according to the Gregorian Calendar.

13.2.9 Power Factor: the rate expressed as a percentage of the kilowatt hours to the kilovolt hours consumed during a billing period.

13.2.10 Use of System Charge means any charge (fixed or variable) payable by a Distribution Company, BPC or any other user of the transmission system for Transportation of Power from Generator to Delivery Metering Point and delivery to a distribution company, BPC or any other user and as required under Article 13 and 14 of the NTDC License.

13.3 <u>Other Terms and Conditions (Power Factors)</u>

The DISCOS shall maintain an average power factor during a billing period at the delivery metering point of at least 85% lagging. In the event of the said Power Factor falling below 85% in a billing period the concerned DISCO shall pay to NTDCL and claim a penalty as determined by the Authority for general applicability on the recommendation of NTDCL and after consultation with the relevant generation and distribution licensees.

13.4 <u>Directions of the Authority</u>

13.4.1 The directions of the Authority given in the instant petition are as under;

- To ensure completion of its planned activities within the prescribed timeframe to avoid tripping incidents in future. Progress in this regard to be shared with the Authority on a quarterly basis.
- To timely file before the Authority the next tariff petition i.e. for the FY 2017-18 on the basis of calculation of MDI on coincidental basis and to share the periodic progress on the implementation of system for recording of MDI on coincidental basis with the Authority after the issuance of this decision on a quarterly basis.
- To file its next tariff petition timely either under Single Year Tariff (SYT) or Multi-Year Tariff (MYT) regime. The Petitioner should overcome its inability in previous years in timely filing tariff petition.
- To apprise the Authority about the progress of 220 KV Grids Stations along-with allied transmission lines.
- To ensure tariff petitions are supported with corroborative evidences for the claims made along with necessary calculations done accordingly.
- To expedite the process of creation of separate post retirement funds and to transfer the amount claimed and already allowed by the Authority for this retirement fund to be professionally managed through this.
- To provide summary of new hiring made during the FY 2015-16 and FY 2016-17 along-with their financial and performance / operational impact in its next tariff petition.
- To ensure implementation of reliability indices for all in-process and future projects.

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- To provide a detailed report on the recent improvements in networks undertaken to prevent transmission system breakdowns resulting in black outs and tripping particularly in cold foggy weather.
- To provide loading position of its 500 kV and 220 kV components to the Authority on quarterly basis.
- To submit a detailed report regarding the reasons for major incidents of brownouts and blackouts during the FY 2015-16 & FY 2016-17 and the preventive measures taken to avoid such frequent system collapses in future.
- To ensure installation of Secured Metering System (SMS) on remaining Common Delivery Points (CDPs). A comprehensive report in this regard shall also be submitted to the Authority by September 30, 2018.
- To submit the updated progress regarding dispersal of power from major power plants, wind corridors, solar parks, hydel projects on monthly basis.
- To share the TORs set for the engagement of international consultant for the capacity building of NTDC's Planning department.
- To ensure timely right of way and other associated tasks assigned to NTDCL for timely completion of HVDC / all HVAC Transmission lines.
- To ensure all issues with the CPPA-G be resolved before filing the next tariff petition.
- To apprise periodically the progress made on import of electricity with TAVANIR Iran and to submit the outcome (if any) of the Joint Working Group formed in this regard.

13.5 The order part is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

(Saif Ullah Chattha) 4.5.2018
Member

4.5.18
(Himayat Ullah Khan)
Member

(Syed Masood ul Hassan Naqvi) 4/5
Member/Vice Chairman

(Brig (R) Tariq Saddozai)
Chairman

NEPRA AUTHORITY
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4-5-18