Registrar

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No. NEPRA/R/TRF-450/NTDC-2018/9710-9712
March 31, 2020

Subject: **DECISION OF THE AUTHORITY IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW FILED BY NATIONAL TRANSMISSION AND DISPATCH COMPANY LIMITED WITH RESPECT TO THE DETERMINATION OF THE AUTHORITY DATED JULY 31, 2019 - CASE NO. NEPRA/TRF-450/NTDC-2018**

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (13 pages) in Case No. NEPRA/TRF-450/NTDC-2018.

2. The Decision is being intimated to the Federal Government for the purpose of notification in the official gazette pursuant to Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

3. The Order Part along with **Annex-I** of the Decision are to be notified in the Official Gazette.

Enclosure: As above

31 03 20

(Syed Safeer Hussain)

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 Motion for Leave for Review Filed by National Transmission and Dispatch Company Limited with respect to the Determination of the Authority dated July 31, 2019

1. **Brief Facts:**

1.1 National Electric Power Regulatory Authority (hereinafter "NEPRA" or "the Authority") in accordance with provisions of NEPRA Tariff (Standards & Procedure) Rules – 1998 determined the Use of System Charge (hereinafter "UOSC) for National Transmission & Dispatch Company (hereinafter" NTDC") on July 31, 2019. The requested and allowed UOSC is as under:

Requested in Tariff Petition		Allowed in Determination dated 31.07.2019	
Rs./kW/M			
FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
170.79	186.48	158.71	151.77

1.2 As per Section 31(7) of the Regulation of Generation, Transmission & Distribution of Electric Power Act, 1997 (the NEPRA Act), the above tariff determinations/decisions were forwarded to the Federal Government for notification.

1.3 In terms of Rule 16(6) of NEPRA Tariff (Standards & Procedure) Rules – 1998 NTDC submitted the motion for leave for review for consideration of the Authority. NTDC requested the Authority to review the following issues:

- The Average Capital Base of RORB for the FY 2017-18 be assessed based on Financial Statements of FY 2017-18.
- The Long-Term loan be re-assessed while considering the actual current maturity of loans for FY 2017-18 & FY 2018-19.
- To allow ROE of 16%.
- Cost of Debt for FY 2017-18 & FY 2018-19 be allowed in light of the GoP relent policies of the respective loans along with reasonable spread.
- To allow O&M cost, Professional Fee Charged to Operations (including E&Y HR consultancy amount of Rs. 17 million), Communication Charges and Office supplies
- To allow MDI calculations on Non-Coincidental Basis.
- Revenue requirement may be calculated based on actual MDI of 23,694 MW for the FY 2018-19.
- To allow actual T&T Losses of 2.97%.
- To allow imposition of Power Factor Penalty on the concerned DISCO for power factor falling below 95% lagging.

2. **Proceedings**

2.1 The review motion of NTDC was considered and admitted by the Authority for consideration on September 24, 2019. In order to provide opportunity of hearing to the Petitioner for substantiating its claim through documentary evidence, the Authority decided to hold hearing in the matter. Individual notices to the concerned stakeholders were issued on October 23, 2019. Hearing in the matter was held on November 13, 2019 which was attended by the representatives of NTDC, Ministry of Energy etc.

3. Issue wise discussion and decision is as under:

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3.1 Calculation of RORB

3.1.1 NTDC submitted that the average capital base taken in the RoE calculation has been under-stated which has a considerable effect on the Rate of Return. NTDC submitted that the Capital Base considered in the calculation of Average Capital Basis for FY 2017 -18 has been taken as Rs. 128,914 million as opposed to Rs. 133,866 million as per figures of the Audited Financial Statements for FY 2016-17. This has resulted in the reduction of the Average Capital Base to the tune of Rs. 2,496 million which directly impacts the RoE of NTDC.

3.1.2 Regarding RORB for the FY 2017-18 & FY 2018-19, NTDC submitted that the Authority while calculating long term loans for the RORB calculations has considered Non-Current loans as well as current portion of long term loans. According to NTDC, due to under-recovery of UoSC from CPPA-G, the Company is unable to make a repayment of long-term loan when due, hence the current portion of long-term loan also comprises of such pending payments of previous years in addition to the actual current maturity amount due. NTDC requested the Authority to consider the Loan amount for FY 2017-18 as Rs. 82,946 million (Actual) and for FY 2018-19 as Rs.107,809 million (Actual) for calculation of RoRB.

3.1.3 It has been noted that ROE of NTDC has been calculated based on the audited accounts provided by the Company for the FY 2017-18 and in line with the approved mechanism for calculation of RORB. The major difference in the calculation of capital base rate is amount of long term loans. For calculation of RORB, the figures of long term loans (Non-Current + Current portion) are subtracted. Hence NTDC's request in the matter is not justifiable.

3.1.4 The Authority considers that the NTDC's request for shortfall in revenue due to non-timely payments by CPPA-G is not justified as this impact can be reduced by imposition of LDs/surcharge through bilateral contracts arrangements with CPPA-G. Therefore, the Authority has decided to maintain its earlier decision in the matter.

4. Return on Equity:

4.1 NTDC has also requested the Authority to allow 16% ROE as allowed in the earlier determination for the FY 2015-16 & FY 2016-17 instead of 15% since there is no change in the NTDC business and circumstance.

4.2 The Return on Equity for NTDC has been determined in light of the average yield of the Pakistan Investment Bond for the period FY 2017-18 & FY 2018-19, market risk of 6.5% and beta of 0.862 for transmission sector. The average yield for the period FY 2017-18 and FY 2018-19 of Pakistan Investment Bond (PIB) was 9.24%. Based on Capital Asset Pricing Model (CAPM) mechanism the return on equity has been worked out as 15% and the same has been allowed to NTDC. The same return on equity of 15% has been allowed to other transmission companies. Hence no discrimination has been made, therefore the Petitioner's request for 16% ROE is declined.

5. Cost of Debt:

5.1 In the case of Cost of Debt, NTDC submitted that the Authority vide Para # 175 has taken into consideration the two years average KIBOR for the FY 2017-18 & FY 2018-19 without allowing

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any spread thus bringing the Cost of Debt to 8.99% as opposed to 12% requested based on last six year's average KIBOR along with 2.5% spread. NTDC further submitted that it is an infrastructure based company and the current loan portfolio of NTDC includes foreign loans which have been taken at 17% (prior to 17th March 2009), 15% (following 17th March 2009) and 12% (following 8th September 2016) as per the relent policy of GOP along with some local loans. The actual average cost of debt of NTDC comes out to the approximately 14% for the NTDC current loan portfolio. NTDC submitted that total mark-up on loans comes to Rs.11.6 billion out of which Rs.4.6 billion has been charged to operations which is duly allowed by the Authority as per tariff mechanism and the remaining amount of Rs. 7 billion is charged to development and hence is paid from return for which the Authority has determined Cost of Debt at 8.99% as opposed to the actual average Cost of Debt of 14%. Resultantly the incremental 5% Cost of Debt has to be borne from the return which would have normally been ploughed back into development, thus compromising the NTDC development program.

5.2 NTDC submitted that Company operates on a going concern basis as per IAS and is engaged in the transmission business with long term obligations therefore short-term basis would distort the consistency of tariff. NTDC therefore requested that while determining NTDC's Cost of Debt for FY 2017-18 & FY 2078-19, the Authority may consider NTDC's situation and allow a reasonable spread on KIBOR as per the previous practice in NTDC Tariff determination for the FY 2015-16 & FY 2016-17.

5.3 As per audited financial statements of the NTDC financing cost was Rs. 4.5 billion and the same was allowed to the Company. Considering the fact that the cost of equity is always higher as compared to cost of debt. In line with NEPRA's policy / benchmarks, the Authority has restricted maximum equity portion to 30% while equity exceeding 30% has been allowed as debt. Accordingly, the equity amount of Rs. 65,790 million and Rs. 75,955 million for the FY 2017-18 & FY 2018-19 was allowed 15% return whereas the remaining amount of Rs. 69,804 million and Rs. 63,109 million for the FY 2017-18 & FY 2018-19 was treated as debt at average KIBOR for the period FY 2017-18 & FY 2018-19 along with spread of 2%. The Authority does not find any justification to review its earlier decision in the matter hence Petitioner's request is declined.

5.4 The ROE of NTDC in the original determination dated July 31, 2019 was assessed based on the provisional accounts provided by NTDC for the FY 2018-19. In review motion, NTDC provided the audited financial statements for the FY 2018-19. As per information provided by NTDC through audited financial statements for the FY 2018-19, Rs. 72,943 million has been capitalized in the FY 2018-19. Similarly Rs. 85,038 million on account of accumulated depreciation has been indicated. Based on the revised capitalization, financing cost and other financial parameters, the Capital Base for the FY 2017-18 & FY 2018-19 has been assessed as Rs. 142,014 million and Rs. 140,979 million respectively. Similarly the average RAB for the FY 2017-18 & FY 2018-19 has been calculated as Rs. 136,077 million and Rs. 141,497 million respectively. Accordingly based on 30% equity amount of Rs. 65,790 million and Rs. 76,568 million for the FY 2017-18 & FY 2018-19, the 15% return has been assessed as Rs. 9,868 million and Rs. 11,485 million and allowed to NTDC. For remaining equity portion exceeding 30% equity to Rs. 70,287 million and Rs. 64,929 million for the FY 2017-18 & FY 2018-19, the return based on average KIBOR for the FY 2017-18

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& FY 2018-19 has been worked out as Rs. 6,319 million and Rs. 5,837 million respectively. Total return on equity has been worked out as Rs. 16,187 million and Rs. 17,322 million for the FY 2017-18 and FY 2018-19 and the same is allowed to NTDC.

6. **Operating Costs**

6.1 NTDC submitted that in its tariff petition for the FY 2017-18 & FY 2018-19, O&M costs were based on conservative figures and provisional projections. NTDC submitted that the costs pertaining to HR consultancy of E&Y, professional fee, communication charges and other O&M costs may kindly be revised based on the audited financial statements. With respect to E&Y HR Consultancy amount, NTDC submitted that vide Para # 116 of determination dated July 31, 2019, the cost on this account was disallowed. NTDC submitted that E&Y consultants has been engaged after following due process and payments of the deliverables are subject to approval of BoD. NTDC further submitted that based on the proposal of E&Y, revised pay structure will be submitted to NEPRA in upcoming tariff petition. NTDC requested the Authority to allow Rs. 17 million on account of HR consultancy for E&Y consultants.

6.2 The Authority while disallowing the cost of E&Y in the original determination made following observations:

- Though approved by the BoD, the assignment does not establish a direct link with the overall strategic restructuring of NTDCL. Therefore it is not clear how the Job Description are being prepared in the absence of Department Strategic roles and their alignment with the central restricting vision.
- Despite of this ongoing activity and inception report presented to the Board, the NTDCL Management continues to recruit and hiring with no direct linkage with this activity and the contents of the inception report. The financial and legal aspects are not clarified for proposed changes by E&Y wherein a new cadre and employment structure is being proposed to replace the historical BPS based permanent employment structure with post-retirement benefits.
- No substantial evaluation has been made on the financial and legal acceptability and transformation to this proposed model.

6.3 NTDC in its review motion did not provide details / clarifications / justifications in support of their claim with respect to the above queries pointed out by the Authority. In view thereof the Authority has decided to maintain its earlier decision.

Professional Fee Charged to Operations & CWIP:

6.4 NTDC submitted that the Authority vide Para#154 has stated that since the amount charged to the Profit and Loss account is less than the amount charged to Cost of work in Progress and the expense on the existing projects under progress are capitalized therefore the same cannot be allowed twice. NTDC submitted that although costs incurred on development projects are capitalized however costs pertaining to operations are charged to P&L and hence no duplication takes place in this regard.

6.5 NTDC was directed to provide the documentary evidence in support of its claim. Accordingly NTDC submitted the trial balance for FY 2017-18 which provides the details of amount charged

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to the respective head of legal and consultancy fee. However, NTDC did not provide any details pertaining to FY 2018-19. Accordingly based on the available information, Rs. 4 million on account of professional fee for the FY 2017-18 has been allowed to NTDC. In absence of supportive information for the FY 2018-19, the Authority is constrained to allow requested amount. Hence the assessed amount of Rs. 5 million has been considered reasonable and is allowed to the Company for the FY 2018-19.

<u>Communication Charges:</u>

6.6 NTDC submitted that the Authority in its determination vide Para#123 stated that this amount is already covered in office supplies and others therefore cannot be allowed twice. In this regards it is apprised that Communication Charges and Office Supplies are separate expense heads in the NTDC Accounts. It is therefore requested to allow the said amounts separately as both expenses are mutually exclusive.

6.7 NTDC in support of its claim submitted the audited financial statements for the FY 2018-19. NTDC was directed to provide supportive information along with trial balance. While evaluating the submitted information, it was observed that the cost requested by NTDC is already covered under the miscellaneous expense head therefore cannot be considered. In view thereof the earlier decision pertaining to communication charges has been maintained.

<u>Other O&M Costs:</u>

6.8 NTDC submitted that the Authority allowed Rs. 6,853 million on account of salaries and wages as against the audited financial statements figures of Rs. 7,112 million. NTDC requested the Authority to allow the O&M costs as per audited financial statements for the FY 2017-18 and FY 2018-19.

6.9 The Authority considered the request of NTDC and observed that as per audited accounts of FY 2017-18, Rs. 7,880 million contains the impact of Cost of Work in Progress salaries and wages amounting to Rs. 1,056 million which was already covered under the CWIP. Similarly provision of pension fund amount of Rs. 4,042 million was reflected. As per Authority previous practice the actual amount paid as pension fund is allowed which was reflected in the audited accounts as Rs. 2,007 million. Accordingly based on the information provided by NTDC, after adjusting the CWIP salaries and wages, post retirement pension for the FY 2017-18, the amount of Rs. 6,853 million was allowed. NTDC stance in this regard is not correct and therefore cannot be accepted by the Authority.

6.10 For the FY 2018-19 amount of Rs. 9,027 million was assessed based on the provisional information provided by NTDC. Now audited financial statements for the FY 2018-19 have been provided by NTDC. Accordingly based on the audited accounts, it has been observed that Rs. 2,694 million actual benefits on account of pension and other retirement benefits has been paid during the period. Based on the provided information salaries and wages including financial benefits paid has been worked out as Rs. 9,387 million and the same is allowed to NTDC for the FY 2018-19.

7. <u>Review the Basis for MDI Calculations</u>

7.1 NTDC requested the Authority to allow calculation of MDI on non-coincidental basis on the following grounds:

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- Complete Power Sector participation (CPPA-G, NTDC, DISCOs) presently use non co-incidental MDI metering Data jointly signed by respective Metering Committees for all billing matters. Moreover, NEPRA Commercial Code provisions for Meter Reading & Data Collection (Section 7.1.5) & Data Sharing & Communication (Section 12.2.iv) are also built around Non-coincidental MDI mechanism.
- Market Operation Fee calculation mechanism is essentially the same as of Use of System Charge of NTDC in theory and practice. NEPRA has recently determined tariff of CPPA Market Operation Fee based on non-coincidental MDI. NEPRA approved Commercial Code for Market Participants Section 11.1.1 also dictates that *"The mechanism for calculation of the CPPA-G Market Operation Fee shall remain the same as that being used for UoSC"*. Hence, NTDC's UoSC based on non-coincidental MDI may not be changed in isolation
- NTDCL has invested in infrastructure (transmission lines, grid stations and infrastructure) and keeps it ready to cater for the highest possible peak demand of DISCOs (at all CDP points separately as well as collectively). CDP-wise non-coincidental MDI dictates the sizing of NTDC infrastructure (transmission lines, transformers and circuit breakers) for every CDP location individually even if that demand lasts just one hour in whole year. Moreover, this CDP-wise non-coincidental MDI is technically more meaningful as it directly reflects Load Factor of the CDP.
- Accurate and reliable co-incidental MDI from all CDP meters is not possible unless and until an automated system is in place which ensures the online connectivity of all CDP meters and periodic transmission of meter parameters to centralized Meter Data Management Software (MDM) which has enabling provisions for meeting all Tariff Billing requirements. This calculation is sensitive as even the missing of one meter will result in inaccurate co-incidental MDI calculations. Use of non-coincidental metering data practice has matured over time while co-incidental MDI system first needs to be deployed and monitored and benchmarked for various testing and/or fault tolerant scenarios before utilizing it for billing purposes
- As per Grid Code clause PC 2.2.1, Annual System Reliability Assessment and Improvement Report (ASRAIR) needs to be submitted by NTDC for which NTDC has to include the plans based on grid station wise peak demand, which is non-coincidental in nature. NTDC is going to install online telemetering system to synchronize the meter data at a center point.

7.2 NTDC requested the Authority to allow Non-coincidental recording based on sectoral harmony and other points as mentioned above.

7.3 NTDC was advised by NEPRA in FY 2014-15 to use coincidental demand and for that purpose NTDC was directed to install such meters which could record peak demand at the same instant. In response, NTDC during the proceedings pertaining to FY 2017-18, informed that it had initiated installation of necessary metering at Common Delivery Points (CDPs) with DISCOs. NTDC provided its progress on installation of meters at CDPs as follows:

"The installation of Smart Metering System (SMS) is in progress. 465 Nos. SMS have been installed and brought online out of total 498 Nos. CDPs."

7.4 The Authority considered the above information and directed NTDC to ensure the installation of Secured Metering System (SMS) on all the remaining CDPs before March 31, 2019 and inform the

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Authority accordingly. It is noted with concern that NTDC has not fully complied with the aforementioned directions and brought it again for consideration of the Authority. In order to address NTDC's concerns, the Authority considers that the matter of coincidental and non-coincidental requires further deliberations for joint participation of all stakeholders i.e. CPPA-G, NTDC and XWDISCOs etc for sectorial harmony and allocation of fixed cost on justified basis. Accordingly the Authority has decided that separate proceedings shall be initiated a part from this review decision.

8. <u>Allowed Level of T&T Losses Target</u>

8.1 NTDC submitted that the Authority in its determination at Para # 62-70 have maintained the capped level of T&T losses allowed at 2.8%. NTDC in its support submitted the following:

- The overall power demand of NTDC system is increasing which is directly contributing to the increase in losses (I^2R losses) due to increased power flow in the primary transmission network and transformers.
- In view of the Government policies and generation planning principles, generation mix has to be spread in the form of different technologies and fuels like coal, hydel, RLNG, solar and wind etc. Since, the power from generation (which can only be installed at source) needs to be delivered to the load centers, therefore, losses are increased due to large distance between the load centers and generator corridors.
- The previous loss calculation methodology has been modified as per instructions of NEPRA (to consider only 500 and 220 kV system), the percentage losses has been increased.

8.2 Further, following points are added to support NTDC requested target of losses i.e. 2.97% (actual):

- The DISCO's are drawing excessive reactive power from NTDC transformers due to lack of reactive power sources (Capacitor banks, SVC etc.) in their network. This results in increase in loading of NTDC network, reduction in NTDC primary system voltage and increase in NTDC network losses.
- Amid system expansion, NTDC is hiring internationally reputed consultant to prepare updated base case related studies for Primary Transmission System losses and submit the same for information of Authority. The expected timeline for completion of the said task is June 2020.

8.3 Based on above points NTDC Losses will reduce and a benchmark will be set through the results of consultant report. Till the absence of such benchmark, it is requested that NTDC be allowed actual T&T losses of 2.97%.

8.4 The above submissions of NTDC have been reviewed by the Authority and it is noted that the above justifications have already been considered by the Authority in its determination dated July 31, 2019. It is also noted that a huge investment for implementation of system up-gradation schemes have already been allowed by the Authority with the objective to reduce technical losses and to overcome the overall transmission system constraints at 500kV and 220kV level.

8.5 The Authority feels that with the addition and rehabilitation/up-gradation of the transmission components, the technical losses can be controlled at already determined level of losses by the Authority. Hence the above reiterated justifications by NTDC is not accepted.

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8.6 Further, as discussed in the preceding paragraphs wherein NTDC is directed to install secured/smart metering system on remaining CDPs; in the absence of such meters, the Authority's assessed loss target of 2.80% is maintained for the FY 2017-18 and FY 2018-19. NTDC is directed to urgently complete installation of such metering system on all of its CDPs. The data so gathered will become basis for setting of annual transmission losses by the Authority.

9. <u>Power Factor Penalty</u>

9.1 NTDC submitted that the Authority in its determination vide Para# 198.1 has mentioned that 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 NTDC a penalty as determined by the Authority for general applicability on the recommendation of NTDC and after consultation with the generation and distribution licensees. The clause 'OC 4.9.7 - Reactive Power Management of the Grid Code 2005 states that:

"Distribution companies, KESC, BPC's, and other power consuming entities, as applicable, shall all be responsible for the maintenance of power factor at 132 kV Connection Point grid station busses; such that the power factor at 132 kV busses in the NTDC potion of Connection Point substations shall be maintained within the range of 95% and better during steady state operating conditions.

Distribution companies, including IGSC, shall require BPCs within their Service Territory to install shunt capacitors and/or other power factor correction facilities so that the power factor at their Point of Connection is 95% or better,

In no case, DISCOs and BPCs shall offer leading power factor to NTDC,"

9.2 In the light of above, NTDC proposed that Power Factor Penalty should be imposed on the concerned DISCO for power factor falling below 95% lagging based on Grid Code as stated above. It is also important to highlight that the lower voltage profile of DISCOs is currently being addressed by maximizing taps of 220 /132 kV transformers as DISCOs are not managing their voltage profile through capacitor banks and other techniques. This situation result in excessive drawl of reactive power from primary network in order to boost 132 kV system voltages. As a consequence; primary network experiences low voltages and excessive current flows causing two major issues on NTDC primary network:

- Voltage Stability gets reduced and risk of partial collapse, during peak load conditions, increases.
- T&T losses are increased two-fold i.e., due to low voltage and due to excessive current flows.
- Overloading of equipment as all the equipment like transformers, transmission lines and generators are based on apparent power which includes reactive power as well.

9.3 NTDC submitted that the impact of power factor improvement will directly affect the losses and reduce it significantly.

9.4 As per available record of correspondence made between NTDC and MEPCO vide letters dated: December 06, 2019 and December 17, 2019 wherein MEPCO submitted that NTDC is calculating incorrect/wrong power factor at 500kV New Multan Grid Station. In the letters, MEPCO stated

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that NTDC calculated a lower power factor of 89%-90% at 220/132kV CDPs whereas, MEPCO claimed that the power factor of 97% is being maintained at the same CDPs. In order to avoid such ambiguities, a close coordination between NTDC and concerned DISCO is required for smooth and reliable system operation and to keep the system parameters within permissible limits.

10. The NTDC revenue requirement for the FY 2018-19 was assessed based on the provisional accounts provided by the Company. NTDC vide email dated January 01, 2020, January 08, 2020 and January 15, 2020 submitted the financial audited statements. It was observed that general establishment cost, Depreciation, Financial Charges, Prior Year adjustment and other income was assessed as Rs. 7,496 million, Rs. 8,902 million, Rs. 6,318 million, Rs. 5,902 million and Rs. 1,597 million. As per audited financial statements the costs pertaining to general establishment cost, Depreciation, Financial Charges, Prior Year adjustment and other income has been worked out as Rs. 9,387 million, Rs. 9,278 million, Rs. 8,119 million, Rs. 6,002 million and Rs. 1,994 million respectively and the same is allowed to the Company

11. In pursuance to Regulation 3 of NEPRA (Review Procedure) Regulations – 2009, *"The Authority may, at any time, on its own motion, review or order passed by it and on so reviewing modify, reverse, or confirm the same."* In addition as per Regulation 3(2) of NEPRA aforesaid review regulations, *"any party aggrieved from any order of the Authority and who, from the discovery of new and important matter of evidence or on account of some mistake or error apparent on the face of record or from any other sufficient reasons may file motion seeking review order."* Accordingly the Authority hereby declines the NTDC request to the extent of RORB, communication charges, T&T losses and loan amount. However, based on the audited financial statements, the above mentioned costs have been incorporated in the revenue requirement of the Company.

12. Keeping in view the submissions of the Company, audited accounts and provided information, the Authority decided to revised the NTDC tariff which is hereunder:

Requested		Earlier Allowed on 31.7.2019		Review Decision	
Rs./kW/M					
FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19
170.79	186.48	158.71	151.77	159.08	176.16

13. <u>ORDER</u>

13.1 The National Transmission and Dispatch Company (NTDC) is allowed to charge such tariff and on such terms and conditions as provided hereunder:

13.2 <u>Use of System Charges</u>

13.2.1 Since FY 2017-18 has already lapsed, therefore, the Authority has incorporated the impact of difference in the tariff determined for the FY 2015-16, 2016-17 and the tariff actually charged by the Petitioner during this period, in the assessed revenue requirement for the FY 2017-18 as Prior Year Adjustment (PYA).

13.2.2 The actual amount on account of salaries wages, accumulated depreciation, other income, financial charges and other parameters have been adjusted based on the audited financial statements

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provided by the NTDC for the FY 2018-19. 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 2018-19:

Fixed charge (USCF)	=	Rs.176.16/kW/Month
Variable charge (USCV)	=	Rs.0.18/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.

13.2.3 In case of DISCOs, NTDCL shall charge the fixed charges i.e. Rs. 176.16/kW/Month. The variable charge shall only be applicable to the energy in kilowatt-hours (kWh) transmitted / delivered during a 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) NTDC transmission system (NTDC System) and the bulk power consumer.

(b) NTDC system and the transmission system of a special purpose transmission licensee.

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

(d) NTDC system and a distribution company receiving power in bulk either for sale to its own consumers or on behalf of another distribution company or a BPC located in another distribution company.

14. <u>Terms and Conditions:</u>

14.1 <u>Definitions:</u>

14.1.1 Bulk Power Consumer (BPC) means a Bulk Power Consumer as defined in NEPRA Act.

14.1.2 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 ssytem in respect of power delivered. The billing period for the purpose of applying a transfer charge shall be on a one month basis (starting 24:00 hrs of the 1st day of the month and ending 12:00 hrs on the last day of the month) till a shorter billing period is specified by NEPRA through a Competitive Trading Arrangement Transitional Order.

14.1.3 Competitive Market Operation Date = The date as defined under article 7(2) of the License granted to NTDC.

14.1.4 CPPA-G = Central Power Purchasing Agency Guarantee Limited as required under Article 8(a) of the License granted to NTDC.

14.1.5 Delivery metering point means the interconnection point at the grid stations where power is delivered by NTDC 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.

14.1.6 IPPs = Independent Power Producers established under the Federal Government's Power Policies.

14.1.7 System Peak Demand = 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

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recording the maximum system peak demand during a billing period shall be based on a 30 minutes interval reset basis.

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

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

14.1.10 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.

15. <u>Other Terms and Conditions</u>

15.1 Power Factor Penalty: 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 NTDC a penalty as determined by the Authority for general applicability on the recommendation of NTDC and after consultation with the generation and distribution licensees.

15.2 In order to ensure least cost generation, NTDC shall strictly follow the merit order while operating the power plants.

16. <u>Directions of the Authority</u>

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

- To file its next tariff petition timely under Multi-Year Tariff (MYT) regime.
- To submit on quarterly basis the investment made and progress made against the investment being allowed in this tariff.
- To ensure efficient and timely utilization of Loans and Credits from DFIs. The commitment charges due to non-utilization within loan/credit period will not be allowed.
- Conclude the long in-process creation of separate post retirement funds and to transfer the amount claimed and already allowed by the Authority for this retirement fund and separately managed.
- To file tariff petition timely and complete in all aspects to avoid PYA made belatedly
- To file next tariff petition on the basis of calculation of MDI on coincidental basis. Share on quarterly basis the progress on the implementation for recording of MDI on coincidental basis.
- To provide loading position of its 500 kV and 220 kV components to the Authority on quarterly basis and recent improvements.
- To submit the updated progress regarding dispersal of power from major power plants, wind corridors, solar parks, hydel projects on monthly basis.
- To ensure evacuation of the electricity from the upcoming power plants as per timelines of interconnection approval granted by NTDC.
- To ensure timely right of way and other associated tasks assigned to NTDCL for timely completion of HVDC / all HVAC Transmission lines.
- To ensure installation of Secured Metering System (SMS) on remaining Common Delivery Points (CDPs).

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- 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 ensure implementation of reliability indices for all in-process and future projects.

17. The order part along with ~~two~~ Annexure is recommended for notification by the Federal Government in the official gazette in accordance with Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

(Saif Ullah Chattha) 9.3.2020
Member

10/3/2020
(Rehmatullah Baloch)
Member

20/3/20
(Engr. Rafique Ahmed Sheikh)
Member

(Engr. Bahadur Shah)
Vice Chairman

(Tauseef H. Farooqi)
Chairman

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ANNEXURE -J

National Electric Power Regulatory Authority
NTDC
FY 2017-18 & FY 2018-19

Description	FY 2017-18 (Rs. In Million)	FY 2018-19 (Rs. In Million)
Revenue Requirement	43,376	50,087
Avg. MDI	22,720	23,694
Rs. /kW/M	**159.08**	**176.16**
General Establishment Costs	**6,852.53**	**9,387.20**
Pay & Allowances & Other Benefits	6,853	9,387
Administrative Costs	**481.00**	**497.87**
Rent Rate & Taxes	87.12	80.20
Power Light etc.	60.11	66
Communication	-	-
Office Supplies & Other Expenses	12.18	12.78
Travelling Expenses	256.66	269.50
Professional Fee	4.00	5.00
Management Fees	6.17	6.17
General Misc. Expenses	59.00	58.10
Repair & Maintenance	**905.00**	**1,241.92**
R&M of Fixed Assets	671.30	988.00
Vehicle Expenses Repair	68.62	72.05
Vehicle Maintenance & Running Expenses	165.33	181.86
Insurance	199.20	232.31
Depreciation	6,880.36	9,278.17
Finance Charges	4,574.98	**8,119.36**
Return on Equity	**16,187**	**17,322**
Prior Year Adjustment	**8,264**	**6,002**
Less: other income	**(969)**	**(1,994)**

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