

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-258/AEPL-2014/15596-15598 October 11, 2018

Subject: Decision of National Electric Power Regulatory Authority in the matter of Motion for Leave for Review filed by M/s. Access Electric (Private) Ltd. against Decision of the Authority dated January 30, 2018 [Case No. NEPRA/TRF-258/AEPL-2014]

This is in continuation of this office letter No. NEPRA/TRF-258/AEPL-2014/1569-1571 dated January 30, 2018 whereby Decision of the Authority in the matter of Reconsideration Request under Section 31(4) of NEPRA Act, 1997 filed by the Federal Government regarding Upfront Tariff for Access Electric (Pvt.) Ltd. was communicated to the Federal Government for notification in the official Gazette.

2. Enclosed please find herewith the subject Decision of the Authority along with Annex-I and Annex-II (18 pages).

3. 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.

4. Order Part along with Annex-I and Annex-II are to be notified in the Official Gazette.

Encl: As above

(Sved Safeer Hussain)

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

CC:

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



DECISION OF NATIONAL ELECTRIC POWER REGULATORY AUTHORITY IN THE MATTER OF MOTION FOR LEAVE FOR REVIEW FILED BY M/S ACCESS ELECTRIC (PRIVATE) LIMITED AGAINST DECISION OF THE AUTHORITY DATED JANUARY 30, 2018

 Access Electric (Private) Limited ("AEPL" or "the petitioner" or "the company/project company") vide letter dated February 13, 2018 filed motion for leave for review ("review motion") against the National Electric Power Regulatory Authority ("NEPRA" or "the Authority") decision in case No. NEPRA/TRF-258/AEPL-2014/1569-1571 dated January 30, 2018 ("impugned decision"). The impugned decision was issued in the matter of reconsideration request filed by the Federal Government through Ministry of Energy, Power Division in respect of earlier awarded upfront tariff of AEPL.

Background

- 2. NEPRA awarded 1st upfront tariff to AEPL on March 28, 2014 and intimated that decision for notification in the official gazette. That decision; however, was not notified by the Federal Government. Subsequently, 2nd upfront tariff ("revised tariff") was approved for AEPL and intimated to Federal Government on December 30, 2015 for notification. However, that decision also was not notified. AEPL filed a writ petition before the Honorable Islamabad High Court ("IHC") on December 23, 2015 in the matter of, inter alia, non-execution of Energy Purchase Agreement ("EPA") by Central Power Purchasing Agency (Guarantee) Ltd. (CPPA-G). In accordance with the decision of honourable IHC on May 09, 2017, NEPRA vide letter dated June 16, 2017 again intimated the revised tariff decision of AEPL to the Federal Government for notification.
- 3. Referring the aforesaid NEPRA's intimation dated June 16, 2017 and IHC decision, Federal Government filed a reconsideration request before NEPRA dated June 21, 2017 against AEPL's revised tariff decision. In its reconsideration request, Federal Government stated reasons that why it did not notify the revised tariff of AEPL and requested NEPRA to determine the tariff of the petitioner anew under Tariff (Standards & Procedure) Rules, 1998 (" Tariff Rules, 1998"). The Authority after due proceedings issued its decision on the reconsideration request of Federal Government dated January 30, 2018. In the said decision, the Authority determined the levelized





tariff of AEPL anew at US Cents 5.9419/kWh. That decision was made considering the fact that the revised tariff was contingent upon achieving financial close within the specified timelines which could not be achieved by AEPL. Further, the Authority considered that approving 2015 revised tariff for AEPL in 2018 shall not be consistent with the existing market realities as equipment prices have reduced considerably.

- Being aggrieved with the impugned decision of NEPRA, AEPL vide letter dated February 13, 2018 filed review motion in respect thereof. The brief of the points raised by AEPL in its review motion is given hereunder:
 - Impugned decision deviates from the matters decided by IHC and therefore violates the valuable rights that had accrued in favour of AEPL for giving effect to its revised tariff, as held by IHC judgement
 - ii. Impugned decision has been passed in complete violation of the principles of due process, natural justice, non-discrimination as no opportunity of specific hearing was afforded to the company.
 - iii. Impugned decision holding AEPL responsible for not achieving financial close are denied and misleading as CPPA-G refused to execute EPA with AEPL which resulted in the delay.
 - iv. Upfront Tariff (Approval and Procedure) Regulations, 2011 ("Regulations, 2011") specify that upfront tariff once accepted cannot be modified. Neither CPPA-G nor Federal Government may seek the modification of the company's tariff after its acceptance as the same amounts to a violation of company's accrued rights.
 - v. The proceedings under Regulations, 2011 have been morphed into proceedings under Rules, 1998 and that too without affording the company and opportunity to present its point of view or provide pertinent documents demonstrating its project specific parameters and actual costs.



Proceedings

- 5. The Authority considered the review motion and decided to admit the same on February 28, 2018 for processing. The Authority also decided to provide an opportunity of hearing to all the relevant stakeholders. Accordingly, notices of hearing were sent to Ministry of Energy (Power Division), CPPA-G, National Transmission and Despatch Company Limited ("NTDCL"), Alternative Energy Development Board ("AEDB") and the project company on March 21, 2018. The hearing of the review motion was held on March 28, 2018 which was attended by the petitioner, representative of NTDCL, AEDB and others.
- 6. During the hearing, AEPL briefly explained the problems it faced during the four years of development of its project. The petitioner requested the Authority to rectify the point in the impugned decision stating that financial close could not be achieved by the company due to its fault. Then AEPL requested the Authority to review certain parameters and other assumptions that have been used to approve its tariff vide impugned decision. The petitioner requested for the review of following parameters/assumptions:
 - i. EPC cost
 - ii. Plant factor
 - iii. Operation and maintenance cost
 - iv. Debt tenor
 - v. Return on equity
 - vi. Previous development expenses
- 7. Post hearing, AEPL through letter dated April 9, 2018 submitted a brief stating the grounds for the revision in the listed above parameters. In response to NEPRA's communication dated May 06, 2018, AEPL on May 14, 2018 submitted EPC and O&M proposals on fixed tilt technology to support its claim. Subsequently, AEPL on June 05, 2018 submitted that the project sponsor has decided to develop subject project on single axis tracking technology. On the basis thereof, the petitioner claimed EPC cost of USD 0.86 million per MW and capacity factor of 19.38%. In its communication dated April 09, 2018, the petitioner requested to allow O&M cost at the rate of 2.5% of the claimed EPC cost. Vide its communications dated April 09, 2018 and May 14, 2018, the petitioner submitted that it is planning to opt for financing under State Bank of Pakistan's





("SBP") scheme which provides loan at the rate of 6% with repayment period of 10 years post Commercial Operation Date ("COD") in quarterly, mortgage style, fixed annuity instalments and requested to approve it tariff on the basis of the terms of that scheme. The petitioner also requested NEPRA to approve its tariff while allowing return on equity of 17% as was allowed in its revised tariff. Lastly, the petitioner requested the Authority to reproduce the wording of paragraph 26 of the impugned decision in the review decision which provides that:

"The Authority has considered this point and decided that the compensation of legitimate cost of the project company due to its prolonged development period would be given due deliberations on the basis of verifiable documentary evidence. The project company may consider applying for said expenses at the time of tariff adjustment request at COD or at an earlier date".

8. The Authority has considered the review motion, various submissions/communications of AEPL, revision in technology, available record etc. and decided as hereunder:

EPC Cost

9. In the impugned decision, EPC cost of USD 0.724 million per MW was allowed to the petitioner while assuming that the petitioner shall setup its project on fixed tilt technology for which license was granted by NEPRA on January 26, 2014. That cost was assessed and approved keeping in view this parameter allowed in comparable projects at that point of time. Now the petitioner has submitted that it shall setup its project on single axis tracking technology and has claimed EPC cost of USD 0.86 million per MW. EPC cost proposal substantiating its claim was also submitted by the petitioner. In view of change in technology and considering that AEPL has not yet locked-up its EPC prices, the Authority has decided to reassess the EPC cost earlier approved for AEPL in the impugned decision. For the purpose of assessment, the Authority has relied upon the current EPC and project cost data in different countries. The prices of different types of modules, inverters and mounting structures in different parts of the world for different sizes of projects were researched through a number of reports published by credible organizations. Moreover, a number of online sources providing spot prices data of equipment of solar power system were also surfed. It has been noted that module prices have declined sharply in the recent times and further decline is being projected. In addition, due weightage







has also been given for site specific conditions and comparatively smaller size of AEPL's project. In view of all the above discussion, the Authority has re-assessed the EPC cost to the tune of USD 0.7035 million per MW (USD 7.035 million) and has decided to allow the same to AEPL being reasonable. As this cost has been approved for proposed single axis tracking technology, the petitioner is hereby directed to get the approval of change in technology while filing the necessary License Proposed Modification ("LPM") at the earliest.

Plant factor

Annual Plant Capacity Factor ("APCF") of 19.78% was approved in the impugned decision. This 9.1 decision was made keeping in view the difference of 0.72% in APCFs for south and north regions earlier allowed by the Authority under upfront tariffs of 2014 and 2015. AEPL submitted that APCF of 19.78% allowed to it is insufficient and not achievable. AEPL further submitted that the Authority in earlier upfront tariffs had been allowing a difference of 1.00% in plant factor between the south and north regions. Vide its communication dated June 05, 2018, the petitioner requested that APCF of 19.38% may be approved for its project based on single axis tracking technology. AEPL also submitted yield assessment report to support its claim for the APCF of 19.38%. The Authority noted that the submission of AEPL is correct that under the most recent solar upfront tariff which was applicable in 1st half of 2016, the difference in APCF of south and north regions was 1%. Further, it was noted that under the regime of upfront tariff, broad classification of south and north regions was made. The projects in different locations of those regions could have opted for upfront tariffs finding that viable based on their technology and locations. Whereas while determining tariff under Tariff Rules, 1998, the Authority is of the view that wide classifications made in the regime of upfront tariffs cannot be applied as such and specific conditions of each project needs to be taken into account. The Authority has considered in detail the energy yield assessment report submitted by the petitioner. Based on detailed analysis of data using standard available tools, the Authority has decided to approve APCF of 20.26% to work out the tariff in this decision.

Operation and Maintenance cost

9.2 The Authority approved the O&M cost of USD 13,200 per MW per annum for AEPL in the impugned decision. This cost was approved keeping in view the cost allowed to comparable solar projects of fixed tilt technology while including a margin of 20% for the smaller size of





AEPL. Now the petitioner has requested for allowing O&M cost at the rate of 2.5% of the EPC cost. The Authority has considered the submission of the project company and decided not to change the applied methodology for assessing the O&M cost. However, the Authority noted that it has allowed margin of 15% cost to solar power projects being setup on tracking technology. Following this standard, the Authority has decided to revise the O&M cost for the petitioner at USD 15,180 per MW per annum.

Debt tenor

9.3 The Authority has considered the submissions of AEPL and decided to compute its tariff on the terms of SBP financing scheme i.e. at 6% interest rate and repayment period of 10 years on quarterly basis. However, in case AEPL may not be able to avail financing under SBP scheme then part/full of conventional/commercial loan, either local or foreign, shall be approved/adjusted with minimum thirteen years loan repayment period from the date of COD. Tariff on part/full of local commercial loan shall be approved at the rate of applicable KIBOR with spread of 2.25%. Tariff on part/full of foreign loan shall be approved at the rate of applicable LIBOR plus spread of 4.25%.

Return on Equity

9.4 The Authority considered the request of AEPL for setting its tariff at equity return of 17%. It was noted that over the passage of time, the Authority has revised the equity returns downward for a number of generation technologies. For projects awarded earlier tariff on higher returns but could not achieve set milestones were awarded later tariffs on lower rates. Likewise, the tariff of AEPL in the impugned decision was approved allowing equity return of 15% which was allowed to other comparable projects at that point of time. Therefore, the Authority has decided to maintain its earlier decision in this regard.

Previous development expenses

9.5 The Authority has considered the submission of the project company with respect to captioned head and decided to approve the same treatment as was made in the impugned decision in this regard.





Comments of CPPA-G and MoE

- 10. Post hearing, NEPRA on April 23, 2018 sent a letter to MoE and CPPA-G requesting them to provide comments on the review motion of AEPL. In response, CPPA-G submitted comments on April 27, 2018 and MoE's comments were received on June 05, 2018. Following identical comments have been advanced by these entities:
 - NEPRA is requested to consider the planning code clause PC-4, i.e. in which it is stated that each year NTDCL shall prepare and deliver to NEPRA "Indicative Generation Capacity Expansion Plan" in Forecast and Generation Expansion Plan covering 0-10 years while considering the motion for leave for review of the petitioner.
 - Quantum specifically in case of renewable energy for 2017-18 has not been approved/finalized by the Grid Code Review Panel ("GCRP")
 - As per Cabinet Committee on Energy ("CCE") decision all the upcoming future renewable power projects shall be purely based on competitive bidding without exception.
- 11. Regarding the submission with respect to Indicative Generation Capacity Expansion Plan, the Authority noted that NTDCL vide its letter dated June 23, 2017 submitted tentative demand supply analysis with the report namely Power Balance Position Upto 2025. In that report, NTDCL has communicated that it plans to induct additional 600 MW of solar power projects in 2019-20.
- 12. Regarding quantum of renewable energy induction in the Grid, the Authority considered minutes of GCRP's meeting held on September 11, 2017, circulated on July 09, 2018, whereby GCRP decided to inform NEPRA and other stakeholders that the share of solar should be equal to 5% of the total installed grid connected power capacity.
- 13. Regarding award of tariff of renewable energy projects through competitive bidding, it was noted that vide its decision dated March 3, 2017 in the matter of Solar PV Power Generation Tariff, the Authority decided to induct solar energy through competitive bidding and directed the relevant agencies to develop Request For Proposal (RFP) for that purpose. Due to non-finalization of RFP by any agency after the lapse of considerable time period, the process of competitive bidding has not taken place. Further, the Authority through decision dated 20-09-

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2017 passed in the Review Motions of solar power projects clarified that submission of tariff petitions under the Tariff Rules, 1998 is permissible. Therefore, it may not be considered appropriate to stop entertaining applications under Tariff Rules, 1998 merely on the basis of the decision of CCOE.

14. Most importantly, the Authority noted that subject review motion has been filed against decision issued by NEPRA in the matter of reconsideration request filed by Federal Government. In that reconsideration request, MoE itself requested for the determination of tariff of the petitioner under Tariff Rules, 1998. CPPA-G also strongly supported this stance of MoE during the proceedings of that reconsideration request. Now their submissions that the tariff of AEPL should be determined under competitive bidding are contrary to their earlier stance and cannot be considered.

15. **ORDER**

The Authority hereby determines and approves the following generation tariff along with terms and conditions for Access Electric (Pvt.) Limited for its 10 MW_P solar power project for delivery of electricity to the power purchaser:

		Rs./kWh	
Tariff Component	Year 1-10	Year 11-25	
Operations and Maintenance Cost	0.8981	0.8981	
Insurance during Operation	0.2081	0.2081	
Return on Equity	1.8762	1.8762	
Debt Servicing	4.8039	-	
Total	7.7863	2.9824	

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- Levelized tariff works out to be US Cents 5.9374/kWh.
- EPC cost of USD 0.7035 million per MW has been considered.
- PDC including land cost of USD 538,090 has been taken into account.
- Annual Plant Capacity Factor of 20.26% has been used.





- Annual Degradation Factor of 0.5% has been used and capitalized in the approved project cost.
- O&M Cost of USD 15,180 per MW per year has been approved.
- The aforementioned tariff is applicable for twenty five (25) years from COD
- Debt Service shall be paid in the first 10 years of commercial operation of the plant.
- Debt Servicing has been worked out at fixed rate of 6%.
- Debt to Equity of 75:25 has been used.
- Return on Equity during construction and operation of 15% has been allowed.
- Construction period of eight (08) months has been allowed for the workings of ROEDC and IDC.
- Insurance during Operation has been calculated as 0.50% of the allowed EPC Cost.
- Reference Exchange Rates of 105 PKR/USD has been used.
- Detailed component wise tariff is attached as **Annex-I** of this decision.
- Debt Servicing Schedule is attached as **Annex-II** of this decision.

A. One Time Adjustments at COD

- The EPC cost shall be adjusted at actual considering the approved amount as the maximum limit. Applicable foreign portion of the EPC cost will be adjusted at COD on account of variation in PKR/USD parity, on production of authentic documentary evidence to the satisfaction of the Authority. The adjustment in approved EPC cost shall be made only for the currency fluctuation against the reference parity values.
- Approved PDC, Insurance during construction and Financing Fee and Charges shall be adjusted at actual at the time of COD considering the approved amount as the maximum limit. The amounts allowed on these accounts in USD will be converted in PKR using the reference PKR/USD rate of 105 to calculate the maximum limit of the amount to be allowed at COD.





- Duties and/or taxes, not being of refundable nature, relating to the construction period directly imposed on the company up to COD will be allowed at actual upon production of verifiable documentary evidence to the satisfaction of the Authority.
- IDC will be recomputed at COD on the basis of actual timing of debt draw downs (for the overall debt allowed by the Authority at COD) for the project construction period of eight months allowed by the Authority.
- For full/part of conventional local or foreign loans or a mix of both, if availed by the company, the IDC shall also be allowed adjustment for variations in applicable LIBOR/KIBOR.
- The tariff has been determined on debt : equity ratio of 75 :25. The tariff shall be adjusted on actual debt : equity mix at the time of COD, subject to equity share of not more than 25%. For equity share of more than 25%, allowed IRR shall be neutralized for the additional cost of debt : equity ratio.
- The reference tariff has been worked out on the basis of cost of 6% offered under SBP financing scheme. In case cost negotiated by the company under SBP scheme is less than the said limit of 6%, the savings in that cost shall be shared between the power purchaser and the power producer in the ratio of 60:40 respectively.
- For full or part of local or foreign loan, if any, the savings in the approved spreads shall be shared between the power purchaser and power producer in the ratio of 60:40.
- ROEDC will be adjusted at COD on the basis of actual equity injections (within the overall equity allowed by the Authority at COD) during the project construction period of eight months allowed by the Authority.

B. Indexations

Adjustment of O&M, return on equity, return on equity during construction shall be made on quarterly basis for the quarters starting from 1st July, 1st October, 1st January and 1st April based on latest available information. Adjustment of Debt Servicing Component (if any) shall be made either quarterly or bi-annually depending upon the final terms approved by the Authority. For bi-annual adjustments, the periods shall start from 1st July and 1st January. Insurance

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component shall be adjusted on annual basis starting from either 1st January or 1st July. The indexation mechanisms are given hereunder:

i) **Operation and Maintenance Costs**

O&M components of tariff shall be adjusted on account of change in local Inflation (CPI), foreign inflation (US CPI) and exchange rate quarterly on 1st July, 1st October, 1st January and 1st April based on the latest available information with respect to CPI notified by the Pakistan Bureau of Statistics (PBS), US CPI issued by US Bureau of Labor Statistics and revised TT & OD selling rate of US Dollar notified by the National Bank of Pakistan as per the following mechanism:

F. O&M _(REV)	=	F. O&M (REF) * US CPI(REV) / US CPI(REF) *ER(REV)/ER(REF)			
L. O&M _(REV)	=	L. O&M (REF) * CPI (REV) / CPI (REF)			
Where;					
FV. O&M _(REV)	=	The revised O&M Foreign Component of Tariff			
L. O&M _(REV)	=	The revised O&M Local Component of Tariff			
F. O&M _(REF)	=	The reference O&M Foreign Component of Tariff			
L. O&M _(REF)	=	The reference O&M Local Component of Tariff			
US CPI(REV)	=	The revised US CPI (All Urban Consumers)			
US CPI _(REF)	= The reference US CPI (All Urban Consumers) of 246.669 the month of November, 2017				
CPI _(REV)	=	The revised CPI (General)			
CPI _(REF)	=	The reference CPI (General) of 220.420 for the month of November, 2017			
ER _(REV)	=	The revised TT & OD selling rate of US dollar			
ER _(REF)	=	The reference TT & OD selling rate of RS. 105/USD			

Note: The reference indexes shall be revised after making the required adjustments in tariff components at the time of COD.





ii) Insurance during Operation

The actual insurance cost for the minimum cover required under contractual obligations with the Power Purchaser, not exceeding 0.5% of the approved EPC cost, will be treated as pass through. Insurance component of reference tariff shall be adjusted annually as per actual upon production of authentic documentary evidence according to the following formula:

AIC	=	Ins _(Ref) / P _(Ref) * P _(Act)
Where;		
AIC	=	Adjusted insurance component of tariff
Ins _(Ref)	=	Reference insurance component of tariff
P _(Ref)	=	Reference premium @ 0.5% of approved EPC Cost at Rs. 105
P (Act)	=	Actual premium or 0.5% of the approved EPC Cost converted into Pak Rupees on exchange rate prevailing at the time of insurance premium payment of the insurance coverage period whichever is lower

Note: The reference indexes shall be revised after making the required adjustments in tariff components at the time of COD.

iii) Return on Equity

The total ROE (ROE + ROEDC) component of the tariff will be adjusted on quarterly basis on account of change in USD/PKR parity. The variation relating to these components shall be worked out according to the following formula;

ROE _(Rev)	=	ROE _(Ref) * ER _(Rev) / ER _(Ref)				
Where;						
ROE _(Rev)	=	= Revised ROE Component of Tariff				
ROE _(Ref)	=	Reference ROE Component of Tariff				
ER _(Rev)	=	The revised TT & OD selling rate of US dollar as notified by the National Bank of Pakistan				
ER _(Ref)	=	The reference TT & OD selling rate of Rs. 105/USD				

Note: The reference tariff component shall be revised after making the required adjustments at the time of COD.

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iv) Indexations applicable to debt

For full or part of conventional foreign debt, if any, respective principle and interest components will be adjusted on quarterly/bi-annual basis, on account of revised TT & OD selling rate of US Dollar, as notified by the National Bank of Pakistan as at the last day of the preceding quarter, over the applicable reference exchange rate. The interest part of the foreign loan shall be allowed adjustment with respect to change in the applicable LIBOR. For full or part of conventional local loan, if any, the interest component shall be allowed adjustment with respect to change in applicable KIBOR.

C. Terms and Conditions

The following terms and conditions shall apply to the determined tariff:

- All plant and equipment shall be new and of acceptable standards. The verification of the plant and equipment will be done by the independent engineer at the time of the commissioning of the plant duly appointed by the power purchaser.
- As the power project is to be connected at 11 KV level where outages of transmission lines and grids are relatively more frequent than 132 KV system. Therefore, power purchaser should pay careful attention while setting the targets for forced outages and treatment of Non Project Missed Volume in the EPA.
- This review motion decision shall be read with the impugned decision for the parameters/conditions not discussed in this review motion decision.
- This tariff will be limited to the extent of net annual energy generation supplied to the power purchaser up to 20.26% net annual plant capacity factor. Net annual energy generation supplied to the power purchaser in a year, in excess of 20.26% net annual plant capacity factor will be charged at the following tariffs:





Net annual plant capacity factor	<u>% of the prevalent tariff</u>
Above 20.26% to 21.26%	80%
Above 21.26% to 22.26%	90%
Above 22.26%	100%

- The risk of solar resource shall be borne by the power producer.
- In the tabulated above tariff no adjustment for certified emission reductions has been accounted for. However, upon actual realization of carbon credits, the same shall be distributed between the power purchaser and the power producer in accordance with the applicable GOP Policy, amended from time to time.
- Allowed limit of degradation has been made part of the approved project cost. No extra financial compensation shall be provided in the EPA.
- The savings in the cost under SBP scheme during the loan tenor shall be shared between the power purchaser and power producer in the ration of 60:40.
- In case the company shall secure full or part of local conventional loan then the tariff of company shall be adjusted at the time of COD at applicable KIBOR + spread of 2.25%. The savings in the approved spreads during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan.
- In case the company shall secure full or part of foreign conventional loan then the tariff of company shall be adjusted at the time of COD at applicable LIBOR + spread of 4.25%. The savings in the approved spreads during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40. The tenor of the debt servicing shall not be less than thirteen years for this loan.
- In case the company shall secure foreign loan under any credit insurance (Sinosure etc.) then the cost of that insurance shall be allowed to the maximum limit of 0.6% of the yearly



outstanding principal and interest amounts. For that purpose, the spread over that full/part of loan shall be considered as 3.5% as the maximum limit. The savings in the approved spreads during the loan tenor shall be shared between the power purchaser and power producer in the ratio of 60:40.

- The company will have to achieve financial close within six months from the date of issuance of this review motion decision. The tariff granted to the company will no longer remain applicable/valid, if financial close is not achieved by the company in the abovementioned timeline or its generation license is declined/revoked by NEPRA.
- The targeted maximum construction period after financial close is eight months. No adjustment will be allowed in this tariff to account for financial impact of any delay in project construction. However, the failure of the company to complete construction within eight months will not invalidate the tariff granted to it.
- Pre COD sale of electricity is allowed to the power producer, subject to the terms and conditions of EPA, at 50% of the applicable tariff. However, pre COD sale will not alter the required commercial operations date stipulated in the EPA in any manner.
- In case the company is obligated to pay any tax on its income from generation of electricity, or any duties and/or taxes, not being of refundable nature, are imposed on the company, the exact amount paid by the company on these accounts shall be reimbursed on production of original receipts. This payment shall be considered as a pass-through payment. However, withholding tax on dividend shall not be passed through.
- No provision for the payment of Workers Welfare Fund and Workers Profit Participation has been made in the tariff. In case, the company has to pay any such fund, that will be treated as pass through item in the EPA.
- The approved tariff along with terms & conditions shall be made part of the EPA. General assumptions, which are not covered in this determination, may be dealt with as per the standard terms of the EPA.





16. The Order part along with two Annexures 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) 13.19.2313 Member

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2018 Ø 0 (Rehmatullah Baloch) Vice Chairman

17.20 (Brig (R) Tariq Saddozai Chairman OWERR NEPR

	Veer O&M Local O&M Foreign During Equity ROEDC Loan Interest Charges Tariff									
Year	Rs. / kWh	Rs. / kWh	Operation Rs. / kWh	Rs. / kWh						
1	0.4490	0.4490	0.2081	1.7964	0.0798	2.7084	2.0955	7.786		
2	0.4490	0.4490	0.2081	1.7964	0.0798	2.8746	1.9293	7.786		
3	0.4490	0.4490	0.2081	1.7964	0.0798	3.0510	1.7529	7.786		
4	0.4490	0.4490	0.2081	1.7964	0.0798	3.2382	1.5657	7.786		
5	0.4490	0.4490	0.2081	1.7964	0.0798	3.4369	1.3670	7.786		
6	0.4490	0.4490	0.2081	1.7964	0.0798	3.6478	1.1561	7.7863		
7	0.4490	0.4490	0.2081	1.7964	0.0798	3.8716	0.9322	7.7863		
8	0.4490	0.4490	0.2081	1.7964	0.0798	4.1092	0.6947	7.7863		
9	0.4490	0.4490	0.2081	1.7964	0.0798	4.3614	0.4425	7.7863		
10	0.4490	0.4490	0.2081	1.7964	0.0798	4.6290	0.1749	7.7863		
11	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
12	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
13	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
14	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
15	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
16	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
17	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
18	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
19	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
20	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
21	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
22	0.4490	0.4490	0.2081	1.7964	0.0798	- 1	-	2.9824		
23	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
A R 24 25	0.4490	0.4490	0.2081	1.7964	0.0798		-	2.9824		
	0.4490	0.4490	0.2081	1.7964	0.0798	-	-	2.9824		
Levelized Tariff	0.4490	0.4490	0.2081	1.7964	0.0798	2.3216	0.9303	6.2343		

ACCESS ELECTRIC (PVT.) LIMITED Reference Tariff Table

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ACCESS ELECTRIC (PVT.) LIMITED Debt Servicing Schedule

Relevant Quarters	Base amount (USD)	Principal Repayment (USD)	Interest (USD)	Balance Principal (USD)	Total Debt Service (Million USD)	Annual Principal Repayment Rs./kWh	Annual Interest Rs./kWh
1	6,072,792	111,904	91,092	5,960,888	202,996		
2	5,960,888	113,583	89,413	5,847,305	202,996		
3	5,847,305	115,286	87,710	5,732,019	202,996	2.7084	2.0955
4	5,732,019	117,016	85,980	5,615,004	202,996		
5	5,615,004	118,771	84,225	5,496,233	202,996		1
6	5,496,233	120,552	82,443	5,375,681	202,996		
7	5,375,681	122,361	80,635	5,253,320	202,996	2.8746	1.9293
8	5,253,320	124,196	78,800	5,129,124	202,996		
9	5,129,124	126,059	76,937	5,003,065	202,996		
10	5,003,065	127,950	75,046	4,875,115	202,996		
11	4,875,115	129,869	73,127	4,745,246	202,996	3.0510	1.7529
12	4,745,246	131,817	71,179	4,613,429	202,996		
13	4,613,429	133,794	69,201	4,479,634	202,996		
14	4,479,634	135,801	67,195	4,343,833	202,996	_	
15	4,343,833	137,838	65,157	4,205,995	202,996	3.2382	1.5657
16	4,205,995	139,906	63,090	4,066,089	202,996		
17	4,066,089	142,005	60,991	3,924,084	202,996	·	1
18	3,924,084	144,135	58,861	3,779,950	202,996		1.3670
19	3,779,950	146,297	56,699	3,633,653	202,996	3.4369	
20	3,633,653	148,491	54,505	3,485,162	202,996		
21	3,485,162	150,718	52,277	3,334,444	202,996	· · · · · · · · · · · · · · · · · · ·	1
22	3,334,444	152,979	50,017	3,181,465	202,996		
23	3,181,465	155,274	47,722	3,026,191	202,996	3.6478	1.1561
24	3,026,191	157,603	45,393	2,868,588	202,996		
25	2,868,588	159,967	43,029	2,708,621	202,996		1
26	2,708,621	162,367	40,629	2,546,254	202,996		
27	2,546,254	164,802	38,194	2,381,452	202,996	3.8716	0.9322
28	2,381,452	167,274	35,722	2,214,178	202,996		
29	2,214,178	169,783	33,213	2,044,395	202,996		1
30	2,044,395	172,330	30,666	1,872,065	202,996		
31	1,872,065	174,915	28,081	1,697,150	202,996	4.1092	0.6947
32	1,697,150	177,539	25,457	1,519,612	202,996		
33	1,519,612	180,202	22,794	1,339,410	202,996		
34	1,339,410	182,905	20,091	1,156,505	202,996		
35	1,156,505	185,648	17,348	970,857	202,996	4.3614	0.4425
36	970,857	188,433	14,563	782,424	202,996		l
37	782,424	191,259	11,736	591,165	202,996		†
38	591,165	194,128	8,867	397,036	202,996		1
39	397,036	197,040	5,956	199,996	202,996	4.6290	0.1749
40	199,996	199,996	3,000	(0)			ļ

