

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/R/ADG(Trf)/TRF-580/TEPL-2022/1104-1106 January 23, 2023

Subject:

Decision of the Authority in the matter of Tariff Petition filed by Tapal Energy (Pvt.) Limited for Approval of Generation Tariff for Two Years of RFO Based Power Plant of 126 MW (Gross) at Karachi [Case # NEPRA/TRF-580/TEPL-2022]

Dear Sir,

Please find enclosed herewith the subject Decision of the Authority (08 Pages) in Case No. NEPRA/TRF-580/TEPL-2022.

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 within 30 days from the intimation of this Decision. In the event the Federal Government fails to notify the subject tariff Decision or refer the matter to the Authority for reconsideration, within the time period specified in Section 31(7), then the Authority shall notify the same in the official Gazette pursuant to Section 31(7) of NEPRA Act.

Enclosure: As above

(Engr. Mazhar Iqbal/Ranjha)

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 TARIFF PETITION FILED BY TAPAL ENERGY (PRIVATE) LIMITED FOR APPROVAL OF GENERATION TARIFF FOR TWO YEARS OF RFO BASED POWER PLANT OF 126 MW (GROSS) AT KARACHI.

1. INTRODUCTION

- 1.1. Tapal Energy (Private) Limited (TEL), has been operating a RFO based power generation facility of 126 MW gross at Deh Gondpass, Tapo Gabopat, Hub River Road, Taluka & district Karachi (West), Karachi, Sindh. The project is established under 1994 Power Policy. The Project has been selling electricity to K-Electric. The Generation License was granted on 26th August 2003 and vide Modification II extended the term of generation license up to 19th June 2029.
- 1.2. Before expiry of PPA, TEL vide its letter No. REL/NEPRA/011/19 dated 7th December 2018 filed a tariff petition for determination of tariff for extension of the PPA term for further five years from 20th June 2019 to 20th June 2024. The Authority vide its determination dated 20th November 2019 approved the tariff for TEL for supply of electricity to K Electric w.e.f. 20th June 2019 for a term of three years or till the time CPPA-G/NTDC were willing and capable of supplying equivalent additional power to KE, whichever comes earlier.
- 1.3. TEL vide its letter dated 28th November 2019 filed a review motion against above said Determination of the Authority dated 20th November 2019. Decision of the Authority in the matter of review was issued on 9th June 2020.

2. FILING & ADMISSION OF TARIFF PETITION

- 2.1. TEL vide letter dated 10th March 2022 filed a tariff petition for determination of reference generation tariff for 1 more year which was later withdrawn and refiled revised tariff petition on 7th June 2022 for 2 years starting 20th June 2022. The Authority admitted the petition in RM 22-308 held on 13th June 2022. Minutes of meeting were issued on 29th June 2022.
- 2.2. Notice of Admission along with salient features of the petition was made public on 22nd June 2022 inviting comments/interventions from stakeholders. Salient features of the Petition are as under:
 - i. The petitioner proposed the following tariff:



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Description	Year 1	Year 2
Energy Charge :	Rs./kWh	Rs./kWh
Fuel cost component	21.3745	21.3745
Variable O&M cost component	1.1275	1.1267
Total	22.5020	22.5012
Capacity Charge:		
Fixed O&M cost component	1.4024	1.4361
Cost of working capital	0.8363	0.8565
Insurance	0.4314	0.4419
Return on Equity	1.3627	1.3955
Total	4.0328	4.1300
Total Tariff (Rs./kWh)	26.5348	26.6312

- ii. The proposed extended term of the PPA is two year.
- iii. The revised tariff has been worked out on the basis of projected capacity factors of 30.38% and 29.58% for year 1 and 2 respectively.
- iv. The requested fuel cost component is based on Ex-GST RFO price of Rs. 98,356.48/Ton, thermal efficiency of 40.92% (LHV heat rates of 8,337.84 BTU/kWh) and average lower Calorific Value of 38,367.30 Btu/Kg.
- v. The Petitioner has requested variable O&M on the basis of estimated annual cost of Rs. 370.522 million and Rs. 361.577 million for year 1 and 2 respectively.
- vi. The Petitioner has requested fixed O&M on the basis of actual average annual cost of last 3 years of Rs. 460.862 million.
- vii. The petitioner has requested cost of working capital on the basis of working capital requirement of Rs. 2,223.724 million at 12.36% interest rate.
- viii. The requested annual insurance component is calculated on the basis of US\$ 800,000 p.a. which is actual average United States Dollar based annual premium paid over the last 3 years.
- ix. The return on Equity component of tariff has been calculated on the basis of annual ROE of Rs. 447.840 million at 12% ROE.
- x. Net capacity of the plant is 123.50 MW.
- xi. The petitioner has also sought applicable indexation adjustments of all components except for ROE in line with the previous determination.



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- 2.3. The Petitioner vide letter No. TEL/NEPRA/003/23 dated 4th October 2022 submitted that KE has intimated the revised anticipated dispatch factor of 45% for both years and submitted revised tariff for both years on 45%.
- 2.4. The Petitioner vide Letter No. TEL/NEPRA/005/23 dated 7th November 2022 submitted yet again revised anticipated plant factors of 45% and 37% for year 1 and year 2 respectively as communicated by KE. The Petitioner also requested the following revised tariff components:

Description	Year 1	Year 2
Energy Charge:	Rs./kWh	Rs./kWh
Fuel cost component	21.3745	21.3745
Variable O&M cost component	1.1808	1.2967
Total	22.5553	22.6712
Capacity Charge:		
Fixed O&M cost component	0.9466	1.1513
Cost of working capital	0.5646	0.6866
Insurance	0.2913	0.3542
Return on Equity	0.9199	1.1188
Total	2.7224	3.3109
Total Tariff (Rs./kWh)	25.2777	25.9821

3. INTERIM TARIFF

- 3.1. Pursuant to Rule 4(7) of the National Electric Power Regulatory Authority (Tariff Standards and Procedure) Rules, 1998, TEL also requested the Authority to exercise its power and grant a provisional approval of tariff based on the reference tariff petition. Such provisional tariff will allow the company to continue the supply of power to KE during the period between the expiries of its existing tariff i.e. 19th June 2022 till the Authority arrives at its final determination with regard to the Company's reference tariff petition. Since the expiration of the current tariff is near, TEL requested the grant of the provisional tariff approval for the interim period on an urgent basis so that the company can continue to supply electricity to KE.
- 3.2. Decision in the matter was issued on 17th June 2022 wherein the Authority allowed following Take and Pay base tariff for immediate application subject to final decision and an order of refund, if any, for the protection of the consumers while the proceedings are pending before the Authority:



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Description	Rs/kWh
Energy Charge:	
Fuel cost component (RFO price Rs. 166,874.66/ton)	35.6930
Variable O&M cost component	0.8347
Total	36.5277
Capacity Charge:	
Fixed O&M cost component	0.7315
Cost of working capital	0.5534
Insurance	0.1687
Return on Equity	0.5830
Total	2.0366
Total Tariff (Rs./kWh)	38.5643

4. COMMENTS & INTERVENTION REQUESTS

- 4.1. In response to the notice of admission and individual notices, K-Electric vide its letter dated 1st July 2022 filed an intervention request and conveyed that KE will submit its point of view during the proceedings, where required. The intervention request was accepted by the Authority. No written submissions were made during the proceedings.
- 4.2. CPPA-G vide letter dated 21st July 2022 submitted the following comments in the matter:
 - Regarding requested net LHV thermal efficiency of 40.92%, CPPA-G in its comments recommended to direct Tapal Energy to conduct heat rate test through reputable international consultant under latest version of ISO- 3046 to assess actual heat rate and capacity of the power plant and until such time NEPRA may maintain its earlier decision of approving 41.34% net LHV on open cycle mode.
 - Regarding requested LHV CV of 38,367.30 Btu/kg, CPPA-G in its comments recommended to maintain already approved 38,584.49 Btu/kg as LHV calorific value without any adjustment mechanism which is based on financial statements of the company.
 - Although there is claw back mechanism in place to recover excessive returns beyond regulated return however, there is a need to include Fuel and O&M sharing mechanism as available in Master Agreements of RFO based IPPs installed under 2002 power policy. The benefit so obtained by triggering claw back mechanism and Fuel and O&M sharing mechanism be passed on to K-Electric consumers on regular intervals by NEPRA.



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- K-Electric while assuming capacity factors of 30.38% and 29.58% for 1st and 2 years of operation also mentioned that these capacity factors are subject to gas supply, COD of BQPS-III, system demand, supply from NTDC etc. It is submitted that in presence of uncertainty/conditional consent of K-Electric, the request of Tapal Energy may not be considered by the Authority and already determined capacity factor i.e., 71% be utilized for determining generation tariff. Moreover, the actual historical capacity factor as submitted by Tapal Energy i.e., 62.77% requires third party verification to analyze that whether this is due to System demand or due to O&M related issues associated with the power plant. It is suggested that the inefficiency in this regard may not be passed on to the end consumers.
- Owing to significant implications, the expected revision in reference site conditions including temperature, humidity, pressure, and altitude as requested by petitioner may not be allowed by NEPRA. The reference site conditions are already available in Generation License issued by NEPRA to Tapal Energy and the same are recommended to be maintained. In case of any expected relocation of the subject facility, requisite approvals from competent authorities be obtained well in advance.
- The annual availability of 92% be considered for Tapal Energy in line with NEPRA's earlier decision. The 8% outage must be inclusive of Scheduled, Maintenance and Forced outages and any other separate days for major overhaul may not be allowed by the Authority.
- The treatment of force majeure events and risk provisions including LDs be treated at par with standard PPA provisions.
- 4.3. Planning commission vide letter dated 21st July 2022 submitted the following comments in the matter:
 - Tapal Energy (Pvt) Ltd is generating 123.5 MW (net) electricity from RFO based Power Plant. Due to high prices of the fuel, power generation from such RFO based power plants have become more expensive. NEPRA may consider to close the said RFO based power plant and explore the other means for low-priced power generation.
 - K-Electric is currently purchasing around 1100 MW electricity from National Grid without making payments. NEPRA may direct the K-E for release of payments to the CPPA-G/NTDCL, so that the additional power of 123.5 MW may be supplied to the K-E from National Grid.
- 4.4. E-mail comments of Mohammad Raza sangji have been received through Registrar Email which are reproduced as under:
 - Your attention is also invited to my earlier mail dated August 12, 2019.



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- As I had predicted in my mail dated August 12, 2019 that "hence it is crystal clear that Pakistan will have surplus energy by 2021 which will put most of the plants redundant ", Para # 3, therefore those power plants which are run on RFO/FO and not listed to Pakistan Stock Exchange (PSX) should not be given extension as nearly all the Independent Power Producers (IPPs) listed on PSX are working under capacity hence all of them are losing money, therefore instead of running all IPPs under capacity, therefore preference should be given to those IPPs who are listed on PSX therefore they will work efficiently and make profit which will also benefit their small shareholders.
- It is therefore strongly recommended that instead of using private power plants, preference should be given to listed IPPs which will save energy, used efficiently and small shareholders will get dividends, hence Tapal Energy Private Limited should not be given any extension as its total tariff of Rs. 26.5216 is far higher than RLNG/Coal/Nuclear/Bagasse.
- I hope my suggestion will be given urgent attention in order to save fuel, avoid further
 Balance of Payments escalation, inflation.

4.5. Mr. M. Arif Bilwani vide email dated 10th August 2022 submitted following comments:

- At the outset it is to be noted that the application is dated and filed on 7.6.2022, with earlier petition being withdrawn, but contains data which is not only obsolete but is also in great variance with the ground realities existing not only on the date of its filing but also with the last 2-3 months. This window dressing has deliberately been done to make it more presentable and palatable.
- Energy charges for two years have been worked out at Rs. 22.50 approximately on the basis of Reference Fuel Cost of Rs. 98,356.48 per ton whereas the average actual cost of F.O.as per KE data in its monthly FCA was Rs. 113,671/-, 138,582/-, 157,062/- & 161,749/- for the months of March, April, May & June, 2022. Had the reference price for energy been worked out on the basis of above prices it would have been shockingly higher. Further the Calorific Value of F.O. has been based on 38,367.30 Btu/kg. Whereas KE's based at 40,351 Btu/kg. How is it possible? Value of US \$ has been considered at Rs. 177/25 which is highly unrealistic not only under the current circumstances but was not prevalent during the last 3 months. As regards RULA certification, on the remaining useful life of the project, by Continental Marine Energy Sdn Bhd is concerned it would be sufficient to say that the so called Expert is nothing but a Brief Case company which may be verified by visiting web.
- Under the current and near future circumstances it is highly unlikely that KE may get the requisite amount of energy from CPPA/NTDC so also its own new RLNG based power plant is also in doldrums. Therefore, the capacity factors considered in the



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application are on extremely low side which can be vouched from the load factors of July & August, 2022.

- Extension in PPA term by allowing all the benefits of IPPs even after the expiry of the initial term and the extended term totaling 25 years is totally unjustifiable & illogical from the ultimate consumer's point of view who will bear the brunt. Instead they be provided relief after 25 years of fleecing.
- As regards various elements of variable O&M and Fixed costs are concerned, the Authority is requested to please consider the fact that the sponsors have already recouped not only their investment but also have benefitted with tax free income in the form of extra ordinary profits for the last many years and still have in their hands substantial assets free of cost. It's now time that they share the fruits of production of power at least cost. It's the primary duty of the NEPRA employees to minutely scrutinize each and every component of cost claimed by the applicant for which they have been tasked.
- Since it's a debt free and almost depreciated plant no WPA/CPA indexation or anything dollar based be allowed. Pass through items like WPPF, WWF, all sorts of taxes including income tax, minimum tax, super tax or any other levy may not be allowed. The renewed contract must be as simple as Take It or Leave It.
- Further comments, if any, shall be provided during & after the hearing.

5. ISSUES FRAMMED FOR HEARING

- 5.1. On the contents of the tariff Petition, following issues have been framed for the hearing:
 - i. Whether the requested extension in PPA term at revised tariff is justified?
 - ii. Whether the revision in tariff on the basis of projected capacity factors of 30.38% and 29.58% for year 1 & 2 respectively are justified?
 - iii. Whether the fuel cost component at thermal efficiency of 40.92% on actual data of last 3 years is justified?
 - iv. Whether the requested variable O&M costs are justified?
 - v. Whether the requested fixed O&M cost is justified?
 - vi. Whether the requested insurance cost is justified?
 - vii. Whether the requested cost of Working Capital is justified?
 - viii. Whether the requested ROE is justified?
 - ix. Any other relevant issue arising during the proceedings.



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6. HEARING

- 6.1. The hearing in the subject matter was scheduled on 3rd August 2022 which was rescheduled on 11th August 2022 on the request of Petitioner. Revised notice was published on 29th/30th July and individual notices were also sent to stakeholders on dated 28th July 2022.
- 6.2. The hearing was held as per schedule and was participated by representatives from the Petitioner, KE and Mr. Arif Bilwani.

7. DECISION

- 7.1. The submissions of the Petitioner have been evaluated. The project is part of IGCEP 2022-31 till 30th June 2023. With the advent of CTBCM and end of 5 years moratorium period in April 2023, the power producer is free to sell energy under CTBCM regime. It may also find new off takers and enter into bilateral agreements with bulk power consumers.
- 7.2. Accordingly, the Authority has decided to extend the term of tariff till 30th April 2023 or lifting of the moratorium period before the stipulated date, whichever comes earlier, on the same terms & conditions approved vide decision dated 9th June 2020. The instant decision shall supersede the interim tariff decision dated 17th June 2022. After 30th April 2023 TEL may sell energy under CTBCM regime.
- 7.3. The above decision of the Authority shall be notified in the Official Gazette in terms of Section 31(7) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

Engr. Rafique Ahmed Shaikh

Member

Engr. Magsood Anwar Khan

Member

Tauseef H. Farood

Chairman

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