

National Electric Power Regulatory Authority Islamic Republic of Pakistan

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> No. NEPRA/BAR-180/33169-71 September 30, 2020

Subject:

APPROVAL OF POWER ACQUISITION REQUEST FILED BY K-ELECTRIC LIMITED FOR PURCHASE OF 1-6MW FROM LUCKY CEMENT LIMITED UNDER NEPRA INTERIM POWER PROCUREMENT (PROCEDURES & STANDARDS) REGULATIONS, 2005 [CASE NO. NEPRA/PAR-180]

Dear Sir.

Please find enclosed herewith the subject Approval of the Authority (15 pages) in Case No. NEPRA/PAR-180.

- 2. The Approval is being intimated to the Federal Government for the purpose of notification in the official gazette in accordance with the provisions of Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act, 1997.
- 3. Order of the Authority is to be to be notified in the official Gazette.

Encl: As above

(Syed Safeer Hussain)

Secretary
Ministry of Energy
'A' Block, Pak Secretariat
Islamabad

CC:

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



National Electric Power Regulatory Authority

`(NEPRA)

Approval of

Power Acquisition Request Filed by

K-Electric Limited

For Purchase of 1-6 MW from Lucky Cement Limited

under

NEPRA Interim Power Procurement (Procedures & Standards) Regulations 2005

(No: NEPRA/PAR-180)

Islamabad

Commentator:

- i. Hyderabad Electric Supply Company (HESCO)
- ii. Lucky Cement Limited



1. INTRODUCTION

- 1.1. K-Electric Limited (KE) submitted the Power Acquisition Request (PAR) for purchase of 1-6 MW from Lucky Cement Limited (LCL) under the Interim Power Procurement (Procedure & Standards) Regulations, 2005 (hereinafter "IPPR-2005"). KE, inter-alia, also submitted Power Sale proposal (PSP) from LCL along with its PAR to NEPRA, in accordance with IPPR-2005 and requested the Authority to approve following:
 - i. The power acquisition request (PAR) so that KE may purchase power from LCL.
 - ii. Determine a power purchase tariff;
- 1.2. KE further submitted that Power Acquisition Contract (PAC) between KE and LCL will be submitted after approval of PAR and tariff determination.
- 1.3. While justifying the demand supply gap, KE submitted that it has a customer base of more than 2.8 million connections across residential, commercial, industrial and agricultural sectors. Besides serving the existing customer base, KE continues to make efforts to cope with the power demands of emerging suburban areas around Karachi city. For this purpose, KE is engaged in planning, development and execution of new grid stations and distribution networks to be able to serve the power demands of emerging load centers.
- 1.4. KE further submitted that DHA City Karachi (DHCK) is a new residential cum commercial project in the suburbs of Karachi and falls within the KE licensed territory. According to KE, DHCK has agreed to fulfill new connections requirement including construction of required power infrastructures but it has requested for immediate energization of DHCK. The nearest KE grid is at a distance of around 35-40 KM from DHCK, however, generation facility of LCL is around 5 KM away from DHCK. Therefore, the only possible solution for immediate energization of DHCK is to lay feeder from LCL generation facility. Accordingly, KE, DHCK and LCL have reached an understanding for purchase by KE of surplus power of up to 6 MW from LCL for onward supply to DHCK through 11 kV network.
- 1.5. According to KE, the present load requirement of DHCK is low and is estimated to be between 1-2 MW. KE further submitted that it is engaged with DHCK for planning of EHT transmission line and grid stations, however, its planning and construction would take few years. The acquisition of Right of Way for the transmission line is also time consuming. A solution is therefore required to address the existing and growing demand during the intervening period before EHT network becomes available to DHCK.
- 1.6. KE also submitted that LCL has 29.7304 MW thermal power plant fired on gas. The plant consists of three (3) Rolls Royce engines of 7 MW each and one (1) Wartsila engine of 8.7 MW. This facility is being used to supply HESCO up to 20 MW. LCL can supply 1-6 MW power to KE for onward delivery to DHCK. LCL has a valid generation license no. SGC/72/2011 issued by NEPRA for this facility which is valid up to 24 October 2031. LCL plans to supply KE up to 6 MW from the same facility. For this purpose, LCL filed a Licensee Proposed Modification ("LPM") with NEPRA on 20 July 2019 for inclusion of KE as a power purchaser. The Authority modified the license of LCL on 21 February 2020 thereby allowing LCL to supply electric power to KE for onward supply to DHCK on individual connection/metering basis.



1.7. According to KE, LCL has a Gas Supply Agreement with SSGC and also uses gas for generation and sale of surplus power to HESCO. LCL has applied to SSGC vide its letter dated 17 May 2019 for a No Objection Certificate ("NOC") in relation to supply of surplus power to KE. SSGC provided NOC to LCL for sale of surplus power to KE vide its letter No. Sales/NOC-PG594/2 dated March 17 2020.

2. ADMISSION & SILENT FEATURES OF PAR

- 2.1. The PAR was filed on March 03, 2020 for purchase of power from LCL. The Authority admitted the PAR on April 23, 2020.
- 2.2. Salient features of PAR are as under:
 - i. KE requested following tariff:

Description	Amount (Rs./kWh)
Fuel Cost Component Excluding GIDC	12.38
Gas Infrastructure Development Cess (GIDC)	2.42
Fixed Cost Component	2.37
Financial Cost Component	1.28
Total Tariff (Year 1-7)	18.45

ii. The requested tariff is based on following economic assumptions:

PKR-US\$	155.35 PKR/US\$ NBP selling rate as on 31 st
Exchange Rate	December 2019
Gas Price	Rs. 1,021/MMBtu on HHV basis
GIDC	Rs. 200/MMBtu
	13.55%
Interest Rate	3-Months Offer Side KIBOR as on 31 st December
	2019 published by State Bank of Pakistan

- iii. Plant efficiency as per NCPP Policy is assumed by the applicant.
- iv. The fuel cost component will be adjusted on account of fuel price variation, the fixed cost component will be subject to bi-annual indexation for inflation and the financial cost component will be subject to indexation on account of variation in quarterly KIBOR.
- v. The proposed tariff shall be on "Take and Pay" basis.
- vi. The proposed term for the power acquisition request is seven (7) years.
- 2.3. According to KE during discussions with LCL with respect to the proposed tariff, the latter maintained that in order to supply power to KE, anything less than the NCPP tariff is not feasible for them. Consequently, LCL included the NCPP policy tariff in the power sale proposal (PSP) submitted to KE for tariff determination by NEPRA. KE understands that for any pass through of power purchase costs to the consumer end tariff of KE, the same shall be determined by NEPRA. Therefore, KE requests NEPRA to admit the PAR and review the PSP of LCL to determine a generation tariff for the purchase of power from LCL in accordance with the IPPR-2005.

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NEPRA



3. NOTICE OF ADMISSION

- 3.1. Notice of admission along with salient features of PAR was published in newspapers on 9th July 2020 inviting comments from various stakeholders. Individual notices were also issued in the matter on 14th July 2020.
- 3.2. In response to Notice of Admission dated 9th July 2020 and 14th July 2020, no comments were received.

4. ISSUES FRAMED

- 4.1. On the basis of contents of PAR, following issues were framed for the hearing:
 - i. Whether the term of the proposed contract of 07 years is reasonable and justified?
 - ii. Whether the requested fuel cost component of Rs. 12.38/kWh and GIDC of Rs. 2.42/kWh on the basis of efficiency as per NCPP policy are justified?
 - iii. Whether the requested fixed cost component of Rs. 2.37/kWh is justified?
 - iv. Whether the requested financial cost component of Rs. 1.28/kWh is justified?
 - v. Whether the proposed tariff indexations / adjustments are justified?
 - vi. Whether adequate transmission facilities are available for evacuation of power from LCL generation facility?

5. HEARING

- 5.1. The Authority decided to hold a hearing in the matter on 28th July 2020 through video link on Zoom. Notice of Hearing was made public on 25th July 2020 and 26th July 2020. Individual notices were also sent to stakeholder.
- 5.2. Hearing was held as per schedule and was participated by representatives from KE, LCL and DHKC through Zoom. Hyderabad Electric Supply Company (HESCO) representatives were present in person.

6. COMMENTS

6.1. In response to the notice of hearing, HESCO made following submissions vide its letter No. CEO/HESCO/CE(P&E)/DM(SPP)/6852 dated 28th July 2020:

Sr. No.	Issues	HESCO's Comments	
		The main features of NCPP Policy is as under:	
1.	New Captive Power Producers (N-CPP's) Policy Framework	 The Captive Power Producers (CPP's) established with new investments on new machines or engines Companies (CPP's) while fulfilling their own requirements would simultaneously be offering sale of at least 10 MW. 	
	ROWER REGUL	In view of the above, it is stated that M/s Lucky Cement Limited (LCL) neither have a new machines/engines nor offering 10 MW to M/s KE, therefore, M/s LCL is not eligible	





Sr. No.	Issues	HESCO's Comments
110.		for NCPP based tariff.
į		According to PAR approved by NEPRA on 09.01.2013 for M/s LCL, the applicable reference Fuel Cost Component (FCC) effective from 1 st December 2013 or completion of the combined cycle power plant, whichever is earlier, will be Rs. 2.0957/kWh (calculated on the basis of heat rate of 9,736 Btu/kWh or thermal efficiency of 43%).
2.	Fuel Cost Component (FCC)	Therefore, according to the formula provided by NEPRA, the Revised Fuel Cost Component is as under:
		Gas Cost Component (Revised) = Revised Gas Price as per OGRA notification / Reference Gas Price × Reference Gas Cost Component.
		GCC (Rev) = $1021/238.38 \times 2.0957 = 8.9760$
3.	Gas Infrastructure Development Cess (GIDC)	It is NEPRA's directive that if Power Producer is not paying GIDC to Government of Pakistan (GOP) through Gas Supplier i.e. M/s SSGCL, there is no need to pay GIDC to Power Producers.
3.		It is stated that GIDC is not admissible for M/s LCL, because at present M/s LCL is not paying GIDC to M/s SSGCL.
		Therefore, NEPRA has to decide accordingly. NEPRA allowed the following fixed cost component to CPP's:
	Fixed Cost Component	O&M Variable = 0.6100/kWh O&M Fixed = 0.4749/kWh Insurance = 0.1067/kWh ROE = 0.387/kWh Total Fixed Cost = 1.5787/kWh
4.		NEPRA assessed the Fixed Cost on the basis of 09 month plant operation, in case of plant operating in 03 non-gas months; the power producer i.e. M/s LCL will be entitled only the fuel cost component and variable O&M.
		NEPRA also allowed the O&M indexation every two years in the month of April on the basis of CPI. (General)
5.	Financial Cost Component	The Financial Cost Component is not admissible in this case, as M/s LCL does not fall under NCPP policy framework, as discussed in point-1 above.
Tota	l Tariff Excl. GIDC	10.5547/kWh
1	l Tariff Excl. GIDC During Non- Month	9.586/kWh
6.	Court Cases	Honorable High Court of Sindh, Karachi in its decision dated 19.08.2015, allowed the NEPRA tariff from 01.02.2012,





Sr. No.	Issues	HESCO's Comments
		however, the review appeal of both parties i.e. Power Producers and Power Purchaser are still under litigation at Honorable Supreme Court of Pakistan.
		If NEPRA allowed the higher tariff to M/s LCL, then it will directly affect our petition under litigation in Supreme Court of Pakistan, and Honorable Court can decide the case in favor of M/s LCL & others and due to this HESCO/GoP can face huge financial loss in terms of higher tariff.
		Therefore, it is requested to allow the lower tariff or tariff equal to HESCO purchase rate from M/s LCL.
7	Contracted Capacity between M/s LCL & KE	NEPRA allowed M/s LCL to supply 5.00 MW power to KE, whereas KE submitted the Power Acquisition Request (PAR) for I to 6 MW.
		It is requested to check and correct the same accordingly.
8.	M/s LCL & HESCO	NEPRA should bind M/s LCL for supply of 20.0 MW power to HESCO on 1 st priority basis and then KE. As HESCO has paid the huge amount to M/s LCL in term of Financial Cost Component, as allowed by NEPRA.

6.2. HESCO made further submissions vide its letter No. CEO/HESCO/CE(P&E)/DM/(SPP)/6924 dated 30th July 2020, which are reproduced here under:

Sr.	Issues Raised by HESCO During the Hearing	Authority's Directions	HESCO's comments in view of Authority's Decision
1.	It has been praying to NEPRA that HESCO's interests should be protected i.e. uninterrupted power supply of 20 MW to HESCO	M/s LCL should submit the undertaking to NEPRA for uninterrupted power supply of 20 MW to HESCO as well as M/s LCL should ensure the Authority that they will not utilize the subject	It is added that HESCO & M/s LCL signed the Power Purchase Agreement (PPA) on CPPA tariff and HESCO obtained the undertaking from M/s LCL for the tariff determined by NEPRA. Subsequently, NEPRA determined the tariff for M/s LCL & other Power Producers (NCPPs) on 09.01.2013 and the same was challenged by M/s LCL (in presence of abovementioned undertaking by M/s LCL) & others in Court of Law for its suspension.
ELECTOR	NEPRA AUTHORITY	determination against HESCO in tariff dispute case of NCPP, which is under litigation in Supreme Court of Pakistan. If NEPRA allows higher tariff to M/s LCL as compare to HESCO	From the above position, HESCO would not trust on M/s LCL that M/s LCL will follow the provisions of undertaking to be submitted by them in NEPRA. Moreover, HESCO understands that if the decision of NEPRA on the subject matter is in favor of M/s LCL (if NEPRA allows higher tariff to M/s LCL for sale of power to M/s KE) and M/s LCL gives assurance to the Authority that they will not utilize the subject determination against HESCO in tariff



Sr.	Issues Raised by HESCO During the Hearing	Authority's Directions	HESCO's comments in view of Authority's Decision
			dispute case of NCPP, the worth of above assurance of M/s LCL is useless because 08 No Power Producers (SPPs/NCPPs) also filed the same review petition in Supreme Court of Pakistan and it is possibility that they can utilize and submit subject determination in Honorable Supreme Court of Pakistan against NEPRA & HESCO for favourable consideration.
			Foregoing, in view of the above it is therefore, requested to look into the matter and protect the HESCO's rights as well as to protect the NEPRA & HESCO's stance in Supreme Court of Pakistan or at any other forum
	Installed Capacity of M/s LCL	OWER REG	As per NEPRA Generation License No. SGC/72/2011 the installed capacity of M/s LCL is 29.7304 MW, whereas the net capacity of M/s LCL is 27.8940 MW (after deducting de-rated & auxiliary consumption).
2	LECT	NEPRA JTHORITY	The share of HESCO is 20 MW and share of KE is 05 MW, the remaining power of M/s LCL is 2.894 MW.
	AD INCINE S	W * NIE	Please enquire from M/s LCL that how is it possible to run the industry on 2.894 MW? As well as obtain the documents from M/s LCL, as they conveyed in hearing that their installed capacity is 115 MW

- 6.3. LCL submitted following comments vide letter No. LCL/KP/NEPRA/050820 dated 05 August 2020:
 - The proposed term of 07 years is completely justified. As stated in our Power Sale Proposal that, DHA City Karachi-DHCK is operating without electricity since 2011. Considering this fact, KE has expressed its willingness to procure power from LCL on fast track basis at 11KV. As per mutual understanding between DHCK & KE, it is expected that electricity will be provided to them on large scale basis within this period of 07 years; therefore, during this interim period electricity will be provided by KE to DHCK through LCL. The initial supply is estimated to be 01 to 02 MWh, which would gradually increase to maximum 06 MWh depending upon the escalation of demand, by DHCK. Meanwhile KE & DHCK are also working for an alternate source of power supply from KE's network.
 - Fuel Cost Component is based on NCPP upfront tariff offered to LCL, in which Reference Gas Cost is determined as Rs.2.89/KWh, which is also included in Power Purchase Agreement-PPA dated March 22, 2011 between LCK & HESCO. After determination of tariff by NEPRA dated January 9, 2013 the said Reference Gas Cost was reduced to Rs.2.4030/kWh which was subsequently reduced to Rs.2.0957/KWh on





Combined Cycle basis from December 1, 2013. LCL filed a civil suit in Sindh High Court-SHC and stay was granted in F/O LCL and we continued to receive payments against our invoices based on PPA for the period from COD (June, 2012) to February 2015. After this period, LCL continued to supply electricity from March, 2015 to January, 2016 but HESCO refused to make any payments against the invoices based on PPA. It was not feasible for LCL to continue electricity supply to HESCO as internal Gas cost was much higher than the Gas Cost determined by NEPRA. Therefore, LCL terminated its supply of electricity from February 2016. However, after lengthy negotiations between HESCO & LCL a settlement agreement was mutually agreed upon in March 2017. After the Settlement agreement LCL resumed its power supply from March 2017 with the understanding that both the parties will continue their business without prejudice to their rights with respect to the appeals filed by them in the Supreme Court of Pakistan. Subsequently on August 9, 2017, Sindh assembly passed New Captive Power Plant Subsidy Act 2017 to facilitate the payment of differential to NCPPs arising between tariffs determined in PPA & NEPRA. However, such subsidy will not be available to LCL in the case of KE and hence, the proposed tariff structure has been based on the PPA with HESCO.

- Combined Cycle is not being considered, as the reference gas cost component is reduced to Rs. 2.0957/kWh in the tariff, but no benefit is being offered to NCPPs by NEPRA in the form of:
 - a) Additional financial cost incurred on WHRS
 - b) O&M to operate the WHRS plant.
- As far as GIDC of Rs.2.42/KWh is concerned, it is a pass though item. At present, the matter regarding levy of GIDC is pending before the Supreme Court of Pakistan wherein a judgment has been reserved on 20 February 2020. Therefore, it is included separately from the total tariff determined.
- Fixed Cost Component of the reference tariff is based on NCPP upfront tariff and included in PPA between HESCO & LCL i.e. Rs.1.53/kWh. It will be subject to indexation for inflation with effect from the Reference date of Commencement of Operations and bi-annually (i.e. January 1st & July 1st) on each second anniversary (of COD), by using the most current inflation values determined on basis of Consumer Price Index (CPI General) on the last date of the previous six months. In case CPI is not available for that date, then average CPI (General) for the whole month, i.e. June & December will be considered. The breakup of Reference Fixed Cost is given below:

Fixed Cost Component	As Per NCPP PPA Rs./kWh	
Spares & Spares Part	0.50	
Salaries & Wages	0.60	
Oil & Lubricant	0.20	
Chemicals	0.08	
Insurance	0.05	
Others-External Service	0.10	
Total	1.53	





- Financial Cost Component of Rs.1.28/kWh is based on NCPP upfront tariff and included in PPA between HESCO & LCL. However, the said reference cost was determined based on installed capacity of LCL i.e. 29.730 MW, but was allowed only for 20MW in case of PPA between LCL & HESCO. Financial Cost of the remaining 9.73 MW was not paid to us and hence being claimed in our Tariff (for 01-06 MW) to KE on per kWh basis.
- The proposed tariff indexations/adjustments are based on the same indexations as stated in NCPP tariff and also included in PPA between LCL & HESCO.
- KE is working with our technical staff for evacuation & transmission of electric power to DIICK.

7. CONSIDERATION OF VIEWS OF THE STAKEHOLDERS, ANALYSIS AND DECISION ON IMPORTANT ISSUES

7.1. The issue wise discussion, submissions of stakeholders, analysis, findings and decisions are provided in the succeeding paragraphs.

Whether the term of the proposed contract of seven (07) years is reasonable and justified?

- 7.2. According to KE, subject to approval of NEPRA, the PAC shall be on a "take and pay" basis and the proposed terms for the PAC is seven (07) years. During the hearing, KE submitted that it is engaged with DHCK in planning of transmission line and grid station and the entire process will take four (04) years after which KE will be able to provide electricity to DHCK by itself. However, no justification was provided by KE for considering 07 years as proposed term of the contract.
- 7.3. According to LCL, the proposed term of 07 years is completely justified. DHCK is operating without electricity since 2011. Considering this fact, KE has expressed its willingness to procure power from LCL on fast track basis at 11KV. As per mutual understanding between DHCK & KE, it is expected that electricity will be provided to them on large scale basis within this period of 07 years; therefore, during this interim period electricity will be provided by KE to DHCK through LCL. The initial supply is estimated to be 1-2 MW, which would gradually increase to maximum 06 MW, depending upon the escalation of demand by DHCK. Meanwhile KE & DHCK are also working for an alternate source of power supply from KE's network.
- 7.4. Keeping in view the comments of KE and LCL, there seems little justification for proposed term of seven years. As per KE, system will be in place for supply of electricity to DHCK from KE network within approximately four (04) years. Accordingly, the Authority has decided to approve four years term of the contract instead of seven years. The Authority has further decided that either party shall have the right for early termination by giving suitable notice which shall be made part of PAC.
- 7.5. HESCO submitted that NEPRA allowed LCL to supply 5 MW power to KE, whereas KE submitted the PAR for 1 to 6 MW. HESCO requested to check and correct the same accordingly.





7.6. As per generation license, LCL is authorized to sell 5 MW power to KE for onward supply to DHCK. Accordingly, the proposed power acquisition has been approved for up to 5 MW instead of 6 MW.

Whether the requested fuel cost component of Rs. 12.38/kWh and GIDC of Rs. 2.42/kWh on the basis of efficiency as per NCPP policy are justified?

- 7.7. According to the PSP, the cost of fuel is a pass through item and is variable with dispatch. The Fuel Cost Component (FCC) is calculated using following specifications:
 - i. Rs. 1,021/MMBtu on HHV basis plus Rs. 200/MMBtu of Gas Infrastructure Development Cess (GIDC) making total Gas Price of Rs. 1,221/MMBtu
 - ii. The Reference Gas Cost Component is considered as Rs. 2.89/kWh which is the same as allowed in the NCPP policy 2009.
- At the outset it is clarified that the Authority did not accept the tariff agreed in the PPA between HESCO and LCL for supply of 20 MW under the referred policy. No efficiency number was provided in the PPA or the referred policy. On the basis of reference fuel cost component of Rs. 2.89/kWh and reference gas price of Rs. 238.38/MMBTU, the HHV thermal efficiency worked out 28.15% (LHV 31.18%). The Authority vide its decision dated 09 January 2013, in the matter of Approval of PAR filed by HESCO for Purchase of 20 MW power from LCL, approved FCC of Rs. 2.4030/kWh on gas price of Rs. 238.38/MMBTU on the basis of 37.5% efficiency on simple cycle operation with the direction to convert the plant from simple cycle to combined cycle. With effect from 1st December 2013 or completion of combined cycle operation, whichever was earlier, the Authority approved FCC of Rs. 2.0957/kWh on gas price of Rs. 238.38/MMBTU on the basis of 43% efficiency subject to adjustment as per changes in gas price. On the basis of current gas price of Rs. 1,021/MMBTU, the revised applicable FCC for 20MW power sale to HESCO is Rs. 8.9759/kWh. Being the same generation facility, the Authority has decided to approve same fuel cost component of Rs. 8.9759/kWh for sale of surplus power to KE by LCL. The FCC shall be subject to variation in gas price. In accordance with the decision of the Supreme Court of Pakistan dated 13-8-2020, GIDC has not been accounted for.

Whether the requested fixed cost component of Rs. 2.37/kWh is justified?

7.9. LCL in its comments submitted that the Fixed Cost Component of Rs. 2.37/kWh is based on the reference tariff as agreed in the PPA between HESCO & LCL i.e. Rs.1.53/kWh under the referred policy subject to indexation for inflation with effect from the Reference date of Commencement of Operations and bi-annually (i.e. January 1st & July 1st) on each second anniversary (of COD), by using the most current inflation values determined on basis of Consumer Price Index (CPI General) on the last date of the previous six months. In case CPI is not available for that date, then average CPI (General) for the whole month, i.e. June & December will be considered. The breakup of reference fixed Cost is given below:







Description	Reference Fixed Cost Component Rs./kWh	
Spares & Spares Part	0.50	
Salaries & Wages	0.60	
Oil & Lubricant	0.20	
Chemicals	0.08	
Insurance	0.05	
Others-External Service	0.10	
Total	1.53	

- 7.10. It has been observed that the above breakup is not in line with the definition of fixed cost component as provided in the PPA which states as "The tariff component payable @ Rs. 1.53/kWh delivered, by the company which includes but not limited to O&M cost, tax on income of the company, insurance cost, return on investment, duties etc." As per the proceedings recorded in the case of HESCO PAR, this component was negotiated back in 2006/07 with APTMA members @ Rs. 1.26/kWh which was later enhanced to Rs. 1.53/kWh w.e.f 1st January 2009. As against the request of Rs. 1.53/kWh, the Authority decided to allow fixed O&M component of Rs. 1.1736/kWh comprising variable and fixed O&M, insurance and ROE. The O&M components are subject to indexation on the basis of CPI local every two years.
- 7.11. Being the same generation facility, the Authority has decided to approve same fixed cost component as allowed in the case of HESCO's PAR after adjusting for local CPI (General) of 240.98 of March 2019. The details of fixed cost component is provided hereunder:

Description	Rs./kWh
Variable O&M	0.6100
Fixed O&M	0.4750
Insurance	0.1067
ROE	0.3871
Fixed Cost Component	1.5788

7.12. Apart from variable O&M, other components of fixed cost are determined on plant operation of nine months. In case of plant operation of three non gas months from December to February, only variable O&M along with fuel cost shall be paid.

Whether the requested financial cost component of Rs. 1.28/kWh is justified?

- 7.13. LCL in the PSP requested financial Cost Component of Rs.1.28/kWh based on the referred NCPP Policy 2009. According to HESCO, the Financial Cost Component is not admissible in this case as M/s LCL does not fall under NCPP policy framework, as it neither installed new machines/engines nor offering 10 MW to M/s KE, therefore, M/s LCL is not eligible for NCPP based tariff
- 7.14. The Authority has not been allowing financial cost/ capital cost for surplus sale of energy by CPPs. Therefore, in line with other CPPs the same is not being allowed in the instant case.





NEPRA



Whether the proposed tariff indexations / adjustments are justified?

- 7.15. LCL proposed adjustment of fuel cost component for variation in gas price, fixed cost component on account of CPI and financial cost component on account of KIBOR variation.
- 7.16. The Authority has considered the proposed adjustment/indexations and decided to allow adjustment in fuel cost component on account of gas price variation in line with other CPPs. The Authority has also decided to allow CPI indexation on fixed and variable O&M components after every two years in April on the basis of CPI of preceding month of March in line with other CPPs. Since the Authority has not considered financial cost component in the instant case, no adjustment mechanism is required.

Whether adequate transmission facilities are available for evacuation of power from LCL generation facility?

7.17. According to LCL, KE is working with LCL for evacuation and transmission of electric power to DHCK. KE was asked to update on the interconnection arrangement for evacuation of power from LCL and its transmission/distribution to DHCK. KE vide email dated 5th September 2020 submitted following in the matter:

a) Interconnection Arrangement

• Lucky cement generation which is on 6.3kV will be connected to two 6.3/11 kV (7.5 MVA) Power transformers via three VCBs (1 incomer and 2 outgoing switch). 11kV side of each Power transformer will be connected to two separate VCBs (VCBs includes Metering) through which 400 sq.mm feeder will be connected.

b) Procurement & Construction Scope

• Procurement of all material which mainly includes 5 VCBs (1250 Amp), 2 Power transformers (7.5 MVA), 1 KM 630 sq.mm 1/\infty copper cable and around 12 KM 400 sq.mm 3/c XLPE U/G cable will be done by DHCK. Construction of substation at Lucky cement, installation of switches, installation Power transformers and laying of two feeders will also be done by DHCK

c) Operation & Maintenance of Power Evacuation Line

• K-Electric will operate and maintain 5-6 KM XLPE 3/\$\infty400 sq.mm feeder cable from Lucky cement to DHCK. Accordingly, DHCK will arrange for switch room as per KE spees with placement of 11kV VCB switches as per KE standards/spees for all maintenance activity

8. Undertaking

During the hearing, the Authority directed LCL to submit an undertaking to ensure 8.1. uninterrupted power supply of 20 MW to HESCO and in case the Authority approves higher tariff for the instant PAR, that shall not be used by LCL against HESCO PAR's approved tariff

8.2. LCL submitted the required Undertaking vide letter dated 30th July 2020. The contents of the Undertaking are reproduced hereunder:





- "We, Lucky Cement Limited a company incorporated under the laws of Pakistan, (hereinafter referred to as "LCL"), with respect to the supply of electricity to K-Electric for onward supply to DHA City Karachi, undertake to the National Electric Power Regulatory Authority as follows:
- i. That LCL has entered into a Power Purchase Agreement ("PPA") dated 22.03.2011 with Hyderabad Electric Supply Company Limited ("HESCO") to sell electricity on the terms and conditions as enshrined under the PPA
- ii. That it shall, at first instance, fulfill all its obligations towards HESCO as laid down in the PPA
- iii. That in the event NEPRA approves the tariff as applied for by LCL for supply of surplus electricity to K-Electric for onward supply to DHA City Karachi, LCL shall not use such tariff to discriminate in any manner against HESCO."
- 8.3. HESCO vide its letter dated 30th July 2020 submitted that HESCO & LCL signed the Power Purchase Agreement (PPA) on CPPA tariff and HESCO obtained the undertaking from LCL for the tariff determined by NEPRA. Subsequently, NEPRA determined the tariff for LCL & other Power Producers on 09.01.2013 and the same was challenged by LCL (in presence of abovementioned undertaking by LCL) & others in Court of Law for its suspension. From the above position, HESCO would not trust on LCL that it will follow the provisions of undertaking to be submitted by them in NEPRA.
- 8.4. Keeping in view the comments of HESCO, LCL is directed to completely abide by its undertaking. failure to which, may lead to fine or termination of LCL's generation license or both.

9. Summary of Tariff

9.1. The summary of tariff is presented hereunder:

Description	Rs./kWh	Indexation/ Adjustment
Fuel Cost component Excl GIDC	8.9759	Gas Price
Fixed Cost Component:	1.5788	
Variable O&M	0.6100	CPI (General)
Fixed O&M	0.4750	CPI (General)
Insurance	0.1067	
ROE	0.3871	_
Total	10.5547	

10. Order

10.1. In pursuance of the Regulation 4(1) of the NEPRA Interim Power Procurement (Procedure & Standards) Regulations 2005, K-Electric Limited is granted permission for power acquisition of up to 5 MW from Lucky Cement Limited on take and pay basis of on following reference tariff:





Reference Tariff

Description	Rs./kWh	Indexation/ Adjustment
Fuel Cost component Excl GIDC	8.9759	Gas Price
Fixed Cost Component:	1.5788	
Variable O&M	0.6100	CPI (General)
Fixed O&M	0.4750	CPI (General)
Insurance	0.1067	
ROE	0.3871	_
Total	10.5547	

Tariff Adjustments/Indexations

10.2. The reference tariff is subject to following adjustments/indexations:

Adjustment on Account of Gas Price Variation

10.3. The fuel cost component shall be gas price variation as notified by OGRA or any other body for captive power producers from time to time according to following mechanism:

 $FCC_{(Rev)}$ $FCC_{(Ref)} \times GP_{(Rev)}/GP_{(Ref)}$

Where:

FCC_(Rev) Revised Fuel Cost Component applicable for the billing cycle

FCC_(Ref) Reference FCC on Gas is Rs. 8.9759/kWh

GP_(Rev) Revised Ex-GST HHV gas price applicable for the billing

cycle as notified by OGRA for captive power plants

GP_(Ref) Reference Ex-GST HHV Gas Price is Rs. 1,021/MMBtu

Adjustment on Account of Inflation

10.4. The O&M cost shall be subject to indexation every two years in the month of April on the basis of CPI (General) as published by Pakistan Bureau of Statistics for the preceding month of March as per the following mechanism:

 $O&M_{(Rev)} = O&M_{(Ref)} \times CPI_{(Rev)}/CPI_{(Ref)}$

Where:

O&M_(Rev) = Revised Variable and Fixed Variable O&M components of tariff Reference Variable and Fixed O&M components of tariff of Rs.

0.6100/kWh and Rs. 0.4750/kWh respectively

CPI_(Rev) = Revised CPI(General) index as published by Pakistan Bureau of

Statistics

 $GP_{(Rel)}$ = Reference CPI (General) of 240.98 for March 2019

- 10.5. Fixed cost has been assessed on the basis of 9 months plant operation, in case of plant operation in three non-gas months; the power producer will be entitled only the fuel cost component and variable O&M.
- 10.6. The term of the contract shall be four (04) years with effect from the date of this determination.
- 10.7. Either party shall have the right for early termination of the contract by giving suitable notice.





10.8. K-Electric is directed to incorporate the same in the Power Acquisition Contract and submit the proposed Power Acquisition Contract in line with the Regulation 5(1) of the IPPR-2005.

11. Notification

11.1. The above order is to be notified in the official gazette in accordance with the provisions of Section 31(7) of the Regulation of Generation, Transmission and Distribution of Electric Power Act 1997.

AUTHORITY

Saif Ullah Chattha

Member

Rehmatullah Baloch

Member /

Engr. Rafique Ahmed Shaikh

Member

Engr. Bahadur Shah

Member

Tauseef H. Farooqi Chairman

NEPRA AUTHORITY

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