



National Electric Power Regulatory Authority Islamic Republic of Pakistan

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No. NEPRA/TRF-299/PQEPCPL-2015/17086-17088
December 29, 2015

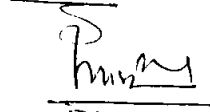
Subject: **Decision of the Authority in the matter of Request by Port Qasim Electric Power Company (Private) Limited (PQEPCPL) for Confirmation of the EPC Contract and the Management Consulting (Supervision) Services Contract for Coal Unloading Jetty Channel for Port Qasim Electric Power Company [Case No. NEPRA/TRF-299/PQEPCPL-2015]**

Dear Sir,

This is in continuation of this office letter No. NEPRA/TRF-299/PQEPCPL-2015/1839-1841 dated February 13, 2015 whereby the Approval of National Electric Power Regulatory Authority in the matter of Application of Port Qasim Electric Power Company (Private) Limited (PQEPCPL) for Unconditional Acceptance of Upfront Coal Tariff for 2x660 MW Coal Power Plant was communicated to the Federal Government for notification in the official Gazette in Case No. NEPRA/TRF-299/PQEPCPL-2015.

2. Enclosed please find herewith the subject Decision of the Authority (09 pages). The Decision is being intimated for the purpose of notification in the official gazette pursuant to Section 31(4) of the Regulation of Generation, Transmission and Distribution of Electric Power Act (XL of 1997).

Enclosure: As above


29-12-16
(Syed Safer Hussain)

Secretary
Ministry of Water & Power
'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 REQUEST BY PORT QASIM ELECTRIC POWER COMPANY FOR CONFIRMATION OF THE EPC CONTRACT AND THE MANAGEMENT CONSULTING (SUPERVISION) SERVICES CONTRACT FOR COAL UNLOADING JETTY CHANNEL FOR PORT QASIM ELECTRIC POWER COMPANY

1.0 BACKGROUND OF THE CASE

1.1 Port Qasim Electric Power Company (Pvt.) Limited (hereinafter "PQEPC" or the "Company") is undertaking the construction of an imported coal power plant of 2 x 660 MW capacity at Port Qasim Karachi. On January 7, 2015, the Company submitted an application for unconditional acceptance of upfront coal tariff determined by the Authority through its decision dated June 26, 2014 (hereinafter referred as the "Decision"). The Authority, vide its decision dated February 13, 2015 granted approval of upfront tariff to the Company. The approved tariff included a notional cost of US\$ 9.46 per Ton for use of a common jetty facility. Para 49 of the Authority's Decision dated June 26, 2014 and Para 106 of the Authority's Decision in the matter of Review Motion filed by Asad Umar dated November 21, 2014, provide the provision of construction of self-use/ standalone jetty instead of using a common jetty facility. The cost of such jetty was required to be determined and allowed by the Authority on case to case basis subject to provision of verifiable documents to the satisfaction of the Authority. In such a case, the cost of a common use jetty shall be eliminated and be replaced with the cost of a self-use jetty. The instant project is in the process of constructing a self-use jetty.

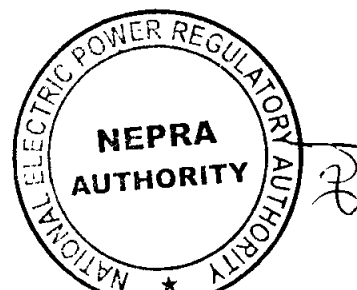
2.0 FILING OF REQUEST FOR CONFIRMATION OF CONTRACT PRICES

2.1 Port Qasim Electric Power Company (Pvt.) Limited, vide its letter No. PQEPC/NEPRA/2015-20, dated December 29, 2015, filed a request for confirmation of US\$ 238.55 million as the contract price of EPC of coal unloading Jetty and Channel, including Rs. 14.313 million for taxes at the rate of 6%. The Company also requested confirmation of US\$ 1.88 million as the price for Management Consulting (Supervision) Services Contract of the coal unloading jetty.

3.0 SCOPE OF WORK FOR EPC OF COAL UNLOADING JETTY AND CHANNEL

3.1 The scope of work for EPC of coal unloading Jetty and Channel as prescribed within Section 1 of the Bidding Documents include the following;

- a. Construction of a coal-unloading Jetty of 70,000 DWT, approach bridge, revetment and associated auxiliary facilities
- b. 50,000 DWT approach channel works
- c. Preliminary ground improvement to the reclamation of power plant
- d. Other necessary and relevant works





4.0 **BIDDING PROCESS FOR EPC OF COAL UNLOADING JETTY AND CHANNEL**

4.1 The Petitioner submitted Tender Evaluation Report pertaining to the bidding process carried out for the selection of EPC Contractor for the aforementioned scope of work to be carried out at the location of Port Qasim coal-fired project. According to the Company, it carried out an open tendering (ICB) for the EPC of coal unloading Jetty and Channel. As per the Tender Evaluation Report, the Invitation for Bids was advertised in the DAWN in Pakistan and China Daily in China on June 18, 2015. The eligible bidders were invited who had prior experience in Pakistan, to submit a competitive bid for engineering, procurement, construction, inspection, delivery, installation, testing, commissioning, and warranty for works associated with EPC of coal-unloading Jetty & Channel. The deadline for submission of bids was fixed for July 8, 2015.

4.2 According to the Company, the following four (4) bidders purchased the bidding documents within the prescribed time period:

- i- Sinohydro Harbour Co., Ltd,
- ii- CCCC Tianjin Dredging Co., Ltd,
- iii- China International Water & Electric Corp.,
- iv- Northern Industries Group Co.,



4.3 Out of the four bidders, Northern Industries Group Co. could not submit its tender within the prescribed time period. As per the information provided, the tenders were opened in China on July 8, 2015 in the presence of a Tender Evaluation Committee including representatives from Powerchina Resources LTD, representatives from tenderers and supervisors from Export-Import Bank of China and External Supervisors.

Tender Evaluation Procedure for EPC

4.4 According to the evaluation method prescribed within Section 4 of the Bidding Documents, the evaluation procedure was classified into these steps (1) preliminary evaluation, (2) detailed evaluation and (3) final evaluation. The Detailed Evaluation Stage was further divided into Technical and Commercial evaluations. The bidders who passed Preliminary and Detailed Evaluations were allowed to proceed to the final stage of bid evaluation.

4.5 Summary of the results of final evaluation is as under:

Name of the Bidder	Technical Score (60% weightage)	Commercial Score (40% weightage)	Final Score (Weightage Average)	Ranking
Sinohydro Harbour Co.	98.29	100	98.97	1
CCCC Tianjin Dredging Co.	87.79	78.44	84.05	2
China International Water & Electric Corp.	84.65	69.79	78.70	3



4.6 The Company issued Announcement of Tender Evaluation Result on July 17, 2015. The publicity period of announcement was from July 17 to July 23, 2015. According to the Company, it did not receive any objections or complaints against the evaluation results during this period. The Company further informed that on August 11, 2015, the EPC Contract was signed between Sinohydro Harbor Co. and the Company for an amount of US\$ 238.55 million.

5.0 **BIDDING PROCESS FOR MANAGEMENT CONSULTING (SUPERVISION) SERVICES CONTRACT**

5.1 The Company also carried out a bidding process for the selection of Management Consulting (Supervision) Services Contractor for the coal unloading jetty. The documents for competitive negotiations in this matter were issued on August 24, 2015. The three companies invited were:

- i. Guangzhou Huashen Engineering Management Co.
- ii. Consultant & Construction Supervision Co., of CCCC Second Harbor Consultants Co.
- iii. Tianjin Beixin Engineering Supervision & Consultants Company

5.2 Bids were opened on September 7, 2015 in the presence of participants from Powerchina Resources, Port Qasim Electric Power Company and the representatives from the three aforementioned tenderers.

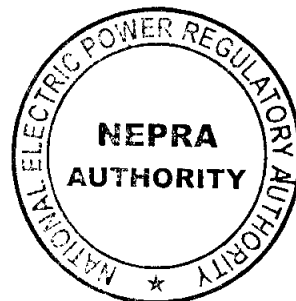
5.3 Summary of the results of final evaluation is as under:

Company Name of the Bidder	Technical Score	Commercial Score	Final Score	Ranking
Consultant & Construction Supervision Co., Ltd of CCCC Second Harbor Consultants Co., Ltd	64.90	25.35	90.25	1
Guangzhou Huashen Engineering Management Co., Ltd	62.10	22.30	84.40	2
Tianjin Beixin Engineering Supervision & Consultant Company Limited	59.10	19.26	78.35	3

5.4 The Company reached an agreement price of US\$ 1.88 million with the first ranked bidder; Consultant & Construction Supervision Co., of the CCCC Second Harbor Consultants Co.

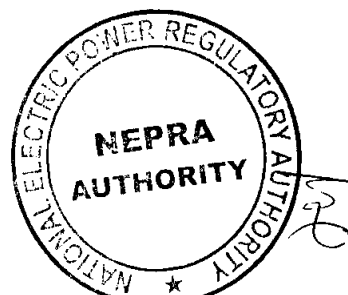
6.0 **HEARING**

6.1 The Company's request for confirmation of EPC and Management Consulting (Supervision) Contract prices was considered by the Authority and it was decided to conduct a hearing in the matter in order to proceed with the case. Accordingly, a hearing was scheduled on March 25, 2016 and notices for hearing were sent to the stakeholders. Representatives from Port Qasim Authority (PQA), Pakistan International Bulk Terminal (PIBT), Karachi Port Trust (KPT) and Central Power Purchasing Agency (Guarantee) participated in the hearing.





- 6.2 During the hearing, the representative from PQA informed that the draft agreement between the Management Consultant and the Company was submitted to PQA which was yet to be approved by PQA. The representative of PQA was directed to convey to the Authority about a final approval of the agreement or otherwise. On the subject, PIBT stated that the Port Qasim Electric Power Company did not consult them for using their jetty on shared basis. PIBT further explained the key features of the PIBT jetty and stated that the PIBT has the capacity to handle coal imports for the said power plant. However, PIBT further highlighted some constraints including transportation of coal via conveyor system or any alternate arrangement in this regard for in-land transportation of coal from PIBT's site to the power plant's site. During the hearing the representatives from Karachi Port Trust (KPT) explained that the construction of a dedicated jetty may cost high initially, but subsequently, it shall be very beneficial. He further explained that at KPT, they were facing trouble with clearance of cargo. Therefore, according to KPT, the timely clearance of cargo was an important factor to be considered. The representative from CPPA-G made an observation that Pakistan Engineering Council (PEC) looks after the preparation of tendering documents and RFPs as per World Bank and ADB standards which have two phases of tendering; issuance of RFPs for the selection of the bidders and then thereafter the competition among qualified bidders. According to CPPA-G, the direct tendering process carried out by the Company did not include prequalification of the competitive bidders. He further explained that since it was an international tender, advertisements being published in print media only, were not sufficient. It should have been advertised on the internet as well. Further, CPPA-G observed that the overall cost of contracts of EPC and Management Consultancy for the Jetty were 20% higher than the cost provided in the upfront tariff and that the Authority may look into this. He also questioned whether the Company had any internal cost estimate for the jetty before issuing RFPs and whether Lucky and Siddiqsons projects, which are in close proximity, can also benefit from this jetty?
- 6.3 Subsequent to the hearing, the Authority, vide its letter No. NEPRA/SAT-I/TRF-229/4244, dated April 1, 2016, directed the Company to clarify following:
- i- Whether you have thoroughly investigated into the possibilities of changing the design of the Jetty in a way that least cost and reliable coal offloading facility is achieved?
 - ii- Whether the proposed EPC Price is arrived through transparent and competitive process?
 - iii- Whether the consents/ approvals/ NOCs from relevant departments have been taken while finalizing Jetty cost?
 - iv- What is the capacity of proposed jetty and in addition to meeting your plant requirement? Can the proposed jetty facility be shared with similar or small power plants?
 - v- Provide the operation/ O&M cost of the proposed jetty along with supporting documents.





vi- Explanation in writing regarding information provided during the hearing on the subject held on March 25, 2015 that the proposed jetty will have a depth of just over 15m and the jetty will be capable of handling ships up to 50,000 DWT. with such water depth larger vessel of 75,000 DWT + size can easily be handled which will reduce among other things, the marine freight.

6.4 In response to issue (i) indicated above, the Company, submitted that its consultants have looked at options other than the construction of a self-use jetty (**Option-1**), including the use of existing port and arrangement of trucks or conveyor system from port to the plant's location. However, according to the Company this option was eliminated due to the following reasons:



- This option could have adverse environmental impact on the immediate vicinity
- The number of truck movement per day to move 4.5 million tonnes of coal and the damage/ congestion to the road network which is already poor in condition
- The challenge of trying to obtain numerous land owner approvals to build a conveyor through private and PQA land
- Time factor
- The impact on the costs of the project
- By construction a Jetty, the Company retained control of the project to meet the very tight time frame stipulated by the GOP

6.5 With regards to the construction of a self-use jetty (**option-2**), the Company submitted that the following considerations needed to be addressed:

- The Company is dredging 4KM of channel which will be available to other parties in the future and the PQA.
- The cost includes the construction of revetment walls and the reclamation of circa 60-70% of the total site.
- The cost includes the installation of two coal unloaders.

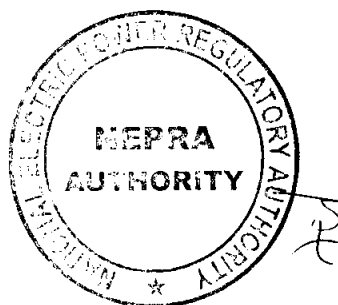
6.6 According to the Company, the three factors that greatly impact the cost of a jetty are; determination of navigation channel, type of marine structure and equipment selection of coal unloading. These were also considered in a review conference held in China on July 6, 2014 to July 7, 2014 and the optimal proposals have been finally determined which approximately saves \$30 million and shorten construction period distinctly. A comparison of the three aforementioned factors for both the options, as provided by the Company is as follows:

Approach Channel Option		
Item	Option 1	Option 2
Scheme Description	For the navigation of bulk carrier with capacity 50,000T at the first phase, the width of channel takes 150m and the design water depth	Because the dredged materials under -12.5m include a large proportion of sandstone, mudstone and conglomerate, the



	of channel should be -14.5m.	cost of dredging work for these materials is proper high. The channel was advised to take advantage of the tide 2.0m for navigation to reduce the cost of dredging.
Dredging Quantities	7.30 million m ³	5.4 million m ³
Cost Saving	Owing to the dredged quantities for the Option 2 would be decreased by 1.90 million m ³ , approximately \$21 million will be reduced.	
Conclusion	Option 2 is feasible and will save money.	
Marine Structure Option		
Name	The gravity caisson type	The pile-supported type
Construction Period	Longer caisson precasting and installation	Time saving
Conclusion	Option 2 is feasible and will save construction time.	
Ship Unload Option		
Name	Screw Continuous Ship	Bridge-type grab ship unloader
Advantage	Higher automation and higher efficiency	low cost equipment and easy maintenance
Cost Saving	Option 1 costs higher approximately \$8 million than Option 2	
Conclusion	Option 2 is recommended and will save money.	

- 6.7 In response to issue (ii) Company ensured that the EPC price and Management Consulting (Supervision) Service Contract were arrived at through a transparent and competitive process.
- 6.8 In response to issue (iii), the Company submitted that all consents/ approvals/ NOCs have been obtained by the concerned departments while finalizing jetty cost. China Eximbank has issued approval for the EPC of tender on coal-unloading jetty and channel, while Port Qasim Authority (PQA) has approved the Consultant for Management Consulting (Supervision) Service Contract. All approvals/ NOCs in this regard are submitted by the Company.
- 6.9 In response to issue (iv), the Company submitted that it is willing to share this jetty, however, it highlighted certain issues which need to be addressed first:
- The jetty could meet the coal requirements for itself only for the time being and it would have seldom chance to be shared with similar or small scale power plants under the limit of capacity of proposed jetty.





- Besides capacity limitation, there are other commercial/ legal constraints for sharing this jetty. For instance, PQA has advised that if the jetty was to be shared with other companies for commercial purpose, the whole jetty project needed to be separated from the power generation complex and will be subject to regulations for the development of jetty of PQA, which according to the Company is not feasible and contrary to the agreements signed with GOP and Power Purchaser.

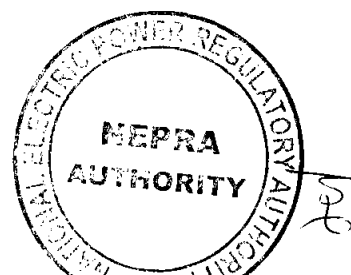
6.10 In reply to issue (v), the Company submitted that it is in the process of tendering for operation/ O&M and the supporting documents will be immediately provided as soon as the tendering process is finalized and the contracts have been negotiated and executed.

6.11 In reply to issue (vi), the Company submitted that it had carried out numerous studies before making decision for approach channel construction. To decrease the cost of the approach channel, the current bottom elevation of approach channel for navigation of 50,000T bulk carrier is -12.5m by utilizing the tide at the first phase; it is feasible and reasonable and at the same time also to cut the cost of channel construction. According to the Company, the construction has now been carried on in the channel. Also the approach channel would be reserved to deepen to -14.0m to meet the navigation of 70,000T bulk carrier at the second phase of the tide. During the later operation, plant would choose the proper time to do such dredging according to the price condition of coal transport and renting vessel to meet the best profits. Finally, coal freight pricing is determined on a cost per tonne basis, generally regardless of the size of the vessel. There may be some very marginal savings of port charges by using larger ships.

7.0 DECISION OF THE AUTHORITY

7.1 Pursuant to the para 49 of Decision of the Authority regarding Reconsideration Request filed by Government of Pakistan dated June 26, 2014, and in pursuance of para 106 of the Decision on the Review Motion filed by Asad Umar dated November 21, 2014, any project opting for building dedicated jetty was required to ensure transparency and competitiveness in arriving at least cost coal offloading jetty facility. In view of that, the Authority thoroughly scrutinized the documents pertaining to the bidding process to determine whether the process could be considered transparent and competitive.

7.2 In this regard, it was observed that the Company appraised the Authority regarding key stages of the bidding process. The Authority also observed that the Company had laid out a comprehensive evaluation criteria for evaluation of bids received and that it was also made part of the Bidding Documents leaving no ambiguity for the prospective bidders. To further reduce ambiguity, it was observed that no revision in the evaluation criteria or the bidding requirements was made at any stage. The bidders were thoroughly evaluated on technical grounds after which they were commercially evaluated and the bid price for each of the submitted bids was recorded. It was also

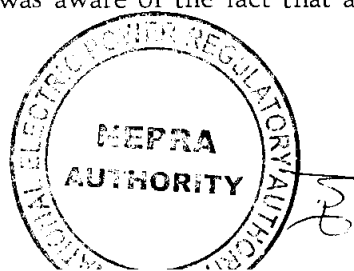




observed that in order to encourage competitiveness, the Company not only advertised Invitation for Bids in Pakistan, but the same was also advertised in China. Further, it was observed that for the purpose of evaluation of bids, an Evaluation Committee comprising of a director, technical evaluation team, commercial evaluation team, supervisory team and external supervisor was formed. The Authority thoroughly examined the bidding process carried out for the selection of the EPC Contractor of the coal unloading jetty and the Authority is also mindful of the fact that the Petitioner had carried out a competitive bidding process for the selection of the Management Consulting (Supervision) Consulting Services Contractor. It was noted that the final price amounting to US\$ 1.88 million arrived through the bidding process is reasonable therefore it has been decided to allow as such.

7.3 Pursuant to Para 49 of Authority's Decision in the matter of Reconsideration Request filed by GoP in the matter of Upfront Tariff for Coal Power Projects dated June 26, 2014, the Petitioner was also required to keep on board and obtain NOCs from PPIB, Pakistan Navy, Pakistan Coast Guard, Ministry of Ports and Shipping. All the aforementioned required NOCs have been submitted by the Petitioner to the satisfaction of the Authority. Besides these NOCs, the Authority observed that the Company had kept the lender abreast with the bidding process at all times. A Lender's approval serves as a natural check as it commits huge sums of money in a project, which is why it is in the interest of the lender to make sure that the bidding process is carried out in a transparent manner, and the winning company is competent to successfully complete the project. Therefore, the lender's approval of the process, the recommended EPC Contractor and the EPC Contract price contributes significantly in determining the reasonability of the cost. The Petitioner has submitted the lender's consent along-with all other requisite NOCs.

7.4 According to para 49 of Authority's Decision in the matter of Reconsideration Request filed by GoP in the matter of Upfront Tariff for Coal Power Projects dated June 26, 2014, at the time of determination of the Coal Upfront Tariff, the Authority derived a notional total common jetty cost of US\$ 223.5 million or US\$ 9.46 per ton for 2 x 660 MW coal based power project's coal unloading jetty facility. Out of 223.5 million around 200 million was assumed to be CAPEX/EPC cost. The notional jetty cost was estimated based on the feasibility study conducted in early 2008 by AES Pakistan Private Limited for its 2 x 660 MW coal based power plants. It was also noted that although the jetty cost changes from one location to another primarily because of change in depth of sea water and annual coal handling requirement etc., but for the sake of comparison the final jetty cost of US\$ 224.241 million (exclusive of taxes) is not very different from the notional cost of US\$ 200 million assumed at the time of upfront coal tariff determination in 2014. Further, as per para 47 of the aforementioned Decision dated June 26, 2014, it was stated that "*The Authority is also aware of the fact that a standalone jetty for one project will cost more than the common jetty...*". Despite allowing a notional cost of common jetty based on a feasibility conducted by AES, it is evident from para 47 that the Authority, at the time of determination, was aware of the fact that an adjustment in the





common jetty cost with a standalone jetty cost, if required, may result in costs over and above US\$ 200 million that the Authority may have to consider.

- 7.5 In the light of the above and considering the fact that the Authority did not receive any adverse comments/ objections with regards to the EPC cost of the coal offloading jetty, the Authority has decided to approve the EPC Contract price of US\$ 224.241 million net of taxes and Management Consulting (Supervision) Service Contract price of US\$ 1.880 million for the coal unloading Jetty and Channel. Taxes, if any actually paid shall be treated as pass through subject to provision of verifiable documentary evidence for the payment with a maximum cap of US\$ 14.313 million.
- 7.6 The above decision of the Authority may be read with Approval of National Electric Power Regulatory Authority in the matter of Application of Port Qasim Electric Power Company (Private) Limited (PQEPCL) for Unconditional Acceptance of Upfront Coal Tariff for 2x660 MW Coal Power Plant vide No. NEPRA/TRF-299/PQEPCL-2015/1839-1841, Dated February 13, 2015.
- 7.7 The above Decision of the Authority shall be notified in the official gazette in accordance with Section 31(4) of the Regulations of Generation, Transmission and Distribution of Electric Power Act, 1997.

AUTHORITY

(Himayat Ullah Khan)

Vice Chairman

(Masood-ul-Hassan Naqvi)

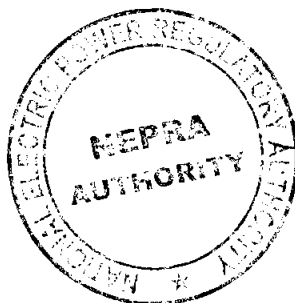
Member

(Maj (R) Haroon Rashid)

Member

(Brig (R) Tariq Saddozai)

Chairman



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