



PREQUALIFICATION DOCUMENTS
AS PER PPRA RULES

Tender No. 05/2022

**Hiring of Services of Consultant/Consulting Firm/
Joint Ventures to Carry out Comprehensive
Assessment on Operations of K-Electric Ltd. on
Issues related to Plant Dispatch for FY 2019-20 &
FY 2020-21**

National Electric Power Regulatory Authority

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MANDATORY REQUIREMENTS FOR SERVICES OF CONSULTANT/CONSULTING FIRM/ JOINT VENTURES TO CARRY OUT COMPREHENSIVE ASSESSMENT ON OPERATIONS OF K-ELECTRIC ON ISSUES RELATED TO PLANT DISPATCH FOR FY 2019-20 & FY 2020-21

Sr. No.	Parameter	Yes	No
1.	Tax Registration		
2.	Active Filer Status		
3.	Lead Firm having atleast experience of 5 years		
4.	Similar Assignments in Past by Consultant/Consulting Firm /JV etc.		
5.	Knowledge of NEPRA Act, Rules, Regulations & Working of K-Electric		
6.	Build the Capacity of NEPRA Professionals to carry out such assignments in future		
7.	Bid Bond @ 02% of Bid Price (Bidder is required to submit an undertaking stating that the checque containing Bid Bond/Security has been placed in the envelop of Financial proposal.)		

Note:

- a. Proof of aforesaid parameters must be provided.
- b. Bidders who fail to provide supporting documents will not be entertained.
- c. In case of prices quoted in currency other than PKR – conversion rate to PKR will be taken as rate given by State Bank of Pakistan SBP on one day before the closing date of submission.

Name of the Bidding Firm: _____

Undertaking:

That the information provided in the bidding documents is true; whereby, found false or deceptive, NEPRA reserves the right to disqualify the bidder from existing and all of the future biddings.

Seal and Signature of the Bidding Firm with date:

Section – I

Schedule to Tender

Sr.#	Activity Description	Schedule
1	Tender No.	No.
2	Sale of Tender	
3	Time & Last Date of Depositing Tender / Bid	31 August 2022 1400 Hrs
4	Time & Date of Opening of Tender Bid (Technical Proposal)	31 August 2022 1430 Hrs
5	Minimum Validity of Tender Offer	Six months from the date of opening of tender
6	Services to be offered	Comprehensive Assessment on operations of K-Electric on issues related to plant dispatch for FY 2019-20 and FY 2020-21
7	Duration	One Time – Three Months
8	Amount of Bid Security to be Deposited	2% of the bid price
9	Cost of Tender Document	• Rs. 1000/- for physical collection

SECTION II

Bidder's Information:

Tender Serial No. _____ Dated _____

Name of Firm to whom Tender issued: _____

SIGNATURE
OF TENDER ISSUING OFFICER

Name of Firm/Contractor: _____

Address: _____

Contact Person: _____

Telephone No: _____

Fax No: _____

National Tax Number: _____

GST Number: _____

We M/s _____ hereby undertake to accept all the terms and conditions laid down by NEPRA with regard to award of this contract.

Signature of Bidder

SECTION - III

TERMS AND CONDITIONS FOR HIRING SERVICES OF CONSULTANT/CONSULTING FIRM/ JOINT VENTURES TO CARRY OUT COMPREHENSIVE ASSESSMENT ON OPERATIONS OF K-ELECTRIC ON ISSUES RELATED TO PLANT DISPATCH FOR FY 2019-20 & FY 2020-21

National Electric Power Regulatory Authority (NEPRA) was established as an independent Regulatory Authority under section 3 of Generation, Transmission and Distribution of Electric Power, Act 1997 for regulating the provision of electric power services in Pakistan.

KE is a privatized vertically integrated utility possessing three separate licences of Generation, Transmission and Distribution businesses. The licence issued to KE allows it to generate, transmit and distribute the electricity to its consumers within its service area. Whereas KE owns some of the plants most of its current energy needs are met by external sources including generation from NTDC/CPPA system. Under the current arrangement KE acts as a System Operator of its system. Therefore role of KE as 'System Operator' is very critical for the purpose of ensuring affordable and reliable supply of electricity to the consumers lying in its service territory

In recent proceedings, the Authority has highlighted that there is a dire need to carry out an assessment on System Operations of K-Electric Ltd. with focus on how the plant dispatch is being carried out, to what level the K-Electric is ensuring compliance of the Economic Merit Order (EMO) and whether the claims of the K-Electric for deviations from EMO are justified?

For reviewing KE's working, the Authority desires to hire a Consultant/Consulting Firm/Joint Ventures (JVs) to carry out a comprehensive assessment on operations of K-Electric on issues related to power plant dispatch. The assessment will use the record, information and data including but not limited to, NEPRA's Act, Rules, Regulations and other Applicable Documents, Grid Code, Daily Log Reports prepared by K-Electric, daily record maintained with K-Electric regarding availability of power plants, power dispatch instructions, record of Scheduled and Forced outages of power plants, record of the transmission system constraints maintained by K-Electric, record of fuel constraints maintained by K-Electric, record of Gas/RLNG indent and supplied thereof maintained by K-Electric, etc. for the years i.e. FY 2019-20 & FY 2020-21.

GENERAL

1) Sealed tenders are invited from reputed tax registered firms having a proper registered office anywhere in Pakistan for provision of Services to carry out Comprehensive Assessment (CA) on the operations of K-Electric on issues related to Plant Dispatch for FY 2019-20 & FY 2020-21.

2) International Consultant/Consulting Firm/Joint ventures can apply for the tender in collaboration with local registered Consultant/Consulting Firm.

SCOPE OF WORK

3) The Consultant/Consulting Firm/Joint ventures (JVs) will base its assessment and evaluate K-Electric's performance keeping in view the international best practices of power utilities and established principles of operation. The consulting firm shall have to develop the computerized base model to analyze the available data/information to ascertain that power plants were dispatched by K-Electric in accordance with the Economic Merit Order (EMO) or otherwise. In case Power Plants were not operated in accordance with EMO then reason thereof shall be obtained by the consultant/consulting Firm. The financial impact of power plant(s) operation in violation to EMO, for reason whatsoever, shall also be calculated by the consultant/Consulting Firm. The assessment shall cover but not limited to the following:

1. Provide and clarify different types of load curtailment carried out by K-Electric i.e. due to generation shortages, transmission constraints and electricity not supplied by K-electric to areas on account of excessive losses. The reasons and justifications or otherwise as well as the financial impact for such load curtailment shall also be covered in the assessment.
2. Provide an analysis on total system demand with and without load shedding and dependable electric power generation capacity of the system.
3. Provide an analysis that whether K-Electric ensures that its operation costs are minimum on hourly basis. Also analyse that whether, K-Electric carries out analysis or have human resource and hardware / software tools to establish and demonstrate that its operation leads to minimum costs to the system.
4. Provide detailed account of K-Electric's working, specifically deliberating the concept of economic merit order operations and dispatch. The analyses as a minimum will include the following:
 - i. What is the criteria for preparing merit order and dispatch of power plants used by K-Electric?
 - ii. How often low ranked power plants have been used in preference to high ranked power plants?
 - iii. Select sufficient number of representative periods and establish that the power plants have been operated as per merit order or otherwise.
 - iv. Whether K-Electric has system/tools to record reasons for not operating its power plants according to merit order? Comments on the reasonability of the K-Electric approach shall also be recorded in the assessment report.
 - v. To analyse and record that to what extent efficient power plants were underutilized due to a) Non availability of demand b) Non availability of fuel, and c) Non availability of transmission line facilities and transmission constraints.

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- vi. To analyse the nature of constraints whether it was controllable or uncontrollable? and the age of constraints i.e. since how long this constraint is persisting.
- vii. To analyze the impact of forced outages of plants during the specific period.
- viii. Work out the financial amounts during specific periods (FY 2019-20 and FY 2020- 21), on account of non or underutilization of higher ranked power generation plants. Also segregate the calculated amount under the heads of justifiable and nonjustifiable.
- ix. What procedure does K-Electric use to verify the availability declared by generation power plants in absence of SCADA system?
- x. What are the standard procedures followed by Power Control Centers of different countries for tackling fuel shortages (especially with respect of RLNG) in their dispatch procedure.
- xi. Identify the shortcomings in procedures/practices being used by K-Electric in consideration of prudent utility practices being used around the globe and suggest way forward for NEPRA's consideration.
- xii. To provide that whether System Operations are in accordance with Multi-year mechanisms.

GUIDELINES FOR PREPARATION OF PROPOSAL

4) The Consultant/Consulting Firm/Joint Ventures (JVs) will base its assessment and evaluate K-Electric's performance keeping in view international best practices and established principles of system operations. The proposal of the Consultant/Consulting Firm/Joint Ventures (JVs) will be evaluated against the methodology for carrying out this assignment. While preparing the proposal, the Consultant/Consulting Firm/Joint Ventures (JVs) will elaborate the areas including but not limited to the following:

- Data required to undertake this assignment
- Methodology to assess the performance and working of K-Electric
- Assessment mechanism to assess total system demand and available dependable capacity, load shedding being carried out and reasons thereof, non and underutilization of power plants.
- Carrying system operations to ensure compliance with EMO and to evaluate technical constraints/reasons/justifications for deviation from EMO
- Scenarios for non-availability of gas/RLNG and reasons thereof

5) The Authority requires the Consultant/Consulting Firm/Joint Ventures (JVs) to develop an open access tool along with manual for the Authority to carry out such assessments at its own. Consultant/Consulting Firm/Joint Ventures (JVs) will impart training to the NEPRA professionals and will hand over the source code to NEPRA enabling it to continuously improve as per requirement.

DELIVERABLES OF THE ASSESSMENT

6). Detailed assessment which will elaborate the areas including but not limited to the following:

- i. The Consultant(s)/Consulting Firms/JVs would be required to provide comprehensive work breakdown structure including inception meeting, consultation, data collection, review on assessment, development of tool, training and capacity building of NEPRA professionals, submission of the first

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draft of assessment to NEPRA for consideration of the Authority, incorporation of comments/inputs by the Authority and submission of final draft of the assessment **(Attached at Performa – A)**.

- ii. The Consultant(s)/Consulting Firms/JVs will ensure active engagement with the NEPRA professionals in due course to address the issues, comments and inputs.
- iii. The Consultant(s)/Consulting Firms/JVs will be required to impart Training of NEPRA professionals for their capacity building to undertake similar assignments in future.
- iv. The Consultant(s)/Consulting Firms/JVs will be required to provide the model/Software Tool used for the assignment to the NEPRA professionals.

BIDDING AND EVALUATION PROCESS

7) The bid process will be single stage two envelop and the minimum threshold for qualifying in the technical proposal is 80%. Bid shall be submitted in a single package containing two separate envelops clearly marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL”. Initially only envelop marked “TECHNICAL PROPOSAL” shall be opened, whereas envelop marked as “FINANCIAL PROPOSAL” shall remain in the custody of NEPRA without being opened.

8) The bids must be submitted in accordance with the requirements mentioned vide **Section IV, and place same in the envelops marked as Technical & Financial Proposals respectively**. The quoted rates will be only considered if the bidding firm has qualified through the Technical Proposals and matches requirements of NEPRA in letter and spirit. Therefore, the bids which are non-compliant with the given requirements of NEPRA will not be entertained.

9) NEPRA shall evaluate the technical proposal, in a manner prescribed in advance, without reference to the price, and reject any proposal which does not conform to the specified requirements.

10) The bidders qualifying in the Technical Proposals would be called for the opening of the financial proposals, and the bidder who obtains highest points collectively in the Technical as well as Financial Proposals would be awarded the contract. If two or more bidders obtain equal, the firm/bidder which has obtained the highest marks in the Technical proposal among same will be awarded the contract.

11) Minimum validity of bid shall be SIX months.

12) The bidder himself will be responsible for ensuring that the bid submitted is in accordance with the instructions stated herein. Any bid(s) not submitted by the prescribed deadline will not be considered / entertained.

13) The bidder cannot modify or withdraw his bid(s) after submission.

14) Sealed tenders along-with required documents must be delivered to this office by _____ before _____ and will be opened the same day at _____ hrs in the presence of available participants.

AWARD OF CONTRACT

15) The technically qualified bidder becoming successful in the financial evaluation will be awarded the contract.

16) Delivery of services will be made after the award of the contract.

Contract Period:

17) Three Months from the date of start of contract. However, NEPRA reserves the right to terminate this contract during the currency of contract after giving 10 days' notice in terms of para 18.

Termination of Contract on Poor Performance:

18) In case of un-satisfactory work or non-compliance of the given timelines, or consistent poor performance, notice(s) may be served with one (01) week improvement time.

19) If the contractor still fails to deliver, the contract may be terminated resulting forfeiture of the performance guarantee submitted by the successful bidder.

20) If the firm fails to keep the confidentiality of NEPRA's assigned work.

SECTION IV

Eligible Bidders:

21) Only those companies and firms who have valid registration can participate. The Tax and Tax registration certificates must be attached with the sealed company profiles along-with relevant works evidences.

22) International Consultant/Consulting Firm/Joint ventures can apply for the tender in collaboration with local registered Consultant/Consulting Firm.

Technical Qualification Criteria

23) Prequalification will be based on meeting all the following minimum pass / fail criteria regarding the applicant's general and particular experience, personal and equipment capabilities, financial position. The Employer reserves the right to waive minor deviations, if they don't materially affect the capability of an applicant to perform the contract.

Sr. No.	Category	Weightage/ Points
1.	Company Profile	40
2.	Project Resources	20
3.	Understanding of TORs	10
4.	Approach & Methodology	<u>30</u>
		Total: 100

24) The applicant must secure at least **80 % score** in Technical Proposal.

Criteria, sub-criteria, and point system for the evaluation of Technical Proposals are:		<u>Points</u>
Company Profile:		[40]
a)	Detail of Human Resource	[10]
b)	Number of Similar Assignments in last 5 years (2 marks per assignment up to a maximum of 10 marks)	[10]
c)	Experience of working in the power sector of Pakistan (4 marks will be awarded to each qualified bidder who have 5 years of experience. Furthermore, additional 2 marks for each next year will be awarded up to a maximum of 10 marks)	[10]
d)	National / International accreditations	[10]
(ii) Project Resources:		[20]
a)	Fulltime Project Lead (at least bachelor degree in electrical engineering having valid PEC with experience of 10 years and above, higher qualification will be an advantage, should have knowledge of financial terms)	[8]
b)	Fulltime Project Managers (deputed officers should be from technical and financial background having valid registration from respective authorities)	[6]
c)	Details of model(s)/software tools to be used (Bidder is required to provide the details of the valid software/ model that shall be used for the assignment.)	[8]
(iii) Understanding of the TORs:		[10]
(iv) Methodology and approach for conducting the assignment.		[30]
The minimum qualifying technical score points will be: 80 points [Proof of aforesaid criterion must be provided]		
Documentary evidence of aforesaid parameters must be provided.		

Financial Qualification Criteria

<u>Financial Bid</u>
a. Lump sum cost in PKR inclusive of all taxes: PKR _____ /-
<u>(Financial Bid should cover the cost for the assignment)</u>
The formula for determining the financial scores is the following: Sf = 100 x Fm / F, in which Sf is the financial score, Fm is the lowest price and F the price of the proposal under consideration. The weights given to the Technical (T) and Financial Proposals (F) are: T = 0.80 , and F = 0.20

SECTION VII

Payment Terms

25) The successful bidder will be paid as per the following payment schedule:

- Upon submission of first report * 30%
- Upon submission of revised report for cumulative 2 year period 30%

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- Upon submission of final report** 20%
- Upon acceptance of the final report by the Authority 20%

* (After the submission of first report, the bidder is required to incorporate the ideas, recommended addition and deletion up to the satisfaction of client and re-submit the revised reports till final report)

** (as per the directions of the client given from time to time – details in Performa A)

SECTION-VIII

Confidentiality

26) The Consultant/Consulting Firm/Joint ventures (JVs) or either of their personnel shall not, either during the term or after the expiration of this Contract, disclose any proprietary or confidential information relating to the assignment, the Services, this Contract, or the Client's and KE's business or operations without the prior written consent of the Client.

Miscellaneous Responsibilities of the Translation/Bidding Company:

27) The bidding amount shall be in Pak Rupees and shall be inclusive of cost of services, transportation, duties, taxes, surcharges, overhead and profits. If selected in the tendering process, the quoted rates would be considered as the contractual amount and no claim whatsoever will be determined for any extra or additional payment in this regard until and otherwise agreed between both the parties in contract agreement.

28) NEPRA reserves the right to forfeit the bid security in case of breach of any of the agreement by the contractor.

29) Upon selection, the selected bidder shall not be allowed to transfer, assign, pledge or sub-contract its rights and liabilities under this agreement to any other Service Provider or organization by whatever name be called without the prior written consent of the designated NEPRA Official.

30) Successful bidder, upon award of contract, will sign the contract agreement as per the specimen provided by NEPRA and submit an amount **equal to the 10% of the bid price in form of the performance guarantee in the name of NEPRA as performance security which will be released on successful completion of contract period.**

31) NEPRA reserves the right to accept or reject all bids as per PPRA rules.

PERFORMA – A

Sr No.	Event	Date*
1	Award of Contract	Day0
2	Inception Meeting with the Bidder	Day 03
3	Submission of First Report for 1 year period	Day 45
4	Preliminary Presentation before NEPRA	Day 48
5	Discussion with NEPRA Professionals	Day 48-51
6	Revision of the report based upon the discussion up to the satisfaction of the Client	Day 51-61
7	Submission of the revised report for cumulative 2 year period	Day 76
8	Presentation of the revised report before the Authority	Day 77
9	Revision of the report based upon the directions of the Authority	Day 81
10	Submission of the Final Report	Day 87
11	Presentation of Final Report before the NEPRA	Day 89

*If the proposed day is weekend or gazette holiday, next working day will be considered as deadline for the consultant. However, the total term of the contract will not exceed 3 months.