

REQUEST FOR PROPOSALS
FOR
HIRING OF INTERNATIONAL CONSULTANCY FIRM
FOR
DESIGN, DEVELOPMENT & IMPLEMENTATION OF
COMPETITIVE TRADING BILATERAL CONTRACT MARKET (CTBCM)
IN POWER SECTOR OF PAKISTAN



Central Power Purchasing Agency (Guarantee) Ltd.

Ministry of Energy, Power Division
Government of Pakistan

March 2021

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REQUEST FOR PROPOSAL (RFP)
REGARDING
HIRING OF INTERNATIONAL CONSULTANCY FIRM
FOR
DESIGN, DEVELOPMENT & IMPLEMENTATION OF
COMPETITIVE TRADING BILATERAL CONTRACT MARKET (CTBCM)
IN THE POWER SECTOR OF PAKISTAN

RFP No: RFP/CPPA/SMD/2021/01

RFP Issuance Date: March 1, 2021

Bid Closing Date and Time for Submission of Technical and Financial Bids: **1000 hrs. Pakistan Standard Time (PST) on March 31, 2021**

Opening Time for Technical Bids: **1200 hrs. PST on March 31, 2021**

Opening Time for Financial Bids: The final date and time will be communicated to the technical responsive Bidders for participation in the opening process of financial bids.

Central Power Purchasing Agency - Guarantee (CPPA) is issuing this Request for Proposals (RFP) from firm(s) for services on matters detailed in *Clause 6*.

The proposals, in response to this RFP, must include:

- All documentation as required in various clauses below.
- Certificate mentioning that the firm(s) meets the Eligibility Criteria as laid down under Clause 2.2 and accordingly is able to deliver the Terms of Reference (TOR) as laid out in *Clause 6*.
- Submission by **hardcopy** to the Strategy and Market Development (SMD) Department, Shaheen Plaza, 73 East, A.K. Fazl-ul-Haq Rd, Block-H, G 7/2, Blue Area, Islamabad, on or before the closing date/time along with a soft copy of the proposals on USB Flash Drives.

NOTE: There will be no extension in the Bid Closing Date. Similarly, no request for extension in the Bid Closing Date will be entertained.

I. Technical Proposal

The technical proposal in response to this solicitation must address how the Bidder intends to carry out the terms of reference contained in *Clause 6*. It should also contain a clear understanding of the work to be undertaken and the responsibilities of all parties involved. Please note that the technical proposal will be evaluated based on the evaluation criteria set forth in *Clause 3*. The technical proposal should clearly state the Bidder's understanding of the requirements in the terms of reference, and the proposed approach to accomplish the contract objectives and achieve the desired results. Clarity, completeness, brevity and directness are imperative.

II. Cost Proposal

The cost proposal shall be submitted as a stand-alone document and should contain the Bidder's proposed price to perform the anticipated services described in the TOR as set forth in *Clause 6*, and must be prepared in a manner that is current, accurate and complete. The cost proposal should include the budget format given at *Annexure D*.

Any questions regarding this solicitation should be submitted to shaheer.ali@cpga.gov.pk with the title "RFP – CTBCM Design and Implementation": till 1600 hrs. PST on March 15, 2021 in order to provide a timely response to such questions prior to the closing date.

All questions submitted on or before March 15, 2021 shall be reviewed and considered by CPPA. Upon review of the questions, CPPA may issue an amendment to the solicitation by email and posted on the official CPPA website www.cpga.gov.pk. The RFP document is also available for download on the official CPPA website.

1. INTRODUCTION

1.1 Executive Summary

Background:

Taking its roots from the National Power Policy 2013, the Economic Coordination Committee (ECC) of the Cabinet – in its meeting on April 30th, 2015 – directed CPPA that, within two years of the notification of the Market Rules and the associated operationalization of CPPA, CPPA shall prepare a comprehensive plan for the transition of the power market to a Competitive Trading Bilateral Contract Market (CTBCM) in consultation with the stakeholders and subsequently approved by National Electric Power Regulatory Authority (NEPRA). The plan or roadmap as per said direction was supposed to outline the actions that ought to be taken for the transition to a fully competitive wholesale electric power market within the stipulated time. Subsequently, the Power Market Operator Rules, 2015 were issued by NEPRA, whereby CPPA was tasked to play a central role in power market transition, in line with the ECC decision.

Based on this given mandate, in mid 2016 CPPA began its market model development efforts by forming an internal team and subsequently hiring market development consultants. A strategy was devised for the preparation of the future market model, i.e. the CTBCM model, as well as a roadmap for its implementation. As per the strategy, the initiative was divided in to three phases.

The Phase-I included (a) research and study of global competitive markets, (b) capacity building of market entities, (c) proposing the market model and the CTBCM Plan for Pakistan through a consultative process, (d) building strategic partnerships with Market Operators globally and (e) submission of the CTBCM model and plan for regulatory approval. This phase has now been completed, and NEPRA has approved the high-level design of the CTBCM model on December 5, 2019. The Phase-II entailed the detailed market design comprising of (i) preparation of the updated CTBCM Roadmap; (ii) preparation of the updated Detailed Design of the CTBCM; and (iii) preparation of the updated Integrated Electricity Market Simulation Model (IE-SM). The

CTBCM Detailed Design and Implementation Roadmap Reports were prepared in extensive consultations with relevant stakeholders. All documents targeted under this phase were submitted to NEPRA on February 4, 2020. The **Phase-II** (Detailed Design phase) has been concluded with the approval of NEPRA for the Detailed Design Report and Updated Implementation Plan Report on November 12, 2020.

Phase-III, the implementation phase, includes the implementation of all initiatives as per the approved CTBCM Implementation Roadmap. This phase has already been kicked-off in parallel with the implementation of certain essential activities considered building blocks for any market to operate effectively. However, **Phase-III** has been commenced in full swing immediately after NEPRA's recent approval of the CTBCM Detail Design and Implementation Roadmap Report.

The donors' support available to CPPA for Technical Assistance in the designing and implementation of CTBCM will end by close of 2020, and therefore CPPA seeks to initiate the hiring of consultancy services for continuation of Phase-III tasks through an open competitive bidding process, thereby avoiding any gap.

CPPA thus seeks the services of a Consultancy Firm specializing in wholesale competitive power market design, development, implementation and aligned activities and which has performed such tasks in countries across the globe and can demonstrate the capacity of the firm and staff to carry out such activities. Deep knowledge about the Pakistan power sector, its entities, and the features of the market to be implemented are considered a significant advantage for the bidder. The firm will work for the implementation of the Pakistan's power market and assist CPPA and allied entities in the full implementation of the CTBCM Plan for the commencement of the target market, i.e. the CTBCM, by April 2022. The details and scope of work have been detailed in the section "Terms of Reference" under *Clause 6* of the RFP.

2. INSTRUCTIONS TO BIDDERS FOR PROPOSAL PREPRATION / SUBMISSION

2.1 General Instructions

- Bidders shall provide proposals directly in their own name to CPPA under the terms and conditions hereunder.
- Proposals shall concisely address the Scope of Work specifications as they are presented. Proposals not meeting the prescribed Scope of Work specifications shall be rejected.
- Proposals received after the deadline will not be considered. Such proposals will be declared late, rejected and returned unopened to the Bidder.
- All Bidders shall submit proposals in response to this solicitation in English language with all prices stated in US Dollars (USD). All payments will be made in USD. CPPA reserves the right to make payments in PKR for any cost or payment incurred locally.
- The Bidders may enter into a consortium / joint-venture with any consulting firm.

- The Bidders shall submit Technical and Financial Proposals in two separate sealed envelopes simultaneously, clearly marking each envelope as “TECHNICAL” and “FINANCIAL” respectively, and enclosed together in a single outer envelope. Proposals submitted in a single envelope or in an unsealed envelope will be disqualified, rejected, and returned to the Bidder. The outer as well as both the inner envelopes shall:
 - a) bear the name and address of the Bidder
 - b) be addressed to the Strategy and Market Development (SMD) Department as per the provided address
 - c) bear a warning “Not to open before Bid Closing Time”
 - d) the following shall be written on top of the envelope in bold letters
 - i. Proposal in Response to RFP No. -----
 - ii. Bid Closing Time -----
- The Bidder should also copy the contents of the Technical Proposal, including write-ups, annexures, attachments, supporting documents etc., preferably in editable form, on a USB Flash Drive and shall enclose the USB Flash Drive in the sealed envelope of the Technical Proposal.
- Similarly, the complete package of the Financial Proposal including all the relevant tables and spreadsheets prepared on MS Excel, for calculation of level of efforts (LOE), budget estimates etc. should be saved on another USB Flash Drive and placed within the sealed envelope of the Financial Proposal.
- Both Flash Drives containing the contents related to Technical Proposal and Financial Proposal must be placed **separately in the respective sealed envelopes of Technical and Financial Proposals.**
- The Hard Copy of the complete proposals, along with Flash Drives sealed within the respective envelopes, may please be submitted to the Strategy and Market Development (SMD) Department, Shaheen Plaza, 73 East, A.K. Fazl-ul-Haq Road, Block-H, G 7/2, Blue Area, Islamabad, on or before the closing date/time. **Note:** Hard Copy of the Technical and Financial Proposals will be treated as the ‘Authoritative Copy’.
- Bidders may submit modifications to their proposals at any time before the solicitation closing date and time.
- This RFP will be governed by the applicable laws of Pakistan.

2.2 Eligibility Criteria

- i. The Bidder must have sound financial credentials and should be able to demonstrate that their firm(s) is a going concern from its financials. The firm must have an annual turnover of USD 1.0 million or more in the previous year
- ii. The Bidder must submit a declaration, duly signed by an authority of the Bidder, that their firm(s) is not blacklisted from anywhere in the world
- iii. The Bidder must have successfully carried out two similar assignments (one in a developing country and one in a developed country, during the last ten years)
- iv. The Bidder must have a well-established office and should have a global footprint in terms of number of similar assignments in-hand (at least five)
- v. The Bidder's key personnel should have the minimum experience as detailed under the TOR *Clause 6*

2.3 Technical Proposal

The Bidder's technical proposal shall include the following information:

- The first page of the proposal must provide the following:
 - i. The Bidder's name, address, electronic mailing address and contact numbers
 - ii. A statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and an agreement to furnish any or all items and the prices at which these are offered
 - iii. The name, address, electronic mailing address and contact numbers of the person(s) authorized to negotiate on behalf of the Bidder
 - iv. The name, address, electronic mailing address and contact numbers of the person authorized to sign the proposal on behalf of the Bidder
- The Technical Proposal will demonstrate the Bidder's knowledge regarding the project requirements and an understanding of the tasks set forth in the TOR for Consultants (Clause 6). The Bidder will demonstrate how it will implement the tasks in the TOR to achieve the desired outcomes.
- The proposal should be based on the following format:
 - i. Background and experience of the firm(s) / Joint Venture (JV) /partners associated for the purpose of providing the services for this Project in both developed and developing countries. A list of past and present references covering major assignments of a similar nature carried out or being carried out by the firm(s) / JV, if any.
 - ii. Information on the staff deployment on existing assignments by the firm(s) / JV at the time of submitting this proposal.
 - iii. General approach and methodology proposed for carrying out the project scope including such detailed information as deemed relevant, pursuant to *Clause 6*.
- Supportive illustrations by way of:
 - i. Implementation work plan/schedule of principal activities indicating those on the critical path.

- ii. A bar chart manning schedule indicating the estimated duration separately in the home-office and in the field (Islamabad, Pakistan). Please note that the delivery of the scope of work may also require local travelling within Pakistan.
 - iii. Composition of the Bidder's team of personnel and the tasks to be assigned.
 - iv. Proposed timing of the assignment of the key personnel.
 - v. Comments, if any, regarding the TOR etc. to improve performance in carrying out the assignment and achieving the desired outcomes.
 - vi. An organization chart along with details of firms / JV arrangements
 - vii. Availability Certificates signed by all Key Personnel of the Bidder detailing their name, age, educational background, employment record and detailed professional experience of the Key Personnel to be assigned for providing the proposed services, with particular reference to the kind of experience required for the Project.
 - viii. A schedule in the form of a Gantt chart on the completion and submission of tasks/deliverables.
 - ix. A list of projects completed by the Bidder's firm and Key Personnel. Also, a list of similar projects completed and the contact information of the Clients, separately, for the firm and the Key Personnel.
- The Consultant shall obtain prior approval in writing from CPPA if any of the Key Personnel are to be replaced during course of the project implementation.

2.4 Cost Proposal

The cost proposal, including a Budget Spreadsheet (*Annexure D*), shall be submitted as a separate/standalone document. Pricing information must be fully comprehensive, complete, and must list any available discounts. Pricing information supplied with the proposal must be valid for at least **180 (one hundred and eighty) calendar days** after the Bid Closing Date. All one-time and recurring costs must be fully described. Rates shall be quoted, inclusive of all and showing in separate heads the lodging, travelling, visa, transportation, overheads and other levies (if any) etc. All taxes will be applicable in accordance with the Taxation Laws of Pakistan and Taxes will be deducted at source by CPPA. Bidders from countries having respective double taxation treaty with Pakistan will be dealt with accordingly regarding the taxation on the basis of such information provided by the foreign bidders. Evaluation of Cost Proposals will be done on the bid amount, exclusive of taxes. **A firm fixed price type of contract is anticipated to be awarded, the draft template of which is attached as *Annexure E*.**

2.5 Budget Spreadsheet

Budgets shall be submitted both in hardcopy and softcopy (on USB Flash Drive) comprising MS EXCEL spreadsheets, in the format shown in *Annex D* and must not be in Adobe® Portable Document Format (.pdf) format so that the formulas used are reviewable by CPPA. However, the hardcopy will remain the Authoritative Copy. The Bidders shall provide sufficient details to allow for a complete examination of costs. Bidders shall include a breakdown of budget line items

in the applicable currency that they believe are realistic and reasonable for the work in accordance with the technical requirements outlined.

3. PROPOSAL EVALUATION CRITERIA

Proposals will be evaluated as per the defined evaluation criteria for compliance, previous experience of similar projects by the Bidder, technical capacity, the qualifications of the personnel for delivering the tasks, and the prices. CPPA may contact a Bidder's previous clients and may obtain any information related to other projects that the Bidder has executed. CPPA may contact any Bidder for further clarification or additional information, and at the same time CPPA reserves the right to make decisions based solely on the information provided with the proposals. CPPA may but is not obligated to conduct additional negotiations prior to the issuance of a Contract.

Mathematical errors will be corrected in the following manner:

- If a discrepancy exists between the total price proposed and the total price resulting from multiplying the unit price by the corresponding amounts, then the unit price will prevail and the total price will be corrected.
- If a discrepancy exists between the numbers written out in words and the amounts in numbers, then the amount expressed in words will prevail.
- If the Bidder does not accept the correction, the offer will be rejected.

CPPA will carry out its evaluation based on the factors listed below. These factors will serve as the standard against which all technical information will be evaluated and will identify the determination factors that Bidders should address. CPPA intends to evaluate Bidders proposals in accordance with the Terms of Reference in *Clause 6* of this RFP and make an award to the Bidder submitting the most responsive and reasonable proposal that offers the best value to CPPA. Proposals will be scored based on a **1,000** points system.

3.1 Evaluation of Technical Proposals

The technical proposals will be evaluated by a technical evaluation committee using the criteria shown below. When evaluating the competing proposals, CPPA will consider the written technical/capability information provided by the Bidders, and / or any other information obtained by CPPA through its own research.

The criteria listed below are presented by major category, so that Bidders will know which areas require emphasis in the preparation of their proposals. Bidders should note that the criteria serve as the standard against which all technical information will be evaluated and serve to identify the significant matters which Bidders should address. The assignment of the points to each Bidder will be done according to the following evaluation criteria, based on 1,000 points:

Evaluation Criteria

CPPA will use the “**Quality and Cost Based Selection Method**” under the “**Single Stage Two Envelope Method**”. The criteria for Technical and Financial Evaluations are enclosed. Scores will be allocated based on the evidence available in the proposal and/or any other information obtained by CPPA through its own research. The assignment will be awarded to the Bidder with the highest Total Score based on the following weight ratios:

- 90% for Technical Score
- 10% for Financial Score

Technical and Financial Evaluation

Technical Evaluation:

For Technical Evaluation there are 1,000 points in total. The proposals will be evaluated as per following criteria (details are provided in table below):

- i. Demonstration of Key Personnel’s experience and capabilities proposed for this project.
- ii. Relevant experience of Key Personnel for carrying out similar consultancy work (power market design and implementation) in developed and developing countries in the last 15 years.
- iii. Key Personnel’ Experience in working in Pakistan’s power sector.
- iv. Suitability of methodology and approach to the scope of work as provided in RFP.

Minimum Technical Score for competing in the next stage or minimum qualifying score is **80% or 800 points out of 1,000. The Financial Proposal of only those Bidders that have secured 80% or more in the Technical Evaluation will be opened.**

The tables hereunder depict the further details of technical evaluation criteria:

Criteria for Technical Evaluation

A - Technical Proposal Evaluation: Approach and Methodology

Approach and Methodology	Maximum Score	Score Awarded by CPPA
Experience of the Firm	50	
Quality of Approach and Methodology	180	
Personnel Schedule	20	
Total Score: Approach and Methodology	250	

B - Technical Proposal Evaluation: Personnel

Key Personnel: A					
S. No.		Key Personnel/Area of Expertise	Name	Maximum Score	Score Awarded by CPPA
1	1	Team Leader/ Power Market Design and Implementation Expert		180	
2	2	Market Development (Transmission, System Operations and Market Operations) Expert		180	
3	3	Market Modeling Simulation Expert (Market Operations and System Operations)		100	
4	4	Financial and Settlement Expert		80	
5	5	Organizational Restructuring Expert		60	
Sub-Total (A)				600	

Key Personnel: B					
Sr. No		Key Personnel/Area of Expertise	Name	Maximum Score	Score Awarded by CPPA
6	1	Power Sector Expert/ Local Team Lead		80	
7	2	Legal Expert		40	
8	3	Financial Expert		30	
Sub-Total (B)				150	
Total Score: Personnel Evaluation (A+B)				750	

Please note:

- i. The criteria for minimum qualification / experience is provided in the Terms of Reference for Key Personnel *Clause 6*
- ii. Incremental relevant experience which is over and above the minimum experience will carry additional marks

C - Technical Proposal Evaluation: Total Technical Score (TS)

A-Approach & Methodology Score	250
B-Personnel Evaluation Score	750
Total Score (TS) = A+B (Max 1,000)	1,000

3.2 Evaluation of Cost Proposals

The submitted cost proposals will be one of the selection factors and will be considered in making a final determination. Therefore, the closer the technical evaluation scores of the various proposals are to one another, the more important cost considerations will become.

It is clarified that CPPA is not obliged to award a contract on the basis of a lower proposed cost, nor is CPPA obliged to award a contract to the Bidder with the highest technical evaluation score. After the evaluation of all proposals correctly received, CPPA will make the award to the Bidder whose proposals attain the total highest score considering both technical and cost factors.

- Bidders should quote their fees based on the number of man-days required to complete the task (Annexure-C). Please note that the duration of the assignment under this RFP is 1.5 years (18 months) and as such, man-days or man-months shall be given only for one and half years (18 months) from the start of the assignment. All costs shall reflect the plan to be completed during these 18 months. All expenses shall be separately itemized, including travelling costs etc. However, the total cost figure will be used for the purpose of cost evaluation.
- Cost realism and completeness of the cost proposal and supporting documentation should be maintained. (C)ost realism means that costs in a Bidder's proposal are realistic for the work to be performed; reflect a clear understanding of the requirements; and are consistent with the various elements of the Bidder's technical proposal;
- Consistency with the technical proposal should also be maintained;

Financial Proposals of only Technically Qualified Firms will be opened. The Firm obtaining the maximum marks on a 90-10 weightage (90% for Technical and 10% for Financial) will be selected.

The formula for determining the Financial Score is the following:

$$FS = 1,000 \times LP / F$$

(Where, FS is the Financial Score; LP is the Lowest Price and F is the Price of the Proposal under consideration. The lowest Bidder will get maximum 100 points = 1,000 points x weight of 10%

Final Total Score:

The weights given to the Technical (T) and Financial Proposals (F) are:

$$T = 0.90 \text{ and } F = 0.10$$

Final Total Score (Technical + Commercial) = Technical Score (TS) x (T=90%) + Financial Score (FS) x (F=10%)

4. GENERAL TERMS AND CONDITIONS

CPPA intends to award a contract resulting from this solicitation to the eligible Bidder whose proposal will attain the highest score after evaluation in accordance with the factors in the solicitation. Bidders should note the following:

1. CPPA reserves the right to cancel this solicitation or to reject all bids received without providing any reason.
2. CPPA will enter into a lump sum (firm fixed price) contract of one and half years (18 months) with the successful Bidder who wins this bid to be the Consultant of this project (Specimen attached at Annexure E).
3. At the time of the award of the contract, the Bidder shall commit in writing to extend the term of the contract to one more year, if required to do so by CPPA, before the date of the expiration of the contract foreseen in this RFP. The TORs of that extension shall be negotiated before the end of the 18 months period of this contract.
4. CPPA is not obligated to pay for any costs incurred by the Bidder in preparation of a proposal in response hereto, or otherwise compensate the Bidder if CPPA rejects any or all proposals or if it withdraws, annuls, suspends or cancels the RFP or the bidding process.
5. CPPA may reject any or all proposals if such is in CPPA's interest, without providing a reason.
6. CPPA intends to evaluate bids and award a contract without discussions with Bidders (except for clarifications, if required). Therefore, the Bidder's initial bid should contain the Bidder's best terms from a cost or price and technical standpoint. CPPA reserves the right to conduct discussions and/or to establish a competitive range and conduct discussions with multiple Bidders if CPPA later determines discussions to be necessary.
7. Multiple bids from a single Bidder will not be accepted. Additionally, Key Personnel participating from one Bidder cannot participate on behalf of another Bidder.
8. Payment to the Consultant will be made as per the schedule provided under the clause "Payment Terms".
9. CPPA reserves the right to monitor the firm's progress to ensure if it covers the scope of work as determined at the time of award, and achieves the desired outcomes.
10. Exchanges/Discussions with Bidders after the receipt of a proposal do not constitute an acceptance, rejection or counter-offer by CPPA of the Bidder's proposal.
11. A proposal may be rejected if CPPA determines that the lack of balance between line items and sub-line items poses an unacceptable risk.
12. If a cost realism analysis is performed, cost realism may be considered by the source selection authority in evaluating performance or schedule risk.

13. CPPA will monitor the quality of work performed by the Consultant using an agreed-upon methodology at the time of award. If the quality of work is inadequate, CPPA reserves the right to order the firm to redo the work judged to be of insufficient quality, at the sole cost of the Consultant. Please refer to *Clause 11: Failure and Termination* for further details.
14. Unsuccessful Bidders will be notified as soon as possible following the award of a contract.
15. The Consultant shall not change any of the Key Personnel without the prior written approval of CPPA.
16. CPPA shall bear no liability towards any Bidder or any person based on any act or omission related to or in connection with or arising out of this RFP or otherwise.
17. The CPPA will preliminarily examine the bid to determine whether they are complete, whether any computational errors have been made, whether prerequisites have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
18. CPPA agrees that all submissions shall be held as confidential, shall not be disclosed outside of CPPA, and shall not be duplicated, used, or disclosed – in whole or in part – for any purpose other than to evaluate the proposal. If, however, a contract is awarded to this Bidder as a result of – or in connection with – the submission of any data, CPPA shall have the right to duplicate, use, or disclose such data to the extent provided for in the resulting contract awarded. This restriction does not limit CPPA’s right to use information contained in a proposal if it is obtained from another source without restriction.
19. CPPA reserves the right to seek from the bidders additional information required to verify the claims made in the proposal during the proposal evaluation phase.
20. All the pages of Bidding documents in case having any erasing / cutting / crossing or over writing etc., therein, must be properly signed by the signing person of the Bidder by the authorized signatory, who has been given the requisite power of attorney on the company’s letterhead.
21. Offer shall not be considered if received after the time and date fixed for its receipt.

5. DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

The following documents/ certificates shall be submitted in hard form along with the Authoritative Copy of the bid. Soft copies of these documents shall also be provided on the respective Flash Drive for the Technical Proposal:

1. Declaration duly signed by an Authorized Representative of the Bidder that the services offered under the bid are in accordance with the tender specifications amended to-date.
2. List of any deviations or reservations from the bid specifications.
3. Detailed CV’s of the individuals to perform the mentioned scope of work as per **Annexure A**. All CVs of candidates proposed to carry out the assignment will be signed by the candidate and accompanied by the Certificate of Availability.
4. Certificate of availability from the Key Personnel who will work on the project as per **Annexure B**.
5. Firm’s details and profile showing experience in similar field(s).
6. Registration Certificate of the firm.

7. Profile of the team to be deployed including their qualification & experience.
8. Declaration by the Firm for non-blacklisting
9. Any other information which is specified in this RFP document.

6. TERMS OF REFERENCE (TOR)

CONSULTANCY SERVICES FOR IMPLEMENTATION OF CTBCM IN POWER SECTOR OF PAKISTAN AND THE ALLIED ACTIVITIES

PART –I: Background

The Economic Coordination Committee (ECC) of the Cabinet, through its Decision No. ECC-78/9/2015 (April 30, 2015), directed CPPA to prepare and submit a comprehensive plan for the transition of the wholesale power market to a Competitive Trading Bilateral Contract Market (CTBCM) in consultation with stakeholders within two (02) years of the bifurcation of NTDC's License and notification of the Market Rules. NEPRA's approved Market Rules 2015 were published by the Federal Government through the Official Gazette on 5th June 2015 and the same mandate is reflected under Rule 2.1f, Schedule 1 of the Market Rules.

To implement the ECC's decision the following actions have been undertaken:

- a. CPPA created the Market Development Department, to lead/facilitate/organize the work on the development of the Competitive Trading Bilateral Contract Market (CTBCM)
- b. An international Market Development Consultant firm was hired through ADB's funding to support CPPA in this endeavor.
- c. CPPA defined the market development strategy as consisting of three phases:
 - Phase I: Preparation of a comprehensive high-level model for the CTBCM and Implementation Roadmap.
 - Phase II: Preparation of detailed aspects of the market (the detailed design) and the formulation of an Implementation Plan (the Roadmap).
 - Phase III: Implementation (execution of actions identified the Roadmap for the implementation of the Wholesale Electricity Market in Pakistan. Several are already underway as discussed hereunder).
- d. CPPA organized and conducted consultations with NEPRA, MoE (PD) and provided trainings to Market Stakeholders (including the DISCOs and KE etc.) for developing the CTBCM model and Plan. This included 100+ consultative sessions including workshops and one-to-one consultation meetings with said stakeholders, 2,000 man-days of training by local and international trainers on market development, and several international exchanges and study tours.
- e. CPPA has established strategic partnerships with several international Market Operators and has been effectively coordinating with them to ensure learning from their experiences.
- f. CPPA, in its central coordinator role, is facilitating NPCC, NTDC, DISCOs, and PPIB/AEDB in the implementation of their respective groups of actions identified in the CTBCM Implementation Roadmap.
- g. CPPA designed and launched an Electricity Market Professionals (EMP) Program in July 2018, which is an annual recurring training program on market development followed by a certification test. 50+ professionals have already graduated and 50+ more are expected to do so in this year. The training program is jointly delivered by CPPA market experts and their international counterparts, and will help build and sustain capacity among the market participants and service providers.

Phase-I has been concluded with the principal approval of the CTBCM conceptual design by NEPRA in December 2019.

Phase-II (Detailed Design Phase) began after the principal approval of the CTBCM conceptual design in December 2019. It required the CTBCM Roadmap, Detailed Design and Integrated Electricity Market Simulation Model (IE-MSM) reports to be updated and submitted to NEPRA within 60 days of the receipt of the approval determination i.e. by February 4, 2020. In compliance, these documents were submitted to NEPRA on February 4, 2020, meeting the targeted deadline. On the 29th of May 2020, NEPRA requested CPPA for certain clarifications and adjustments to the Detailed Design and the Updated Implementation Reports. On the 30th of July, 2020 CPPA submitted revised versions of both reports, and on 24th August 2020 NEPRA called for a public hearing to receive comments about the updated reports. Consequently, after a rigorous regulatory review process, NEPRA approved the CTBCM Detailed Design and Implementation Roadmap on November 10, 2020 marking the completion of the Phase-II.

Phase-III (Implementation Phase) has also started in parallel on must-do items independent of any market model architecture. However, **Phase-III** will now pick up the pace and will commence in full swing immediately following the recent approval of the CTBCM Detail Design and Implementation Roadmap Report by NEPRA.

As ADB's support is ending in Dec 2020, in order to continue working on the CTBCM detailed design and implementation, this RFP is being floated to hire consultants specialized in power market development, design and implementation to provide support to CPPA, and other stakeholders through CPPA. In addition to the CTBCM implementation work, the consultants shall extend support to CPPA in capacity building, provide access to knowledge and information resources available to them, and provide training to the CPPA and other stakeholders by embedding the required international and national experts in advisory and supporting roles.

Documentation Available for Interested Bidders

The following reports have been produced, in relation to the target market model:

- CTBCM –Detail Design Report
- CTBCM – Implementation Roadmap Report

These reports are attached at **Appendices-1 & 2**.

PART – II: SCOPE OF CONSULTANCY SERVICES

A consulting firm of international repute is requested to provide a team of international and national consultants to deliver the scope of work outlined below. The international consultants must have in-depth experience in power sector restructuring; competitive electricity market development and design; power sector financial and settlement systems; power trading regulations; market and system operations; modeling; drafting of power sector legal and regulatory instruments [market code, grid code and related rules and regulations etc.]; change management, etc. Please refer to Section 2.2 for details on Eligibility Criteria and Section 3 for Evaluation Criteria. The consultants will be placed at CPPA and primarily based in Islamabad during the detailed design of the CTBCM and its

implementation. The required Level of Effort (LoE) for the consulting firm is summarized in **Table under PART – IV: MANPERSON-MONTH INPUT**. Please note that this is CPPA’s estimate of the LoE and Bidders can provide their own estimate of LoE for the assignment.

1. Team Leader / Power Market Detailed Design Implementation Expert

The Team Leader will coordinate and guide the activities of the consultants and act as liaison with the counterpart appointed by CPPA to interact with the consultants.

The Team Leader will primarily work on the implementation strategies of the group of actions under the Implementation Roadmap. Team Leader will also ensure consistency of the overall implementation activities among all stakeholders involved in the execution of the CTBCM group of actions. The Team Leader will ensure the quality of the support delivered by the team of consultants. Further, the Team Leader will support CPPA in reorganizational matters and in aspects related to restructuring, legal, policy and regulatory issues, as well as to other stakeholders in the preparation and submission of documentation for approval of different authorities, and to make presentations whenever the process requires that. The Team Leader, through CPPA, shall also extend their support to the relevant entities of the power sector responsible for their respective group of actions under the roadmap, if required. Training and capacity building of CPPA and other participants will also be an essential task.

The Team Leader will preferably have a degree and post-graduate qualification in economics, finance, engineering or law; and a minimum of 20 years of international experience in power sector restructuring and competitive wholesale electricity market development, design and implementation, market operations, system operations etc. including relevant experience regarding transition towards the competitive electricity market in at least 10 different developing countries and one 01 developed country. In-depth knowledge of the Pakistani Power Sector and its peculiarities is highly desirable. Experience in the management of autonomous power sector settlement companies will also be considered a plus.

2. Market Development (Market Operations, System Operations & Transmission) Expert

The Market Development Expert will look after all aspects of the CTBCM implementation related to the technical including its regulatory aspects, such as interfacing with NTDC, the System Operator, the Grid Code Review Panel, the Commercial Code Review Panel, etc. The Expert will develop concept papers for the development of new regulatory documents and make modifications to existing regulatory documents consistent with the CTBCM design. The Expert will also prepare the concept papers on different aspects of the detail design of CTBCM and its implementation that will be used as a base for further developments of systems and rules, regulations and codes etc. The Expert will support the preparation and submission of documentation for the approval of different authorities and make presentations when required. The Expert will also assist CPPA in the capacity building of allied power sector entities in market design and operations.

The Expert will preferably have a degree and post-graduate qualification in economics, finance or engineering and a minimum of 20 years of experience in power sector restructuring and competitive wholesale electricity market design and implementation, Grid Codes, Commercial Codes, Market Rules, including relevant experience in at least 10 different developing countries and 01 developed country. Experience in system operations and transmission and generation expansion planning will be considered a plus.

3. Market Modeling Simulations Expert (Market Operator and System Operator)

The Market Modeling Simulations Expert will look after all aspects of the CTBCM implementation that require numerical analysis and scenarios assessment to examine the impact of different aspects of the market design and market start-up. The expert will conduct wholesale market simulations for the short to medium term to cater for the impact on prices due to the allocation of the existing PPAs/EPAs to the DISCOs through bilateral arrangements, the impact of future market prices due to competitive trading, simulating economic prices (market prices) through optimized dispatch techniques etc. Training and capacity building of CPPA and other participants on simulations tools and techniques will be an essential task.

The Market Modeling Expert will preferably have a degree and post-graduate qualification in economics, finance or engineering and a minimum of 10 years of hands on experience on different internationally used market simulation optimization tools and software, ensuring least cost dispatch, day ahead or week ahead dispatch planning, hydro thermal coordination, security constraints optimization, market price simulation etc., including relevant experience in at least 05 different developing countries and 01 developed country. Relevant experience in countries similar to Pakistan will be considered a plus.

4. Financial and Settlements Expert

The Expert shall provide the international settlement knowledge, experience and inputs required to support the CPPA to establish and operationalize the settlement process for both the Market Operator (MO) and the Special Purpose Trader (SPT), keeping in view the parameters of the commercial code as well as the SPT code. The Expert shall also successfully complete their tasks, including (i) ongoing embedded management advice and support to the CPPA management team, and (ii) evaluating, identifying and understanding the design mechanisms, in accordance with the approved detailed market model for Pakistan, to support the operation of the new market covering financial settlement systems for Market Participants by the MO, (iii) propose mechanisms of payment for legacy contracts and new bilateral contracts, (iv) evaluate and propose mechanisms of the collection and disbursement of system service charges of the respective service providers, (v) evaluate the design of escrow account mechanisms for the DISCOs and MO &/ or SPT, (vi) the release of various subsidies to DISCOs through up-front subsidies mechanism or otherwise and payment frequencies thereto by the GOP, (vii) evaluate, propose, design and provide assistance to implement the structure and operations of the finance department of the MO covering end-to-end transactions, (viii) participate / contribute in the development of new market contracts and assess risks of the new market contracts, (ix) the Expert

through CPPA shall also extend support to the external entities – specifically the DISCOs – in activities related to financial health assessment, arrangement of credit covers/guarantees through PPIB/AEDB, opening and operation of Escrow Accounts etc. It is expected that the Expert will also interact with the CPPA information systems experts and other stakeholders to build the necessary interface with the MO.

The Settlements Expert will preferably have a degree and post-graduate qualification in accounting or finance and a minimum of 15 years of experience related to financial and accounting aspects of the power sector / energy sector with respect to the competitive wholesale electricity market, including relevant experience in at least 10 different developing countries and 01 developed country. Additionally, the expert should have knowledge and experience in international accounting standards, internal control/ audit principles, cash management and business/financial planning and other activities related to power sector. Relevant experience in countries similar to Pakistan will be considered a plus.

5. Organizational Restructuring Expert

The Restructuring Expert shall provide the international experience, knowledge and inputs required to support the CPPA in organizational re-structuring activities and change management. Further, the Expert shall provide contributions in (i) the drafting and review of the Market Operator (MO), Functions, Process Manuals, HR Manual, Corporate Policies, Training and Capacity Building Plans, Stakeholder Management and Communications Plan, SOPs, JDs, KPIs, Guidelines etc. in light of international best practices, (ii) contribute to the exercise of business process mapping of the MO functions and assist CPPA in its implementation, (iii) lead implementation of organizational restructuring activities using change management approaches and interact with CPPA restructuring team and senior leadership to accomplish the objectives, and (iv) provide advice and support to other experts and CPPA management team with regard to people, processes and organizational development.

The Restructuring Expert will preferably have a degree and post-graduate qualification in business management, law or human resources, a minimum of 15 years of work experience including HR policies, change management, operational restructuring, business processes restructuring, corporate communications management, etc., in the competitive wholesale electricity markets, including relevant experience in at least 10 different developing countries and 01 developed country. Relevant experience in countries similar to Pakistan will be considered a plus.

6. Power Sector Expert

The Power Market Expert is expected to provide support to CPPA particularly in creation of the Independent System and Market Operator (ISMO), the restructuring of CPPA for the creation of MO, provide assistance to the CPPA team in monitoring and controlling the CTBCM Implementation Plan and perform coordination of the work being done by several stakeholders involved in the CTBCM implementation. The Expert shall also review the technical deliverables prepared by the other

consultants or the CPPA team and provide their technical feedback on the same. The Expert shall assist the CPPA team in the activity of ISMO creation and manage day-to-day coordination and implementation activities in this regard. The Expert, through CPPA, will perform stakeholder management and accordingly reach out to different stakeholders for information dissemination, consultations and will actively keep them engage in the CTBCM implementation activities. The Expert through CPPA will work with PPIB/AEDB in matters related to policy, legal and regulatory issues.

As a consequence of the coordination and monitoring, the Expert will propose to CPPA and the Consultant's team solutions whenever implementation problems arise and provide for measures to mitigate the effects of problems and / or delays if any; support CPPA in providing guidance and support to stakeholders requiring specialized services in order to accomplish their targets in relation to the implementation of the CTBCM Plan; support CPPA in seeking the involvement of different authorities to authorize or take appropriate decisions, whenever required; support CPPA in organizing and facilitating the capacity building programs aimed to improve the knowledge base of stakeholders at their respective levels; support CPPA in organizing forums, permanent or ad-hoc, as deemed necessary in order to address issues related to the CTBCM implementation and support CPPA in providing, preparing, and disseminating information about the progress of the CTBCM implementation.

The Expert will preferably have a degree and post-graduate qualification in economics, finance or engineering and a minimum of 15 years of relevant work experience in the power sector and also have an in-depth knowledge of the peculiarities of Pakistan's power sector; and preferably with hands-on experience in policy, legal, regulatory and planning aspects of Pakistan's power sector.

7. Legal Expert

The Legal Expert will look after several legal aspects related to the CTBCM implementation. The most critical one will be working with the CPPA's Legal team in drafting new market contracts; writeups of regulatory documents including commercial codes etc.; contractual arrangement documents including Connection Agreements, Market Participation Agreement, Service Provider Agreement etc.

The Expert will also provide contributions to the formation of the ISMO wherein the Expert will provide legal inputs to the allied activities, including the legal incorporation of the ISMO as separate legal entity(ies), the preparation of licensing/registration applications for the ISMO/ SPT for submission to NEPRA, modification of the Power Procurement Agency Agreements, drafting of Business Transfer Agreements etc. The Expert will also review taxation matters involved in the trading of electricity among market participants as per the existing taxation law of Pakistan and provide legal input to avoid double taxation if any. The legal expert is also expected to provide legal inputs and views on policies and the regulatory framework, CPPA functions and organizational re-structuring, as well as legal advice and support to the Restructuring Expert and CPPA's management team in decision-making related to the CPPA restructuring and ISMO formation.

The Legal Expert will have a law degree and preferably post-graduate qualification in law; a minimum of 12 years of work experience in the power sector preferably in power sector of Pakistan, including experience with the regulatory framework and power purchasing agreements.

8. Financial Expert

The Expert shall work in close coordination with the Financial and Settlement Expert and provide assistance in all finance related aspects. This Expert shall work closely with the Financial and Settlement Expert in evaluating, designing and implementing the financial system for the MO, the mechanism of the collection and disbursement of system service charges of respective service providers, subsidies management including provision of up-front subsidies and payment frequencies by GOP etc.

The Expert will work with the CPPA Legal Team and the consultant's Legal Expert on issues such as taxation, new market contracts etc. The Expert will also assist CPPA in preparation of the market fee petition for claiming the budget of the newly created ISMO from NEPRA. The Expert will assist CPPA in opening and operating the Escrow Accounts and will liaise with local banks in coordination with the CPPA team for this purpose. It is expected that the Expert will also interact with the CPPA information systems experts and other stakeholders to build the necessary interface with the MO related to financial transactions. The Expert, through CPPA, shall also extend support to external entities, specifically including the DISCOs, in activities related to financial health assessment, arrangement of credit covers/guarantees through PPIB/AEDB, opening and operations of Escrow Accounts etc.

The Financial Expert will have a degree and preferably post-graduate qualification in accounting, or finance and a minimum of 15 years of experience in international and national accounting standards, internal control/ audit principles, cash management and business/financial planning and other activities related to financial and accounting aspects in public/private sector of Pakistan. The Expert should be aware of the billing and collection systems of the electric power utilities. The Expert must have knowledge related to banking system, taxation laws etc. in relation to the Power Sector. Power sector experience of Pakistan will be highly preferred.

Scope of Work – Other Details

The implementation of the CTBCM has been divided into 19 group actions, which also have certain sub-actions, as mentioned in detail in Appendices 1 & 2. These group actions include preparing and amending regulatory documents, amendments to the legal framework, modifications or replacements of energy policies to ensure consistency with the market development policy, commercial allocation of the existing PPAs/EPAs, restructuring of CPPA, strengthening of the market interface by providing assistance to the network and system operator and the DISCOs, assistance in the establishment of credit cover mechanisms, and other activities relating to the readiness of the market for commencement of commercial operation. As noted under Section 2 of this TOR, the following reports (attached as Appendices 1 & 2) have been approved by NEPRA and provide the details on

the proposed market model and implementation roadmap, which should be referred to gain a complete understanding of the scope of work under this assignment:

- CTBCM – Detail Design Report
- CTBCM – Implementation Roadmap Report

The Consultants will be required to develop a detailed Gantt (as part of the Inception Report) against all deliverables and CTBCM actions in consultation with CPPA, and complete the implementation of these deliverables as per their prescribed timelines. The way forward, including definition of specific tasks and scheduling, will be decided according to the working mechanisms described in the following section.

CPPA reserves the right to reschedule the tasks of the consulting firm in consultation with the firm.

Capacity building sessions on Competitive Power Market Operations for CPPA staff, the SO and other stakeholders is an essential task. The exact number of sessions and their themes will be decided later.

Deliverables

The Consultants are expected to provide support to CPPA on the following subjects and associated expected outputs. This support may consist of making recommendations; preparing working papers and reports; making presentations; conducting capacity building through workshops, seminars, etc.; database organization; information gathering and related IT activities; testing methodologies and models; theoretical and technical knowledge transfer to the CPPA team working on the development of the CTBCM etc.

Work is anticipated to be started from May 2021. However, CPPA reserves the right to reschedule the tasks of the consultants in consultation with the Consultant.

In the proposed high level CTBCM model certain tasks / actions have been identified. These actions have been further divided into sub-actions. The description of the tasks and actions, and the responsibilities anticipated from the Consultant to be completed in the one and a half year timeframe against each task is outlined in the table below. This is a high-level list of the tasks and responsibilities of the Consultant that are due in the contracted timeframe.

In the Technical Proposal, the Consultant shall propose the potential deliverables that its team would produce and submit to CPPA as a consequence of performing the listed activities/ action items. The methodology proposed by the Consultant should encapsulate the technical approach that the Consultant shall adopt to fulfill these responsibilities and what documented deliverables the Consultant perceives by performing these actions.

Consultant is required to propose deliverables against each action item / responsibility in the following table. However, it is also recommended to critically analyze Appendices 1 & 2 in order to come up

with a complete list of action items / responsibilities for completing the actions as mentioned in the table and to achieve the desired outcomes. The Consultant may propose any additional or missing task / activity required to complete the scope of work.

The deliverables could be in the form of, but may not be limited to, the following:

- Review of existing power sector documents including but not limited to laws, policies, codes, regulations, agreements, other regulatory and governance documents etc. and their assessment / post-review reports
- Drafts of proposed power sector documents including but not limited to, policies, rules, regulations, codes, guidelines, procedures, standard forms, templates, agreements, etc.
- Design and drafts of corporate level documents, templates and reports including but not limited to strategies, policies, plans, systems, manuals, business processes, company formation, organizational structures, job descriptions etc. for existing and proposed power market entities
- Design of mathematical models for forecasting, formulas, calculations related to CTBCM model, settlement algorithms for market settlement software, website design for the proposed market entities etc.
- Draft responses (letters/emails) on the queries of stakeholders throughout the market design and implementation phase
- Design and preparation the curriculum and contents for workshops/consultative sessions/training and capacity building sessions/conferences related to market development activities and participation in such sessions/activities in the role of facilitator/adviser/trainer.
- Preparation of cases for obtaining specific approvals from concerned authorities and written legal opinions on the legal matters

No.	Task Description	Stakeholders directly involved	#	Actions and Responsibility	Deliverable(s) To be proposed by the Bidder
1	Implementation Process Start; Overall Decision and Actions; Coordination	MoE, NEPRA, CPPA-G	1	The Consultant will develop complete understanding of the CTBCM Detailed Design and Implementation Roadmap which has been approved by NEPRA in November 2020	
			2	Providing assistance to Market Implementation Monitoring Group (MIMG) through CPPA-G for the monitoring and implementation of market development process	
			3	Providing assistance to CPPA-G in MIMG coordination, monitoring and reporting	
2	Concept Papers describing the market detailed design	NEPRA, CPPA-G,	1	Drafting of different concept papers for understanding of different aspects of CTBCM (Product Development, Trading and Balancing Rules, Transfer and Allocation of Existing PPAs, Design of New Market Contracts, Treatment of Transmission Losses, Settlement Documents etc.).	

			2	Lead Sessions with NEPRA and other relevant stakeholders explaining the CTBCM Detailed Design Concepts	
3	Modifications to adapt or replace electricity policies to be consistent with the market development policy	MoE	1	Assist CPPA and MoE to revise relevant power policies to ensure consistency with the approved market model	
			2	If and as necessary, assist in preparing the drafts of additional policies to implement the approved market model	
			3	Assist MoE in the approval and enactment of new or amended policies	
4	Development of New Rules and Modification to Existing Rules	MoE, NEPRA CPPA-G	1	Assist MoE through CPPA-G in drafting of New Rules / assist in approval process	
			2	Assist NEPRA through CPPA-G in modifying Existing Rules / assist in approval process	

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5	Amendment to legal framework	MOE with CPPA support	1	Review of regulatory framework in place with proposal / recommendations to make necessary amendments in the legal framework to include competitive electricity markets and submit report	
			2	Assist CPPA in the consultations and drafting the necessary proposed amendments in the legal framework	
6	Modifications (review, amendments and additions) to power sector regulatory framework to be consistent with the approved market model	NEPRA	1	Through CPPA assist NEPRA to review existing Regulations and issue new Regulations in line with the approved market model.	
			2	Through CPPA assist NEPRA to review existing guidelines and issue new guidelines aligned with the approved market model.	
			3	Through CPPA assist NEPRA to review existing rules and issue modifications aligned with the approved market model	
			4	To assist CPPA and through it to NEPRA in the review / draft of any other rules / regulations deemed necessary for competitive market development.	
7	New Commercial Code and SPT Code	CPPA G draft and, NEPRA for review and approval.	1	Preparing/finalizing the Draft of the New Market Commercial Code, and provide assistance in consultations and regulatory review and approval process of the same	
			2	Preparing/finalizing the Draft of the Revised SPT Code (existing Commercial Code) and provide assistance in consultations and regulatory review and approval process of the same	
8	Legacy Contracts:	MOE (PD) and CPPA G, IPPs	1	Assist CPPA in preparation of commercial allocation methodology and Allocation Factors in consultation with DISCOs	

	Commercial allocation of pre-existing PPAs/EPAs		2	Provide assistance in the approval process by NEPRA approves of Methodology and Allocation Factors	
			3	Perform modification in the Power Purchase Agency Agreements (PPAA) to reflect the allocations	
9	Separation of CPPA-G into Market Operator and Special Purpose Trader	CPPA-G	1	Assist CPPA-G in the design and implementation of the MO detailed design and structure in line with the high-level MO structure approved by the CPPA Board.	
			2	Development of the documentation associated with MO and SPT including SOPs, manuals, systems specifications, JDs, KPIs, etc. consistent with the organizational design (MO's Adjustments with approved framework)	
			3	Organizational Implementation including personnel reallocation, capacity building, purchasing and or hiring IT services and other systems, automation of MO business functions and development of applications Website Development, etc. (MO's Adjustments with approved framework)	
			4	Functional Separation of the Business Units including Trial Run	
			5	Legal Separation and creation of the two separate entities of Independent System and Market Operator (ISMO) and SPT	
			6	Licensing for ISMO and Registration for SPT from NEPRA	
10	Creation of the Independent Auction	PPPIB/AE DB CPPA G Discos	1	Through CPPA provide assistance to PPIB/AE in getting registration with NEPRA to undertake the IAA function	

Request for Proposal (RFP)

	Administrator (IAA) and scheme for credit cover / guarantees for low performing Discos		2	Provide assistance in strengthening the organizational capacities of PPIB/AEDB to run the IAA function	
			3	Assist in assessing security package and concession agreement and contribute in the modification of the same	
			4	Detailed Report for developing the required credit cover / guarantees scheme to low performing Discos. Assist in the implementation to be ready for market start.	
			5	Report on standard auction procedures, templates and bidding documents	
			6	Provide input in drafting of new market Contracts for regulated consumers	
11	Strengthening of System Operator,	NTDC and NPCC	1	Through CPPA, NPCC in the implementation of NPCC strengthening plan for systems, software, data base & data exchanges, dispatch and balancing as per market design and Grid Code. Authorizations, budget.	
			2	Assist NPCC in the dispatch and processes improvement	
			3	Assist NPCC in the SO Restructuring, getting SO license from NEPRA and merger with MO for the creation of ISMO.	
			4	Through CPPA, assist NPCC in developing necessary IT infrastructure, data institutionalization, transparency and information sharing portal, SO website etc.	

12	Strengthening Discos credit worthiness and readiness as market participants	DISCOs, MoE (PD) as the owner of DISCOs	1	Through CPPA/MIMG, assist Discos in capacity building to determine demand forecast, and for the management of contract (bilateral) portfolio and power acquisition plans.	
			2	Assistance of DISCOs through CPPA in the development of market interface within DISCOs to enhance their wholesale payment history, financial situation, losses and collection of Discos. Measures for financial strengthening. Identify bad performing Discos (unable to provide credit cover)	
			3	Through CPPA, assist Discos in establishing Market Implementation and Regulatory Affairs Department (MIRAD)	
			4	Through CPPA, assist Discos in assessing Credit Cover and Financial Health	
			5	Through CPPA, assist Discos in making association of DISCOs	
			6	Through CPPA, assist Discos in amendment of Distribution Code and submission to NEPRA for Approval	
13	Strengthening of NTDC as Transmission Network Operator, Planner, and Metering Service Provider (MSP)	NTDC . NEPRA review and approval of plan CPPA G (as observer of meter testing) and metering register	1	Through CPPA, assist NTDC in drafting standard (templates) of Connection Agreements and subsequently acquiring approval from NEPRA	
			2	Assist NTDC in strengthening the expansion planning (generation and transmission) and demand forecasting function	

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			3	Assist NTDC in the SMS Metering Project and develop SOPs for data transfer protocols, dispute resolution etc.;	
			4	Assist NTDC in Grid Code Revision and acquiring approval from NEPRA	
			5	Assist CPPA and through CPPA to NTDC in the review of the Grid Code to incorporate market design relevant issues	
14	K-Electric (KEL) Integration Into CTBCM	KE , NTDC, NPCC, CPPA-G	1	Assistance of KE through CPPA-G for one SCED in whole Pakistan	
			2	Assistance in formalizing bilateral contracts between Ex-WAPDA DISCOs and KE	
			3	Assistance of KE through CPPA-G for standardizing connection agreement	
			4	Assistance of KE through CPPA-G for inclusion in association of DISCOs & Generators	
			5	Assistance of KE through CPPA-G for making operation under one grid code and distribution code	

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15	Measures to enhance wholesale payment culture: credit cover mechanisms and payment system	CPPA G/Market Operator Discos MWP IAA	1	Assist CPPA in the establishment of market payment system	
			2	Develop methodology and formula to determine market credit cover (collateral).	
			3	Assist CPPA for establishing a payment security cover for low performing Discos for contracts and mechanism for market payments of those Discos organized through the IAA.	
16	Data Institutionalization Project	CPPA- G,NTDC,NPCC	1	Assist CPPA in Identification of information clusters, sources of information, develop templates and standard operational procedures (SOPs) for collecting and sharing information, allocation of roles and responsibilities and establishing regulatory documents to imprint regulatory status to the data institutionalization. Additionally, preparing plans, processes, formats, systems and solutions to institutionalize this function. Assist in devising strategies and plans for Data Institutionalization Project and contribute in its implementation	
17	Association of DISCOs, Generators, BPCs & Transmission Companies	Generators, Transmission Comp. & BPCs	1	Assist in formation of association of DISCOs, Generators, BPCs and Transmission Companies	
18	Readiness for commercial operation of electricity market:	Lead by CPPA G, includes all market participants; CPPA G reporting of readiness tests and results to MoE and NEPRA	1	Prepare plan and procedures for to test-run Pilot Shadow Market	

19	Evolution of the CTBCM	MoE	1	Prepare a comprehensive report on the natural evolution of first targeted market (CTBCM) progressively towards enhanced competition in medium to long term	
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Following are some other critical tasks that are important for the implementation of the CTBCM model in Pakistan. Consultant is required to undertake the tasks keeping in view the required outcomes expected from these actions and mention the deliverables envisaged from each action:

No.	Task Description	Stakeholders directly involved	#	Actions and Responsibility	Deliverable(s) To be proposed by the Bidder
1	Capacity Building of CPPA G and Allied Power Sector Entities	CPPAG & Other Entities	-	Capacity building of CPPA and through CPPA the other stakeholders working on the power market development through transfer of knowledge to make sure that when TA period ends, the power sector of Pakistan has enough technical capacity/ experience to deal with market development / design & market operations etc.	
2	Market Simulation and Modeling	CPPA, NTDC/NPCC	-	Assist CPPA in conducting wholesale market simulations for the short to medium term to cater for the impact on prices due to assignment of the existing PPAs/EPAs to the DISCOs through bilateral arrangements, impact of future market prices due to competitive trading, simulating economic prices (market prices) through optimized dispatch techniques etc. Training and capacity building of CPPA and other participants on simulations tools and techniques.	

Working Mechanism

The scheduling of the deliverables provided above will be done jointly at the start of the project by the Consultant's Team and CPPA. However, adjustments may be made before the start of each quarter based on mutual consent. Shortly before the beginning of each quarter, the Consultant and CPPA will agree on the specific deliverables / reports to be submitted during the upcoming quarter. This agreed-upon plan will be included in the Quarterly Action Plan Report and presented to CPPA at latest by the first working day of the related quarter. Each Quarterly Action Plan Report will also feature a complete status of the activities scheduled for the previous quarter and their respective states of advancement, as well as any other information useful for the management of this project.

PART – III: PROJECT DURATION-SCHEDULE

The overall assignment is envisaged to be completed in 18 months.

PART – IV: PERSON-MONTH INPUT

The Bidders should provide a complete list of total man-months segregated by key personnel, other professionals and technical staff (including, names, qualification, experience etc.) of the firm.

The table below entails person-months indicative requirements for the Bidders. The Bidders may propose their own estimates:

#	Expert Position	Dedication required	
		Person-Month	Missions During the 1.5 Years Assignment (two-weeks per mission)
1	Team Leader/ Power Market Implementation Expert	7.5	8
2	Market Development (Market Operations, System Operations and Transmission) Expert	11.5	12
3	Market Modeling Simulation Expert (Market Operator and System Operator)	5.5	6

4	Financial and Settlement Expert	4.5	5
5	Organizational Restructuring Expert	2.5	2
6	Power Sector Expert	10.5	-
7	Legal Expert	4	-
8	Financial Expert	4	-

PART – V: ADDITIONAL SERVICES

Any services which are not specifically mentioned in the TOR above but which are allied and essential for the effective implementation and completion of the project will also be provided by the Consultant and will be deemed to have been part of this TOR. However, this will not include services for any additional scope of work.

Note:

a) Office Facilities:

CPPA will provide office space and routine office facilities to the Consultant.

b) Transport:

The Consultant shall make their own arrangements for transport within Islamabad and its outskirts. Transportation outside of Islamabad will be provided by CPPA

c) Logistical Support for Workshops:

CPPA will provide logistical support for workshops and other capacity building activities

PART – VI: CONTRACT TYPE

The contract will be on a lump sum basis. Payment will be made on an activity basis as specified under Clause 7, “Payment Terms”.

PART – VII: REPORTING REQUIREMENTS

Reports to be submitted by the Consultant to CPPA as part of consultancy services will include the following:

- i. Inception Report including the detailed plan to implement the project and achieve the desired outcomes
- ii. Key Deliverables and Periodic Reports on project status as illustrated under Payment Terms

7. PAYMENT TERMS

The Consultant will be remunerated according to the following tentative payment schedule:

#	Milestone	Condition	% of Price	Observations
1	Mobilization Payment ¹	After Notice to Proceed (NTP) ²	5%	-
2	Inception Report + Quarterly Action Plan (QAP) Report # 1 within 10 calendar days from Mobilization	CPPA approval of Inception Report and QAP Report #1	10%	Inception Report: The Consultant's understanding of the project including the detailed plan to implement the project QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables
3	Quarterly Progress Report (QPR) # 1 (within 10 calendar days after the end of quarter) + QAP Report # 2 (before 10 calendar days of start of next quarter)	CPPA approval of QPR #1 and QAP #2	15%	QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables
4	Quarterly Progress Report (QPR) # 2 (within 10 calendar days after the end of quarter) + QAP Report # 3 (before 10 calendar days of start of next quarter)	CPPA approval of QPR #2 and QAP #3	15%	QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables

¹ Mobilization shall be within two weeks from NTP. The contract effective date will be date of mobilization.

² Please note that it usually takes one month to process payments in local currency and even more time to obtain approvals from Government of Pakistan for transferring payments to foreign accounts in foreign currencies. CPPA will do its best effort to ensure transfer of payments within one-month time.

5	<p>Quarterly Progress Report (QPR) # 3 (within 10 calendar days after the end of quarter) +</p> <p>QAP Report # 4 (before 10 calendar days of start of next quarter)</p>	<p>CPPA approval of QPR #3 and QAP #4</p>	<p>15%</p>	<p>QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP</p> <p>QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables</p>
6	<p>Quarterly Progress Report (QPR) # 4 (within 10 calendar days after the end of quarter) +</p> <p>QAP Report # 5 (before 10 calendar days of start of next quarter)</p>	<p>CPPA approval of QPR #4 and QAP #5</p>	<p>15%</p>	<p>QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP</p> <p>QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables</p>
7	<p>Quarterly Progress Report (QPR) # 5 (within 10 calendar days after the end of quarter) +</p> <p>QAP Report # 6 (before 10 calendar days of start of next quarter)</p>	<p>CPPA approval of QPR #5 and QAP #6</p>	<p>15%</p>	<p>QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP</p> <p>QAP Report: Detailed schedule of activities in next Quarter for completion of the deliverables</p>

8	Quarterly Progress Report (QPR) # 6 (within 10 calendar days after the end of quarter) + Completion Report (within 20 calendar days after end of Quarter # 6)	CPPA approval of QPR #6 and Completion Report	10%	QPR: Review of status of activities in the respective Quarter reflecting actual progress on completion of agreed deliverables as per relevant QAP Completion Report: Review of the overall progress of the project reflecting actual progress on completion of agreed deliverables as per TOR (Clause 6)
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The Quarterly Action Plan shall mention the specific deliverables, proposed by the Consultant with reference to the Table outlined under *Clause 6: Terms of Reference*, which the Consultant will be working on for submission to CPPA during the respective quarter. Consultant shall also mention an action plan towards producing those deliverables within stipulated timeframe.

Similarly, the Quarterly Progress Report of a particular quarter shall be in line with the QAP of the respective quarter. It shall summarize the achievements vs. targets of the particular quarter in terms of deliverables produced by the Consultant and submitted to CPPA.

Timesheets and Project Director from CPPA

The Project Director (PD) from CPPA will be the Head of Strategy & Market Development (SMD) and the timesheets shall be submitted by the Consultant to the PD on a fortnightly basis for approval. PD will also approve the project deliverables / milestones for payment.

Charges and Payments

- The amount payable for the supply of the Services will be as detailed above. Invoices shall be inclusive of all but shall separately display all heads, taxes, etc. and any and other levies.
- The Consultant shall invoice CPPA for the Services supplied in accordance with the Payment Terms as above. Payment will become due 30 days³ following receipt of the invoice.
- If any tax exemptions, reductions, allowances or privileges may be available to the firm in Pakistan, CPPA shall use its best efforts to enable the supplier to benefit from any such tax savings to the maximum allowable extent.
- In case the Federal or Provincial Government or any other competent authority levies any new/additional taxes, charges, surcharges, fees, duties, etc. or withdraws any exemptions that directly or indirectly affect the quoted/contracted price, the same shall be added to the overall quoted price accordingly to be paid by CPPA to the Consultant.
- The Consultant will invoice CPPA upon the successful completion / acceptance of the deliverable(s), which invoice will be due for payment within 30 days of the date of its filing. The following documents should also accompany each invoice submitted by the Consultant:

³ It usually takes one month to process payments in local currency and even more time to obtain approvals from Government of Pakistan for transferring payments to foreign accounts in foreign currencies. CPPA will do its best effort to ensure transfer of payments within one-month's time

- a) Bill in triplicate for the claim(s) due.
- b) Acceptance Certificate issued by the PD, CPPA.
- c) The Consultant shall also give an undertaking in its invoices that in case of omission of any deductible amount, CPPA's claim at any later stage (through pre-audit or post audit) shall be acceptable to the Bidder.
- d) While raising invoice for the service delivered, the Consultant shall specifically mention the account number as well as the name of the bank and branch enabling CPPA to release payment thereof accordingly.

8. SUBMISSION OF BIDS

Potential Bidder(s) must submit 02 separate copies of Technical and Financial Proposals marked as "ORIGINAL" and "COPY". The complete package of the Technical and Financial Proposals, burned on to two separate CDs must be placed in the respective "ORIGINAL" sealed envelopes of Technical and Financial Proposals. Refer to **Section: 2** of the RFP for more instructions on the submission of proposal.

Bids must be submitted to the address provided above as per submission guidelines by 1000 hrs. PST on Mar 31, 2021. Technical Proposals of the bids submitted will be opened publicly on 1200 hrs. PST on Mar 31, 2021.

9. LATE BIDS

Bidders will themselves be responsible for ensuring that their bids are submitted in accordance with the instructions stated herein. Any bid submitted after the deadline prescribed for submission of the bids will not be considered even if it becomes late as a result of circumstances beyond the Bidder's control.

10. RIGHTS RESERVED BY THE CPPA

- i. CPPA may, in its sole, unfettered discretion, cancel this solicitation or reject any or all proposals without assigning any reason and without thereby incurring any liability towards a prospective Bidder or to any other person.
- ii. CPPA may, in its sole, unfettered discretion, withdraw, annul, suspend or cancel the RFP or the bidding process without thereby incurring any liability towards a prospective Bidder or to any other person.
- iii. CPPA may, in its sole, unfettered discretion, reject any or all proposals without thereby incurring any liability towards a prospective Bidder or to any other person if it determines that, due to any reason, the interests of CPPA are compromised or adversely affected.
- iv. CPPA reserves the right to modify the bidding documents at any time prior to the deadline for submission of bids, on the request of the prospective Bidders for any clarification or on its own initiative, and for any reason. This amendment shall constitute a part of the bidding documents. In order to afford the prospective Bidders reasonable time to take these amendments into account in preparing their bids, CPPA may, at its discretion, extend the deadline for submission of bids.

- v. If at any future point of time, it is found that the Bidder had made a statement which is factually incorrect, the CPPA reserves the right to debar the Bidder from bidding prospectively for a period to be decided by CPPA and take any other action as may be deemed necessary.
- vi. CPPA reserves the right to accept or reject offers as per the Public Procurement Regulatory Authority (PPRA) rules. The offer received incomplete or not in accordance with the terms and conditions / specifications as laid down in the tender document(s) will not be entertained. The bid offered is likely to be ignored if;
 - a. The tender is unsigned.
 - b. It is received after the time and date fixed for its receipt.
 - c. The offer is ambiguous or conditional.
 - d. The bid offered is inconsistent with the RFP
- vii. Further, CPPA shall have the right to cancel or amend the tender process at any time without providing any reason, prior to the finalization of the bidding process, without thereby incurring any liability towards the affected Bidder or Bidders. The reasons for cancellation will be determined by CPPA at its sole discretion. However, any amendment will be communicated to prospective Bidders well in time.
- viii. The decision of CPPA in all matters will be final and binding on all Bidders participating in this bid.

11. FAILURE AND TERMINATION

- (A) If the Consultant fails to deliver the services in accordance with the agreed timelines or the RFP, the CPPA shall be:
 - i) entitled to not to pay the Consultant's invoices for any pending work until the work is completed by the Consultant and accepted and approved by CPPA,
 - ii) entitled to cancel the contract at Bidder's sole risk and cost.
- (B) If, during the course of the execution of the contract, the Bidder is blacklisted by any company or Federal Government entity, the CPPA may proceed with all or any of the actions detailed below:
 - i) to allow the contract to run its course until its completion in accordance with the terms and conditions of the Contract,
 - ii) to stop further services with or without financial repercussions,
 - iii) to cancel the contract with or without reservation or rights.
- (C) CPPA reserves the right to terminate the contract or modify the scope of the contract any time at its discretion with one month's prior notice in writing.

12. COST OF BIDDING

The Bidder shall bear all the costs associated with the preparation and submission of its bid, and CPPA will in no case be responsible or liable for any such costs, regardless of the conduct or outcome of the bidding process.

13. CLARIFICATION OF BIDDING DOCUMENT

A prospective Bidder requiring any clarification of the bidding document may notify the purchaser in writing through electronic mail (e-mail) shaheer.ali@cpga.gov.pk. CPPA will respond in writing at the Bidder's provided e-mail address within due course of time.

14. LANGUAGE OF BID

The bid prepared by the Bidder shall be written in English. Any supporting documents and printed literature furnished by the Bidder may be in another language provided that they are accompanied by an accurate translation in English, for the purpose of interpretation of the bid.

15. ANNEXURES

The Bidder shall complete all the Annexures furnished in the bidding document.

16. PRELIMINARY EXAMINATION

- i. The CPPA will examine the bid to determine whether it is complete, whether any computational errors have been made, whether the required prerequisites have been furnished, whether the documents have been properly signed and whether the bids are generally in order.
- ii. Arithmetical errors will be rectified on the following basis: if there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and the quantity, the unit price shall prevail and the total price shall be corrected. If there is a discrepancy between words and figures, the amount in words will prevail. If the Bidder does not accept these correction of errors, its bid will be rejected.

17. FORCE MAJEURE

- i. The Bidder shall not be liable for forfeiture of its performance security (if any), liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the contract is the result of events of Force Majeure.
- ii. For purpose of this clause "Force Majeure" means an event beyond the control of the Bidder and not involving the Bidder's fault or negligence and not restricted to act of CPPA, including epidemics, quarantine restrictions and freight embargoes etc..
- iii. If a Force Majeure event arises, the Bidder shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- iv. If a Force Majeure event arises, the Bidder shall – with the assistance of CPPA – take all reasonable and necessary actions to mitigate the effects of the Force Majeure event on the Bidder's performance of its obligations under the Contract.

18. LAWS GOVERNING THE CONTRACT

- i. The template of the draft contract is attached with the RFP as Annexure – E. The contract will be negotiated with the successful bidder at the time of the award.
- ii. The contract shall be governed by the Laws of Pakistan, as amended from time to time.

Omer Haroon Malik
Head SMD, CPPA-G

Shaheen Plaza, A.K. Fazl-ul-Haq Rd, Block-
H, G 7/2, Blue Area, Islamabad

ANNEXURE A – Resume Format:

- Designation _____

- *Personal*

Name	
Date of Birth	

- *Professional Qualifications / Certifications*

Qualification	Institute	Year

- *Professional Experience*

Company	Title/Role	From	To

- *Relevant Experience*

Client Company / Project Title	Position Title & Brief Nature of Assignment	From	To

- *Any other information*

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- *Signature of Proposed Candidate* _____
- *Dated* _____
- *Countersigned by Authorized Person of Bidder* _____
- *Dated* _____

ANNEXURE B – Certificate of Availability:

I, Mr./Miss/Mrs. _____ solemnly declare/ certify that I have authorized (Firm Name) to include my CV in their proposal for the subject assignment and if the contract is awarded to this firm I shall be available to work on this contract up to the completion of the assignment

Name: _____

Signature: _____

Date: _____

ANNEXURE C – Number of Man Days Required

Vendor should provide their cost estimates based on the number of man days required to perform the complete scope of work

Sr.#	Resource Expert	Man Days Requirement
1	Team Leader / Power Market Detailed Design Expert	
2	Market Development (Transmission, System Operations & Market Operations) Expert)	
3	Market Modelling Simulations Expert (Market Operator and System Operator)	
4	Financial and Settlements Expert	
5	Restructuring Expert	
6	Power Sector Expert	
7	Legal Expert	
8	Financial Expert	

ANNEXURE D - Cost Spreadsheet

- All Bidders shall submit proposals with all prices stated in USD only.
- Proposals are required to be submitted based on the following heads:

#	Heads	Foreign Component Costs (USD)
1	Labor	
2	Traveling	
3	Other Direct Costs	
4	Per-Diems etc.	
A: Total Firm Fixed Price Budget-Foreign Component		
#	Heads	Local Component Costs (USD)
1	Labor	
2	Traveling	
3	Other Direct Costs	
4	Per-Diems etc.	
B: Total Firm Fixed Price Budget-Local Component		
Total Firm fixed price Budget-Local + Foreign (USD)		

Notes:

- ✓ *The payment terms can be negotiated at the time of award.*
- ✓ *For evaluation purposes, Bidder shall provide sufficient detail of the cost. Bidder should include a breakdown of line items that they believe are realistic and reasonable for the work in accordance with the technical requirements outlined.*
- ✓ *The Consulting Firm will be paid in USD. However, CPPA reserves the right to make payments in PKR for any cost or payment incurred locally.*
- ✓ *Rates shall be quoted, inclusive of all but showing separately all heads, taxes, etc. and any and others levies.*
- ✓ *Evaluation of the bid amounts will be done exclusive of taxes.*
- ✓ *In case of discrepancy between unit price and total, the unit price shall prevail. Similarly, subtotals shall prevail over totals.*
- ✓ *Separate prices should be provided for separate heads*

ANNEXURE E – Draft Contract Template

APPENDIX 1 - CTBCM Detail Design Model

APPENDIX 2 - CTBCM Implementation Roadmap Report