



(By Email Only)

क्रमांक:-के.बे.लि.परि.प्राधि./खण्ड/झांसी/टी-30(TAG)/

दिनांक:

No:-KBLPA/Div./JHANSI/T-30(TAG)/ 30-50

Date: 21.01.26

**Sub:- Minutes of 14<sup>th</sup> Meeting of Technical Advisory Group of Ken Betwa Link Project Authority held on 15.01.2026 & 16.01.2026 at Jhansi.**

The 14<sup>th</sup> Meeting of Technical Advisory Group of Ken Betwa Link Project Authority was held on 15.01.2026 & 16.01.2026 at 11:00 hrs at Jhansi under the chairmanship of Shri D.P. Bhargava, Former Director (Technical), NHPC, Faridabad.

Minutes of the meeting, duly approved by the Chairman(TAG-KBLPA) is enclosed for kind information and further necessary action by all concerned,

(T. M. Tripathi)  
ACEO (Canal) &  
Member-Secretary

**To: All the Members of TAG of KBLPA**

1. Shri D.P. Bhargava, Former Director (Technical), NHPC, Faridabad.
2. Shri Vijai Saran, Former Chief Engineer, CWC.
3. Shri P.K. Saxena, Former Commissioner (Indus), DoWR, RD&GR.
4. Shri V.K. Niranjana, Former HOD & E-in-C, I&WRD, UP.
5. Shri G.P. Soni, Former Chief Engineer, WRD, MP.
6. Chief Engineer, Designs (NW&S), CWC, New Delhi.
7. Director(CSMRS) or nominee.
8. Director (Hydrology), CWC, New Delhi.
9. Additional CEO (Head Works), KBLPA, Bhopal.
10. Additional CEO (HQ/P), KBLPA, Lucknow.
11. Additional CEO (E&M), KBLPA, Bhopal.
12. Chief Engineer (Designs)/BODHI, WRD, MP.
13. ACEO, Design and Planning, KBLP, UP.

**Copy for kind information to:-**

1. The Additional Chief Secretary, WRD, Govt. of MP, Bhopal.
2. The Principal Secretary, I&WRD, Govt. of UP, Lucknow.
3. The Member, D&R, CWC, New Delhi.

**Special Invitee :-**

1. Director General, NWDA, New Delhi.
2. Chief Executive Officer, KBLPA, Bhopal.
3. Engineer-in-Chief, WRD, Govt. of MP, Bhopal.
4. Engineer-in-Chief (Projects), I&WRD, Govt. of UP, Lucknow.
5. ACEO (Construction), KBLP, I&WRD, Jhansi.

## **Minutes of 14<sup>th</sup> Meeting of Technical Advisory Group of Ken-Betwa Link Project Authority held on 15.01.2026 & 16.01.2026**

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The 14<sup>th</sup> meeting of the Technical Advisory Group of Ken-Betwa Link Project Authority (TAG-KBLPA) was held on 15.01.2026 & 16.01.2026 under the Chairmanship of Shri D. P. Bhargava, Former Director (Technical), NHPC, Faridabad. The list of participants is appended as **Annexure-I**. The Agenda for the meeting was as following:

- A. Finalization of draft tender documents of Ken-Betwa Link Canal
- B. Raising of pond level of Banda Barrage.

At the outset, the Chairman welcomed all participants and requested Member Secretary to present the Agenda Items. The detail of the agenda items and discussions/decisions taken on the agenda items are as under:

### **14.1 Action Taken Note**

- 14.1.1 Action taken note on the decisions taken in the 13<sup>th</sup> TAG-KBLPA meeting was presented to TAG which was discussed in detail & it was approved by the TAG.

### **14.2 Draft tender documents of the work “EPC execution of Ken-Betwa Link Canal (Package-I & II).**

- 14.2.1 The TAG was informed that in compliance with the directions issued by TAG-KBLPA in its 11<sup>th</sup> meeting, KBLPA carried out the required curvature marking in accordance with relevant IS Codes and shared the corresponding KML file with both State Governments. The curvature-marked KML file of the Ken–Betwa Link Canal (KBLC) alignment, having a total length of 216.465 km, was subsequently presented before TAG in its 14<sup>th</sup> meeting, wherein TAG-KBLPA approved the alignment.
- 14.2.2 Team Leader PMC-KBLPA presented the salient features of draft tender documents of the work “EPC execution of Ken-Betwa Link Canal for Package-I”
- 14.2.3 The TAG was informed that the design discharge of the Ken-Betwa Link Canal at its head has been revised from 165.05 cumecs to 179.39 cumecs at head of KBLC to accommodate updated water demands submitted by the Governments of Uttar Pradesh and Madhya Pradesh. Representatives from both states confirmed that the total quantum of water required at various tapping points under this revised allocation remains fully compliant with the water-sharing framework established in the Memorandum of Agreement (MoA) dated 22 March 2021 between Madhya Pradesh and Uttar Pradesh. Following this confirmation, the Technical Advisory Group for the Ken-Betwa Link Project Area (TAG-KBLPA) formally accepted the revised design discharge of 179.39 cumecs at head of KBLC for the Ken-Betwa Link Canal.

- 14.2.4 Chairman TAG-KBLPA advised to incorporate list of the minimum required construction equipment in the tender documents. Accordingly, the list of minimum required construction equipment for KBLC tender document Package I was prepared & placed by KBLPA in the TAG Meeting. The list was discussed and finalized in the meeting (Attached as **Annexure II**)
- 14.2.5 On the query of Shri G.P. Soni, Member TAG-KBLPA about the provisions of Head Regulator to supply the water at various locations of the KBLC, it was informed that the provisions of head regulators have been made in KBLC in proximity of tapping locations intimated by Governments of UP and MP to supply peak discharges at the respective tapping locations. CEO KBLPA advised that the details of the off-taking system (like elevation, cross section, RD from the offtake etc.) may be shared by GoMP and GoUP with KBLPA so that same may be reviewed and considered during the detailed design stage.
- 14.2.6 It was brought to notice that the canal crosses the railway line at two locations. Shri GP Soni observed that the construction of Railway Bridge over canal is a time taking process as the same is undertaken as a deposit work by the railway authorities on the request of government agency only. After deliberations it was agreed that to expedite the work and minimize the procedure, the KBLPA will do correspondence with railway authorities and will make requisite payments, if any. However, all required coordination, technical inputs and liaison work shall be in the scope of the contractor. The cost of Railway bridges shall be deducted from the package. At the crossings of National Highways, the cost of land etc. and correspondences for NOC to be made by KBLPA. The work shall be executed by the contractor unless the road authorities intend to do deposit work themselves. In that case, payment shall be made directly by KBLPA & finally adjusted from the contractor.
- 14.2.7 The TAG was informed that works of SCADA based automation of Gates is not included in the scope of this tender and that this work shall be tendered separately. The Technical Advisory Group (TAG) recommended that a study be conducted by selected TAG members to assess the Narayanpur Left Bank Canal (NLBC) system which was supported by the Ministry. The objective is to evaluate the operational functionality and effectiveness of the SCADA system currently in use before adopting similar technology in the tender specifications suitably. The Ken-Betwa Link Project Authority (KBLPA) shall coordinate this study and make necessary arrangements for the site visit.
- 14.2.8 TAG advised that the estimates for both packages be updated using the latest MPWRD SOR-2024.
- 14.2.9 Shri Vijai Saran, Member, TAG highlighted that KBLPA's proposed financial eligibility criteria are same as those in the Dam contract. After detailed deliberations, the committee recommended that these thresholds should align with the CVC guidelines. Accordingly, the criteria were revised as per the following:
- i. Three works, each valued at 40% of the estimated cost
  - ii. Two works, each valued at 50% of the estimated cost
  - iii. One work valued at 80% of the estimated cost
- 14.2.10 Subsequently, TAG recommended further modifications to the Qualification Requirements, which have been incorporated and are provided in **Annexure-III**. It was informed that the 100m of Right of Way (RoW) is being acquired for the canal construction. Therefore, in

reaches of deep cutting, cut & cover RCC box section and the reaches of high filling, provision of gabion walls along the toe of the embankments have been made to accommodate the canal section within RoW of 100m. This proposal was agreed by TAG.

- 14.2.11 The TAG was informed that in deep cutting sections (cutting exceeding 18 m), a cut-and-cover RCC box structure has been proposed with side slopes of 1V:0.25H. TAG advised that temporary slope protection arrangements during construction shall be made by the Contractor at its own cost.
- 14.2.12 It was informed that provision of interest-bearing advance payment of 10% of contract price has been made against Bank Guarantee in the tender which shall be paid in 2 equal installments of 5%. In addition to above, provision of advance payment of 10% of contract price has also been made for purchase of new construction equipment. TAG observed that the maximum advance payment against purchase of new construction equipment is limited to 5% only as per CVC norms. It was then decided that the total advance shall be limited to 10% of contract price i.e. 5% for mobilization advance and 5% for purchase of new construction equipment. The mobilization advance payment shall be made in 2 equal installments of 2.5% on submission and approval of detailed work plan and 2nd installment on completion of Milestone 1 (completion of survey & investigations and finalization of layout).
- 14.2.13 Mr. G P Soni advised that the initial BoQ of the works should be submitted by the contractor after verification and signature by PD&E sub-contractor to avoid any disagreement by the PD&E contractor. It was deliberated and agreed that this being the internal matter of KBLPA, sub-contractor should not be included in the tender document.
- 14.2.14 TAG advised to include reference of Appendix CW2 in the main tender and also revise the foot note so that the saving in one component (completed) can be apportioned in other components. It was also advised to incorporate in GCC that during the payment against final settlements, the surplus left-over amount in work components, if any, shall be released to the contractor in the final bill after completion of works.
- 14.2.15 It was advised in the meeting that the minimum manpower requirements to provide services for operation & maintenance period should be included in the tender document. The same was prepared, discussed and finalized (attached as **Annexure IV**).
- 14.2.16 It was agreed in the meeting that the cost provision of O&M should be kept to 5% of contract price against earlier agreed value of 7.5%. Yearly distribution of O&M payment should be as per provision in the contract of EPC execution of Daudhan Dam
- 14.2.17 ACEO (HQ, Env and R&R), KBLPA suggested to keep provision for buildings (Residential and Non-Residential) required during and after execution of the project for utilization by the O&M staffs.
- 14.2.18 It was informed that provision of 5 nos. of canal syphons have been made in KBLC Tender Package I and also in Tender Package II including provision of canal syphon across Dhasan River due to HFL of river lying above the canal bed level to avoid choking of river. Mr. V K Niranjana, Member TAG advised that the KBLC being the Main Canal should not be syphoned

and all proposed canal syphons shall be replaced by syphon aqueducts. This was agreed by TAG.

- 14.2.19 WRD, Government of Madhya Pradesh referred to the decisions of the 11th TAG meeting and informed that, due to significant commercial development in the Niwari area between RD 210.357 km and RD 211.824 km, RCC box structure may be provided to restrict the ROW from 100 m to 25 m. TAG agreed to the proposal and decided that land acquisition between the aforesaid RD chainages shall be restricted to 25 m. The canal longitudinal bed slope shall be made steeper, as far as practicable, to avoid siltation of the canal bed. To achieve this, falls may be minimized as far as possible.
- 14.2.20 Shri V K Nirajan observed that the longitudinal slope proposed for the link channel is quite mild, which may compromise its long-term operational efficiency. A mild longitudinal slope results in low flow velocities, which create favorable conditions for sediment deposition and may affect its sustainable performance. He further recommended that the longitudinal slope be redesigned to ensure non-silting conditions from the outset by reducing the falls. This would ensure efficient and sustainable operation of the link canal.
- 14.2.21 CEO, KBLPA deliberated upon the issue of uploading the KBLC alignment on the PM Gati Shakti Portal. Shri GP Soni, on behalf of WRD, Government of Madhya Pradesh informed that they would get uploaded the KML file of the revised KBLC alignment on the PM Gati Shakti Portal with assistance from KBLPA, Jhansi.
- 14.2.22 The issue pertaining to the Ken-Betwa Link Canal alignment crossing the Bansujara micro irrigation pipelines was deliberated upon. TAG-KBLPA directed that a suitable provision shall be incorporated in the tender documents stating that “the Contractor shall take all necessary and appropriate measures to safeguard the existing underground pipelines of the Bansujara Micro-Irrigation Project during execution of works.”
- 14.2.23 ACEO (Design & Planning), KBLP UP advised that the Article 38 of the GCC for Settlement of Disputes and Arbitration should be aligned with the Ministry of Finance OM No F.1/2/2024-PPD dated 3.6.2024. The same was agreed upon by the TAG and is attached as **Annexure V**.
- 14.2.24 In concrete lining, following changes have been suggested in the meeting
- The mandatory provision of 200X150 mm sleepers should be removed
  - PVC Water seal should be replaced by uPVC water seal
  - Provision of PRV may be replaced with other suitable measures like porous window using geotextile etc. which can be decided at the detailed design stage
- 14.2.25 In the cost estimate provision of 3% contingency should be removed and provision of 5% for O&M cost should be included in the estimate. GST should be applied on all items including PD&E and O&M charges. Further, TAG directed that all financial qualification requirements shall be based on the estimated cost excluding GST.
- 14.2.26 The TAG recommended that the Estimate and tender documents for both packages be revised based on the above suggestions. Accordingly, TAG approved both the tender packages,

subject to incorporation of the changes suggested above. Thereafter, upon incorporating the said changes, the tenders shall be submitted to the TEC for further review and approval.

### 14.3 Raising of Pond Level of Banda Barrage

14.3.1 I&WRD, Govt. of Uttar Pradesh presented the case to increase the Pond Level of Banda Barrage from RL 104m to 107 m. As per the recommendations of 13th TAG meeting held on 13.08.2025, all the suggestions have been incorporated. They presented the details of barrage storage capacity, submergence area and backwater length at various Pond Levels. The key points discussed during the meeting are as under:

14.3.2 I&WRD UP reassessed the drinking water demand in coordination with Jal Nigam Banda. They reviewed the culturable command area (CCA) and submitted that no functional pump canal system is currently serving the proposed CCA.

14.3.3 I&WRD UP calculated the Submergence, Storage Capacity and Backwater Length at various pond levels using HEC-RAS and the result is tabulated as under

| <b>Pond Level (m)</b> | <b>Storage Capacity (MCM)</b> | <b>Submergence Area (UP+MP) (ha)</b> | <b>Backwater Length (km)</b> |
|-----------------------|-------------------------------|--------------------------------------|------------------------------|
| 104.0                 | 57.36                         | 1195.14                              | 24.64                        |
| 105.0                 | 67.37                         | 1304.34                              | 25.98                        |
| 106.0                 | 82.49                         | 1467.81                              | 29.89                        |
| 107.0                 | 112.26                        | 1871.48                              | 38.04                        |

14.3.4 It was emphasized that keeping pond level at 107m will fulfill the requirement of drinking water (upto 2055) and provide irrigation facility in Banda district.

14.3.5 I&WRD, Govt. of Uttar Pradesh submitted that on increase of the pond levels from 104m to 107m, the water spread area shall remain confined within the banks of river Ken and its contributing nalas.

14.3.6 The location of the villages of Madhya Pradesh is at approximately 5.5 km from the proposed barrage site. However, at the proposed pond level (107 m), none of the villages within the territory of the Government of Madhya Pradesh would submerge but only some part of riparian land of 11 no villages (Parai, Barwa, Parwar, Mawaighat, Thakurra, Khurdana, Phattepur, Rampur ghat, Kandela, Gorya, Barikhera) would be affected and such submergence would be for few months in a year.

14.3.7 I&WRD, Govt. of Uttar Pradesh shared the HEC-RAS study toposheet and details of submergence (Riparian land, private land and River bed) in MP region at various pond levels (104m to 107m) with WRD, MP vide NWDA letter no NWDA/CE(N) LKO T-16(N)/KBPLA dated 12.01.2026

14.3.8 I&WRD UP explicitly shared the submergence area details of MP region at various pond levels. The Submergence area include the Riparian Land, Private Land (which is included in Riparian Land) and Riverbed Land. Clearly the major submergence in MP is the river area and Riparian Land is a meager part which is as under

| <b>Pond level</b> | <b>Riparian Land (Ha)</b> | <b>Private Land (Ha)</b> | <b>River Bed (Ha)</b> | <b>Total Land (Ha)</b> |
|-------------------|---------------------------|--------------------------|-----------------------|------------------------|
| <b>1</b>          | <b>2</b>                  | <b>3</b>                 | <b>4</b>              | <b>5 (2+4)</b>         |
| 104.0             | 20.75                     | 16.74                    | 180.19                | 200.94                 |
| 105.0             | 29.10                     | 21.80                    | 207.54                | 236.64                 |
| 106.0             | 53.53                     | 35.79                    | 237.05                | 290.58                 |
| 107.0             | 218.76                    | 103.185                  | 369.2                 | 587.96                 |

In above table, private land (col 3) is part of Riparian land (col 2)

- 14.3.9 I&WRD UP concluded that pond level of 107m would fulfill drinking water demand and irrigation demand in Banda district. They also shared month-wise receding pond level which clearly depicts the riparian land is not submerged throughout the year.

| <b>Month</b> | <b>Storage (in MCM)</b> | <b>Private Land of MP (in Ha)</b> | <b>Reduced Pond level (in m)</b> |
|--------------|-------------------------|-----------------------------------|----------------------------------|
| 15 Oct       | 112.26                  | 103.185                           | 107                              |
| 15 Dec       | 81.43                   | 35.79                             | 106                              |
| 15 Jan       | 65.93                   | 21.80                             | 105                              |
| 07 Feb       | 55.11                   | 16.74                             | 104                              |

Members of TAG agreed to above proposal for raising pond level to 107.0 m.

The meeting ended with vote of thanks to Chair.

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**Annexure-I****List of participants in 14<sup>th</sup> Meeting of Technical Advisory Group of Ken-Betwa Link Project Authority on 15.01.2026 at Jhansi**

| <b>In Chair</b>                                |                          |   |
|--|--------------------------|---|
| 1  | Shri D.P. Bhargava       | Former Director (Technical) NHPC, Faridabad                     |
| <b>Special Invitee</b>                         |                          |   |
| 2  | Shri P.K. Dixit          | CEO, KBLPA, Bhopal  |
| 3  | Shri Devesh Shukla       | ACEO(Cons.), KBLP, I&WRD, UP                                    |
| <b>Members of the Technical Advisory Group</b> |                          |   |
| 4  | Shri P.K. Saxena         | Former Commissioner (Indus), DoWR, RD&GR                        |
| 5  | Shri Vijai Saran         | Former Chief Engineer, CWC                                      |
| 6  | Shri V.K. Niranjana      | Former HOD & E-in-C, I&WRD, UP                                  |
| 7  | Shri Gyan Prakash Soni   | Former Chief Engineer, WRD, MP                                  |
| 8  | Shri Kayum Mohammad      | Director, CMDD, CWC (Representative-Chief Engineer (NW&S), CWC) |
| 9  | Dr. Manish Gupta         | Scientist-E, CSMRS (Representative-Director CSMRS)              |
| 10   | Shri Raj Kumar Mishra    | ACEO(HW), KBLPA, Bhopal   |
| 11   | Shri Shiva Prakash       | ACEO(HQ/P), KBLPA, Lucknow                                      |
| 12   | Shri T.M. Tripathi       | ACEO(Canal), KBLPA, Jhansi                                      |
| 13   | Shri Prabhat Kumar Dubey | ACEO, Design and Planning, KBLP, Lucknow                        |
| <b>KBLPA</b>                                   |                          |   |
| 14   | Shri Anshul Jain         | I/C Executive Engineer, KBLPA, Jhansi                           |
| 15   | Shri Ashish Swami        | Assistant Engineer, KBLPA, Jhansi                               |
| 16   | Shri Amit Tiwari         | Assistant Engineer, KBLPA, Jhansi                               |
| 17   | Shri Ravi Sagar          | Junior Engineer, KBLPA, Jhansi                                  |
| 18   | Shri H.K. Pandey         | Consultant-3, KBLPA, Bhopal                                     |
| <b>I&amp;WRD, UP</b>                           |                          |   |
| 19   | Shri Dinesh Kumar        | SE, KBLCC, Mahoba   |
| 20   | Shri Nalin Vardhan       | EE, KBLCCD-1, Banda   |
| 21   | Shri Chandan Kumar       | Assistant Engineer, KBLCCD-1, Banda                             |
| 22   | Shri Sourabh Verma       | Assistant Engineer, KBLCCD-1, Banda                             |
| <b>WRD, MP</b>                                 |                          |   |
| 23   | Shri R.P.S Kanwar        | Chief Engineer, Dhasan-Ken Basin, WRD, Sagar, MP                |
| 24   | Shri Naveen Gaur         | SE, KBLC, WRD, UP   |
| 25   | Shri Mohsin Hasan        | Executive Engineer, KBLC, WRD, Baldeogarh, MP                   |
| 26   | Shri Kanhaiya            | Consultant, KBLP, WRD, MP                                       |
| <b>PMC-KBLPA</b>                               |                          |   |
| 27   | Shri Mithilesh Kumar     | Team Leader, PMC-KBLPA.   |
| 28   | Shri A.K. Banerjee       | Contract Management Specialist, PMC-KBLPA                       |
| 29   | Shri Manas Dubey         | Design Engineer, PMC-KBLPA                                      |

**List of participants in 14<sup>th</sup> Meeting of Technical Advisory Group of Ken-Betwa Link Project Authority on 16.01.2026 at Jhansi**

|  |                          |   |
|--|--------------------------|---|
| <b>In Chair</b>                                |                          |   |
| 1  | Shri D.P. Bhargava       | Former Director (Technical) NHPC, Faridabad                     |
| <b>Special Invitee</b>                         |                          |   |
| 2  | Shri P.K. Dixit          | CEO, KBLPA, Bhopal  |
| 3  | Shri Devesh Shukla       | ACEO(Cons.), KBLP, I&WRD, UP                                    |
| <b>Members of the Technical Advisory Group</b> |                          |   |
| 4  | Shri P.K. Saxena         | Former Commissioner (Indus), DoWR, RD&GR                        |
| 5  | Shri Vijai Saran         | Former Chief Engineer, CWC                                      |
| 6  | Shri V.K. Niranjana      | Former HOD & E-in-C, I&WRD, UP                                  |
| 7  | Shri Gyan Prakash Soni   | Former Chief Engineer, WRD, MP                                  |
| 8  | Shri Kayum Mohammad      | Director, CMDD, CWC (Representative-Chief Engineer (NW&S), CWC) |
| 9  | Dr. Manish Gupta         | Scientist-E, CSMRS (Representative-Director CSMRS)              |
| 10   | Shri Raj Kumar Mishra    | ACEO(HW), KBLPA, Bhopal   |
| 11   | Shri Shiva Prakash       | ACEO(HQ/P), KBLPA, Lucknow                                      |
| 12   | Shri T.M. Tripathi       | ACEO(Canal), KBLPA, Jhansi                                      |
| 13   | Shri Prabhat Kumar Dubey | ACEO, Design and Planning, KBLP, Lucknow                        |
| <b>KBLPA</b>                                   |                          |   |
| 14   | Shri Anshul Jain         | I/C Executive Engineer, KBLPA, Jhansi                           |
| 15   | Shri Ashish Swami        | Assistant Engineer, KBLPA, Jhansi                               |
| 16   | Shri Amit Tiwari         | Assistant Engineer, KBLPA, Jhansi                               |
| 17   | Shri Ravi Sagar          | Junior Engineer, KBLPA, Jhansi                                  |
| 18   | Shri H.K. Pandey         | Consultant-3, KBLPA, Bhopal                                     |
| <b>I&amp;WRD, UP</b>                           |                          |   |
| 19   | Shri Dinesh Kumar        | SE, KBLCC, Mahoba   |
| 20   | Shri A.P. Singh          | EE, KBLCC-1, Jhansi   |
| 21   | Shri Akhliesh Kumar      | EE, KBLCCD-1, Mahoba  |
| <b>WRD, MP</b>                                 |                          |   |
| 22   | Shri R.P.S Kanwar        | Chief Engineer, Dhasan-Ken Basin, WRD, Sagar, MP                |
| 23   | Shri Mohsin Hasan        | Executive Engineer, KBLC, WRD, Baldeogarh, MP                   |
| 24   | Shri Kanhaiya            | Consultant, KBLP, WRD, MP                                       |
| <b>PMC-KBLPA</b>                               |                          |   |
| 25   | Shri Mithilesh Kumar     | Team Leader, PMC-KBLPA.   |
| 26   | Shri A.K. Banerjee       | Contract Management Specialist, PMC-KBLPA                       |
| 27   | Shri Manas Dubey         | Design Engineer, PMC-KBLPA                                      |

**Annexure II - List of the minimum required Critical Construction Equipment for KBLC Tender  
Package I**

| <b>Sl. No.</b> | <b>Equipments</b>                       | <b>Size / Capacity</b> | <b>No.</b> |
|----------------|---|------------------------|------------|
| 1              | Hydraulic Excavator                     | 2.5 m <sup>3</sup>     | 12         |
| 2              | Hydraulic Excavator                     | 1.0m <sup>3</sup>      | 36         |
| 3              | Dumper                                  | 20m <sup>3</sup>       | 120        |
| 4              | Mobile Rock Breaker                     |                        | 12         |
| 5              | Dozer                                   | 200 m3/hr              | 12         |
| 6              | Loader                                  | 5 m <sup>3</sup>       | 6          |
| 6              | Roller Compactor                        | 10 T                   | 12         |
| 7              | Vibratory Compactor                     | 10 T                   | 12         |
| 8              | Concrete Vibrator (needle / surface)    |                        | 60         |
| 9              | Grader                                  | >100 m3/hr             | 12         |
| 10             | Jack Hammer                             | 120 cfm                | 120        |
| 11             | Batching Plant                          | 100 m3/hr              | 20         |
| 12             | Crusher Plant                           | 250 TPH                | 4          |
| 13             | Bitumen Plant                           | 160 TPH                | 2          |
| 14             | Hydra / Crawler Crane                   | 20 T                   | 5          |
| 15             | Mobile Crane                            | 20 T                   | 2          |
| 16             | Loader                                  | 75m3/hr                | 12         |
| 17             | Transit mixer                           | 4.5 m3                 | 80         |
| 18             | Concrete Pump                           | 38 m3/hr               | 24         |
| 19             | Concrete Paver Machine for canal lining | >50 m3/hr              | 18         |
| 20             | Water Tanker                            | 5000 / 10000 litre     | 60         |
| 21             | Compressor                              | 160 cfm                | 12         |
| 22             | Dewatering Pump                         | 10 HP                  | 30         |
| 23             | Dewatering Pump                         | 5 HP                   | 30         |
| 24             | Tractor with trolley                    |                        | 30         |
| 25             | Concrete Boom Placer                    |                        | 15         |
| 26             | Side Compactor                          |                        | 20         |

## **Annexure III – Revised Qualification Requirements for KBLC Tender Package I**

### **3. QUALIFICATION REQUIREMENTS:**

#### **3.1 CIVIL WORKS**

##### **3.1.1 GENERAL EXPERIENCE**

The Lead bidder (Sole Contractor or Lead Partner of the Joint Venture) should have successful experience as Sole Contractor or Partner of the JV or sub-contractor approved by the employer of having successfully or substantially completed, during last 10 years, either of the following works:

- i. Major components of three Water Resources/ Hydropower / Highway projects with cost of executed works not less than ₹ 1500 Crore each OR
- ii. Major components of two Water Resources/Hydropower/ Highway projects with cost of executed works not less than ₹ 2000 Crore each OR
- iii. Major components of one Water Resources/Hydropower/ Highway projects with cost of executed works not less than ₹ 3000 crores

Provided that

- a) The completion date for the above experience should fall within the preceding ten (10) years reckoned from the last day of the month previous to the one in which Tender is invited
- b) The substantially completed works for the above purpose means the works for which at least 80 percent payments of the contract value have been received. For contracts under which the applicant participated as a joint venture member or sub-contractor, only the applicant's share, by value, shall be considered to meet this requirement.
- c) For arriving at cost of similar work, the value of work executed shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion of the work to date of publication of NIT.

##### **3.1.2 SPECIFIC EXPERIENCE**

In addition to meeting the criteria of General Experience (Para 3.1.1), the bidder (Sole Contractor or the Joint Venture collectively) should have specific experience of having successfully or substantially completed, during last 15 years, all of the works listed below under A. Civil Works (i to v)

#### **A. CIVIL WORKS**

##### **(i) Earthwork**

Experience of completion of gross combined excavation of 71,00,000 cum **AND** gross combined earth filling of 20,00,000 cum in Canal/water resources/ infrastructure projects. For this purpose, not more than five Canal/water resources/ Highway projects can be considered and should necessarily include construction/Modernization of at least one water carrier canal/channel of length not less than 25 km with a cross-sectional area of not less than 40 sqm.

##### **(ii) Concrete Lining**

Experience of completion of combined concrete lining of 1,13,000 cum. For this purpose, not more than five canal / water resources projects / tunnels will be considered.

**(iii) Cross Drainage Works**

Experience of construction of at least one canal syphon/ aqueduct/ syphon-aqueduct/super passage having canal design discharge not less than 45 cumecs.

**(iv) RCC Box**

Experience of construction of at least one RCC Box of inner sizing minimum 15 sqm and minimum collective length of RCC Box should be 1.2 Km in irrigation/ infrastructure projects but necessarily including at least a length of 500 m in a single stretch.

**(v) Bridges**

Construction of at least one major concrete bridge of span not less than 15 m with IRC Class AA loading

For contracts under which the applicant participated as a joint venture member or sub-contractor, only the applicant's share, by value in the Joint Venture shall be considered to meet this requirement.

**3.2 HYDRO MECHANICAL WORKS:**

**(i) General Experience**

The bidder solely or through a Joint Venture Partner or through the sub-contractor shall be required to have an experience as prime contractor or as partner in a JV or as a Sub-contractor approved by the employer of executing a gross quantity of at least 125 MT of Hydro-mechanical components (Gate Work) of work in water resources/hydro-power projects. For contracts under which the applicant participated as a joint venture member or sub-contractor, only the applicant's share, by value, shall be considered to meet this requirement.

**(ii) Specific Experience**

The bidder solely or through a Joint Venture Partner or through the sub-contractor shall be required to have a specific experience in Designing, Manufacturing, installation, testing and commissioning of Fixed Wheel type Vertical Lift Gate operated by hydraulic hoist or rope drum hoist with  $A \times H = 100$  cum or more (Where 'A' & 'H' denote Area for one Gate leaf in Sqm and Water Head at bottom sill level in metre respectively).

Provided that

- a. The completion date for specific construction experience should fall within the preceding Ten (10) years reckoned from the last day of the month previous to the one in which Tender is invited. In case of ongoing projects, the value of completed work more than 80% shall be considered.

**3.3 Deleted without change in Sl. No.**

**3.4 PLANNING, DESIGN AND ENGINEERING WORKS:**

The bidder solely, through a Joint Venture Partner or through the sub-contractor shall be required to have an experience in:

- i) Lead Bidder should have completed at least one canal with at least 2 CD structures of cross-sectional area not less than 25 sqm OR canal discharge not less than 45 cumecs in preceding 10 years AND at least one canal syphon/ aqueduct/ syphon-aqueduct/super passage of from one or more canals having canal design discharge not less than 45 cumecs.

Design and Engineering of at least one major concrete bridge of IRC Class AA loading and

Experience of Construction of at least one RCC Box of inner sizing of minimum 15 sqm and minimum collective length of RCC Box should be 1.2 Km in irrigation/ infrastructure projects but necessarily including at least a length of 500 m in a single stretch.

### 3.5 FINANCIAL CAPACITY

- (i) **Turnover:** Minimum average annual turnover of the sole bidder or the Joint Venture as specified in Article 3.1 (C) in the preceding 3 years (FY 2022-23, 2023-24 & 2024-25) shall be INR 1200 crore. For arriving at the turnover of the years prior to 2024-25, the same shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum.
- (ii) **Net worth:** Net worth (paid up share capital + reserves & surplus) of the bidder (and each partner of JV in case of JV) of last 3 financial years (2022-23, 2023-24 and 2024-25) should be positive and Net Worth of the bidder or JV (each partner in case of JV) of last Financial Year (2024-25) should not be less than 400 crores. The bidder shall submit the Audited Balance sheet in support of the above.

For arriving at the financial figures of the years prior to 2024-25, the same shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated as given in preceding paragraph.

- (iii) **Working capital:** The working capital of the bidder/Each partner in case of JV (current assets minus current liabilities), shall be at least ₹ 200 crore.

For this purpose, current assets and current liabilities will be considered as classified in the audited balance sheet for the year immediately preceding the last date of submission of Bids. If the Working Capital calculated from the audited Balance Sheets is negative then such working capital shall be treated as zero. In case there is a shortfall in the Working Capital as per this, the unutilized Cash Credit Limits sanctioned to the Bidder by the Banks/Financial Institutions of international repute shall be considered to meet the shortfall.

The statement displaying Cash Credit limits should not be more than three (3) months old as on the last date for submission of bids.

- (iv) **Solvency Certificate:** - The lead partner/ each member in case of JV, should have the minimum solvency of the amount INR 400 Cr.

Note:

1. For this purpose, a certificate from a Chartered Accountant should be submitted. It is clarified that the certificates shall be subject to verification at the discretion of the department. Only Audited Balance Sheet or CA certificate based on Audited Balance Sheet shall be considered. Provisional balance sheet will not be considered.
2. The above financial criteria during the current financial year may be considered subject to the condition that an Audited Balance Sheet or CA certificate based on the Audited Balance Sheet shall only be considered and the number of financial years under consideration shall not be more than 3 continuous financial years.
3. Other income shall not be considered for arriving at Annual Turnover.
4. The Bidder's financial evaluation *vis-a-vis* the requirement as stipulated above shall be done on the basis of duly printed (offset) Annual Report for the immediately preceding 3 (three) years submitted

by the Bidder along with the Bid. Further, standalone audited Annual Financial Statement of Bidder shall be forming part of the Annual Report.

5. In case, if Bidder has not submitted the above Annual Report along with Bid, then a certificate from CEO/CFO/Managing Director of the Bidder shall be submitted along with Bid mentioning that the requirement of Annual Report as per governing law of country is not mandatory. In such cases duly notarized copies of Audited Printed Annual Financial Statement (Balance Sheet, Profit & Loss Statement, cash flow statement, Auditor 's Report thereon including all relevant Schedules/ annexures etc.) for the immediately preceding 3(three) years be submitted by the Bidder along with the Bid.
6. In case where Audited financial results for the immediately preceding year are not available, then a statement of account as on the closing date of the immediately preceding financial year depicting the Turnover, Working Capital & Net Worth (calculated as per laid down criteria) duly certified by their Statutory Auditor/ Certified Public Accountant carrying out the statutory audit shall be enclosed with the Bid along with copy of appointment letter of the statutory auditor.
7. Wherever, the Annual Report/ duly notarized copies of Audited Printed Annual Financial Statement are in language other than English, then copy duly translated & printed into English language and certified by approved / recognized English translator shall be submitted with the Bid.
8. The Turnover during the financial Year (2024-25) may be considered subject to the condition that Audited Balance sheet or CA Certificate based on Audited Balance Sheet shall only be considered and number of Financial years under consideration shall not be more than three (3) continuous financial year. Weightage will be adjusted accordingly.
9. The bidder/each partner in case of JV should not have incurred any loss in more than two years during last five years.

### **3.6 BID CAPACITY:**

The available Bid Capacity of the bidder (Sole bidder or JV as specified in Article 4.0 C (vi) below) at the time of submission of Price Bid, calculated as under should not be less than the 4000 crores:

Available Bid Capacity =  $2.0 \times A \times N - B$ ,

where;

A = Maximum value of works executed in any one year during last 3 years. (7% weight age per year shall be given to bring the value of work executed to the price level of year under consideration

N = Number of years prescribed for completion of the subject Contract Package i.e. N=3 (36/12)

B = Value of existing commitments (as on bid submission date) and ongoing works to be completed in the next '3' years.”

The value adopted for “A” and “B” above should be necessarily certified by the statutory auditor.

**Note:-** Upon incorporation of the suggestions of TAG–KBLPA, the estimated project cost is likely to undergo revision. Accordingly, after finalization of the revised estimated cost, the eligibility/experience criteria shall be revised.

#### Annexure IV - List of minimum Manpower Requirement for O&M of KBLC Tender Package I

| S.N. | Designation  | Nos       |
|------|--|-----------|
| 1.   | Project Manager  | 1         |
| 2.   | Deputy Project Manager Civil   | 2         |
| 3.   | Deputy Project Manager HM  | 1         |
| 4.   | Junior Engineers/ Work Inspector (Civil)   | 4         |
| 5.   | Junior Engineers/ Work Inspector (HM)  | 2         |
| 6.   | Technicians for instrumentation / SCADA  | 2         |
| 7.   | Regulator operator (two at each head Regulator to work in shifts)                              | 20        |
| 8.   | Skilled Labor for regulator operations, welding, fitting /electricians for gates               | 10        |
| 9.   | Unskilled Labor to be deployed at a place as required  | 20        |
| 10.  | Mazdoors/Beldars in for desilting, weed control, bank protection, and cross drainage cleaning. | 4         |
| 11.  | Equipment Operators (for excavators, trucks, etc.) as needed                                   | 5         |
| 12.  | Data Entry Operator  | 2         |
| 13.  | Chief Security Supervisor  | 1         |
| 14.  | Security Guards  | 20        |
| 15.  | Drivers for inspection vehicle , to be arranged by the contractor                              | 3         |
|      | <b>TOTAL</b>   | <b>97</b> |

**Notes:**

1. The manpower numbers shown are indicative minimum requirements. At the commencement of the O&M period, the Contractor shall submit a detailed manpower deployment plan to KBLPA for approval, specifying the deployment location for each position. The plan shall include Curriculum Vitae (CV) for all managerial and skilled personnel (Positions 1-6), containing their full names, age, nationality, educational qualifications, detailed work experience, and a list employers alongwith the location of projects where they have been employed during the last 10 years.
2. All deployed staff must possess working knowledge of Hindi and/or English. The supporting staff shall be deployed in shifts to ensure 24/7 coverage throughout the O&M period. During monsoon and canal closure periods, the Contractor shall engage additional manpower as required for flood vigilance, desilting, and emergency repairs, as directed by the Engineer in charge.
3. The Contractor shall maintain and regularly update a comprehensive staffing register clearly indicating the names, designations, and employment status (whether long-term or temporary) of all personnel deployed at the site which can be inspected/requisitioned by the KBLPA.
4. The Contractor shall provide all necessary tools and equipment to the maintenance staff for carrying out repair work. In the event the Contractor fails to provide the required tools and equipment, KBLPA shall supply them and recover their actual cost plus 25% overhead charges from the Contractor's payments.

No.F.1/2/2024-PPD  
Government of India  
Ministry of Finance  
Department of Expenditure  
Procurement Policy Division

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502, Lok Nayak Bhawan,  
Khan Market, New Delhi  
03.06.2024

**OFFICE MEMORANDUM**

**Subject:- Guidelines for Arbitration and Mediation in Contracts of Domestic Public Procurement – reg.**

In recent decades, there has been an increasing resort to arbitration as a mean of alternative dispute resolution with a view to reducing litigation and achieving quick and efficient settlement of contractual disputes. Arbitration as a remedy is based on explicit provision in a contract and is not a judicial process. Arbitration can cover a whole range of contractual matters, including disputes between private sector parties where the Government or a public sector undertaking is not involved.

2. Arbitration is expected to provide several advantages compared to the process of litigation in the Courts:

- (i) **Speed**: It is expected to result in quicker resolution of disputes.
- (ii) **Convenience and Technical Expertise**: As it is not a judicial process, it provides greater convenience and less formality, enabling persons other than serving Judges (including technical experts) to act as Arbitrators. This may improve the quality of factual decision making, especially on technical issues.
- (iii) **Finality**: Under the Arbitration and Conciliation Act, 1996, the decisions of the Arbitrators are final, and grounds for challenge in Courts are very limited. Hence, finality is an expected benefit of arbitration.

3. Recent developments, namely the enactment of the Mediation Act, 2023 and Court decisions, combined with the experience gained over many years have necessitated a re-examination of the Government's approach towards arbitration vis-à-vis other methods of dispute resolution, such as mediation and litigation.

4. The Government (or a Government entity or agency) as a disputant has certain peculiarities:

- (i) The system of decision-making in Government involves accountability to Parliament. The law requires the Government to act fairly without

arbitrariness. There are multiple levels of scrutiny before and after decisions are taken. Acceptance of an adverse award when judicial avenues are not exhausted is often perceived to be improper by various authorities, despite the 'finality' envisaged in theory.

- (ii) The necessity for fairness and non-arbitrariness makes it difficult to accept arbitration awards if they vary from the practice followed for other similarly-placed contractors who are not involved in the arbitration.
- (iii) Officers in Government and its undertakings are transferrable and hence the personal knowledge of an officer involved in an arbitration matter may not be as deep as of the opposing private party. This handicaps the Government when presenting its case before arbitrators.

5. Notwithstanding the expected benefits of arbitration, the actual experience of arbitration in respect of contracts where the Government (or a Government entity or agency, such as a public sector enterprise) is a party have been, in many cases, unsatisfactory in meeting the expectations:

- (i) The process of arbitration itself takes a long time and is not as quick as envisaged, besides being very expensive too.
- (ii) The reduced formality, combined with the binding nature of decisions, has often led to wrong decisions on facts and improper application of the law. The arbitral process being contractual and intended to be final with very limited further recourse, is also exposed, particularly in matters of high financial value, to perceptions of wrong-doing including collusion. It is noteworthy that arbitrators are not necessarily subject to the high standards of selection which are applied to the judiciary and to judicial conduct. Further, proceedings are conducted behind closed doors and not in open court. There have been judicial decisions regarding impropriety on the part of arbitrators and there is little accountability for such wrong decisions, if taken by arbitrators.
- (iii) The benefit of finality has also not been achieved. A large majority of arbitration decisions are being challenged in the Courts both by the Government (or its entity or agency) and by the opposite party, when the decision of the arbitrators is not to the satisfaction of either party. The expectation that challenge to arbitration award would be rare, has not been realised in practice. Therefore, instead of reducing litigation, it has become virtually an additional layer and source of more litigation, delaying final resolution. The objective of relieving the burden on Courts has generally not been achieved.



- (iv) The intended finality, though often not realised in practice, also has a bearing on possible civil and criminal actions, attendant to the subject matter of the disputes.
- (v) In many cases, a commercial and sensible practical approach if resorted to, may indeed amicably resolve the issues at the threshold, but the existence of an arbitration clause makes it easy for officers to avoid taking a decision by letting the dispute go to arbitration. Thereafter, in the adversarial process, realistic claims and counter-claims are often replaced by inflated claims, counter-claims or cross-claims and arbitral process many a time ends in concluding resolutions which are in-between or extreme in nature, when in reality, the intrinsic actual claims are far smaller.

6. Adjudication by the courts is a remedy which always exists wherever there is no arbitration clause. However, another alternative to arbitration is mediation, which is a process whereby parties attempt to reach an amicable settlement of their dispute with the assistance of a third person (mediator) who does not have the authority to impose a settlement upon the parties to a dispute. There are successful models of mediation/ conciliation being practiced in certain Government entities, for example in the oil and gas sector. Section 48 of the Mediation Act, 2023 allows the Government or any Government entity or agency to frame schemes or guidelines for resolution of disputes through mediation or conciliation, and in such cases, a mediation or conciliation may be conducted in accordance with such schemes or guidelines.

7. Keeping all these factors in view, the following guidelines are issued for contracts of domestic procurement by the Government and by its entities and agencies (including Central Public Sector Enterprises [CPSEs], Public Sector Banks [PSBs] etc. and Government companies):

- (i) Arbitration as a method of dispute resolution should not be routinely or automatically included in procurement contracts/ tenders, especially in large contracts.
- (ii) As a norm, arbitration (if included in contracts) may be restricted to disputes with a value less than Rs. 10 crore. This figure is with reference to the value of the dispute (not the value of the contract, which may be much higher). It may be specifically mentioned in the bid conditions/ conditions of contract that in all other cases, arbitration will not be a method of dispute resolution in the contract.
- (iii) Inclusion of arbitration clauses covering disputes with a value exceeding the norm specified in sub-para (ii) above, should be based on careful application of mind and recording of reasons and with the approval of:


- a. In respect of Government Ministries/ Departments, attached/ subordinate offices and autonomous bodies, the Secretary concerned or an officer (not below the level of Joint Secretary), to whom authority is delegated by the Secretary.
  - b. In respect of CPSEs/ PSBs/ Financial Institutions etc., the Managing Director.
- (iv) In matters where arbitration is to be resorted to, institutional arbitration may be given preference (where appropriate, after considering reasonableness of the cost of arbitration relative to the value involved).
  - (v) In matters covered by arbitration/ court decisions, the guidance contained in General Instructions on Procurement and Project Management dated 29.10.2021 should be kept in mind. In cases where there is a decision against the government/ public sector enterprise, *the decision to challenge/ appeal should not be taken in a routine manner, but only when the case genuinely merits going for challenge/ appeal and there are high chances of winning in the court/ higher court.*
  - (vi) Government departments/ entities/ agencies should avoid and/ or amicably settle as many disputes as possible using mechanisms available in the contract. Decisions should be taken in a pragmatic manner in overall long-term public interest, keeping legal and practical realities in view, without shirking or avoiding responsibility or denying genuine claims of the other party.
  - (vii) Government departments/ entities/ agencies are encouraged to adopt mediation under the Mediation Act, 2023 and/ or negotiated amicable settlements for resolution of disputes. Where necessary, e.g. matters of high value, they may proceed in the manner discussed below:
    - a. Government departments/ undertakings may, where they consider appropriate e.g. in high value matters, constitute a High-Level Committee (HLC) for dispute resolution which may include:
      - i. A retired judge.
      - ii. A retired high-ranking officer and/ or technical expert.

This composition is purely indicative and not prescriptive.
    - b. In cases where a HLC is constituted, the Government department/ entity/ agency may either
      - i. negotiate directly with the other party and place a tentative proposed solution before the HLC; or



- ii. conduct mediation through a mediator and then place the tentative mediated agreement before the HLC; or
  - iii. use the HLC itself as the mediator.
- c. This will enable decisions taken for resolving disputes in appropriate matters to be scrutinized by a high-ranking body at arms-length from the regular decision-making structure, thereby promoting fair and sound decisions in public interest, with probity.
- (viii) There may be rare situations in long duration works contracts where, due to unforeseen major events, public interest may be best served by a re-negotiation of the terms. In such circumstances, the terms of the tentative re-negotiated contract may be placed before a suitably constituted High Level Committee before approval.
  - (ix) Approval of the appropriate authority will need to be obtained for the final accepted solution. Section 49 of the Mediation Act, 2023 is also relevant in this regard.
  - (x) Mediation agreements need not be routinely or automatically included in procurement contracts/ tenders. The absence of a mediation agreement in the contract does not preclude pre-litigation mediation. Such a clause may be incorporated where it is consciously decided to do so.
  - (xi) Disputes not covered in an arbitration clause and where the methods outlined above are not successful, should be adjudicated by the courts.

8. General or case-specific modification in the application of the above guidelines may be authorised by the Secretary concerned (or an officer not below the level of Joint Secretary to whom the authority is delegated by him) in respect of Government Ministries/ Departments, attached/ subordinate offices and autonomous bodies, or the Managing Director in respect of Central Public Sector Enterprises including Banks and Financial Institutions etc.

  
(Anil Kumar)

Deputy Secretary (Procurement Policy)

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To

1. Secretaries of all Ministries/ Departments of Government of India for information and necessary action. They are also requested to inform these provisions to all procuring entities under their administrative control.
2. Secretary, Department of Public Enterprises with a request to reiterate these instructions in respect of all Central Public Sector Enterprises.

3. Secretary, Department of Financial Services with a request to reiterate these instructions in respect of all Public Sector Financial Institutions.
4. Financial Advisers of All Ministries /Departments of Government of India for information and necessary action.
5. Chief Secretaries of State Governments for information.