



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

(भारत सरकार का उपक्रम)

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

TCN – 02

Ref: PSER:SCT:KDM-M2378:TCN-02

Date: 10-07-2025

Sub	Tender Change Notice (TCN) - 02	
Job	Providing Drone based Monitoring and Visualization System Services for 2X800 MW Koderma Thermal Power Project Site, Koderma, Jharkhand on monthly rental basis to BHEL for a basic period of 48 months.	
Ref	1.0	Tender no. PSER:SCT:KDM-M2378:25
	2.0	BHEL's NIT, vide reference no PSER:SCT:KDM-M2378:11039 Date: 30-06-2025
	3.0	BHEL's TCN-01, vide reference no PSER:SCT:KDM-M2378:TCN-01, dated 10-07-2025.
	4.0	All other pertinent issues till date.

With reference to above, following points/documents, relevant to tender, may please be noted and complied with while submitting the offer.

1. Clarification to Bidder's query(ies) are attached/enclosed as **Annexure-A to this TCN-02**. Bidder to submit their offer accordingly.
1. Revised 'No deviation certificate' is attached. Bidder to submit 'No deviation certificate' as per attached format only.
2. All other terms & conditions shall remain unchanged.

Thanking you,

Yours faithfully,
for BHARAT HEAVY ELECTRICALS LTD.

DGM / SCT

Encl.: As Above.

पावर सेक्टर पूर्वी क्षेत्र (मुख्यालय)

POWER SECTOR EASTERN REGION, DJ-9/1, SALT LAKE CITY, KOLKATA - 700 091

फैक्स/Fax : (033) 2321 1960 फोन/Phone : बोर्ड/EPABX : (033) 23398000

ANNEXURE-A to TCN-02				
Name of Job- Providing Drone based Monitoring and Visualization System Services for 2X800 MW Koderma Thermal Power Project Site, Koderma, Jharkhand on monthly rental basis to BHEL for a basic period of 48 months.				
Tender no. PSER:SCT:KDM-M2378:25				
CLARIFICATION / MODIFICATION				
Sl. No	Reference clause of tender document	Existing Provision	Bidder's Query	BHEL's Clarification/ Reply
1	DUE DATE & TIME OF OFFER SUBMISSION	Date: 10-07-2025, Time: 13-00 Hrs. IST	Request you to please extend the bid submission date for a week.	Due date of Bid submission is extended up to 15.07.2025 vide TCN-01.
2	PROJECT INFORMATION	The Site is located at latitudes of 24°23'00" N, and longitudes of 85°33'15" E respectively.	What is the Total survey area?	Total area is 157.84 Hectre
3	2.1. Key Deliverables:	3. Orthomosaic	What Ortho image resolution is expected	Resolution expected to delivered is More or less <5 CM
4	2.1. Key Deliverables:	4. Contour Map at required scale and interval	What contour interval is required and what scale is expected.	Contours can be generated at required intervals say 0.5 m or 1 m, using this photogrammetric data and drawings are prepared up to the scale of 1:1,000 which is sufficient for planning and development of any infrastructure project.
5	2.1. Key Deliverables:	5. Profile Graph (Longitudinal/ Cross sectional)	What interval is required for Cross section in the AOI, please clear the total length of L section also	Area of Interest (AOI) is approximately 2 square Kilo Meter .length of L section as per customer (DVC Koderma) tender specification or as desired by the customer / instructed by BHEL site Construction Manager (Ex. Broiler structure , chimney height, TG hall, Excavation, Roads etc. i.e. how much is the progress since last month.).

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6	2.1. Key Deliverables:	8. Periodically Aerial Videography (4K Aerial videos)	Please clearly mention when it is required? Exact frequency and duration.	Required from the start of the contract or as instructed by BHEL site Construction Manager. Frequency of survey is once in a month. The survey frequency may exceed depending on the customer requirement occasionally, duly instructed by BHEL site Construction Manager. Duration of flight is to cover the complete AOI (Area of Interest).
7	2.1. Key Deliverables:	9. Real time data /video shooting on requirement basis	Please clearly mention how many times videography is required and total area need to be shoot in a day?	15 minutes 4k video by default for every flight (max) or as instructed by BHEL site Construction Manager.
8	2.1. Key Deliverables:	—	Request you to please clear that total no. of Hardcopy and softcopy submission of the data at the time of delivery?	No Hard copy is to be Submitted. As per “key deliverable” as mentioned in the tender scope of work and medium of delivery as per scope of work (Dashboard, cloud based repository, 2D/3D visualization) PDF and Excel formats, and manage geospatial data from various sources like shapefiles, GeoJSON, and KML and users can upload and visualize custom data layers These new feature need to consider in the scope.

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9	2. SCOPE OF WORK	r) The basic period is 48 months. The contract may extend further depending upon the construction progress of the project. Rates, terms, and condition remain same	Request you to please give clarity on this also. What is the frequency of capturing data in 48 Months?	Once in a month for duration of 48 months
10	Scope of work Clause b)	All the photographs should be precisely geo-referenced by GPS, Glonass etc. for an accurate aerial triangulation process for the generation of orthomosaic and 3D data	accuracy expected in the survey in terms of X Y and Z.	More or less <5 CM accuracy is expected for accurate distance and surface measurements in various applications, including land surveying, construction monitoring, and infrastructure inspection.
11	Scope of work Clause f)	The agency should provide a dashboard that serves as a department-level interface that consolidates details about all projects, missions, and other relevant information. It includes login and user management, along with role-based access control to ensure appropriate permissions.	The platform access will be given to how many concurrent users, kindly share the no of users	More or less 10 concurrent access to the visualisation platform is desirable. Named user access is preferable.
12	-	-	Do we have to conduct mapping and videography for all the 48 months or videography is to be conducted as and when required. If required as and when, kindly let us know the minimum no of time the video has to be conducted	Videography is to be conducted once in a month for all 48 months. 15 minutes 4k video by default for every flight (max) required to be considered or as decided by BHEL.

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13	-	-	Do we have to capture any GCP points? If yes, kindly share the number of counts expected per sqkm	For the purpose accuracy bidder to use Photogrammetry technique like GIS Tool (Geographic Information System) etc. as per tender terms. For precise measurement GCP point is required and required Positional accuracy (x,y) with in (+/-) 10 CM. Quantity of point may consider at any extend depending on the construction scenario but should not be less than 4 no's per SQKM at any instances.

FORMAT FOR NO DEVIATION CERTIFICATE
(To be submitted in the bidder's letter head)

BHARAT HEAVY ELECTRICALS LIMITED,
 Power Sector - Eastern Region,
 Plot no 9/1, DJ Block, Sector – II, Salt Lake City,
 Kolkata – 700 091

Sub	No Deviation Certificate.	
Job	Providing Drone based Monitoring and Visualization System Services for 2X800 MW Koderma Thermal Power Project Site, Koderma, Jharkhand on monthly rental basis to BHEL for a basic period of 48 months.	
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	5.0	All other pertinent issues till date.

Dear Sir/Madam,

With reference to above, this is to confirm that as per tender conditions, we have visited site before submission of our offer and noted the job content & site conditions etc. We also confirm that we have not changed/ modified the tender documents as appeared in the website/ issued by you and in case of such observance at any stage, it shall be treated as null and void.

We hereby confirm that we have not taken any deviation from tender clauses together with other references as enumerated in the above referred NIT. We hereby confirm our unqualified acceptance to all terms & conditions, unqualified compliance to technical specification, integrity pact (if applicable) and acceptance to reverse auctioning process.

In the event of observance of any deviation in any part of our offer at a later date whether implicit or explicit, the deviations shall stand null & void.

We confirm to have submitted/uploaded offer/documents in accordance with tender instructions with acceptance of the terms & conditions of the tender by us and as per aforesaid references.

Thanking you,

Yours faithfully,

(Signature, date & seal of authorized
representative of the bidder)