#### **ADDENDUM**

**DATE: 26-11-2021** 

Supply and E&C of Side Beam for WT-4&5

**Tender Ref:** 77/21/6072/DSP

#### "Extension of due date for submission of offer"

Due date for submission of Offer has been extended to 03.12.2021

Submission of offer by 1.00 PM on 03.12.2021

Opening of Techno commercial bid at 4.00 PM on 03.12.2021

# "Replies/Corrigendum to bidder queries"

Attached Corrigendum of replies/changes to be read in conjunction with GCC & SCC

Any further addendum such issued carry part of the bidding documents and this will be available at the web site from where the original documents have been received / downloaded by the bidder. Hence, bidders are requested to visit the web site on regular basis.

## For Further Queries if any, Contact:

### For Commercial:

Sh. D S Pradeep Kumar Sarma

Manager / MM BHEL-ISG, Prof.C.N.R.Rao Circle, Bangalore-560 012 Off: 080 2218 4520,

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# For Technical:

**Sh. Indrajit Dey** 

Sr Manager / PE / Mech BHEL-ISG, Prof.C.N.R.Rao Circle, Bangalore-560 012 Off: 080 2218 4219, e-mail: idey@bhel.in

	TECHNICAL ENQUIRY SPECIFICATION FOR REPLACEMENT	INT OF SIDE BEAM OF WI-4 & WI-3	
	BHEL ISG Doc. No.: IS-1-10-2009/WT-4&5, Rev-1, Dated:		
	23.9.2021		
SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
Α	PROJECT & SITE INFORMATION:	Information only. No comments	
В	BACKGROUND & BROAD SCOPE OF WORK:		
	SUPPLY:		
R-Δ	Comprising of design, engineering, manufacture, fabrication, assembly, inspection & testing at vendor's works, painting, lubricants & consumables, forwarding, proper packing, shipment and delivery at site for project for the total scope defined as per BHEL NIT & tender technical specification, amendment & agreements till placement of order.	<ol> <li>Only dimensional inspection is possible at our works. Testing of side beam is not possible at our works.</li> <li>one time lubricants and consumables required for only fixed side beam replacement acitivity is in our scope.</li> </ol>	MTC shall be submitted by bidder during inspection    Noted
	Supply of new main (side) beam: Beam will be fabricated out of minimum 16 mm thick, IS: 2062 plates (outer box) with designed internal stiffeners - 2 Sets.	OK. Noted & confirmed.	-
	INSTALLATION SERVICES:		
	Installation Services as per scope defined in NIT specification comprising of receipt, unloading, handling, transportation & storage at site, lifting/shifting, in-site transportation, security till completion of work, dismantling ,assembly, complete erection, alignment, carrying out Pre-Commissioning, Commissioning, trial run at site, Touch- Up painting at site after erection and assisting Performance Guarantee Tests.	<ol> <li>Alignment of new fixed side beam with end rings will be in our scope. Re-alignment of tippler table, drives with sector gear or any other alignment work is not in our scope.</li> <li>Pre commissioning, commissioning and trial run of wagon tippler after replacement of fixed side beam is in BHEL scope, however, Bidder will assist the activity.</li> </ol>	All necessary re-alignment required for readiness of equipment is in bidder scope.  Pre commissioning, commissioning and trial run of wagon tippler after replacement of side beam is in bidder scope.
	DISMANTLING SERVICES FOR EXISTING BEAM COMPRISING FOLLOWING ACTIVITIES:		
	a. Dismantling of Hydraulic pipes, manifolds on the beam and covering with dummy plates - 2 Sets.	We will be dismantling hydraulic pipes, Manifolds mounted on the Fixed side beam & required for side beam replacement only.	Noted.
B-B.1	b. Dismantling of Movable side beam and its brackets - 2 Sets.	OK. Noted & confirmed.	-
	c. Dismantling of wagon clamps - 2 Sets.	OK. Noted & confirmed.	-
	d. Dismantling of hydraulic cylinders of clamps and movable side beam - 2 Sets.	OK. Noted & confirmed.	
	e .Arresting end rings in their aligned positions - 2 Sets.	OK. Noted & confirmed.	-
	f. Splice plate bolts removal and making ready for beam dismantling - 2 Sets.	OK. Noted & confirmed.	-
	g. Existing damaged beam dismantling - 2 Sets.	OK. Noted & confirmed.	-
	ERECTION SERVICES FOR NEW BEAM COMPRISING FOLLOWING ACTIVITIES:		

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
	b. Beam and end ring splice plate bolts torque tightening - 2 Sets.	OK. Noted & confirmed.	-
	c. Erection of wagon clamps - 2 Sets.	OK. Noted & confirmed.	-
	d. Erection of wagon clamps cylinders - 2 Sets.	OK. Noted & confirmed.	-
	e. Erection of Movable side beam cylinders - 2 Sets.	OK. Noted & confirmed.	-
B-B.2	f. Erection of Movable side beam - 2 Sets.	OK. Noted & confirmed.	-
	g. Installation of hydraulic pipes and manifolds - 2 Sets.	OK. Noted & confirmed.	-
	h. Re-erected pipe lines flushing - 2 Sets.	<ol> <li>Re-erected pipe line flushing will be in our scope.</li> <li>Acid pickling of dismantled pipes is not in our scope.</li> <li>No oil filtration of hydraulic oil is in our scope as there is no mention of about NAS value in the tender.</li> </ol>	Oil filtration of hydraulic oil in the system to be done to the requisite NAS level as per bidder's standard practice and same shall be in Bidder's scope.
	SPECIALISED/EXPERT COMMISSIONING SERVICES as per BHEL Site Requirement for specialized job of PLC, Hydraulic systems.		
	a. PLC Expert (From M/s. Honeywell) - 10 man-days	<ul> <li>2) 10 man days with 2 trips (5days+5days) is considered in our scope.</li> <li>3) Instructing the service engineer and getting work done by him is in BHEL scope.</li> <li>4) BHEL to inform 7 days in advance on the requirement of expert, as mentioned in BHEL's note no5. Regarding availability of expert engineer, Bidder shall revert back to BHEL.</li> </ul>	1) Noted. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement. 3) Co-ordination shall be under BHEL scope for description under B.3 4) Agreed 5) To & fro Travel time to site is excluded from Man days, and counting for mandays will be from the 8 am of the day service engineer is Physically avaialble at site. Note: For B.3,B.4, B.5 Each Man-day charge shall be inclusive of local conveyance and boarding & lodging at site. No other separate charges will be paid or borene by BHEL.
B-B.3	h Hydraulic system Expert (from M/s, Reyroth) - 10 man-days	<ul> <li>2) 10 man days with 2 trips (5days+5days) is considered in our scope.</li> <li>3) Instructing the service engineer and getting work done by him is in BHEL scope.</li> <li>4) BHEL to inform 7 days in advance on the requirement of expert, as mentioned in BHEL's note no5. Regarding availability of expert engineer, Bidder shall revert back to BHEL.</li> </ul>	1) Noted. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement. 3) Co-ordination shall be under BHEL scope for description under B.3 4) Agreed 5) To & fro Travel time to site is excluded from Man days, and counting for mandays will be from the 8 am of the day service engineer is Physically avaiable at site. Note: For B.3,B.4, B.5 Each Man-day charge shall be inclusive of local conveyance and boarding & lodging at site. No other separate charges will be paid or borene by BHEL.

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
	c. Each Man-visits cost for expert visit - 4 Nos.	done by him is in BHEL scope.  3) BHEL to inform 7 days in advance on the	<ol> <li>1) 1 Man visit is the a single trip made to site which included To &amp; fro travel expenses.</li> <li>2) Co-ordination shall be under bidder scope for description under B.3.</li> <li>3) Shall be as per NIT Spec.</li> </ol>
	EXPERT SUPERVISION FOR POST-COMMISSIONING AND ASSISTING IN PG TESTING OF THE MACHINE, PROTOCOLS OF PG TEST AS PER BHEL SITE REQUIREMENT		
B-B.4	a. Cost of Man-days - 30 man-days	scope.  3) BHEL to inform 7 days in advance on the	1) Noted. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement. 3) Agreed.
	b. Cost of each man-visits - 4Nos.	requirement of service engineer, as mentioned in	1) 1 Man visit is the a single trip made to site which included To & fro travel expenses.  2) Agreed.
	MANPOWER FOR OPERATING THE MACHINE & MISCELLANEOUS SERVICES AS PER BHEL REQUIREMENT FOR SITE DEPUTATION BASIS		
а	Mechanical supervisor, Diploma with min. 3 years' experience in WT erection & commissioning - 60 man-days	supervisor will be decided by Bidder.  2) 60 man days with 4 trips are considered in our	1) Engagement of Manpower under B.5 is for exclusive requirement of BHEL and thus qualification shall be as per min. requirments specified in tender. Further it is clarifed manpower being engaged by bidder for carrying out the work as mentioned under B.1 & B.2 shall be decided by bidder. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement.
b	Electrical/Instrumentation supervisor, Diploma with min. 3 years' experience - 60 man-days	supervisor will be decided by Bidder.  2) 60 man days with 4 trips are considered in our	1) Engagement of Manpower under B.5 is for exclusive requirement of BHEL and thus qualification shall be as per min. requirments specified in tender. Further it is clarifed manpower being engaged by bidder for carrying out the work as mentioned under B.1 & B.2 shall be decided by bidder. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement.

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
С	Electrician, ITI with min. 2 years' experience - 60 man-days	2) 60 man days with 4 trips are considered in our	1) Engagement of Manpower under B.5 is for exclusive requirement of BHEL and thus qualification shall be as per min. requirments specified in tender. Further it is clarifed manpower being engaged by bidder for carrying out the work as mentioned under B.1 & B.2 shall be decided by bidder. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement.
d	Fitter,ITI with min. 2 years' experience - 60 man-days	2) 60 man days with 4 trips are considered in our	1) Engagement of Manpower under B.5 is for exclusive requirement of BHEL and thus qualification shall be as per min. requirments specified in tender. Further it is clarifed manpower being engaged by bidder for carrying out the work as mentioned under B.1 & B.2 shall be decided by bidder. 2) No. of days of stay per visit shall be as per BHEL/KPCL/Job requirement.
е	Un-skilled worker/ Helper - 120 man-days	OK. Noted & confirmed.	-
B-B.6	TOUCH-UP PAINTING OF THE MACHINE SURFACE as per BHEL Requirement - Two (2) finish coats (having DFT of min. 50 Microns per Coat) of PU golden Yellow paint shall be applied to the steel structure at site = 100 Microns Total DFT of primer and paint (Including all coats) shall be Min. 240 Microns - 100 Sq.M Surface area	OK. Noted & confirmed.	-
B-B.7	VETTING OF DESIGN & FEM MODEL ANALYSIS of the new side beam by Third party like IIT/ IISc or other technical institution of repute or any consultant connected to Coal handling plant who has held a senior position at a reputed consulting firm.	OK. Noted & confirmed.	-
NOTE:	Bidder to ensure there shall not be any changes w.r.t. existing civil construction - foundation & load data.	OK. Noted & confirmed.	-
1	The scope of this enquiry shall also include initial filling of consumables i.e., top-up oil, lubricants etc. & demonstrate satisfactory working of new fixed side beam.	OK. Noted & confirmed.	-
2	Handing over of the dismantled side beam to BHEL site shall be in scope of Bidder	OK. Noted. Dismantled damaged beam will be shifted to a distance of 1km (max.) for the WT complex and will be stacked to an height of 1m(max.) above the ground.	Agreed
3	measurement, do design study and do necessary evaluation from	OK. Noted. The statement "other associated minor damage" is not clear. Hence, studying of any existing damages in wagon tippler other than fixed side beam will not be in our scope and we will not be attending to the same.	Agreed

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
4	For dismantling & Re-erection activities identified under B.1 & B.2 bidder to submit the detail program for the job with activity duration, start & end time, mobilize to site with required men, material, tools & tackles & machineries to carry out all the associated work required for replacement of existing beam with new beam in time bound manner in consultation with BHEL site team.	OK. Noted & confirmed.	-
5	For mobilization of manpower & expert services as per BHEL exclusive requirement identified under B.3, B.4, B.5 and B.6, BHEL will intimate 7 days prior to actual requirement and as per that Bidder to mobilize.	OK, Noted. However, Bidder shall revert back to BHEL on the availability of manpower & expert.	Agreed
6	Bidder shall take due diligence to ensure none of the existing facilities and machine parts are damaged during the course of this job. Bidder shall take due care of items/parts/equipment during dismantling & re-erection to avoid any mishandling or damages to any existing machine parts or facilities.	OK. Noted & confirmed.	-
7	engineering Drawings / Documents, Quality Plans, specifications, applicable codes and standards, approved make/vendor etc. for site execution, as per the scope of this package.	tippler. b) Quality plans> OK. Noted. c) Applicable codes and standards> In the absence of complete WT structure and load details, beam to be designed with available information and our past experience. Hence not possible to confirm	a) Noted. b) - c) Concern is noted , however codes and standard applicable for complying to general workmanship and quality w.r.t side beam replacement shall be ensured by bidder like material ( eg. IS; 2062), tolerences, welding procedure etc. d) Noted.
8	Necessary support structures, scaffolding, etc. which are temporarily required during dismantling, erection shall in bidder's scope of work.	OK. Noted & confirmed.	-
9	Bidder shall make their own arrangements well in advance for erection of equipment like crane, hydra, tools, tackles, welding machines, gas-cutting machines, cutting sets, lifting tools, winches, etc. that will be required during the execution of this new beam replacement work shall be in bidder's scope	OK. Noted & confirmed.	-

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
10	Bidder shall be responsible for safety of bidder's manpower till end of the job and bidder shall strictly follow and adhere to the guidelines laid down in BHEL's HSE & PPE manuals.	1.We are responsible for safety of our manpower till the end of the job has been done during erection of belt conveyor package.  2. We will provide all necessary PPE's which are available in market and and as required to suit type of work. These PPEs will not be having BHEL's name on them, as specified in the tender.  3. Firefighting system/ items or any other special requirement mentioned in the HSE management system manual is not in our scope of supply / responsibility.	Agreed
11	Bidder shall necessarily take photographs (evidences) of the replacement parts / sections during various stages of work carried out by them & shall be submitted to BHEL without fail.	OK. Noted. However we request BHEL to carry this as we are not aware of your requirement.	Shall be under the scope of bidder & shall carry out the work in coordination with BHEL-RM/Site Incharge instructions in line with requirement.
С	OTHER IMPORTANT POINTS:		
1	Bidder shall comply with all the currently applicable statutes, regulations and safety codes in the locality where the equipment is to be installed and shall conform to the latest edition of Indian and other international standards and codes. Nothing in this specification shall be construed to relieve the contractor of the required statutory responsibility. In case of any conflict & ambiguity in the standard to be followed, the decision of BHEL shall be final and binding.	Please refer to our reply at note-7 above, which is referring to codes and standards.	Concern is noted , however codes and standard applicable for complying to general workmanship and quality w.r.t side beam replacement shall be ensured by bidder like material ( eg. IS; 2062) , tolerences, welding procedure etc.
2	Bidders are encouraged to raise all ambiguities, conflict in the standard & specification and/or interpretation of clauses, if any, in this enquiry spec. and its enclosures during pre bid stage itself, failing which it shall be understood that bidder has no issue, and at later date, successful bidder shall have no right to take any technical and commercial advantage out of any ambiguity, conflict in the standard & specification and/or interpretation of clauses. In this regard, the decision of BHEL shall be final and binding and any change due to this shall have no price implication on BHEL and shall have to be absorbed by successful bidder.	OK, Noted. Please refer to our reply at note-7 above, which is referring to codes and standards.	Concern is noted, however codes and standard applicable for complying to general workmanship and quality w.r.t side beam replacement shall be ensured by bidder like material (eg. IS; 2062), tolerences, welding procedure etc.
	Cleaning of any debris produced by the bidder during E&C shall be done immediately at each front.	OK, Noted.	-
_ 4	Bidder to ensure sufficient manpower throughout the contract period at site.	We accept this clause only for fixed side beam replacement activity.  Manpower requirement for other activities related to WT operation and maintenance shall be as per manpower requirement given by BHEL.	Agreed
5	Bidder to ensure the availability of qualified <b>safety officer</b> throughout the contract period and daily/weekly report shall be submitted to BHEL.	OK, Noted and confirmed.	-

SI. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021
6	Construction Power and Construction Water Facilities shall be provided at one location.	Power and water shall be provided at tippler complex.	Agreed
7	Bidder shall submit a signed copy of BHEL's tender documents with all enclosures along with the technical offer without any deviations.	List of deviations is sent to BHEL for approval.	Agreed
8	Bidder shall comply with approved painting scheme/schedule in line with NIT specifications.	OK, Noted and confirmed.	-
9	Bidder to note that time is the essence of this contract, thus they shall submit the detail program schedule item-wise along with the offer, in no. of days from LOI date and adhere to it.	OK, Noted and confirmed.	-
10	The supplied new beams shall be compatible with the already existing machine.	OK, Noted and confirmed.	-
11	All fasteners, consumables etc. are in the scope of bidder.	All fasteners and consumables required for fixed beam replacement is in our scope of supply.	Agreed
12	scope understanding & the scope division along with technical	List of deviations is sent to BHEL for approval. The mutually agreed copy of document will be sent with stamp. But to be read in conjunction with this deviation document.	Agreed
D	ENCLOSURES		
1	GA of Side Discharge Wagon Tippler with SAC (Drg. No: IS-0-GA-656-103-M147 Rev 3)	Content related to fixed side beam design and erection in the drawing will be considered in our scope. Remaining all other information in the drawing is not relevant to our work and hence not considered.	Noted.
2	GA of Wagon Tippler with Hyd. Clamping & Hyd. Drive (Drg. No: IS-0-GA-656-103-M143 Rev 3)	Content related to fixed side beam design and erection in the drawing will be considered in our scope. Remaining all other information in the drawing is not relevant to our work and hence not considered.	Noted.
3	QAP for Wagon Tippler (Doc. No: IS-4-QP-656-103-M039 Rev 2)	Content related to fixed side beam inspection in the document will be considered in our scope.  Remaining all other information in the document is not relevant to our work and hence not considered.	Noted.
4	,	The information in the document is not related replacement of fixed side beam. Hence not applicable for our work.	Noted.

Sl. No.	Item Description	Bidder's Position	BHELReplies Dated 26-11-2021	
	Painting Schedule for CHP Machines (Doc No: IS-4-SC-656-101-	Painting specification and schedule will be as per		
		clause no. B-B.6 of the tender.		
1 5		Surface preparation will be as per the painting	Noted.	
		schedule. Remaining portion of the schedule is not		
		relevant to our work.		
	PG Test Procedure for CHP Machines (Doc No: IS-4-DS-656-100-Our scope is only to assist BHEL. This document is		Noted.	
6	M123A Rev2)	only for information.	Noteu.	
7	Site Photographs showing cracks/damaged portion of WT-5 (6	These pictures are only for information	Noted.	
,	pages)	These pictures are only for information	Noted.	
Ω	BHEL HSE/PPE Manual (16+142 Pages)	Please refer to Bidder reply mentioned under note	Noted.	
0		no.: 10.	inoteu.	

	Commercial Clarific	cations for BHEL,Tender no.77/21/6072/DSP and tender ID: 2021_BHEL_5883_1 for	r supply and E & C of Side Beam for WT 4 & 5	
SI No.	Subject	BHEL Eprocurment Tender	Bidder COMMENTS	BHEL Clarification
1	Payment for Expert Supervision & Manpower services:	(SI No.12, Page no 3/12 of SCC) 4) Terms of Payment for Expert Supervision & Manpower services: (S No.3 & 4 of BOQ) 80% along with GST against activity/works as per billing schedule on prorata basis, 10% along with GST against commissioning and balance 10% along with GST against completion of PG Test of Wagon Tippler. The last 10% will be released either against completion of PG Test or 180 days from commissioning of Wagon Tippler, whichever is earlier.  Payable on pro rata basis upon completion of activity/works as per billing schedule based on the certification by BHEL site Engineer/Construction Manager. Copy of site certification / RAB for having completed the work shall be submitted by bidder at the time of claiming payments.	submission. The invoice will be submitted on weekly basis.	Tender condition prevail
2	Additional Clause regarding price to be quoted	(CI No.3.0, Page no 5/11 of GCC) Total erection & commissioning charges including service tax should be minimum 20% of the total quoted package price (excluding mandatory spares but including all taxes and freight), failing which the break-up of prices shall be adjusted accordingly for ordering.	Total erection and commissioning charges would be minimum 10% of the basic price excluding taxes and duties	Clause no.3, page no.5/11 of GCC shall be read as: Total erection & commissioning charges(Basic value excluding GST) should be <b>minimum 15%</b> of the total quoted package price (excluding GST), failing which the break-up of prices shall be adjusted accordingly for ordering.
3	Submission of Performance Bank Guarantee (PBG)	(SI No.15, Page no 3/12 of SCC) For original order / contract values above Rs. 25 Lakhs (excluding taxes, duties and freight), the vendor shall submit Contract Performance Bank Guarantee (as per Annexure-IV) for 10% of Order/ Contract value (excluding taxes, duties & freight) before first submission of documents for payment to cover the due performance of Order/ Contract and to fulfill the guarantee conditions stipulated in the Order/ Contract. However, BG value can be proportionality reduced after completion of Guarantee period Unit-wise/ Lot-wise/ Set-wise, as applicable.  PBG, in line with clause no 11 of general commercial terms & conditions of GCC, rev-01, is to be submitted as per format within 15 days from the date of Letter of Intent (LOI). Validity of the Bank Guarantee shall be for the entire Guarantee period +1Year claim period. Initially, it should be at least 18 months + 1 Year claim period, later extended to cover the guarantee period, two months before its expiry.  Bidder agrees to submit performance security required for execution of the contract within the time period mentioned. In case of delay in submission of performance security, enhanced performance security which would include interest (SBI rate + 6%) for the delayed period, shall be submitted by the bidder. Further, if performance security is not submitted till such time the first bill becomes due, the amount of performance security due shall be recovered as per terms defined in NIT / contract, from the bills along with due interest.	Please note that as per Govt. Circular No.F9/4/2020/PPD dt.12.11.2020 (copy enclosed), CPBG is 3% of the Contract value . Hence we would submit CPBG of 3% of Contract value within 45 days of receipt of the contract and no interest on delay of submission of the same is acceptable to us. The BG will be submitted with a validity of 6 months to cover the delivery period and BHEL would return the CPBG to the Contractor immediately on completion of the Validity period irrespective of the claim period mentioned in the BG .  Upon return of the CPBG , Contractor will submit PBG of 10% of the Contract Value with validity of 12 months from the date of the completion of Bidder's scope of work to cover the warranty period . BHEL will return the PBG to the Contractor immediately on completion of the validity irrespective of the claim period mentioned in the BG .	Tender condition shall prevail except for the below changes in place of existing:  PBG, in line with clause no 11 of general commercial terms & conditions of GCC, rev-01, is to be submitted as per format withi 30 days from the date of Letter of Intent (LOI).  Validity of the Bank Guarantee shall be for the entire Guarantee period + claim period as per RBI Guideleines(Minimum 3 Months). Initially, it should be at least 18 months + claim period as per RBI Guidelines (Minimum 3 Months), later extended to cover the guarantee period, two months before its expiry.
4	Price Format	SI. No. 3 , 4 , 5 and Foot Notes 2 , 11, 12	Please note that the rates quoted by us would be valid for 1 year from the placement of order. Subsequently for next 2 years, there would be an increase of rates by 15% year on year. Subsequent to the third year the rates applicable will be informed to BHEL.	Tender condition shall prevail
5	Price Format	Foot Note 13Handing over of "Entire AC and Ventilation System with associated accessories etc "	Please clarify	the entire AC & Ventilation system with associated accessories etc", the following shall be read:  "Complete Scope as per Technical Specifications"