बीए	च ई एन				MANUFACT	URING (	QUALI	TY PLAN		PROJE	CT:				
H	HEL .	Manufacturer Name and Address:						AGITATORS	3	PACKAGE: FGD PACKAGE					
							QP N	<b>0:</b> FGD:704, RE	EV:00	CUST MAIN (	-	RACT	TOR:	BHFI	
Main c	contractor						DT: 26	6.10.2020 Pa	age <b>1</b> of <b>4</b>				• • • • • • • • • • • • • • • • • • • •	5	-
SL.	COMPONE	ENT &	CHARATERISTICS	CLASS	TYPE OF	QUATU	M OF	REFERENCE	ACCEPTANCE	FORMAT		A	GEN(	CY	REMARKS
NO.	OPERATIO	ON		02/100	CHECK	CHEC	CK	DOCUMENT	NORMS	OF REC	ORD	M	С	N	
						M	C/N								
1	2		3	4	5	6		7	8	9	D*		10		11

1.0	RAW MATERIA	LS INSPECTION											
1.1	Shaft & Blades, rubber composition & other material	Chem. & Mech Properties	Major	Review of MTC	One/ Heat	One/ Heat	Drawing/Data Sheet	TC	1	Р	V	٧	For shaft Dia ≥ 40mm UT shall
	including castings &	Dimensions	,	Measure nt	100%			IR	٧	P	-	-	be done as per ASTM A 388.
	forgings	Surface Defects		Visual	100%	-		IR		P	-	-	
2.0	Motor Separate MQP for Electrical Motor as applicable.												
3.0	Gear box	Make,Type, Rating,vibration,n oise Review of Routine/Run test Report	Major	Review of manufact ure's test report	100%	100%	Drawing/Data Sheet	TC/ Repo rt	1	P	V	V	
4.0	IN PROCESS I	NSPECTION											
4.1	Welding Qualifications	WPS,PQR,WPQ	Major	WPS, PQR & WPQ	100%	100%	ASME Sec IX/AWS D1.1	WPS/ PQR	1	Р	٧	٧	

	<b>LEGEND:</b> * RECORDS, INDENTIFIED WITH "TICK" (√) UNDER			
	COLUMN 'D'SHALL BE SUBMITTED TO CUSTOMER AS A 'QA'			
	DOCUMENTATION PACKAGE.			
	M: MANUFACTURE/SUB SUPPLIER, C: MAIN			
	CONTRACTOR(BHEL/BHEL AIA), N:NTPC P: PERFORM W:			
	WITNESS AND V: VERIFICATION / REVIEW OF RECORDS,			
	MTC: MATERIAL TEST CERTIFICATE, TC: TEST CERTIFICATE,			
	MA: MAJOR, MI:MINOR, COC: CERTIFICATE OF			
MANUFACTURER SIGN & STAMP	CONFORMANCE, IR: INSPECTION REPORT, TR: TEST REPORT	PREPARED BY	REVIEWED BY	APPROVED BY
	AIA: AUTHORISED INSPECTION AGENCY.			

वीर	म्य ई एल			MANUFAC1	FURING	QUALIT	Y PLAN		PROJE	ECT:					
R	Manufa Manufa	acturer Name and A	ddress:			ITEM:	AGITATORS	3	PACK		FGD	PACK	AGE		
	<i>//</i>					<b>QP NO:</b> FGD:704, REV:00			CUST No: MAIN CONTRACTOR: BHEL						
Main o	contractor					DT: 26	.10.2020 P	age <b>2</b> of <b>4</b>	IVIAIN	JUNI	NAU	IUN.	DNE	_	
SL.	COMPONENT &	CHARATERISTICS	CLASS	TYPE OF	QUATL	JM OF	REFERENCE	ACCEPTANCE	FORMA			GENC		REMARKS	
NO.	OPERATION			CHECK	CHE M	CK C/N	DOCUMENT	NORMS	OF REC	ORD	M	C	N		
1	2	3	4	5	W 6	1	7	8	9	D*		10		11	
4.2	Marking,cutting ,Edge preparation Tacking	Dimensions	Major	Measure ment	100%	-	Appd.Drawi	ng	IR	-	Р	•	-		
4.3	Shaft & Impeller	Visual & Dimension check,face out and run out of shaft (after flange welding)	Major	Measure ment	100%	100%	As per Spec Appd.Drawi		IR	1	Р	٧	٧		
4.4	Welds	Visual, Dimension	Major	Visual, Measure ment	100%	100%	ASME Sec-	VIII/ AWS D!.1	IR	1	Р	٧	٧		
4.5	Weld surface check	Weld soundness	Major	DPT	100%	100%	ASME Sec- Appendix 8	VIII/AWS D1	IR	1	Р	W	٧		
4.6	Impeller	Balancing	Major	Visual, Measure ment	100%	10%	ISO 1940- /. Data sheet	Appd.Drg.&	TR	٧	Р	W	٧		

	$\underline{\textbf{LEGEND:}} \ ^{\star} \ \ \text{RECORDS, INDENTIFIED WITH "TICK"} () \ \text{UNDER}$			
	COLUMN 'D'SHALL BE SUBMITTED TO CUSTOMER AS A 'QA'			
	DOCUMENTATION PACKAGE.  M: MANUFACTURE/SUB SUPPLIER, C: MAIN			
	CONTRACTOR(BHEL/BHEL AIA), N:NTPC P: PERFORM W:			
	WITNESS AND V: VERIFICATION / REVIEW OF RECORDS,			
	MTC: MATERIAL TEST CERTIFICATE, TC: TEST CERTIFICATE,			
MANUEL OTUBED OLONG OTAMB	MA: MAJOR, MI:MINOR, COC: CERTIFICATE OF	DDED4DED DV	DEVIEWED DV	ADDDOVED DV
MANUFACTURER SIGN & STAMP	CONFORMANCE, IR: INSPECTION REPORT, TR: TEST REPORT	PREPARED BY	REVIEWED BY	APPROVED BY
	AIA: AUTHORISED INSPECTION AGENCY.			

वीर	म ईएन				MANUFACT	TURING	QUALI	TY PLAN		PROJ	ECT:				
R	HFL	Manufa	anufacturer Name and Address:  ITEM: AGITATORS  QP NO: FGD:704, REV:00						S	-	AGE:	FGD	PACK	AGE	
	"						QP NO	<b>):</b> FGD:704, R	EV:00		CUST No: MAIN CONTRACTOR				I
Main (	contractor						DT: 26	6.10.2020 P	age <b>3</b> of <b>4</b>	INIVIIA	OONI	ΠΛΟ	I UI I.	םו ונ	L
SL. NO.	COMPON OPERAT	-	CHARATERISTICS	CLASS	TYPE OF CHECK	QUATU CHE		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMA OF REC		M	AGENO C	Y N	REMARKS
_	ļ.,	•	0		F	M	C/N	-		•	D+		40		44
1	2	2	3	4	5	6	)	7	8	9	D*		10	1	11
4.7	Rubber	Lining	Thickness of Rubber, Hardness, Spark test, Adhesion Test on Test piece	Major	Measure ment	100%	10%	As per Specs./ Appd. Drg. & data sheet	Appd.Drg.& Data sheet,	TR	1	P	W	٧	
5.0	FINAL I	NSPEC1	TION					ı	1						
5.1	Final As Base Frame, F	,	Visual- Workmanship, Dimensional,	Major	Visual, Measure ment	100%	20% of each type(	Appd.Drg. 8	& Spec,	IR	1	P	W	٧	For Top Agitator with shaft length>5meter
5.2	Free Air test of Complei assemb	te	Current,RPM, Vibration,Noise & Temperature rise	Major	Measure ment	100%	Vertic al/Hor izonta l)		er's procedure/ Prawing/Data	IR	1	Р	W	W	run test to be carried out with bearing Shaft only.
5.3	Painting	l	Visual,DFT	Major	Paint Shade & DFT measure ment	100%	10%	NTPC Appr Schedule	oved Painting	IR	1	Р	W	٧	
5.4	Marking		Visual	Major	Visual	100%	10%	Appd.Drawi	ing	IR	1	Р	W	٧	
5.5	Packing		Visual	Major	Visual	100%	100%	Appd.Drawin	g/Specification	COC	-	Р	-	-	
5.6	Review Docume		MQP Compliance	Major	Complian ce Record	100%	100%	Completion documents, as per Appr	Test Report	IR	1	Р	٧	٧	
MANUI	FACTURER	SIGN & ST/	LEGEND: * RECO COLUMN 'D'SHALL DOCUMENTATION M: MANUFACTURE CONTRACTOR(BH WITNESS AND V: ' MTC: MATERIAL T MA: MAJOR, MI:MI CONFORMANCE, I AIA: AUTHORISED	BE SUBM I PACKAGE E/SUB SUP EL/BHEL A VERIFICAT EST CERTI NOR, COC IR: INSPEC	ITTED TO CUST :: PLIER, C: MAIN IA), N:NTPC P: ION / REVIEW C FICATE, TC: TE : CERTIFICATE TION REPORT,	PERFORM PERFORM OF RECORD ST CERTIF OF	W: DS, TICATE,	PREPAI	RED BY	REVI	EWED	ВУ			APPROVED BY

बीए	च ई एल			MANUFAC	TURING Q	UALI	TY PLAN		PROJE	CT:				
R	Manufacturer Name and Address:				ITEM: AGITATORS			PACKAGE: FGD PACKAGE						
						QP N	<b>0:</b> FGD:704, RI	EV:00	CUST MAIN (	-	RAC	ΓΩR·	RHFI	
Main o	contractor					DT: 26	6.10.2020 Pa	age 4 of 4	1000	00111	11110	011.	D11L1	-
SL.	COMPONENT	CHARATERISTICS	CLASS	TYPE OF	QUATUN	1 OF	REFERENCE	ACCEPTANCE	FORMA	Γ	A	GEN(	CY	REMARKS
NO.	OPERATION			CHECK	CHEC	K	DOCUMENT	NORMS	OF REC	ORD	M	$\circ$	N	
					M	C/N								
1	2	3	4	5	6		7	8	9	D*		10		11

### Notes:

- 1. This QP is applicable for Mandatory spare also.
- 2. All other minor items, which are not cover under this QP, shall be manufactured inspected as per OEM (Original equipment Manufacturer)/BHEL standard practice and relevant standard. Relevant TC/COC will be submitted for the same.

	<b>LEGEND:</b> * RECORDS, INDENTIFIED WITH "TICK" ( $$ ) UNDER			
	COLUMN 'D'SHALL BE SUBMITTED TO CUSTOMER AS A 'QA'			
	DOCUMENTATION PACKAGE.			
	M: MANUFACTURE/SUB SUPPLIER, C: MAIN			
	CONTRACTOR(BHEL/BHEL AIA), N:NTPC P: PERFORM W:			
	WITNESS AND V: VERIFICATION / REVIEW OF RECORDS,			
	MTC: MATERIAL TEST CERTIFICATE, TC: TEST CERTIFICATE,			
	MA: MAJOR, MI:MINOR, COC: CERTIFICATE OF			
MANUFACTURER SIGN & STAMP	CONFORMANCE, IR: INSPECTION REPORT, TR: TEST REPORT	PREPARED BY	reviewed by	APPROVED BY
	AIA: AUTHORISED INSPECTION AGENCY.			

	Annexure Q	
	Indent No: Enquiry no:	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
SI.No	BHEL / Customer Requirements	## Specific confirmations by the manufacturer (Acceptable/Not acceptable)
	Quality Plan Requirement: (If SQP is not given & Vendor QP applicable)	
	(i) MQP (Manufacturing Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Our SQP/Typical MQP/ MQP Format is attached for guidance & use.	
	(ii) MQP shall invariably cover w.r.t Inward inspection including on Raw material Procurement, In process and Final inspection in elaborated way/details.	
	(iii) Bidder shall also to give specific confirmation that on need basis, their competent officials shall visit to BHEL / customer for finalization of Quality plan including test procedure/methodology during preaward / post award approval / detailed engineering in the event of an order.	
	(iv) No deviation on BHEL/Customer approved MQP/ SQP (In case BHEL SQP is provided) is acceptable.	
1	(v) Bidder shall agree to submit all cross referred documents other than codes/standards to BHEL/Customer/Consultant.	
	Important Notes shall be included in MQP:  (a) Latest revision of Standard's & Specification shall apply. Only International Standards are applicable.  (b) Materials shall be procured in compliance to Functional Technical Specification.  (c) Inspection shall be in compliance with Approved Quality Control Procedure for the Product.  (d) NDT shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME standard.  (e) Gauges and measuring Instruments, with valid calibration only shall be used.  (f) Cleaning and Painting of products shall be carried out as per Approved Painting Schedule.  (g) Finished Products shall be packed to comply with Approved Packing Schedule.  (h) Welding shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME standard.	
2	Domestic / Inland Inspection will be carried out by BHEL/BHEL appointed Third Party Inspection Agency (TPIA) / Customer/Customer Appointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc. (as applicable).	
3	Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Foreign Sources:  (1) Any one of the following Third Party Inspection Agency (TPIA) shall be appointed by the bidder and same shall be furnished by the bidder in techno commercial bid itself.  (2) The details of TPIA with contact details like Name of the official, Phone no, Email id shall also to be submitted during pre/post award. However cost for such inspection agency shall be borne by the bidder only. Inspection charges for such inspection agency shall be indicated separately so that if BHEL/Customer is undertaking the inspection by on their own , then these charges are non claimable by the bidder.  List of TPIA  1.M/s Bureau Veritas  2.M/s TUV-Nord  3.M/s TUV-SUD  4.M/s TUV Rheinland  5.M/s Lloyds Register  6.M/s SGS  7.M/s Germanischer Lloyds  8.M/s QUEST  9.M/s Certification Engineers International  10.M/s Intertek  11.M/s IR Class Systems and Solutions  12.M/s DNV  13. M/s Fichtner  14. M/s ABS Inspection Services	

Sl.No	BHEL / Customer Requirements	## Specific confirmations by the manufacturer (Acceptable/Not acceptable)
4	Stage Inspection during manufacturing Process: Stage Inspection during manufacturing shall be carried out as per approved quality plan and all necessary documents shall be provided for review, verification and clearance for further processing. This inspection call shall be given well in advance (at least 2 weeks before) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes.	
5	Inspection before despatch for domestic supplier: Inspection before despatch at supplier's works shall be carried out by BHEL appointed Inspection agency (as in SI no. 2). Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet.	
6	Inspection at Foreign Source/Supplier:  (a) As in sl no: 3. shall be ensured without fail  (b) No material / items shall be despatched without getting the written communication from BHEL / Customer inspection carried out by Bidder appointed Third Party Inspection Agency (As per Sl no.3) / Customer/Customer Appointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc. (As applicable).  Inspection before despatch for Foreign supplier: Inspection before despatch at supplier's works shall be carried out by bidder appointed inspection agencies having international presence at vendors and or vendor's sub vendor works. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet by TPIA mentioned in Sl no: 03 at supplier's cost.	
7	Painting shall be done strictly as per BHEL/Customer approved painting schedule / scheme only. Paint Thickness / Paint shade shall be ensured as per BHEL / Customer approved painting schedule / specification / data sheet etc. No deviation is acceptable unless otherwise accepted by BHEL/Customer in writing. Any conflict if any among BHEL / Customer approved painting schedule / Spec / data sheet etc. shall be brought to the notice of BHEL well in advance before proceeding including the BOI being procured for assy / skid like motors etc.	
8	Specific conformation for document package in the event of an order (2 Hard copies & soft copy in PDF file) is to be given containing the following with proper linkages (i) Index Sheet (ii) MQP/RQP/Endorsement Sheet (As applicable) (iii) TCs identified by BHEL/ Customer for record for "CHP" / "W" and Verification portion ("V") as given in approved QP. (iv) Final inspection report + TC including Chemical + Mechanical + HT + NDT etc. (v) Third party Inspection report + TC (vi) Customer CHP/ MDCC (vii) Type test / Performance Test reports conducted (viii) Type test / Performance Test approval/ clearance obtained from BHEL/Customer (ix) BOM with As Build Drgs with actual make / rating used with BHEL/customer approved drawings.	
9	Packing / Seaworthy Packing shall be as per BHEL Packing schedule / approved drg / sketch. This shall be ensured to take care transit / handling / transhipment in Road / Sea / Air. Photographs are to be submitted for BHEL review before despatching the material as per contract conditions.	
10	Outsourcing of test facilities: Bidder shall ensure all the testing facilities in house. However If any of the test facilities are not available with successful bidder, then bidder shall ensure the same at NABL accredited third party lab / Govt / Govt Lab for major testing such as NDT, Electrical & Mechanical testing.	
11	Important Note: No deviation on the above requirement 01 to 10 is acceptable with respect to Quality Requirement and those offers not meeting these specific customer requirement is liable for rejection and hence the bidder shall submit all the required documentary evidences in the offer itself.	
12	## Necessarily to be filled up by the bidder at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirement being customer specific requirement.	
•	VENDOR SIGN AND STAMP:	Vendor Name & Address:

	Annexure Q	
	Indent No: Enquiry no:	## Specific confirmations by the
Sl.No	BHEL / Customer Requirements	manufacturer (Acceptable/Not acceptable)
	Quality Plan Requirement: (If SQP is not given & Vendor QP applicable)	
	(i) MQP (Manufacturing Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Our SQP/Typical MQP/ MQP Format is attached for guidance & use.	
	(ii) MQP shall invariably cover w.r.t Inward inspection including on Raw material Procurement, In process and Final inspection in elaborated way/details.	
	(iii) Bidder shall also to give specific confirmation that on need basis, their competent officials shall visit to BHEL / customer for finalization of Quality plan including test procedure/methodology during preaward / post award approval / detailed engineering in the event of an order.	
	(iv) No deviation on BHEL/Customer approved MQP/ SQP (In case BHEL SQP is provided) is acceptable.	
1	(v) Bidder shall agree to submit all cross referred documents other than codes/standards to BHEL/Customer/Consultant.	
	Important Notes shall be included in MQP:  (a) Latest revision of Standard's & Specification shall apply. Only International Standards are applicable.  (b) Materials shall be procured in compliance to Functional Technical Specification.  (c) Inspection shall be in compliance with Approved Quality Control Procedure for the Product.  (d) NDT shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME standard.  (e) Gauges and measuring Instruments, with valid calibration only shall be used.  (f) Cleaning and Painting of products shall be carried out as per Approved Painting Schedule.  (g) Finished Products shall be packed to comply with Approved Packing Schedule.  (h) Welding shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME standard.	
2	Domestic / Inland Inspection will be carried out by BHEL/BHEL appointed Third Party Inspection Agency (TPIA) / Customer/Customer Appointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc. (as applicable).	
3	Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Foreign Sources:  (1) Any one of the following Third Party Inspection Agency (TPIA) shall be appointed by the bidder and same shall be furnished by the bidder in techno commercial bid itself.  (2) The details of TPIA with contact details like Name of the official, Phone no, Email id shall also to be submitted during pre/post award. However cost for such inspection agency shall be borne by the bidder only. Inspection charges for such inspection agency shall be indicated separately so that if BHEL/Customer is undertaking the inspection by on their own , then these charges are non claimable by the bidder.  List of TPIA  1.M/s Bureau Veritas  2.M/s TUV-Nord  3.M/s TUV-SUD  4.M/s TUV Rheinland  5.M/s Lloyds Register  6.M/s SGS  7.M/s Germanischer Lloyds  8.M/s QUEST  9.M/s Certification Engineers International  10.M/s Intertek  11.M/s IR Class Systems and Solutions  12.M/s DNV  13. M/s Fichtner  14. M/s ABS Inspection Services	

Sl.No	BHEL / Customer Requirements	## Specific confirmations by the manufacturer (Acceptable/Not acceptable)
4	Stage Inspection during manufacturing Process: Stage Inspection during manufacturing shall be carried out as per approved quality plan and all necessary documents shall be provided for review, verification and clearance for further processing. This inspection call shall be given well in advance (at least 2 weeks before) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes.	
5	Inspection before despatch for domestic supplier: Inspection before despatch at supplier's works shall be carried out by BHEL appointed Inspection agency (as in SI no. 2). Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet.	
6	Inspection at Foreign Source/Supplier:  (a) As in sl no: 3. shall be ensured without fail  (b) No material / items shall be despatched without getting the written communication from BHEL / Customer inspection carried out by Bidder appointed Third Party Inspection Agency (As per Sl no.3) / Customer/Customer Appointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc. (As applicable).  Inspection before despatch for Foreign supplier: Inspection before despatch at supplier's works shall be carried out by bidder appointed inspection agencies having international presence at vendors and or vendor's sub vendor works. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet by TPIA mentioned in Sl no: 03 at supplier's cost.	
7	Painting shall be done strictly as per BHEL/Customer approved painting schedule / scheme only. Paint Thickness / Paint shade shall be ensured as per BHEL / Customer approved painting schedule / specification / data sheet etc. No deviation is acceptable unless otherwise accepted by BHEL/Customer in writing. Any conflict if any among BHEL / Customer approved painting schedule / Spec / data sheet etc. shall be brought to the notice of BHEL well in advance before proceeding including the BOI being procured for assy / skid like motors etc.	
8	Specific conformation for document package in the event of an order (2 Hard copies & soft copy in PDF file) is to be given containing the following with proper linkages (i) Index Sheet (ii) MQP/RQP/Endorsement Sheet (As applicable) (iii) TCs identified by BHEL/ Customer for record for "CHP" / "W" and Verification portion ("V") as given in approved QP. (iv) Final inspection report + TC including Chemical + Mechanical + HT + NDT etc. (v) Third party Inspection report + TC (vi) Customer CHP/ MDCC (vii) Type test / Performance Test reports conducted (viii) Type test / Performance Test approval/ clearance obtained from BHEL/Customer (ix) BOM with As Build Drgs with actual make / rating used with BHEL/customer approved drawings.	
9	Packing / Seaworthy Packing shall be as per BHEL Packing schedule / approved drg / sketch. This shall be ensured to take care transit / handling / transhipment in Road / Sea / Air. Photographs are to be submitted for BHEL review before despatching the material as per contract conditions.	
10	Outsourcing of test facilities: Bidder shall ensure all the testing facilities in house. However If any of the test facilities are not available with successful bidder, then bidder shall ensure the same at NABL accredited third party lab / Govt / Govt Lab for major testing such as NDT, Electrical & Mechanical testing.	
11	Important Note: No deviation on the above requirement 01 to 10 is acceptable with respect to Quality Requirement and those offers not meeting these specific customer requirement is liable for rejection and hence the bidder shall submit all the required documentary evidences in the offer itself.	
12	## Necessarily to be filled up by the bidder at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirement being customer specific requirement.	
	VENDOR SIGN AND STAMP:	Vendor Name & Address:

## Details of BOI's/ Sub Systems with respect to Main Items

Sl No.	Item/ Sub system Name	Quantity	Supplier Name	Place of Manufacturing
OEM (OR	IGINAL EQUIPMENT MANUFACT	'URER) SEAL A	AND SIGN.	

## W.r.t FOREIGN OEM VENDORS ONLY

SI	Description & Quality Requirements	Specific confirmation by
no		the vendor
		(Confirmed/Not
		Confirmed)
01	OEM vendor shall meet all the requirements as in	
	Annexure-I and also OEM Vendor shall endorse	
	(Signature and Stamp in all the pages) in attached	
	CONTRACT QUALITY REQUIREMENTS (CQR) for LT	
	MOTORS(IE3) Up to 200KW used in Agitators (DOC.NO:	
	DOC.NO: BAP/QR/G208 to G210, G509 to G511/NTPC	
	Ramagundam/LTM/ Agitators: 002 dt 11.04.2022) and send	
	us the same to follow / ensure all the requirements in	
	the event of an order.	
02	OEM vendor shall ensure Credentials of design and	
	Manufacturing capabilities w.r.t. LT Motors by their LT	
	Motor manufacture.	
03	OEM Supplier shall submit other details like that they are	
	already approved vendor by Ultimate Customer – NTPC	
	(National Thermal Power Corporation	
	Limited) specifically for proposed supply of LT Motor	
	against BHEL/Ranipet. The details of PO already	
	executed preferably through various other BHEL units for	
	any NTPC projects with CHP/MDCC including technical	
	catalogue, PO received so far for similar supply of LT	
	Motors may also be submitted.	
04	Accordingly OEM vendor shall be suitably informed that	
	If Ultimate Customer – NTPC (National Thermal Power	
	Corporation Limited) vendor approvals is not there /not	
	available, then their offer will not be considered for	
	further processing / ordering for the supply of LT Motors	
<u> </u>	to take care of overall equipment/system requirements.	
05	No material shall be dispatched without BHEL/ Ultimate	
	Customer – NTPC (National Thermal Power	
	Corporation Limited) inspection - CHP/MDCC	
	clearances.	

## Annexure-II CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

NTPC FC-N PACI MAII BHE SUB ADD	JECT: NTPC Ramagu oject (3 X 200 MW + 3 EL W.O no: G208-G21 CONTRACT NO: CS-3120 IOA- 6845 KAGE: FGD PACKAN N CONTRACTOR: L - RANIPET CONTRACTOR (OEI RESS: be filled by OEM	3 X 500 MW) 0 & G509-511) 0/3130-109(3)-9- GE M) &	CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	DOC.NO: BAP/QR/G208 to G210, G509 to G511/NTPC Ramagundam/ LTM/ Agitators: 002 Rev NO.: 00 PAGE: Page 1 of 6 DATE: 11.04.2022	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:
SI.	DESCRIPTION	nal Thermal Power	##Specific		
NO.		irements	confirmations by the		
			VIDEO VIDA VIDA VIDA	A0047441	vendor
01	Type Test	A. Vendor sh	ITEM: LT Motors(IE3) - Up to nall submit the type test reports of all		
	Requirements	SL NO: 0 ultimate 0 should be those prop have been witnessed (or) Ultim	on the first period of the first of the first of the formula of the first of the f	10 years from the data of 1.08.2018. These reports ical/similar LT Motors to y and test (s) either should ory (or) should have been inted Inspection Agency) nal Power Corporation) at	
		report as pare not facceptable vendor she ither at rabbin the / BHEL / Ultimate C.	if vendor is not able to submit the signer above condition in 01 (A) (or) in the found to be meeting the specification to BHEL/BHEL AIA/ Ultimate C all conduct all these tests at no additional eputed third party lab (or) Government presence of BHEL AIA (BHEL Apport/Ultimate client NTPC and submit and Customer – NTPC review & approval.	ne case of type test reports from requirement and not sustomer – NTPC, the sonal cost if any to BHEL nt approved lab (or) own binted Inspection Agency) the reports for BHEL /	
		Appointed line with	I Inspection Agency) / BHEL / Ultima NTPC approved data sheet / BOM Arrangement) Drawing etc.	ate client NTPC is must in	

Receipt No: 782364/2022/BAP-QA\_MECH

### **Annexure-II** CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

II Pr (BHI NTPC FC-N PAC MAI BHE SUB ADD	JECT: NTPC Ramago oject (3 X 200 MW + 3 EL W.O no: G208-G21 CONTRACT NO: CS-3120 NOA- 6845 KAGE: FGD PACKA N CONTRACTOR: L - RANIPET CONTRACTOR (OE RESS: be filled by OEM	3 X 500 MW) 0 & G509-511) 0/3130-109(3)-9- GE M) &	CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:	
SI.	DESCRIPTION	BHEL a	nd Ultimate Customer - NTPC (Nation	nal Thermal Power	##Specific
NO.			Corporation)., India Quality Requi	irements	confirmations by the
			ITEM. ITM (40m/IE2) II- 4-	2001/33/	vendor
01	Type Test Requirement(Contd)	for above Standard)  i. Meas (if ap ii. No lo speed iii. Open moto iv. Full l v. Temp vi. Mom vii. High viii. Test ix. Test be lir maxi x. Over xi. Degra xii. Type proof E. The TCs/	circuit voltage ratio of wound rotor		
02	Quality Plan Requirement	b. If any of I approved same is apobtaining	unufacturing Quality Plan) is applicable dingly Actual LT Motor Manufacture ustomer – NTPC format for review and Customer - NTPC.  T Motor manufacture is having, ultim MQP (Manufacturing Quality Plan) and oplicable for these LT Motor for insperultimate customer NTPC formal approach endorsement sheet approval route	shall submit the MQP in ind approval by BHEL / nate customer NTPC and having validity, the ction purposes subject to oval in the event of an	

## Annexure-II CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

NTPC FC-N PAC MAI BHE SUB ADD	JECT: NTPC Ramagu oject (3 X 200 MW + 3 EL W.O no: G208-G21 CONTRACT NO: CS-3120 OA- 6845 KAGE: FGD PACKAN N CONTRACTOR: L - RANIPET CONTRACTOR (OEI RESS: be filled by OEM	3 X 500 MW) 0 & G509-511) 0/3130-109(3)-9- GE M) &	CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	DOC.NO: BAP/QR/G208 to G210, G509 to G511/NTPC Ramagundam/ LTM/ Agitators: 002 Rev NO.: 00 PAGE: Page 3 of 6 DATE: 11.04.2022	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:
SI. NO.	DESCRIPTION	##Specific confirmations by the vendor			
		200KW	vendoi		
02	Quality Plan Requirement	pupplier shall submit the h ultimate customer nt of a Purchase Order CPC review and approval.			
		should su review & e. Typical Ir	abmit a fresh MQP to BHEL/NTPO approval. (copy attached).  Indicative MQP is attached for inf and out of final and binding on BHEL / Ultima		
03	Inspection Methodology to be adopted at Actual LT Motor Manufacture	a. All LT M inspection MQP &	Motors are to be inspected by BHEL and Agency) at LT Motor manufacture approved data sheet/drg/spec/ as per andard) - BIS 325 / IEC 60034 e	AIA (BHEL authorized e works as per approved relevant BIS (Bureau of	
	works by OEM vendor	L AIA (BHEL authorized e works as per approved relevant BIS (Bureau of tc by BHEL / Ultimate			
		NTPC with Degree of	A (BHEL authorized inspection Ager Ill also ensure LT Motor type tests Protection Test Reports & acceptance data sheet / drg / spec / as per releva - BIS 325 / IEC 60034 etc.		
		Customer works and reports in approved	IA (BHEL authorized inspection -NTPC to witness / perform inspect d submit all the inspection documents cluding Degree of Protection Test Re MQP & approved data sheet / drg / s f Indian Standard) - BIS 325 / IEC 6	ion at LT Motor Supplier s and routine & Type test ports (IP 55) as per spec / as per relevant BIS	

### Annexure-II CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

CONTRACT QUALITY PROJECT: NTPC Ramagundam Stage I & ##Enquiry No: DOC.NO: II Project (3 X 200 MW + 3 X 500 MW) REQUIREMENTS (CQR) for BAP/QR/G208 (BHEL W.O no: G208-G210 & G509-511) LT MOTORS(IE3) - Up to 200KW used ## OEM Supplier Name & G210, G509 to G511/NTPC in Agitators Address: Ramagundam/ NTPC CONTRACT NO: CS-3120/3130-109(3)-9-Agitators: 002 FC-NOA- 6845 ##Offer reference: NTPC Ramagundam Stage I & II Rev NO.: 00 Project (3 X 200 MW + 3 X 500 PACKAGE: FGD PACKAGE PAGE: Page 4 of 6 ##Date: MW) DATE: 11.04.2022 MAIN CONTRACTOR: (BHEL W.O no: G208-G210 & G509-**BHEL - RANIPET Contact Official Name:** SUB CONTRACTOR (OEM) & 511) Mobile no: ADDRESS: Email id: (To be filled by OEM VENDOR) SI. **DESCRIPTION BHEL and Ultimate Customer - NTPC (National Thermal Power** ##Specific NΩ Corporation)., India Quality Requirements confirmations by the vendor ITEM: LT Motors(IE3) - Up to 200KW LT Motors up to 30KW - Inspection Categorization: III Inspection

#### Methodology to be adopted at Actual LT Motor Manufacture works by OEM vendor...contd

All Routine tests on LT Motors are to be ensured by OEM Vendor & same are to be inspected & witnessed by OEM Vendor / BHEL / BHEL AIA (BHEL authorized inspection Agency) at LT Motor manufacture works as per approved MQP & approved data sheet /drg / spec/ as per relevant BIS (Bureau of Indian Standard) - BIS 325 / IEC 60034 etc and all the Routine Test Reports with Inspection report (IR) to be submitted for BHEL/Ultimate Customer – NTPC for review and to obtain inspection and dispatch clearance.

LT Motor Manufacturer has to issue COC (Certificate of Conformance) states that the above motor/ motors was manufactured taking care of Customer specific requirements regarding ambient temp., voltage and frequency variation, hot starts, pull out torque, starting KVA/KW, temp. rise, distance between centre of stud and gland plate, space heater and tested in accordance with approved drawing/data.

#### LT Motors (30KW to 50KW) - Inspection Categorization: II

All Routine Tests on LT Motors are to be ensured by OEM vendor & same are to be inspected & witnessed by BHEL / BHEL AIA (BHEL authorized inspection Agency) at LT Motor manufacture works including review of Type Test Reports and Degree of Protection Test Reports (IP 55) as per approved MQP & approved data sheet/drg/spec / as per relevant BIS (Bureau of Indian Standard) - BIS 325 / IEC 60034 etc and all the Routine Test Reports with Inspection report (IR) to be submitted for BHEL/Ultimate Customer - NTPC for review and to obtain inspection and dispatch clearance.

### Above 50KW and up to 200KW - Inspection Categorization: I

All Routine & Type Tests if any on LT Motors are to be ensured by OEM Vendor at Actual LT Motor Manufacture Works and same shall be offered to BHEL/ BHEL AIA (BHEL authorized inspection Agency) / Ultimate Customer-NTPC for inspection & witnessing including review of Degree of Protection Test Reports as per approved MQP /RQP (Reference Quality Plan with endorsement sheet approved) / approved data sheet / drg / spec / as per relevant BIS (Bureau of Indian Standard) - BIS 325 / IEC 60034 etc and all the Routine Test Reports with Inspection report (IR) to be submitted for BHEL/Ultimate Customer - NTPC review and to obtain inspection and dispatch clearance.

## Annexure-II CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

II Pr (BHI NTPC FC-N PAC MAI BHE SUB ADD	JECT: NTPC Ramagu oject (3 X 200 MW + 3 EL W.O no: G208-G21 CONTRACT NO: CS-3120 NOA- 6845 KAGE: FGD PACKAN N CONTRACTOR: L - RANIPET CONTRACTOR (OEI RESS: be filled by OEM	X 500 MW) 0 & G509-511) 0/3130-109(3)-9- GE M) &	CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:	
SI. NO.	DESCRIPTION	BHEL a	nd Ultimate Customer - NTPC (Nation Corporation)., India Quality Requ		##Specific confirmations by the vendor
	<u> </u>	1	ITEM: LT Motors(IE3) - Up to	200KW	
03	Inspection Methodology to be adopted at Actual LT Motor Manufacture works by OEM vendorcontd	LT Motor Mainspection Agand any cost including for works (or) at NTPC are in the As such No exorder and also No material	s / tests /review of documents / ins nufacture by OEM /BHEL / BHEL / gency) / Ultimate Customer-NTPC implication arising out of due to condu vitnessing of any of the tests at Actual third party etc by BHEL / BHEL AIA ne scope of OEM Supplier only. tra cost if any will be admissible and during execution of the contract. shall be dispatched without Bit tomer – NTPC Inspection and disp	pection & witnessing at AIA (BHEL authorized are under OEM scope acting checks / tests I LT Motor Manufacture / Ultimate Customer – paid in the event of an HEL / BHEL AIA and	
04	Painting Requirements	coats if any are	rement like paint shade and painting the to be ensured by the OEM vendor for the Customer -NTPC approved data		
05	Packing	Packing shall	be as per Specification / Drg. / Data s to avoid any transit & handling dama		
06	For Inspection call	Motor Manu inspection/ I witnessing if (QC-Proc)., I and Mr Kova Email id: kov immediate re	all by OEM Vendor for LT Motor facture works to be raised for Ultimate Customer – NTPC in any to be ensured / addressed to Mobile no: +91 9443006303., Emarathanan., DM (QC-Proc)., Mobile rak@bhel.in including for inspecting sponse / resolution.	BHEL/BHEL AIA acluding for type test Mr R Kesavan., DGM ail id: kesavan@bhel.in e no: +91 8903502628., ion related activities for	
07	Document Package / Dossier	soft copies in PI (i) Index (ii) MQP (iii) TCs i (Custr as giv (iv) Final (v) BHEI (vi) Ultim CHP ( Cleara (vii) Type	nation for Document Package in the event Df file) is to be given containing the follow. Sheet  /RQP/Endorsement sheet dentified by BHEL/NTPC for record for "omer Hold Point) Verification & Witness en in MQP / RQP / MQP (as applicable).  Inspection Report + TC L AIA (BHEL Appointed Inspection Ager a report + TC Late customer NTPC (National Thermal Pocustomer Hold Point) / MDCC (Material ance Certificate)  test reports conducted/submitted with applicated and BOM with actual makers.	cCHP" "W" portion  acy) / ower Corporation) Dispatch oroval with	

## Annexure-II CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW

## (For FOREIGN (OUTSIDE INDIA) OEM VENDOR ONLY)

NTPC FC-N PAC MAI BHE SUB ADD	oject EL W CONT NOA- N CO L - R CON RESS	(3 X 200) O no: G2 RACT NO: 6845 E: FGD H ONTRACT ANIPET TRACT(S:	MW + 3 208-G21 CS-312( PACKA) FOR:		CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW in Agitators  NTPC Ramagundam Stage I & Project (3 X 200 MW + 3 X 50 MW) (BHEL W.O no: G208-G210 & G5 511)	: II )0	Ramagua Agitators Rev NO. PAGE:	/G208 509 to G511/N ndam/ I s: 002	to NTPC LTM/	##Offer	Supplier Name & : reference:  Official Name: no:
SI. NO.	DI	ESCRIPT	ION	BHEL a	nd Ultimate Customer - NTPC (N Corporation)., India Quality			nal Power			##Specific rmations by the
					ITEM: LT Motors(IE3) -	Un to	200KW				vendor
				Custo	mer approved drgs.	<b>υρι</b> υ.	-0011 11				
08	Mo	otor det	ails	Inspection Date Inspection Date Inspection Cate COC by Main of inspection as in Any cost implicate tests at Acte Customer – NT be admissible in	SHEL/BHEL AIA and also by Ulti approved and as in sl no:03 egorization: II  Main contractor (BHEL) / BHEL A  PC approved MQP/RQP & based egorization: III  contractor (BHEL) to Ultimate Cu	AIA bas l on ins istomer includin by BHE r only a g execu	sed on U pection a r - NTPC ng for wi EL / BHE nd no ex ution of th	Itimate as in sl no:03 C based on tnessing of an EL AIA / Ultita cost if any ne contract.	ny of imate		
	, 0	S. No		ish following ivi	Agitators	us up	эрпсион	LT Motor	quirj.		]
							ating	Quantity	M	ake	
		1	Abso	rber Tank Agita	tor Motor	(II)	n kW)	(in nos)			-
		2			ank Agitator Motor						1
		3	Filtra	te Water Tank A	Agitator Motor						]
		4		, , ,	clone Feed Tank Agitator Motor						
		5		e Water Tank A					<u> </u>		-
		7			rage Tank Agitator Motor						-
		7 Primary Hydrocyclo 8 Absorber Area Drain			Sump Agitator Motor	UI UI				1	
		9									1
		10		Gypsum Area Drain Sump Agitator Motor Limestone Area Drain Sump Agitator Motor							1
		11			ed in the system (if any)						

**OEM Supplier signature with seal** 

##Necessarily to be filled up & submitted by the OEM vendor at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirements against LT Motors being BHEL/ ultimate customer – NTPC (National Thermal Power Corporation Limited) specific requirements.

## $\begin{array}{c} \textbf{ENDORSEMENT SHEET FOR } \textbf{QP} \\ \textbf{REFERENCE} / \textit{STANDARD} / \textbf{FIELD QUALITY PLAN } (\textbf{RQP} / \textbf{SQP} / \textbf{RFQP} / \textbf{SPQP}) \end{array}$

TO BE FILLED IN BY SUPPLIER AT T	IME OF SUBMISSION	णविष्य To be filled in by NTPC
PROJECT NAME	NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)	2REVIEW & ENDORSEMENT BY NTPC PROJECT SPECIFIC OP NUMBER ALLOTTED
CONTRACT NO.:	CS-3120/3130-109(3)-9-FC-COA- 6845	Thousand the first that the first th
MAIN SUPPLIER	M/S.BHEL, RANIPET , TAMIL NADU., INDIA	QP NO:
MANUFACTURER WORKS & ADDRESS	(TO BE FILLED BY OEM/LT MOTOR SUPPLIER	REV. NO.: 00 DT:
ITEM /EQUIPMENT / SYSTEM/ SUB-SYSTEM DETAILS i.e. MODEL TYPE/SIZE/RATING etc.	LT MOTOR(IE3)	
APPROVED QP NO.; RQP/SQP/RFQP/SFQP	(TO BE FILLED BY OEM / LT MOTOR SUPPLIER	
Confirmation by Main Supplier (TICK WHICHE	VER APPLICABLE)	(TICK APPLICABLE)
I. That the item/ component is identical to that col	nsidered for SQP approval. $$ ponent with respect to that considered for MQP/RQP/SQP approval, however	The MQP/RQP/SQP is endorsed for this project without any change
the same do not affect the contents of MQP/RQP/		
III. That there are minor changes in the item/con the same affect the MQP/RQP/SQP slightly, as inc	nponent with respect to that considered for MQP/RQP/SQP approval, however licated below / in attached sheet.	The SQP is endorsed for this project with changes as indicated.
		DISTRIBUTION OF ENDORSEMENT OF A) MQP/RQP/SQP: 1. MAIN SUPPLIER (WITH A COPY OF MQP/RQP/SQP) 2. MANUFACTURER 3. RIO 4. CQA-SPL 5. CQA-O/C B) RFQP/SFQP: 1. MAIN SUPPLIER (with a copy of MQP/RQP/SQP 2. MANUFACTURER 3. NTPC FQA (with a copy of MQP/RQP/SQP 4. NTPC Erection (with a copy of MQP/RQP/SQP 5. CQA-SPL 6. CQA-O/C
SIGN.: (Main Supplier) DATE:	TO BE FILLED BY OEM / LT MOTOR SUPPLIER  SIGN.: (Manufacturer ) DATE:	NTPC (Reviewed /Approved by/ Date & Seal)

		OEM SUP	PLIER		MANU	FACTURING QL	JALITY PLAN FO	R			IDAM :F	GD AGITATORS:001
		To be fille	nd hv	١.,			//	••	REV:NO:0	0		
	DUEL		•	L	INUIUN	( Up to 10 200	KW) - FGD Appli	callon	DATE: 11.0	04.2022		
BAP	BHEL P/ RANIPET /	OEM Sup	plier						Page :			
TA	MIL NADU											
	INDIA	Manufac	ture									
		To be filled b										
		Supplie										
S1.No.	COMPONET/A	CHARACTE-	CLASS	TYPE OF		REFERENCE DOCUMENT	ACCEPTANCE STANDARD	FORMAT OF REC		AGENCY		REMARKS
	SSEMBLY/OP ERATION/TES	RISTIC		CHECK	CHECK				D	M	BHEL/ BHEL	
	TS										AIA	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.		12.
INCO	MING INSPCE											
1.1	Enamelled round copper conductor(Dual	1.Overall diameter	Major	Mechanical	1 sample/lot	IS 13730 1993 Part 13 / IEC 60317-0-1-2008 (As applicable)	IEC 60317-0-1 2008	Plant format		Р	V	
	coated)MM	2.Bare conductor diameter	Major	Mechanical	1 sample/lot	BHEL / NTPC Spec & Apprd Datasheet	BHEL / NTPC Spec & Apprd Datasheet	Plant format		P	V	
		3.BDV test	Major	Electrical	1 sample/lot	do	do	Plant format		P	V	
		4.Elongation	Major	Mechanical	1 sample/lot	do	do	Plant format		P	٧	
		5.Continuity (insulation)	Major	Electrical	1 sample/lot	do	do	Insp report/ Supplier TC		P	V	
		6.Tan Delta (If applicable)	Major	Electrical	1 sample/lot	do	do	Insp report/ Supplier TC		P	٧	EC gr purity: -99.6%
1.2	Aluminum Ingots	1.Chemical composition	Major	Chemical	1 sample/lot	do	do	Supplier Tc		P	٧	LO gi punty: 30.0%
1.3	FAN	1.Diameter (ID&OD)	Major	Mechanical	1 sample/lot	d0	do	Inspection Report		P	V	
1.4	Bearings (SKF OR FAG)	1.Type & Make	Major	Visual	100%	do	do	Inspection Record		P	V	
		2.Dimensions - ID,OD&width	Major	Mechanical	1 sample/lot	do	do	Inspection Record		Р	٧	
1.5	Terminal Block	1.Dimensions	Major	Mechanical	Plant std.	do	do	Inspection Report		Р	V	
		2.Proof voltage test	Major	Electrical	Plant std.	do	do	Inspection Report		P	٧	

		OEM SUP	PLIER		MΔNII	FACTURING OF	IALITY PLAN FO	R	MQP:E:LTI	M: RAMAGUN	DAM :F	GD AGITATORS:001	
		To be fille		1 ,.			,, <del>.</del>	••		REV:NO:00			
	BHEL		•	L	I WUTUR	( Up to 10 2001	KW) - FGD Appli	cation	DATE: 11.04.2022				
DA	P/ RANIPET /	OEM Sup	plier						Page :				
	AMIL NADU	LT MOT	OR										
	INDIA	Manufac	ture										
		To be filled b	oy OEM										
		Suppli	<u>er</u>										
S1.No	componet/a	CHARACTE-	CLASS	TYPE OF		REFERENCE DOCUMENT	ACCEPTANCE STANDARD	FORMAT OF REC		AGENCY		REMARKS	
	SSEMBLY/OP	RISTIC		CHECK	CHECK				D	M	BHEL/		
	ERATION/TES TS										BHEL		
_			4	-		7	0	0	40	- 44	AIA	40	
1.	2. ROCESS INSP	3.	4.	5.	6.	7.	8.	9.	10.	11.		12.	
2.1	Stator core	1.Core length dia	Major	Mechanical	100%	do	do	Inspection Record		P	٧		
		v	7					4					
		2.Core locking	Major	Visual	100%	do	do	Inspection Record		P	V		
		3.Rigidity of core	Major	Mechanical	100%	do	do	Inspection Record		Р	٧		
		o.r ligitally of core	iviajui	IVICUIAIIICAI	10070	u	- 40	iiispectioii i tecolu		1	*		
2.2	Die cast rotor	1.Core length	Major	Mechanical	100%	do	do	Inspection Record		P	٧		
		2.Blow holes	Maiar	Mechanical	100%	do	do	Inspection Record		Р	V		
		2.blow floles	Major	Mechanical	100%	00	00	inspection necord		r	٧		
2.3	Wound stator (if applicable)	1.Resistance	Major	Electrical	100%	do	do	Inspection Record		P	V		
		2.H.V.Test	Major	Electrical	100%	do	do	Inspection Record		Р	V		
		3.Insulation resisitance	Major	Electrical	100%	do	do	Inspection Record		P	٧		
2.4	Final Assembiy	1.Completeness	Major	Visual	100%	do	do	Inspection Record		P	V		
		2.Runout in case of flanged motors	Major	Mechanical	100%	do	do	Inspection Record		Р	V		
		3.Mounting dimensions	Major	Mechanical	100%	do	do	Inspection Record		Р	V		

		OEM SUP	PLIER		MANU	FACTURING QU	ALITY PLAN FO	R	MQP:E:LTN	1: RAMAGUN	DAM :FO	GD AGITATORS:001
		To be fille							REV:NO:00			
			•	L	MOTOR		KW) - FGD Applic	cation	DATE: 11.0	4.2022		
	BHEL	OEM Sup	plier						Page :			
	P/ RANIPET /											
TA	MIL NADU	<u>LT MOT</u>	<u> OR</u>									
	INDIA	<b>Manufac</b>	ture									
		To be filled b	y OEM									
		Supplie										
S1.No.	. COMPONET/A		CLASS	TYPE OF		REFERENCE DOCUMENT	ACCEPTANCE STANDARD	FORMAT OF REC		AGENCY		REMARKS
	SSEMBLY/OP ERATION/TES	RISTIC		CHECK	CHECK				D	M	BHEL/	
	TS										BHEL	
L.							-				AIA	
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.		12.
		N AND TESTING										
3.1		1.Resistance Measurement on winding & space heater	Major	Electrical		BHEL / NTPC Spec, GA Drawing & Apprd Datasheet and IS/IEC 60034 (As applicable)	BHEL / NTPC Spec, GA Drawing & Apprd Datasheet and IS/IEC 60034 (As applicable)	Inspection Record		P	W	
		2.HV Test	Maior	Electrical	100%	do	do	Inspection Record		Р	W	
		3.Phase sequence & direction of rotation	Major	Electrical	100%	do	do	Inspection Record		P	W	
		4.No load run test	Major	Electrical	100%	do	do	Inspection Record		Р	W	
		5. Vibration test	Major	Mechanical	100%	do	do	Inspection Record		P	W	
		6.Name plate recheck	Major	Visual	100%	do	do	Inspection Record		Р	W	
		7.Paint shade thickness & adhesion	Major	Visual & Measurement	100%	do	do	Inspection Record		P	W	
		8.Moutings & Overall dimensions	Major	Mechanical	100%	do	-d0-	Inspection Record		P	W	

		OEM SUPF	LIER		MΔNI	JFACTURING QL	ΙΔΙ ΙΤΥ ΡΙ ΔΝ ΕΛ	R	MQP:E:LTI	M: RAMAGUN	DAM :F	GD AGITATORS:001		
		To be fille		١.,			-		REV:NO:00					
			•	L	IMOIO	R ( Up to TO 200	KW) - FGD Appli	cation	DATE: 11.0	DATE: 11.04.2022				
	BHEL	OEM Sup	plier						Page :					
	P/RANIPET/													
T <i>A</i>	AMIL NADU	LT MOT	<u> </u>											
	INDIA	Manufact	ture											
		To be filled b	y OEM											
		Supplie												
S1.No	. COMPONET/A	CHARACTE-	CLASS	TYPE OF	QUANUTM O	F REFERENCE DOCUMENT	ACCEPTANCE STANDARD	FORMAT OF REC		AGENCY		REMARKS		
	SSEMBLY/OP ERATION/TES TS	RISTIC		CHECK	CHECK				D		BHEL/ BHEL Aia			
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	•	12.		
3.2	TYPE TESTS ###													
3.3	Preservation and Packing	1.Completeness	Major	Review	100%	do	do	Inspection Record		P	V			
		2.Motors covered with polythene sheets	Major	Visual	100%	do	do	Inspection Record		P	V			
		3.Packing	Major	Visual	100%	do	do	Inspection Record		P	V			

### TYPE TEST REQUIREMENTS FOR LT MOTOR INCLUDING DEGREE OF PROTECTION TEST REPORT (IP 55)

BHEL/BHEL AIA (Authorised Inspection Agency) shall review the Identical design type test report during including degree of Protection Test report (IP 55) for acceptance in line with BHEL/ Ultimate Customer - NTPC approved Data sheet/Drg/Spec for LT Motor rating up to 50KW and BHEL/Ultimate Customer NTPC approved type test report for LT Motor rating more than 50KW and up to 200KW. If not available for Similar / Identical Design of any of the LT Motor motor, then OEM / LT Motor Manufacture shall conduct all these type tests at Third party lab / Government Approved Lab / Own lab in presence of BHEL/BHEL AIA / without any cost implication to BHEL/Ultimate Customer - NTPC within reasonable time.

- 1. Measurement of Resistence of Stator
- 2. No Load test at Rated Voltage
- 3,. Pull out test
- 4.Temperature Rise Test
- 5.Momentary Excees Torque Torque Test
- 6.High Voltage Test
- 7.Test for Vibration Severity
- 8. Test for Noise Level Measurement
- 9. Over Speed Test
- 10. Degree of Protection TC (IP 55)

LEGEND: OEM = Orgional Equipement Supplier M = LT Motor Manufacture -

BHEL AIA = BHEL AUTHORISED INSPECTION AGENCY

**GA Drawing: General Arrangment Drawing** 

NTPC - NATIONAL THERMAL POWER CORPORATION (Ultimate Customer)

OEM SUPPLIER: (To be Filled up by OEM Supplier)
LT MOTOR Manufacture: (To be Filled up by OEM Supplier)

(T(	SEM SUPPLIER WITH OEM MFGR.'S LOGO D BE FILLED BY EM SUPPLIER)	NAME AN (TO BE FI	OR MANUFACTURER'S ID ADDRESS LLED BY OEM/ OR MANUFACTURE)	ITE TO 2 APP	M: LT M 200KW F LICATIO	OTOR(IE3 OR FGD ON M: FGD -		QP NO REV.N DATE:	0.: 00	LAN	500 MV (BHEL PACK NTPC CS-31 MAIN SUB C	PROJECT: NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511) PACKAGE: FGD PACKAGE  NTPC CONTRACT NO: CS-3120/3130-109(3)-9-FC-COA- 6845  MAIN CONTRACTOR: BHEL - RANIPET SUB CONTRACTOR (0EM) & ADDRESS: (TO BE FILLED BY OEM SUPPLIER)								
<mark>SL.</mark> NO	COMPONEN OPERATIO		CHARACTERIST	TICS	CLASS	TYPE OF CHECK	OF C	NTUM HECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS		FORMAT OF RECORD				A	AGENCY		REMARKS	
<u>1</u> .	<mark>2.</mark>		3 <mark>.</mark>		<mark>4</mark> .	<mark>5.</mark>	M	C/N 6.	<mark>7.</mark>	<mark>8.</mark>		<mark>9.</mark>	D*	M **	C * 1	N 0.	<mark>11.</mark>	-		
			LE	GEND:	* RECOR	DS, INDENTI	FIED WI	TH "TICK	"(√) SHALL BE		DOC. N	VO.:				REV	CAT			
OEM MANUFACTURER/ LT MOTOR SUPPLIER SUPPLIER SIGNATURE				SENTIALI M: OEM MAIN SU PERFORN	LY INCLUD MANUFAC PPLIER – B M W: WITN	ED BY SUPPL CTURER/LT M SHEL/BHEL AI	JER IN ( IOTOR S IA , N: VERIFI	(A DOCU UB-SUPP NTPC CATION.	MENTATION. LIER AS APPROPRIATE,	FOR NTPC USE	REVIE	WED B	BY	AI	PPROV	VED BY	APPROVAL SEAL			

FORMAT NO.: QS-01-QAI-P-09/F1-R1 1/1 ENGG. DIV./QA&I



## W.r.t INDIGENOUS OEM VENDORS ONLY

SI	Description & Quality Requirements	Specific confirmation
no		by the vendor
		(Confirmed/Not
		Confirmed)
01	OEM vendor shall meet all the requirements as in Annexure-I	
	and also OEM Vendor shall endorse (Signature and Stamp in all	
	the pages) in attached CONTRACT QUALITY REQUIREMENTS	
	(CQR) for LT MOTORS(IE3) Up to 200KW used	
	in Agitators (DOC.NO: BAP/QR/G208 to G210, G509 to	
	G511/NTPC Ramagundam/ LTM/ Agitators: 001 dt	
	11.04.2022) and send us the same to follow / ensure all the	
00	requirements in the event of an order.	
02	OEM vendor shall ensure Credentials of design and	
	Manufacturing capabilities w.r.t. LT Motors by their LT	
	Motor manufacture.	
03	OEM Supplier shall submit other details like that they are	
	already approved vendor by Ultimate Customer – NTPC	
	(National Thermal Power Corporation	
	Limited) specifically for proposed supply of LT Motor	
	against BHEL/Ranipet. The details of PO already executed	
	preferably through various other BHEL units for any NTPC	
	projects with CHP/MDCC including technical catalogue,	
	PO received so far for similar supply of LT Motors may also	
	be submitted.	
04	Accordingly OEM vendor shall be suitably informed that	
	If Ultimate Customer – NTPC (National Thermal Power	
	Corporation Limited) vendor approvals is not there /not	
	available, then their offer will not be considered for	
	further processing / ordering for the supply of LT Motors	
	to take care of overall equipment/system requirements.	
05	No material shall be dispatched without BHEL/ Ultimate	
	Customer – NTPC (National Thermal Power Corporation	
	<b>Limited)</b> inspection - CHP/MDCC clearances.	

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

PROJECT: NTPC Ramagundam Stage I & CONTRACT QUALITY ##Enquiry No: DOC.NO: II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511) REQUIREMENTS (COR) for BAP/OR/G208 to LT MOTORS(IE3) - Up to 200KW used ## OEM Supplier Name & G509 G210. to in Agitators Address: G511/NTPC NTPC CONTRACT NO: CS-3120/3130-109(3)-9-LTM/ Ramagundam/ FC-NOA- 6845 ##Offer reference: NTPC Ramagundam Stage I & II Agitators: 001 Project (3 X 200 MW + 3 X 500 PACKAGE: FGD PACKAGE Rev NO.: 00 ##Date: MW) MAIN CONTRACTOR: PAGE: Page 1 of 7 (BHEL W.O no: G208-G210 & G509-DATE: 11.04.2022 **BHEL - RANIPET Contact Official Name:** 511) SUB CONTRACTOR (OEM) & Mobile no: ADDRESS: Email id: (To be filled by OEM VENDOR) SI. **DESCRIPTION BHEL and Ultimate Customer - NTPC (National Thermal Power** ##Specific confirmations NO. Corporation)., India Quality Requirements by the vendor ITEM: LT Motors (IE3) Up to 200KW Vendor shall submit the type test reports of all the type tests as listed Type Test Requirements in SL NO: 01 (D) below and carried out within 10 years from the data of ultimate NTPC bid opening dt 01.08.2018. These reports should be for the test conducted on the identical/similar LT Motors to those proposed to be supplied under this enquiry and test (s) either should have been conducted at an independent laboratory (or) should have been witnessed by BHEL AIA (BHEL Appointed Inspection Agency) / BHEL (or) Ultimate client NTPC at respective LT Motor Manufacture of OEM vendor. B. However, if vendor is not able to submit the similar / identical type test report as per above condition (or) in the case of type test reports are not found to be meeting the specification requirement, the vendor shall conduct all the tests at no additional cost to BHEL either at third party lab (or) own lab in the presence of BHEL AIA (BHEL Appointed Inspection Agency) / BHEL /Ultimate client NTPC and submit the reports for review & approval. Type Test reports review and approval by BHEL AIA (BHEL Appointed Inspection Agency) / BHEL / Ultimate client NTPC is must in line with NTPC approved data sheet / BOM/GA Drawing etc.

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

PROJECT: NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)  NTPC CONTRACT NO: CS-3120/3130-109(3)-9-FC-NOA- 6845  PACKAGE: FGD PACKAGE MAIN CONTRACTOR: BHEL - RANIPET SUB CONTRACTOR (OEM) & ADDRESS:  (To be filled by OEM VENDOR)			CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	DOC.NO: BAP/QR/G208 to G210, G509 to G511/NTPC Ramagundam/ LTM/ Agitators: 001 Rev NO.: 00 PAGE: Page 2 of 7 DATE: 11.04.2022	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:
SI.	DESCRIPTION	BHEL and	Ultimate Customer - NTPC (Nationa	##Specific confirmations	
NO.			Corporation)., India Quality Require	by the vendor	
		I	ITEM: LT Motors (IE3) Up to	200KW	
01	Type Test RequirementContd	i. Meas ii. No lo and s iii. Open motor iv. Full l v. Temp vi. Mom vii. High viii. Test t ix. Test o shall the n x. Over xi. Degre xii. Type proof	circuit voltage ratio of wound rotor nrs) oad test to determine efficiency power perature rise test. entary excess load test voltage test for vibration severity of motor of noise levels of motor (Noise level for be limited to 85dB(A) except for BF maximum limit shall be 90dB(A).) speed test ee of Protection Tests (Minimum Ingretest reports for motors located in fuel of enclosures as per BIS 2148/ IEC 6007		
			/ Type Test reports shall also be gi et & page control through Email & SOMB).		

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

II Pr (BHI NTPC FC-N PAC MAI BHE SUB ADD (To	JECT: NTPC Ramagu oject (3 X 200 MW + 3 EL W.O no: G208-G21 CONTRACT NO: CS-3120 NOA- 6845 KAGE: FGD PACKAN N CONTRACTOR: L - RANIPET CONTRACTOR (OEI RESS: be filled by OEM	X 500 MW) 0 & G509-511) 0/3130-109(3)-9-  GE M) &  VENDOR)	CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:  ##Specific confirmations						
SI. NO.	DESCRIPTION	BHEL and	d Ultimate Customer - NTPC (Nationa Corporation)., India Quality Require		##Specific confirmations by the vendor					
	1	1	ITEM: LT Motors (IE3) Up to	200KW						
02	Quality Plan Requirement	2. RQP these Manual ultim  3. If any NTP (Refe appli obtain even route)  4. Accommodate submode with & second submode second	or MQP is applicable for these LT /MQP (Manufacturing Quality Plate LT Motors and accordingly ufacture and OEM shall submit atte customer – NTPC format.  y of LT Motor manufacture is having a capproved MQP (Manufacturing erence Quality Plan) and having a cable for these LT Motor for in ning ultimate customer NTPC for a order through endorsement as in slino: 4 below  ordingly, LT Motor Manufacture & hit the filled up Endorsement shoultimate customer approved MQP, all in the event of a Purchase Order  Motor Manufacture / OEM venezal in the should submit as L/NTPC (in NTPC format) for reviewhed).							
03	BHEL / Ultimate Customer – NTPC approved vendors	Customer - specific requi  KEC CGL SIEN ABB 200k BBL NGE Mara Jyoth	are to be procured only from following Ultimate NTPC approved vendors and no deviation on this rement is acceptable. / Bengaluru (Up to 200KW) & Hubli (Up to 90KW) /Ahemdnagar (Up to 200KW) IENS/Mumbai (Up to 200KW) /Faridabad (Up to 55KW) and Bengaluru (Up to CW) Mumbai (Up to 200KW) F/ Bengaluru (Up to 15KW) thon / Kolkatta (Up to 200KW) ni / Vadodara (Up to 200KW) ni Hydralics Private Limited (LHPL) / Solapur (Up to							

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (FOR INDIGENOUS OEM VENDOR ONLY)

PROJECT: NTPC Ramagundam Stage I & CONTRACT QUALITY ##Enquiry No: DOC.NO: II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511) REQUIREMENTS (COR) for BAP/OR/G208 to LT MOTORS(IE3) - Up to 200KW used ## OEM Supplier Name & G509 G210. to in Agitators Address G511/NTPC NTPC CONTRACT NO: CS-3120/3130-109(3)-9-LTM/ Ramagundam/ FC-NOA- 6845 ##Offer reference: NTPC Ramagundam Stage I & II Agitators: 001 **Project (3 X 200 MW + 3 X 500** PACKAGE: FGD PACKAGE Rev NO.: 00 ##Date: MW) MAIN CONTRACTOR: PAGE: Page 4 of 7 (BHEL W.O no: G208-G210 & G509-DATE: 11.04.2022 **BHEL - RANIPET Contact Official Name:** SUB CONTRACTOR (OEM) & Mobile no: ADDRESS: Email id: (To be filled by OEM VENDOR) SI. **DESCRIPTION BHEL and Ultimate Customer - NTPC (National Thermal Power** ##Specific confirmations NO. Corporation)., India Quality Requirements by the vendor ITEM: LT Motors (IE3) Up to 200KW Inspection LT Motors up to 30KW - Inspection Categorization: III Methodology to be adopted All Routine tests on LT Motors are to be ensured by OEM Vendor & at Actual LT same are to be inspected & witnessed by OEM Vendor / BHEL / BHEL Motor AIA (BHEL authorized inspection Agency) at LT Motor manufacture works as per approved MQP & approved data sheet / drg / spec/ as per Manufacture relevant BIS (Bureau of Indian Standard) - BIS 325 / IEC 60034 etc and works by OEM all the Routine Test Reports with Inspection report (IR) to be submitted vendor for BHEL/Ultimate Customer – NTPC for review and to obtain inspection and dispatch clearance. LT Motor Manufacturer has to issue COC (Certificate of Conformance) states that the above motor/ motors was manufactured taking care of Customer specific requirements regarding ambient temp., voltage and frequency variation, hot starts, pull out torque, starting KVA/KW, temp. rise, distance between centre of stud and gland plate, space heater and tested in accordance with approved drawing/data sheets

#### LT Motors (30KW to 50KW) - Inspection Categorization: II

All Routine Tests on LT Motors are to be ensured by OEM vendor & witnessed by BHEL/BHEL AIA (BHEL authorized inspection Agency) at LT Motor manufacture works including review of Type Test Reports and Degree of Protection Test Reports (IP 55) as per approved MQP & approved data sheet/drg/spec / as per relevant BIS (Bureau of Indian Standard) - BIS 325 / IEC 60034 etc and all the Routine Test Reports with Inspection report (IR) to be submitted for BHEL/Ultimate Customer – NTPC for review and to obtain inspection and dispatch clearance .

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

PROJECT: NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)  NTPC CONTRACT NO: CS-3120/3130-109(3)-9-FC-NOA- 6845  PACKAGE: FGD PACKAGE MAIN CONTRACTOR: BHEL - RANIPET SUB CONTRACTOR (OEM) & ADDRESS:  (To be filled by OEM VENDOR)			CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509- 511)	DOC.NO: BAP/QR/G208 to G210, G509 to G511/NTPC Ramagundam/ LTM/ Agitators: 001 Rev NO.: 00 PAGE: Page 5 of 7 DATE: 11.04.2022	##Enquiry No:  ## OEM Supplier Name & Address:  ##Offer reference:  ##Date:  Contact Official Name: Mobile no: Email id:				
SI.	DESCRIPTION	BHEL and	Ultimate Customer - NTPC (Nationa		##Specific confirmations				
NO.			Corporation)., India Quality Require		by the vendor				
		Aban FATZY	ITEM: LT Motors (IE3) Up to V and up to 200KW – Inspection (						
04	Inspection Methodology to be adopted at Actual LT Motor Manufacture works by OEM vendor Contd  Painting Requirements	All Routine & Vendor and sa authorized insi inspection & vendor and sa authorized insi inspection & vendor and substitute of the substitut	Type Tests if any on LT Motors are to me shall be offered to BHEL/ BHEL A pection Agency) / Ultimate Customer vitnessing including review of Degree of approved MQP /RQP with endorseming / spec / as per relevant BIS (Bureau of 60034 etc and all the Routine Test Resting Degree of protection test report wit mitted for BHEL/Ultimate Customer — action and dispatch clearance.  AIA (BHEL authorized inspection Agency of the witness / perform inspection at Limit all the inspection documents and ring Degree of Protection Test Reports P & approved data sheet / drg / spec / a lian Standard) - BIS 325 /IEC 60034 and be dispatched without BHEL / BHTPC Inspection and dispatch clearance rement like paint shade and painting the are to be ensured by the OEM vendor Ultimate Customer -NTPC approved for (As applicable).						
06	Packing	Packing shall worthy packin							
07	For Inspection call  Document	Motor Manufa / Ultimate Cus be ensured / a +91 9443006 DM (QC-Proc including for resolution. Specific confirm	acture works to be raised for BHEL/Istomer – NTPC including for type test ddressed to Mr R Kesavan., DGM (6303., Email id: kesavan@bhel.in an id:)., Mobile no: +91 8903502628., Eminspection related activities for internation for Document Package in the even	by OEM Vendor for LT Motor inspection at Actual LT ure works to be raised for BHEL/BHEL AIA inspection omer – NTPC including for type test witnessing if any to dressed to Mr R Kesavan., DGM (QC-Proc)., Mobile no: 13., Email id: kesavan@bhel.in and Mr Kovarathanan., Mobile no: +91 8903502628., Email id: kovak@bhel.in inspection related activities for immediate response /					
	Package /	copies + soft c	opies in PDF file) is to be given contain	ning the following with					

# Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

NTPC FC-N PAC MAI BHE SUB ADD	oject (3 X 20) EL W.O no: C CONTRACT NO SOA- 6845 KAGE: FGD N CONTRACT L - RANIPE' CONTRACT RESS:	0 MW + 3 G208-G21 D: CS-312 O PACKA CTOR: T TOR (OE		CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW u in Agitators  NTPC Ramagundam Stage I & Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G50 511)	G210, G511/N Ramag II Agitato Rev NO PAGE:	R/G208 t G509 t TPC undam/ LTM rs: 001	Address:	plier Name & rence:			
SI. NO.	DESCRIP	TION	BHEL and	d Ultimate Customer - NTPC (Nat		al Power	-	ic confirmations the vendor			
110.				• • • • • • • • • • • • • • • • • • • •	Corporation)., India Quality Requirements						
09	Importar notes	nt	(ii) MQP (iii) TCs i (Custo as giv (iv) Final (v) BHEI BHEI (vi) Ultim CHP ( Clears (vii) Type appro Cust Inspection Cate Inspection Cate Inspection Cate Inspection by F based on MQP Inspection by M Customer – NT Inspection Cate COC by Main	A Sheet //RQP/Endorsement sheet //RQP / MQP (as applicate //RQP (as applicate	for "CHP" ness "W" portiole).  Agency) / nal Power Corperial Dispatch n approval wit make used wit  mate Custome  IA based on l on inspection	poration) h h r – NTPC Ultimate as in sl no:04					
			witnessing of BHEL / BHEI Supplier only	application for conducting checany of the tests at Actual LT Mo L AIA / Ultimate Customer – NT and no extra cost if any will be ac during execution of the contract.	y <b>1</b>						
10	Motor de						•				
			ish following M	otor details involved in Agitators	(as applicab	le) for this end LT Motor	quiry.	1			
	S. No			Agitators	Make						
	1		rber Tank Agita		(in kW)						
	2		•	Tank Agitator Motor							
	3 Filtrate Water Tank Agitator Motor										

## Annexure-I CONTRACT QUALITY REQUIREMENTS (CQR) for LT MOTORS(IE3) Up to 200KW (For INDIGENOUS OEM VENDOR ONLY)

II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)  NTPC CONTRACT NO: CS-3120/3130-109(3)-9- FC-NOA- 6845  PACKAGE: FGD PACKAGE MAIN CONTRACTOR: BHEL - RANIPET SUB CONTRACTOR (OEM) & ADDRESS:  (To be filled by OEM VENDOR)		REQUIREMENTS (CQR) for LT MOTORS(IE3) - Up to 200KW used in Agitators  NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)		DOC.NO: BAP/QR/G G210, G511/NTH Ramagund Agitators: Rev NO.: PAGE : P. DATE: 11	G208 to G509 to PC dam/ LTM/ 001 00 age 7 of 7	Address: ##Offer refe	##Offer reference: ##Date: Contact Official Name: Mobile no:			
SI.	DE	SCRIPT	ION	BHEL and	l d Ultimate Customer - NTPC (	Nationa	l Thermal	Power	##Specif	ic confirmations
NO.	-			51122 0110	Corporation)., India Quality		by the vendor			
					ITEM: LT Motors (IE3	3) Up to	200KW			
		4	Secon	ndary Hydrocyc	lone Feed Tank Agitator Mote	or				
		5	Waste	e Water Tank A	gitator Motor					
6 Limestone Slurry Sto					rage Tank Agitator Motor					
7 Primary Hydrocyclor					ne Feed Tank Agitator Motor					
	8 Absorber Area Drain				Sump Agitator Motor					
		9			Sump Agitator Motor				· · · · · · · · · · · · · · · · · · ·	
		10			Sump Agitator Motor					
		11	Other	LT motors involv	ved in the system (if any)					

### **OEM Supplier signature with seal**

## Necessarily to be filled up & submitted by the OEM vendor at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirements against LT Motors being BHEL/ ultimate customer – NTPC (National Thermal Power Corporation Limited) specific requirements.

## ENDORSEMENT SHEET FOR QP REFERENCE / STANDARD / FIELD QUALITY PLAN (RQP / SQP/RFQP/SFQP)

TO BE FILLED IN BY SUPPLIER AT T	IME OF SUBMISSION	एनरीपीसी NTPC	To be filled in by NTPC
PROJECT NAME	NTPC Ramagundam Stage I & II Project (3 X 200 MW + 3 X 500 MW) (BHEL W.O no: G208-G210 & G509-511)	2REVIEW &	ENDORSEMENT BY NTPC PECIFIC OP NUMBER ALLOTTED
CONTRACT NO.:	CS-3120/3130-109(3)-9-FC-COA- 6845	1110020152	
MAIN SUPPLIER	M/S.BHEL, RANIPET , TAMIL NADU., INDIA	QP NO:	
MANUFACTURER WORKS & ADDRESS	(TO BE FILLED BY OEM/LT MOTOR SUPPLIER	REV. NO.: 0	O DT:
SUB-SYSTEM DETAILS i.e. MODEL TYPE/SIZE/RATING etc.	LT MOTOR(IE3)		
APPROVED QP NO.: RQP/SQP/RFQP/SFQP	TO BE FILLED BY OEM / LT MOTOR SUPPLIER		
Confirmation by Main Supplier (TICK WHICHE	VER APPLICABLE)	(TICK APPLICAE	BLE)
I. That the item/ component is identical to that con	nsidered for SQP approval. $$	~ ~	<i>P/SQP</i> is endorsed for this project
II. That there are minor changes in the item/com the same do not affect the contents of MQP/RQP/.	ponent with respect to that considered for MQP/RQP/SQP approval, however SQP	without any c	nange
III. That there are minor changes in the item/con the same affect the MQP/RQP/SQP slightly, as inc	nponent with respect to that considered for MQP/RQP/SQP approval, however licated below / in attached sheet.	as indicated.  DISTRIBUTION A) MQP/RQ 1. MAIN SUPP MQP/RQP/SQ 2. MANUFACT 3. RIO 4. CQA-SPL 5. CQA-O/C B) RFQP/SF( 1. MAIN SUPP 2. MANUFACT 3. NTPC FQA ()	LIER (WITH A COPY OF P) FURER  PP: LIER (with a copy of MQP/RQP/SQP
	(TO BE FILLED BY OEM / LT MOTOR SUPPLIER	NTPC (Revie	wed /Approved by/ Date & Seal)
SIGN.: (Main Supplier) DATE:	SIGN.: (Manufacturer ) DATE:	TITE CINCIL	meanapproved by Date & Seas

(T)	DEM SUPPLIER WITH OEM MFGR.'S LOGO O BE FILLED BY DEM SUPPLIER)	TTH OEM (TO BE FILLED BY OEM / HFGR.'S LT MOTOR MANUFACTURE LOGO E FILLED BY			ITEM: LT MOTOR(IE3) UP TO 200KW FOR FGD APPLICATION  SUB-SYSTEM: FGD-AGITATORS  QP NO.: REV.NO.: 00 DATE: PAGE: OF				LAN	OJECT: PC Ramagundam Stage I & II Project (3 X 200 MW + 3 MW) IEL W.O no: G208-G210 & G509-511) CKAGE: FGD PACKAGE PC CONTRACT NO: 6-3120/3130-109(3)-9-FC-COA- 6845 AIN CONTRACTOR: BHEL - RANIPET B CONTRACTOR (OEM) & ADDRESS: D BE FILLED BY OEM SUPPLIER)				6845 NIPET RESS:		
SL. NO	COMPONEN OPERATIO		CHARACTERI	ISTICS	CLASS	TYPE OF CHECK		NTUM HECK C/N	REFERENCE DOCUMENT	ACCEPTANCI NORMS	E FORMA' RECO		AGENCY			REMARKS
1.	2.		3.		4.	<u>5.</u>		6. 7.		<mark>8.</mark>	9 <mark>.</mark>	D*	M **	<mark>C</mark> ३ 10	N ).	<u>11.</u>
		<b>LEGEND:</b> * RECORDS, INDENTIFIED WITH "TICK" ( $$ ) SHALL BE						DOC. NO.:				REV	CAT			
OEM MANUFACTURER/ LT MOTOR SUPPLIER SUPPLIER SIGNATURE				ESSENTIAL ** M: OEM C: MAIN SI P: PERFOR	LLY INCLUD M MANUFAO UPPLIER – E M W: WIT!	DED BY SUPPL CTURER/LT M BHEL/BHEL A	LIER IN ( IOTOR S IA , N: VERIFI	(A DOCU UB-SUPP NTPC CATION.	MENTATION. LIER AS APPROPRIATE,	FOR NTPC USE	REVIEWED	ВУ	AF	PPROV	/ED BY	APPROVAL SEAL

FORMAT NO.: QS-01-QAI-P-09/F1-R1 1/1 ENGG. DIV./QA&I

