Pre-Qualification Criteria (Technical)

Package Name: Rubber Gaskets

PR No : 1900143682

Project: 1 X 100MW Namrup Combined Cycle Replacement Power Project at Namrup, Assam.

Qualification Criteria of the Bidder:

The Bidders shall meet the Pre-Qualification Criteria (listed below).

- 1) The Bidder should have successfully completed supply of
 - a) Gasket sheet according to the design / manufacturing standard ASME B16.21 and according to material standard BS7531, in the size range of thickness 2 mm and above, of cumulative size not less than 12 sq. m through a single purchase order or multiple purchase orders not more than 5 years old as on date of tender enquiry.
- 2) Detailed BOQ of the Gaskets supplied, satisfying the criteria laid down above, shall be provided in the format enclosed as Annexure –"A" with details like Project & Customer, Description, Quantity & weight of the items supplied, PO details etc. as a minimum for assessing pre-qualification. PO copies, inspection reports and dispatch documents shall be enclosed for the references provided.

Page 1 of 1

ESP-001-2A	बी एच ई एम
Rev.00	BHH

PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page 1 of 7

TECHNICAL SPECIFICATION FOR MISCELLANEOUS GASKETS

PROJECT:	1 X 100MW NAMRUP COMBINED CYCLE REPLACEMENT POWER PROJECT (PHASE -1) –NAMRUP , ASSAM
CUSTOMER:	ASSAM POWER GENERATION CORPOTATION LTD, GUWAHATI, ASSAM
CONSULTANT:	M/S DEVELOPMENT CONSULTANTS (P) LTD CONSULTING ENGINEERS

COPYRIGHT AND CONFIDENTIAL
The information on this document is the property of BHARAT HEAVY ELECTRICALS LIMITED,
It must not be used directly or indirectly in any way detrimental to the interest of the company.

Revisions:	Prepared by:	Checked by:	Approved by:	Date:
Refer to record of revisions	Santosh	AKS	MSSN	30.04.22

ESP-001-2A Rev 00

PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page 2 of 7

1.0 GENERAL:

- a) This standard specifies requirements related to Designation, Material, Sizes, Dimensions and other information required for ordering purposes of Non Metallic Gaskets for Flat Face Flanged connections.
- b) The Gaskets sheet shall conform to the requirements of latest version of ASME Standard B16.21 (Non Metallic Gaskets for Pipe Flanges) and comply with the following additional requirements.

2.0 SCOPE OF SUPPLY:

The Gasket shall be supplied for 18 square meters size with following details.

2.1 MATERIAL:

The material shall consist of fibres and inorganic fillers bonded with a suitable elastomer or blend of elastomers, and shall be manufactured in the form of sheets. The fibres shall be uniformly dispersed throughout the jointing.

Material shall be BS 7531 grade X or Equivalent.

2.2 DIMENSIONS, TOLERANCES AND OTHER REQUIREMENTS:

- a) Dimensions: The Gasket sheet shall be supplied as per the sq mts indicated in the purchase order considering the following points :
 - i) Width of the gasket shall be 1500 mm.
 - ii) Length of the gasket shall be based on the required sq mts
- b) Thickness: Thickness of Sheet shall be 2.0mm
- c) Tolerances: As per BS 7531
- d) Inspection and Testing: As per BS 7531

2.3 SIZE AND FACE:

Gasket Sheet Size (in mm) shall be as per BHEL Enquiry/Order.

2.4 DESIGNATION:

Non Metallic Gasket Sheet as per BS 7531 Grade X for Flat Face Flange connections. Shall be designated as "NAB Sheet BS 7531 Grade X".

2.5 TEST CERTIFICATES:

Three copies of test certificates consisting of mechanical properties and chemical composition of the metals shall be furnished

3.0 DOCUMENTS TO BE SUBMITTED BY BIDDER AT THE TIME OF TECHNICAL OFFER

- 3.1 Un priced, Price-bid format,
- 3.2 Filled Annexure-I & Annexure-II.

ESP-001-2A

Rev 00

PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page 3 of 7

4.0 DOCUMENTS TO BE SUBMITTED BY BIDDER AFTER AWARD OF PO

- 4.1 Data sheet of each item,
- 4.2 GA drawing of each item.
- 4.3 Billing break up of each item

5.0 INSPECTION & TESTING:

Bidder to furnish Quality Plan to BHEL/Customer/Consultant for approval after award of contract. Quality plan will be reviewed during detailed Engineering stage with respect to Inspection, standard Engineering practices & Specification Requirements and various tests and stages of inspection. Bidder to abide by the same. QAP guidelines and format is attached.

Inspection agency:

BHEL/Third Party appointed by BHEL/Customer/Consultant. The various review/ witness/ observation stages by Individual agencies (or) Group of Agencies as above will be in line with approved quality plan.



PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page **4** of **7**

Variant Table:

Item Type		Material Code	Remarks
RUBBER GASKE	TS	PY9754014000	

ESP-001-2A

PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page **5** of **7**

<u>ANNEXURE – I</u>

Bidder to fill and furnish the following information in the indicated format:

	KEY INFORMAT	<u> ION</u>	
1.	Name of the Bidding Company	:	
2.	Registered in (mention the name of the Country)	:	
3.	Name, designation, telex & telephone number and postal address of responsible officer of Bidder to whom all reference shall be made for expeditious coordination.	:	
4.	Name, designation, telex & telephone number and postal address of responsible officer of Indian Agent.	:	
5.	Bidder's proposal number	:	
6.	Bidder's proposal date	:	
7.	Validity of offer, counted from the date of opening of bid	:	
8.	Guaranteed completion period, counted from date of issuance of LOI/TOI	:	
9.	Confirm that Scope of supply and services are exactly as per specification requirement.	:	Yes/No
10.	Confirm technical compliance with specification	:	Yes/No
11.	Confirm that List of Recommended Spares has been furnished as per Annexure-II	:	Yes/No
12.	Confirm that Special Tools & Tackles are as per Annexure-III	:	Yes/No
13.	Confirm that deviations ,if applicable, have been furnished as per Annexure-IV	:	Yes/No

Signature of Bidder's

Date

Authorized representative with date.....



PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page 6 of 7

<u>ANNEXURE</u> – II

DEVIATION FROM SPECIFICATION

If the proposal submitted has got any deviation from the technical stipulations in the bidding document, the Bidder shall tabulate below the full particulars of such deviations and shall sign below. Additional sheets may be enclosed, if necessary. Deviation is to be furnished with mention of specific clause numbers. Technical and commercial deviations to scope of supply and services, shall be indicated separately.

Sl.No.	CLAUSE NO.	DESCRIPTION AS PER SPECIFICATION	DEVIATION BY BIDDER

We confirm that all the deviations/exceptions to the Job specification and enclosures including reference documents attached are listed in this format only. No other deviations or exceptions even if mentioned elsewhere shall be considered for any technical/ commercial evaluation or for ordering.

Signature of Bidder's
Authorized representative with date
Date



PROJECT ENGINEERING & SYSTEMS DIVISION HYDERABAD

Doc. No: PY 54013

Rev. No. 00

Page 7 of 7

		REC	CORD OF REVISIO	NS	
Rev. No.	Date	Revision Details	Prepared By	Checked By	Approved By
00	30.04.22	First Issue	Santol= DSK	AKS	MSSN

वी एग ई एम				STA	ANDARD	MANUFA	ACTURING Q	UALITY PLA	N	720682 8			SD/C /18-1	200																																																																									
							חוובו פו		חבם	RE\	V N	O: 00	D	ATE:	22-02-2019																																																																								
				DUCT	: GASK	(ET	P.O	PEC: AS	PEK			F	PAGE	:10	= 2																																																																								
SL NO	COMPONENTS	CHARACT	ERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT					A P	GEN W	CY V	REMARKS																																																																								
1.0	RAW MATERIAL	S & BOUGH	T OUT ITEM	S																																																																																			
	Raw Material	Material Ide	entification	Major	TC Review	100%	Approved BHEL Spec./Drawing/ datasheet	Approved BHEL Spec./Drawing/ datasheet	MTC		1	2	1	1																																																																									
2.0	FINAL INSPECTI	ON & TESTII	NG				uatasneet	datasneet																																																																															
		Visual ,Dime Marking	ension,	Major	Visual	100%			IR		1	2	1	1	10% shall be witnessed by "1"																																																																								
		Chemical & I properties	Mechanical	Major	TC Review	One per lot/batch			MTC		1	2	1	1	·																																																																								
		Compressibil Recovery	Li .	Major	Testing	Random									,			TC		1	2	1																																																																	
		Residual St permeability Resistance	y &	Major	Testing	Random		ndom	dom																				TC		1	2	2	1	Applicable for NAB gasket																																																				
		BOM check		Major	Visual	100%			IR		1	2	1																																																																										
4.0	PRESERVATION	& PACKING																																																																																					
	Gasket	Packing, Mai	rking	Major	Visual	100%	Approved BHEL Spec./Drawing/ datasheet	Approved BHEL Spec./Drawing/ datasheet	IR		V	2	1	-																																																																									

LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICAT REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.

PREPARED BY

BHEL QA SIGNA (RE * S.) AMP

APPROVED BY QA BHEL QA SIGNATURE & STAMP

APPROVED BY

CUSTOMER'S SIGNATURE & STAMP (IF APPLICABLE)

STANDARD MANUFAC						CTURING Q	QP. NO.:PESD/QA/ GASKET/01/18-19							
		77					סטבו פר		DED	REV N	0: 00	DA	ATE: 2	22-02-2019
PRODUCT: PROJECT ENGINEERING & SYSTEM DIVISION				GASI	GASKET BHEL SPEC: P.O								2	
SL NO	COMPONENTS	CHARACT	ERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT (81	A(GENC W	CY V	REMARKS

Notes:-

- 1. This MQP should be read along with specification, approved drawings & approved datasheet. (Latest revisions to be considered as per PO).
- 2. Drawing/datasheet shall prevail over quality plan for contradiction if any.
- 3. Any project/customer specific requirements, which shall be notified, have to be fulfilled by the vendor at the time of execution of order.
- 4. Seaworthy packing shall be witnessed BHEL/BHEL nominated inspection agency for overseas project.
- 5. End Customer/Consultant inspection if any shall be intimated during quality plan approval.
- 6. NACE requirement: For items coming under NACE category, all tests, reports, MTC and certificates shall be submitted as per NACE MR0103 requirements.

Abbreviations:-

MTC	Η	Material Test certificate	WPS		Welding Procedure Specification
IBR	-	Indian Boiler Regulations	PQR		Procedure Qualification Record
DFT	-	Dry Film Thickness	WPQ	•	Welder Performance Qualification
TC	-	Test Certificate	NDE	-	Non Destructive Examination
IS	-	Indian Standards	UTS	-	Ultimate Tensile Strength
Appd.			YS	-	Yield Strength
Dwg.	-	Approved Drawing	EL.		Elongation
PMI	•	Positive Material Identification	OD	•	Outer Diameter
G.I		Galvanized Iron	ID	ě	Internal Diameter

LEGEND: P: PERFORM, W: WITNESS, V: TEST CERTIFICAT REVIEW. INDICATE 1 FOR BHEL / BHEL NOMINATED INSPECTION AGENCY & 2 FOR VENDOR/SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT /CHARACTERISTIC UNDER P, W & V COLUMNS. * FOR ITEMS MARKED ✓ (TICK) IN COLUMN 'D', TEST CERTIFICATES SHALL BE SUBMITTED TO BHEL FOR RECORDS.



BHEL QA SIGNATURE & STAMP BHEL QA S

APPROVED BY

APPROVED BY

CUSTOMER'S SIGNATURE & STAMP (IF APPLICABLE)