



Ref. Enquiry No.: PE/PG/RTC/E-6162/2018

Dated: 30.03.2019

TENDER ENQUIRY THROUGH E-PROCUREMENT

DUE DATE
10.04.2019
BY 02:00PM

SUBJECT: TENDER ENQUIRY FOR RATE CONTRACT OF FLOW ELEMENT-ORIFICE AS PER TECHNICAL SPECIFICATION NO. PE-TS-20-145-I105A

OUR REF: TENDER ENQUIRY NO: PE/PG/RTC/E-6162/2018, DTD-30.03.2019

Dear Sir/ Ma'am,

We are pleased to invite your offer for subject package in two parts strictly as per Clause-2.0 of the enclosed "Instructions to Bidders". Please upload your best quotation/ offer on <https://bhel.abcpocure.com> for the requirement strictly as per schedule of price format before above mentioned due date & time. The details of the tender enquiry are as mentioned below:

Sl. No	Description for which Rate Contract is desired	Tentative Quantity	Delivery required
1	FLOW ELEMENT-ORIFICE- Refer Technical Specification no. PE-TS-20-145-I105A for detailed description.	As per BOQ cum price schedule in Annexure-I) cumulative for the Prospective Projects as per Annexure-IV	"Four (04) months from drawing/doc approval for respective project/requirement under the RC. Other schedules like submission of drawings, approval of drawings, inspection etc. shall be as per the Technical Specification no. PE-TS-20-145-I105A (Drawings/Documents schedule as per point no. 5 in Section-D (Volume IIB). In case there are delays in drawing/docs submission and resubmission, that much delay would be reduced from delivery period"

Your best quotation/offer for the above requirement, in line with our terms and conditions, should be submitted online via e-procurement system. It shall be the responsibility of the bidder to ensure that the Tender is submitted on or before the due date by 2 p.m. Part-I bids shall be opened at 3 p.m. on the due date in the presence of authorized representatives of the bidders, who may like to be present.

Note: -

1. Please note that Part Supplies offered for tender BOQ shall disqualify the bidder's offer.
2. Documents and Credential as per Technical PQR, Techno Commercial Bids and Price Bids should be uploaded on the e-procurement portal.

Please refer GCC Rev-06 & Corrigenda to GCC Rev 06 which is available on www.bhelpem.com. You are requested to kindly download the same.

1. Rate contract is proposed for two (2) years (with a provision for further extension after review on mutual consent) in the ratio of 70:30 value wise at L1 FOR SITE price for this package (% of splitting of RC between 2 vendors may be changed during ordering process if any of the bidder in RC is not customer approved & same is to be acceptable to bidders).

MR N C SHARMA
DY MANAGER/CMM
BHEL/PS-PEM
POWER PROJECT ENGINEERING INSTITUTE,
PLOT NO. 25, SECTOR - 16A, NOIDA (UP)
(OFF) 0120-4213591, 9911170053

Regd. Office:
BHEL House
Siri Fort
New Delhi-110049



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2. L1 Rates shall be counter offered to all bidders who participated in Price Bid Opening/RA for 30% value and in case acceptance of counter offer received from more than one vendor then acceptance shall be considered as per FINAL Price Bid Opening / Reverse Auction Ranking (as applicable). If none accepts L1 rates, RC shall be done with L1 vendor for 100% value.
3. Evaluation will be done on overall L1 (Total cost to BHEL excluding GST) basis with necessary loading as applicable.
4. Rate Contract is proposed to be finalized on total lump sum basis. However, there is % allocation weightage against BOQ quantity of each item which shall be used for arriving at price break up and same will also ensure that item rates of L1 bidder will be lowest for each items compared with other bidders' rate.
5. Bidders to note the following:-
 - i. Rate contract shall be decided on the basis of grand Total Ex works price & Freight Charges of Total BOQ of Flow Element-Orifice as listed in Annexure-I.
 - ii. Bidder to give single % of freight charges considering anywhere in India in the freight column. Bidders have to give same % of freight for each line item of Price Schedule.
 - iii. Bidders have to quote freight charges in terms of percentage of their quoted total Ex-Works prices. If any bidder will quote freight as Nil/Included, Freight@ 3.13% shall be added to BHEL estimates for evaluating offer of such bidders.
 - iv. Bidders to mention applicable GST rate on (total Ex. works + freight) in the specified cells of price schedule. However, may please note that GST shall not be considered in evaluation.
 - v. Though evaluation is proposed on Ex Works + Freight, but there is % allocation weightage against BOQ quantity of each item (refer Annexure-I) which shall be used for arriving at price break up. Bidders need to give only their total ex works price for given BOQ of Supply, Additional Items & Calibration charges for respective BOQ at the specific cells ("X") that has been kept opened in the price schedule available in the e-procurement portal (i.e. sl. no. F column no. 9 of Annexure-I).
 - vi. Rest of the prices shall be derived by BHEL in line with allocation fixed for each item. There is formula applied in price schedule form available in e-procurement portal. As soon as bidder fills the cells for Total Ex works, freight percentage and GST percentage, rest values for e.g. unit ex works – item wise, total ex works – item wise, FOR site price – item wise will filled automatically. Bidders can also validate and cross check the same by using Check Formula button.
 - vii. For better clarity to the bidders where value is to be filled is noted as "to be quoted" and for other columns it will be noted as "derived" which denotes shall be derived by BHEL as per allocation fixed against each item.
 - viii. HSN Code has been incorporated in BOQ (refer Price Schedule).
 - ix. Incomplete offer shall be summarily rejected.
 - x. Pre-Qualifying Requirements (PQR): All the bidders (registered/ non-registered) will be asked to submit documents fulfilling PQR requirements along with the bid & their further evaluation shall be done accordingly.
 - xi. Bidders to note that their bid shall be conditional subject to qualify PQR by registered vendors & non-registered vendors have to qualify PQR & get registered with PEM for the package.
 - xii. Additional overhead charges shall be 5% instead of 30% as mentioned in clause no 26.2 of GCC Rev 06
 - xiii. Quantity variation shall be +30%. Project list is indicative only, BHEL may ask for delivery anywhere in India for any of the project added in the prospective project/ existing projects during RC period.
 - xiv. CIF is not applicable for the package.

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- xv. Integrity pact is not applicable for this tender.
- xvi. Bidders to note Model Conciliation Clause under BHEL Conciliation Scheme, 2018 as per Annexure-VI.
- xvii. In case of joint bidding, Bidders shall be required to furnish scope matrix which should be clearly defined between foreign bidder and their Indian representative along with the offer for the Main Supply and Erection & Commissioning.
- xviii. Bidders are requested to refer following clause regarding Public Procurement (Preference to Make in India) - PPP-MII.
- "For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017 & 28.05.2018 and subsequent orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/PO/WO against this NIT.
- In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable. Vendors are requested to go through the above mentioned orders and confirm the following:"
- The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content as per above mentioned orders and shall give details of the location(s) at which the local value addition is made.

TERMS AND CONDITIONS:

- Procurement of the subject package shall be done through e-procurement
- Enquiry No., due date etc. must be legibly super scribed on the offers as per clause no. 2.0 of "Instructions to Bidders".
- Offers should be uploaded in two parts online at <https://bhel.abcpocure.com> as follows:
 - Part-I Bid: - Documents and Credential as per Technical PQR and Techno-Commercial offer (along with un-priced copy of un-priced bid and un-priced schedule of Technical-Commercial Deviation, Annexure I & II)
 - Part II Bid: - Price Bid and Priced schedule of Technical-Commercial Deviation
- Bidder to note that this is a conditional Tender enquiry and the price bid (Part-II) opening/RA participation shall be subject to following condition:
 - Techno-commercial qualification/recommendation of bidder by the BHEL-PEM
- Terms and conditions: -
 - Part I bid will be opened on date & time mentioned in the NIT or subsequent corrigenda/amendments, if any.
 - Techno-commercial offer of only those bidders shall be evaluated who will meet the Technical pre-qualifying requirement of the tender.
- Bidders shall submit their offers meeting the requirements of the following tender documents and other Terms and Conditions included in this Enquiry Letter:
 - ANNEXURE-I of GCC Rev. 06: Letter to be furnished by the Bidders.
 - ANNEXURE-II: DEVIATION SHEET (COST OF WITHDRAWAL) - To be furnished by the BiddersAll the above Tender Documents shall automatically become a part of the Order/Contract after its finalisation.
- Vendors shall quote in accordance with the requirements mentioned in the tender documents. In case of deviations (Technical/ Commercial), the same shall be highlighted separately giving Clause references along with

MR N C SHARMA
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BHEL/PS-PEM
POWER PROJECT ENGINEERING INSTITUTE,
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the Cost of withdrawal of Deviations as per Annexure-II to GCC Rev 06 of "DEVIATION SHEET (COST OF WITHDRAWAL)" along with reasons for taking such deviations

Bidder to note all the points mentioned in "Notes" of Annexure-II to GCC Rev 06

8. **Please note the following:**

- Price format is enclosed for compliance.
- SCC enclosed for compliance.
- GCC enclosed for compliance. GCC Rev-06 is available on www.bhelpem.com. You are requested to kindly download the same. GST related corrigenda to GCC Rev.06 is enclosed.

- Tenders shall be submitted strictly in accordance with the requirements of the above tender documents.
- Standard pre-printed terms & conditions of the tenderers shall not be considered valid.
- Validity of offer shall be as per Clause No. 7.0, "Instructions to Bidders" of GCC Rev 06.
- Unsolicited fresh/revised Price Bids shall not be entertained.
- Purchaser shall be under no obligation to accept the lowest or any other tender and shall be entitled to accept or reject any/all tender(s) in part or full without assigning any reason whatsoever.
- Late tenders will be rejected.
- Tenders and all correspondence thereof, shall be addressed to the undersigned by name & designation and sent at the following address:

Mr. I P SINGH, DGM/CMM M/s Bharat Heavy Electricals Ltd., Project Engineering Management, Power Project Engineering Institute, HRD & ESI Complex, Plot No 25, Sector-16 A, Noida-201301 Kind Attn: I P SINGH/ CMM E-MAIL: indra.pal.singh@bhel.in Ph. No. 0120-4368749 ,9818989654	Mr. N C SHARMA, DY MGR/CMM M/s Bharat Heavy Electricals Ltd., Project Engineering Management, Power Project Engineering Institute, HRD & ESI Complex, Plot No 25, Sector-16 A, Noida-201301 Kind Attn: N C SHARMA/ CMM E-MAIL: ncsharma@bhel.in Ph. No. 0120-4213591 ,9911170053
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- Definition of Terms is also enclosed. These definitions will apply to all the tender documents including this Enquiry Letter.
- PRE-QUALIFICATION REQUIREMENT: -**
Bidders is requested to fill up the details in "TECHNICAL PRE-QUALIFYING REQUIREMENT" as per the conditions mentioned in the PQR and also to submit the credentials.
Bids of only those bidders shall be evaluated who meet the Technical pre-qualifying requirements (if applicable).
- Bidders to note that their bid shall be conditional subject to qualify PQR by registered vendors & non-registered vendors have to qualify PQR & get registered with PEM for the package.

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For registration in PEM "Bidders needs to apply & get registered for subject package with PEM before P-2 (price bid opening) & hence you need to apply online for registration on PEM web portal & have to enclose acknowledgement with this effect with the bid documents"

19. Bidder has to submit "NO DEVIATION CERTIFICATE FOR COMMERCIAL TERMS AND CONDITIONS AS PER GCC (06), SCC AND NIT". In case of deviations, bidder to clearly mention the same with their techno-commercial offer.
20. All the above Tender Documents shall automatically become a part of the Order/Contract after its finalization.
21. **The offers of the bidders who are on the banned list as also the offer of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL website www.bhel.com.**
22. **"The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice." BHEL Fraud prevention policy is also uploaded in vendor's section on www.bhelpem.com.**
23. **Bidders are requested to visit constantly our website to update themselves for any technical or commercial change in the NIT.**
24. All corrigenda, addenda, amendments, time extensions, clarifications etc. to the tender will be hosted on BHEL websites only (www.bhelpem.com., www.bhel.com & <https://bhel.abcpocure.com> under subject tender reference. Bidders are requested to visit our websites from time to time to keep themselves updated. **Bidders may go through the Sellers' manual & Help documents provided on E-Procurement Portal website & obtain required Digital Signature Certificate for participating in the subject Tender.**
25. Bidders to submit their offers strictly in line with the enclosed price format.
26. Inspection shall be done by BHEL/ END CUSTOMER/Third party Agency (finalized by BHEL).
27. Any other taxes & duties applicable on the date of bid but not quoted by the bidders shall be to bidder account.
28. Delivery terms for dispatches shall be FOR Dispatch Station.
29. This enquiry is subject to Conditions/ limits if any imposed in PMD / Vendor registration.
30. Foreign & indigenous bidders participating through open/limited tender will necessarily have to but class III DSCs issued by the certifying authorities in India. Basic procedure/ checklist is uploaded on www.bhel.com.
31. Non- registered bidder to submit the credentials required for Registration in BHEL PEM: -
"Online Registration Portal is operational in BHEL. Non-registered Vendors, who wish to apply for registration with BHEL-PEM, have to apply through Online Registration Portal available at www.bhelpem.com - vendor section - Online Supplier Registration. All credentials and/or documents duly signed and stamped related to registration has to be uploaded on the website and submit the application for registration. One set of hard copy of the filled-up SRF downloaded from Online Registration Portal duly signed and stamped has to be submitted."


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32. Purchaser reserves the right to split up the scope of the tender enquiry and place the orders for different scope/ items with different bidders and also increase or decrease the quantity.

33. BHEL reserves the right to go for Reverse Auction (RA) (Guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.

Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit 'Process compliance form' (to the designated service provider) as well as 'Online sealed bid' in the Reverse Auction. Non-submission of 'Process compliance form' or 'Online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com).

The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.

If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com)."

As a reminder to the bidders, system will flash following message (in RED Color) during the course of 'online sealed bid':

"Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL"

Detailed guidelines of reverse auction 2016 are available in "information section" of www. bhel.com, same are applicable for subject tender.

Link for RA guidelines to be followed as:

http://www.bhel.com/vender_registration/pdf/Guidelines%20for%20Reverse%20Auction-2016.pdf

IMPORTANT INSTRUCTION TO BIDDERS IN CASE OF REVERSE AUCTION

"The Bidders have to quote the Single Price (i.e. Total Ex-works + Freight) (excl. GST) in Reverse Auction. Price are to be inclusive of Packing & Forwarding charges, all the routine & type tests as per tender scope, Freight as applicable, including loading (if any). De-loading (if any) shall be done in line with NIT terms".

34. If any bidder has mentioned the term Not Applicable / Not required / Not Quoted in BHEL price format. The bidder needs to substantiate the same. If the same item will be required in future for the system same will be supplied free of cost.


V. N. C. SHARMA
DY MANAGER/CMM
BHEL/PS-PEM
POWER PROJECT ENGINEERING INSTITUTE,
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35. L1 bidder will have to submit Bank Guarantee for each POs (irrespective of value) which will be placed under the Rate Contract finalised through this tender considering RC as original contract as per format mentioned in **Annexure-V** to NIT instead of format mentioned in GCC Rev 06
36. All other terms and conditions shall be as per GCC Rev 06 and Special Conditions of Rate Contract as per attached Annexure-III. In the event of any contradiction in the terms and conditions mentioned, the order of preference shall be NIT / corrigenda related to GCC Rev.06/ Rate contract SCC / GCC Rev. 06

Thanking you,
Yours faithfully,
For and on behalf of BHEL

नरेश चन्द्र शर्मा / Naresh Chandra Sharma
उप प्रबंध (सी.एम.एम.) Dy. Manager (C.M.M.)
भारत भारी इलेक्ट्रिकल्स लिमिटेड Bharat Heavy Electricals Ltd.
पावर प्रोजेक्ट-परियोजना प्रबंधन Power Sector-Project Engineering Management
एच.आर.डी. & ई.एस. कॉम्प्लेक्स H.R.D. & E.S. Complex,
प्लॉट नं. 25, सेक्टर 16A, नोडा-201301 Plot No. 25, Sector 16A, Noida-201301

N C Sharma/Dy. Mgr.
(Name & Signature of official)

Enclosure:

1. Enquiry Terms & Conditions
2. Price Format- Annexure I
3. Techno-Commercial Deviation Sheet (As per GCC Rev 06) – Annexure II
4. RC-SCC – ANNEXURE III
5. Prospective Project List – Annexure IV
6. Annexure V - BG Format
7. Annexure-VI- Model Conciliation Clause under BHEL Conciliation Scheme, 2018
8. Technical PQR-Annexure-VII
9. Technical Specifications
10. Corrigenda to GCC Rev 06

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DY MANAGER/CMM
BHEL/PS-PEM
POWER PROJECT ENGINEERING INSTITUTE,
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ANNEXURE- I

RATE CONTRACT OF FLOW ELEMENT-ORIFICE**PRICE SCHEDULE- FLOW ELEMENT-ORIFICE****NAME OF VENDOR-**

SL NO	ITEM DESCRIPTION (Pipe Size)	UOM	TENTATIVE QUANTITY	HSN CODE	UNIT EX-WORKS PRICE (DULY PACKED) IN PERCENTAGE OF TOTAL EX WORKS PRICE OF ORIFICE GIVEN AT SL NO-F OF COUNN 9	UNIT EX-WORKS PRICE (DULY PACKED) (INR)	TOTAL EX-WORKS PRICE (DULY PACKED) IN PERCENTAGE OF TOTAL EX WORKS PRICE OF ORIFICE GIVEN AT SL NO-F OF COUNN 9	TOTAL EX- WORKS PRICE (DULY PACKED) (INR)	FREIGHT CHARGES WITHOUT GST @ % OF TOTAL EX WORKS (INR)	APPLICABLE GST RATE % ON (TOTAL EX WORKS + FREIGHT) (INR)	TOTAL F.O.R SITE PRICE (INR)
1	2	3	4	5	6	7	8	9	10	11	12
A	Complete Orifice assembly with pipe line material of SA106GRB / SA106GRC / CS AS PER IS 2062 GR B/CARBON STEEL ERW,IS:1239 and flange material of ASTM A 105 [Complete Orifice assembly with THREE (3) pairs of tapping, accessories like pair of gasket , Pressure take-off points, Root valves, Nipples etc and commisioning spare of 1 no. pair of gasket for each assembly]										
A.1	40" (1000 NB)	NOS.	1	9026	1.2230	Derived	1.2230	Derived	% TO BE QUOTED	% TO BE QUOTED	Derived
A.2	36" (900 NB)	NOS.	4	9026	0.9784	Derived	3.9135	Derived			Derived
A.3	32" (800 NB)	NOS.	8	9026	0.8344	Derived	6.6749	Derived			Derived
A.4	28" (700 NB)	NOS.	11	9026	0.6758	Derived	7.4335	Derived			Derived
A.5	24" (600 NB)	NOS.	1	9026	0.6358	Derived	0.6358	Derived			Derived
A.6	20" (500 NB)	NOS.	7	9026	0.4972	Derived	3.4803	Derived			Derived
A.7	18" (450 NB)	NOS.	21	9026	0.4280	Derived	8.9888	Derived			Derived
A.8	16" (400 NB)	NOS.	8	9026	0.3569	Derived	2.8551	Derived			Derived
A.9	14" (350 NB)	NOS.	11	9026	0.2892	Derived	3.1809	Derived			Derived
A.10	12" (300 NB)	NOS.	58	9026	0.2172	Derived	12.5954	Derived			Derived
A.11	10" (250 NB)	NOS.	14	9026	0.1657	Derived	2.3202	Derived			Derived

A.12	8" (200 NB)	NOS.	8	9026	0.1286	Derived	1.0286	Derived			Derived
A.13	6" (150 NB)	NOS.	7	9026	0.1080	Derived	0.7561	Derived			Derived
A.14	4" (100 NB)	NOS.	4	9026	0.0872	Derived	0.3487	Derived			Derived
A.15	< 4" (<100 NB)	NOS.	1	9026	0.0869	Derived	0.0869	Derived			Derived
B	Complete Orifice assembly with pipe line material of SA312TP304 and flange material of ASTM A 182 F304 [SCHEDULE OF PRICES for Complete Orifice assembly with THREE (3) pairs of tapping, accessories like pair of gasket , Pressure take-off points, Root valves, Nipples etc and commisioning spare of 1 no. pair of gasket for each assembly]										
B.1	18" (450 NB)	NOS.	1	9026	1.1886	Derived	1.1886	Derived			Derived
B.2	16" (400 NB)	NOS.	1	9026	1.0565	Derived	1.0565	Derived			Derived
B.3	14" (350 NB)	NOS.	1	9026	0.9244	Derived	0.9244	Derived			Derived
B.4	12" (300 NB)	NOS.	1	9026	0.7924	Derived	0.7924	Derived			Derived
B.5	10" (250 NB)	NOS.	1	9026	0.3529	Derived	0.3529	Derived			Derived
B.6	8" (200 NB)	NOS.	5	9026	0.2566	Derived	1.2830	Derived			Derived
B.7	6" (150 NB)	NOS.	4	9026	0.2029	Derived	0.8115	Derived			Derived
B.8	4" (100 NB)	NOS.	19	9026	0.1500	Derived	2.8503	Derived			Derived
B.9	< 4" (<100 NB)	NOS.	1	9026	0.1171	Derived	0.1171	Derived			Derived
C	Additional items to be included based on project specific requirements (Item shall be applicable for any line size as mentioned at sl. no. A or B)										
C.1	PAIR OF GASKET	NOS.	1	9026	0.0200	Derived	0.0200	Derived			Derived
C.2	NIPPLE 15Nb , SS316 , 250mm long	NOS.	312	9026	0.0023	Derived	0.7100	Derived			Derived
C.3	ROOT VALVE SS316 15Nb # 900	NOS.	312	9026	0.0200	Derived	6.2400	Derived			Derived
D	CALIBRATION CHARGES for Complete Orifice assembly [with pipe line material of SA106GRB / SA106GRC / CS AS PER IS 2062 GR B/CARBON STEEL ERW,IS:1239 and flange material of ASTM A 105]										
D.1	40" (1000 NB)	NOS.	1	9983	0.9808	Derived	0.9808	Derived			Derived
D.2	36" (900 NB)	NOS.	2	9983	0.7846	Derived	1.5693	Derived			Derived

D.3	32" (800 NB)	NOS.	5	9983	0.7478	Derived	3.7389	Derived	% TO BE QUOTED	Derived	
D.4	28" (700 NB)	NOS.	4	9983	0.6992	Derived	2.7968	Derived		Derived	
D.5	24" (600 NB)	NOS.	1	9983	0.4609	Derived	0.4609	Derived		Derived	
D.6	20" (500 NB)	NOS.	3	9983	0.4006	Derived	1.2017	Derived		Derived	
D.7	18" (450 NB)	NOS.	9	9983	0.3951	Derived	3.5556	Derived		Derived	
D.8	16" (400 NB)	NOS.	6	9983	0.3145	Derived	1.8868	Derived		Derived	
D.9	14" (350 NB)	NOS.	4	9983	0.2921	Derived	1.1685	Derived		Derived	
D.10	12" (300 NB)	NOS.	13	9983	0.2572	Derived	3.3431	Derived		Derived	
D.11	10" (250 NB)	NOS.	10	9983	0.1871	Derived	1.8707	Derived		Derived	
D.12	8" (200 NB)	NOS.	5	9983	0.1587	Derived	0.7936	Derived		Derived	
D.13	6" (150 NB)	NOS.	5	9983	0.1387	Derived	0.6934	Derived		Derived	
D.14	4" (100 NB)	NOS.	4	9983	0.0998	Derived	0.3992	Derived		Derived	
D.15	< 4" (<100 NB)	NOS.	1	9983	0.0686	Derived	0.0686	Derived		Derived	
E	CALIBRATION CHARGES for Complete Orifice assembly [with pipe line material of SA312TP304 and flange material of ASTM A 182 F304]										
E.1	18" (450 NB)	NOS.	1	9983	0.4503	Derived	0.4503	Derived		Derived	
E.2	16" (400 NB)	NOS.	1	9983	0.4002	Derived	0.4002	Derived		Derived	
E.3	14" (350 NB)	NOS.	1	9983	0.3502	Derived	0.3502	Derived		Derived	
E.4	12" (300 NB)	NOS.	1	9983	0.3002	Derived	0.3002	Derived		Derived	
E.5	10" (250 NB)	NOS.	1	9983	0.2014	Derived	0.2014	Derived		Derived	
E.6	8" (200 NB)	NOS.	2	9983	0.1587	Derived	0.3174	Derived		Derived	
E.7	6" (150 NB)	NOS.	3	9983	0.1387	Derived	0.4160	Derived		Derived	
E.8	4" (100 NB)	NOS.	11	9983	0.0998	Derived	1.0979	Derived		Derived	
E.9	< 4" (<100 NB)	NOS.	1	9983	0.0686	Derived	0.0686	Derived		Derived	
F	GRAND TOTAL (A+B+C+D+E)						100.0000	TO BE QUOTED = Rs X	Derived	Derived	Derived = Rs Y

Note:-		
1. Bidder to note that evaluation shall be on Grand Total Ex works price + Freight charges, however, Bidder to quote grand total Ex works of the flow element mentioned at sl. A to E (Rs X) only as per the BOQ above. The item wise break up of Ex works prices (unit as well as total) for all the items in the BOQ shall be derived as per the formulae indicated above by BHEL. Indigenous bidder also need to indicate taxes percentage in the respective column and freight percentage of Ex works value considering delivery anywhere in India in the freight column.		
2. Rate contract shall be decided on the basis of grand Total Ex works price + Freight charges of Total BOQ		
3. Bidder to quote single % Freight for the BOQ supply items.		
4. Value is to be filled only where "to be quoted" is mentioned and for other columns where "derived" is mentioned same shall be derived by BHEL as per % allocation fixed against each item		
5. Bidder to note that total price indicated above at F shall be considered for evaluation and hence should be complete in all respect for the full scope defined and considering all terms and conditions agreed.		
6. Prices shall remain firm during contract execution.		
7. For any clarification please refer Technical Specification No-PE-TS-20-145-I105A		



**ANNEXURE-II: DEVIATION SHEET (COST OF WITHDRAWAL)****PACKAGE:- FLOW ELEMENT ORIFICE- RATE CONTRACT**

TENDER ENQUIRY REF NO-RATE CONTRACT - NIT REF NO-E-----/2018 , DTD -----

NAME OF VENDOR:-

SL NO	VOLUME/ SECTION	PAGE NO.	CLAUSE NO.	TECHNICAL SPECIFICATION/ TENDER DOCUMENT	COMPLETE DESCRIPTION OF DEVIATION	COST OF WITHDRAWAL OF DEVIATION	REFERENCE OF PRICE SCHEDULE ON WHICH COST OF WITHDRAWAL OF DEVIATION IS APPLICABLE	NATURE OF COST OF WITHDRAWAL OF DEVIATION (POSITIVE/ NEGATIVE)	REASONS FOR QUOTING DEVIATION
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TECHNICAL DEVIATIONS

COMMERCIAL DEVIATIONS

PARTICULARS OF BIDDERS/ AUTHORISED REPRESENTATIVE

NAME	DESIGNATIONS	SIGN & DATE	

NOTES:

1. For self manufactured items of bidder, cost of withdrawal of deviation will be applicable on the basic price (i.e. excluding taxes, duties & freight) only.
2. For directly dispatchable items, cost of withdrawal of deviation will be applicable on the basic price including taxes, duties & freight.
3. All the bidders have to list out all their Technical & Commercial Deviations (if any) in detail in the above format.
4. Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.
5. Bidder shall submit duly filled unpriced copy of above format indicating "quoted" in "cost of withdrawal of deviation" column of the schedule above along with their Techno-commercial offer, wherever applicable
6. Bidder shall furnish price copy of above format along with price bid.
7. The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at discretion of the Purchaser.
8. Bidders to note that any deviation (technical/commercial) not listed in above and asked after Part-I opening shall not be considered
9. For deviations w.r.t. Payment terms, Liquidated damages, Firm prices and submission of E1/ E2 forms before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII of GCC, Rev-06 will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawal of deviation shall be taken as NIL.
10. Any deviation mentioned in priced copy of this format, but not mentioned in the un-priced copy, shall not be accepted.
11. All techno-commercial terms and conditions of NIT shall be deemed to have been accepted by the bidder, other than those listed in unpriced copy of this format.
12. Cost of withdrawal is to be given separately for each deviation. In no event bidder should club cost of withdrawal of more than one deviation else cost of withdrawal of such deviations which have been clubbed together shall be considered as NIL.
13. In case nature of cost of withdrawal (positive/negative) is not specified it shall be assumed as positive.
14. In case of discrepancy in the nature of impact (positive/ negative), positive will be considered for evaluation and negative for ordering.



BHEL / PEM / CMM
SPECIAL CONDITIONS OF RATE CONTRACT

ANNEXURE- III: SPECIAL CONDITION OF RATE CONTRACT FOR FLOW ELEMENT-ORIFICE

1. BHEL/PEM intends to enter into Rate Contract for supply of the tendered items for a period of two years. The Rate Contract shall come into force from the date of issue of Purchase order for Rate Contract. Validity for ordering shall be two years from the purchase order for Rate Contract.
2. Details of consignee and project site information for dispatch of material shall be intimated at the time of placement of PO for specific project after finalization of RC.
3. Transit Insurance is in BHEL scope.
4. The items will be required against respective projects. Exact quantities and Project information shall be intimated while placing order for a specific project based on the Rate Contract.
5. The prices shall remain firm (except for those items in which PVC is applicable as per NIT) during the period of two years with a provision for further extension after review on mutual consent.
6. Inspection of materials shall be carried out by BHEL/CQA and or by Customer or by an authorized agency at manufacture's works before dispatch, if required. Dispatch of material to be done, only after receipt of BHEL/Customer MDCC. It is responsibility of vendor to for obtain Material Dispatch Clearance Certificate (MDCC) from BHEL or Customer as required before dispatch of material.

Vendor shall give inspection call on BHEL-CQS web site to applicable inspection agency with a copy of inspection call to BHEL-PEM for arranging Customer participation (if applicable) in inspection / Joint inspection on the proposed date with an advance notice of 15 working days. Inspection charges shall be paid by BHEL-PEM.

Items have to be manufactured as per specification and supplied strictly in accordance with the approved BHEL / Customer's Drawings & Quality Plan. The items/ test certificate of items, which for any reason are not acceptable to BHEL / Customer, shall be required to be retested. No extra charge shall be payable on those account by BHEL.

7. Mode of dispatch shall be by road through Schedule Bank/BHEL (PEM) approved transporters.
8. Other terms and conditions shall be as per Standard Technical specification no, GCC Rev 06 & Corrigenda to GCC Rev 06, Enquiry letter.
9. This enquiry is subject to Conditions/ limits if any imposed in PMD/ Vendor registration.
10. Tentative quantity is given in enquiry.
11. Bidders to submit offer for RC of said items ONLINE via e-Procurement System only. Bidder to upload tender documents complete in all respects duly signed & stamped on each and every page by the authorized signatory of the bidder as a token of acceptance of all the terms and conditions of tender.
12. The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendor/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL web site <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud as soon as it comes to their notice.

Annexure-IV

Project considered for Rate contract Orifice 2019-20	
SI No.	Projects Name
1	BARH-1 FGD
2	BARH-2 FGD
3	KOTHAGUDEM FGD
4	BHADRADRI FGD
5	NKSTPP FGD
6	MAUDA FGD
7	2X660MW UDANGUDI
8	1X660MW BHUSAWAL
9	3X800MW PATRATU
10	1X660MW SAGARDIGGI
11	5X800MW YADRADRI
12	1X660MW PANKI

Note-

Project list is indicative only, BHEL may ask for delivery anywhere in India for any of the project added in the prospective project/ existing projects during RC period.



BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

NAME

& ADDRESSES OF THE BENEFICIARY

Dear Sirs,

In consideration of the Bharat Heavy Electricals Limited ¹ (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at _____ through its Unit at.....(name of the Unit) having awarded to (Name of the Vendor / Contractor / Supplier) having its registered office at _____ ² hereinafter referred to as the 'Contractor/Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No.....dated³ valued at Rs.....⁴ (Rupees -----)/FC.....(in words.....) for⁵ (hereinafter called the 'Contract') and the Contractor having agreed to provide a Contract Performance Guarantee, equivalent to% (.... Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract,

we,, (hereinafter referred to as the Bank), having registered/Head office at and inter alia a branch at being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer a maximum amount Rs ----- (Rupees -----) without any demur, immediately on a demand from the Employer, .

Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor/ Supplier in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the contractors/supplier shall have no claim against us for making such payment.

We thebank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We BANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Contractor/Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Contractor/Supplier and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor/Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Contractor/Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall remain in force upto and including.....⁶ and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the⁷we shall be discharged from all liabilities under this guarantee thereafter.

We, BANK lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed.....⁸
- b) This Guarantee shall be valid up to⁹
- c) Unless the Bank is served a written claim or demand on or before¹⁰ all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We, _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dated.....

Place of Issue.....

¹ NAME AND ADDRESS OF EMPLOYER I.e Bharat Heavy Electricals Limited

² NAME AND ADDRESS OF THE VENDOR /CONTRACTOR / SUPPLIER.

³ DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE

⁴ PROJECT/SUPPLY DETAILS

⁵ BG AMOUNT IN FIGURES AND WORDS

⁶ VALIDITY DATE

⁷ DATE OF EXPIRY OF CLAIM PERIOD

⁸ BG AMOUNT IN FIGURES AND WORDS.

⁹ VALIDITY DATE

¹⁰ DATE OF EXPIRY OF CLAIM PERIOD

Note:

1. Units are advised that expiry of claim period may be kept 2/3 months after validity date.
2. In Case of Bank Guarantees submitted by Foreign Vendors-
 - a. **From Nationalized/Public Sector / Private Sector/ Foreign Banks (BG issued by Branches in India)** can be accepted subject to the condition that the Bank Guarantee should be enforceable in the town/city or at nearest branch where the Unit is located i.e. Demand can be presented at the Branch located in the town/city or at nearest branch where the Unit is located.
 - b. **From Foreign Banks (wherein Foreign Vendors intend to provide BG from local branch of the Vendor country's Bank)**
 - b.1 In such cases, in the Tender Enquiry/ Contract itself, it may be clearly specified that Bank Guarantee issued by **any of the Consortium Banks only** will be accepted by BHEL. As such, Foreign Vendor needs to make necessary arrangements for issuance of Counter- Guarantee by Foreign Bank in favour of the Indian Bank (BHEL's Consortium Bank). It is advisable that all charges for issuance of Bank Guarantee/ counter- Guarantee should be borne by the Foreign Vendor. The tender stipulation should clearly specify these requirements.
 - b.2 **In case, Foreign Vendors intend to provide BG from Overseas Branch of our Consortium Bank** (e.g. if a BG is to be issued by SBI Frankfurt), the same is acceptable. However, the procedure at **sl.no. b.1** will required to be followed.
 - b.3 The BG issued may preferably be subject to Uniform Rules for Demand Guarantees (URDG) 758 (as amended from time to time). In case, of Foreign Vendors, the BG Format provided to them should clearly specify the same.
 - b.4 The BG should clearly specify that the demand or other document can be presented in electronic form.

**ANNEXURE TO MODEL CONCILIATION CLAUSE FOR CONDUCT OF
CONCILIATION UNDER THE BHEL CONCILIATION SCHEME, 2018**

BRIEF PROCEDURE FOR CONDUCT OF CONCILIATION PROCEEDINGS

1. The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided herein:
2. The party desirous of resorting to Conciliation shall send an invitation/notice in writing to the other party to conciliate specifying all points of Disputes with details of the amount claimed. The party concerned shall not raise any new issue thereafter. Parties shall also not claim any interest on claims/counter-claims from the date of notice invoking Conciliation till the conclusion of the Conciliation proceedings. If BHEL is to initiate Conciliation, then, the invitation to Conciliate shall be extended to the concerned Stakeholder in **Format 7** hereto. Where the stakeholder is to initiate the Conciliation, the notice for initiation of Conciliation shall be sent in **Format-8** hereto.
3. The party receiving the invitation/notice for Conciliation shall within 30 days of receipt of the notice of Conciliation intimate its consent for Conciliation along with its counter-claims, if any.
4. The Conciliation in a matter involving claim or counter-claim (whichever is higher) up to Rs 5 crores shall be carried out by sole Conciliator nominated by BHEL while in a matter involving claim or counter-claim (whichever is higher) of more than Rs 5 crores Conciliation shall be carried out by 3 Conciliators nominated by BHEL. The appointment of Conciliator(s) shall be completed and communicated by the concerned Department/Group of BHEL Unit/Division/Region/Business Group to the other party and the Conciliator(s) within 30 days from the date of acceptance of the invitation to conciliate by the concerned party in the **Format-9**. The details of the Claim, and counter-claim, if any, shall be intimated to the Conciliator(s) simultaneously in **Format-5**.
5. The Parties shall be represented by only their duly authorized in-house executives/officers and neither Party shall be represented by a Lawyer.
6. The first meeting of the IEC shall be convened by the IEC by sending appropriate communication/notice to both the parties as soon as possible but not later than 30 days from the date of his/their appointment. The hearings in the Conciliation proceeding shall ordinarily be concluded within two (2) months and, in exceptional cases where parties have expressed willingness to settle the matter or there exists possibility of settlement in the matter, the

proceedings may be extended by the IEC by a maximum of further 2 months with the consent of the Parties subject to cogent reasons being recorded in writing.

- 7.** The IEC shall thereafter formulate recommendations for settlement of the Disputes supported by reasons at the earliest but in any case within 15 days from the date of conclusion of the last hearing. The recommendations so formulated along with the reasons shall be furnished by the IEC to both the Parties at the earliest but in any case within 1 month from the date of conclusion of the last hearing.
- 8.** Response/modifications/suggestions of the Parties on the recommendations of the IEC are to be submitted to the IEC within time limit stipulated by the IEC but not more than 15 days from the date of receipt of the recommendations from the IEC.
- 9.** In the event, upon consideration, further review of the recommendations is considered necessary, whether by BHEL or by the other Party, then, the matter can be remitted back to the IEC with request to reconsider the same in light of the issues projected by either/both the Parties and to submit its recommendations thereon within the following 15 days from the date of remitting of the case by either of the Parties.
- 10.** Upon the recommendations by the Parties, with or without modifications, as considered necessary, the IEC shall be called upon to draw up the Draft Settlement Agreement in terms of the recommendations.
- 11.** When a consensus can be arrived at between the parties only in regard to any one or some of the issues referred for Conciliation the draft Settlement Agreement shall be accordingly formulated in regard to the said Issue(s), and the said Settlement Agreement, if signed, by the parties, shall be valid only for the said issues. As regards the balance issues not settled, the parties may seek to resolve them further as per terms and conditions provided in the contract.
- 12.** In case no settlement can be reached between the parties, the IEC shall by a written declaration, pronounce that the Conciliation between the parties has failed and is accordingly terminated.
- 13.** Unless the Conciliation proceedings are terminated in terms of para 22 (b), (c) & (d) herein below, the IEC shall forward his/its recommendations as to possible terms of settlement within one (1) month from the date of last hearing. The date of first hearing of Conciliation shall be the starting date for calculating the period of 2 months.

- 14.** In case of 3 members IEC, 2 members of IEC present will constitute a valid quorum for IEC and meeting can take place to proceed in the matter after seeking consent from the member who is not available. If necessary, videoconferencing may be arranged for facilitating participation of the members. However, the IEC recommendations will be signed by all members. Where there is more than one (1) Conciliator, as a general rule they shall act jointly. In the event of differences between the Members of IEC, the decision/recommendations of the majority of the Members of IEC shall prevail and be construed as the recommendation of the IEC.
- 15.** The Draft Settlement Agreement prepared by the IEC in terms of the consensus arrived at during the Conciliation proceedings between the Parties shall be given by the IEC to both the parties for putting up for approval of their respective Competent Authority.
- 16.** Before submitting the draft settlement agreement to BHEL's Competent Authority viz. the Board Level Committee on Alternative Dispute Resolution (BLCADR) for approval, concurrence of the other party's Competent Authority to the draft settlement agreement shall be obtained by the other party and informed to BHEL within 15 days of receipt of the final draft settlement agreement by it. Upon approval by the Competent Authority, the Settlement Agreement would thereafter be signed by the authorized representatives of both the Parties and authenticated by the members of the IEC.
- 17.** In case the Draft Settlement Agreement is rejected by the Competent Authority of BHEL or the other Party, the Conciliation proceedings would stand terminated.
- 18.** A Settlement Agreement shall contain a statement to the effect that each of the person(s) signing thereto (i) is fully authorized by the respective Party(ies) he/she represents, (ii) has fully understood the contents of the same and (iii) is signing on the same out of complete freewill and consent, without any pressure, undue influence.
- 19.** The Settlement Agreement shall thereafter have the same legal status and effect as an arbitration award on agreed terms on the substance of the dispute rendered by an arbitral tribunal passed under section 30 of the Arbitration and Conciliation Act, 1996.
- 20.** Acceptance of the Draft Settlement Agreement/recommendations of the Conciliator and/or signing of the Settlement Agreement by BHEL shall however, be subject to withdrawal/closure of any arbitral and/or judicial proceedings initiated by the concerned Party in regard to such settled issues.

- 21.** Unless otherwise provided for in the agreement, contract or the Memorandum of Understanding, as the case may be, in the event of likelihood of prolonged absence of the Conciliator or any member of IEC, for any reason/incapacity, the Competent Authority/Head of Unit/Division/Region/Business Group of BHEL may substitute the Conciliator or such member at any stage of the proceedings. Upon appointment of the substitute Conciliator(s), such reconstituted IEC may, with the consent of the Parties, proceed with further Conciliation into the matter either de-novo or from the stage already reached by the previous IEC before the substitution.
- 22.** The proceedings of Conciliation under this Scheme may be terminated as follows:
- a.** On the date of signing of the Settlement agreement by the Parties; or,
 - b.** By a written declaration of the IEC, after consultation with the parties, to the effect that further efforts at conciliation are no longer justified, on the date of the declaration; or,
 - c.** By a written declaration of the Parties addressed to the IEC to the effect that the Conciliation proceedings are terminated, on the date of the declaration; or,
 - d.** By a written declaration of a Party to the other Party and the IEC, if appointed, to the effect that the Conciliation proceedings are terminated, on the date of the declaration; or,
 - e.** On rejection of the Draft Settlement Agreement by the Competent Authority of BHEL or the other Party.
- 23.** The Conciliator(s) shall be entitled to following fees and facilities:

Sl No	Particulars	Amount
1	Sitting fees	Each Member shall be paid a Lump Sum fee of Rs 75,000/- for the whole case payable in terms of paragraph No. 27 herein below.
2	Towards drafting of settlement agreement	In cases involving claim and/or counter-claim of up to Rs 5crores. Rs 50,000/- (Sole Conciliator) In cases involving claim and/or counter-claim of exceeding Rs 5 crores but less than Rs 10 crores.

Sl No	Particulars	Amount
		Rs 75,000 (per Conciliator) In cases involving claim and/or counter-claim of more than Rs 10 crores. Rs 1,00,000/- (per Conciliator) Note: The aforesaid fees for the drafting of the Settlement Agreement shall be paid on the, Signing of the Settlement Agreement after approval of the Competent Authority or Rejection of the proposed Settlement Agreement by the Competent Authority of BHEL.
3	Secretarial expenses	Rs 10,000/- (one time) for the whole case for Conciliation by a Sole Member IEC. Where Conciliation is by multi member Conciliators –Rs 30,000/- (one time)- to be paid to the IEC
4	Travel and transportation and stay at outstation Retired Senior Officials of other Public Sector Undertakings (pay scale wise equivalent to or more than E-8 level of BHEL)	As per entitlement of the equivalent officer (pay scale wise) in BHEL.
	Others	As per the extant entitlement of whole time Functional Directors in BHEL. Ordinarily, the IEC Member(s) would be entitled to travel by air Economy Class.
5	Venue for meeting	Unless otherwise agreed in the agreement, contract or the Memorandum of Understanding, as the case may be, the venue/seat of proceedings shall be the location of the

Sl No	Particulars	Amount
		concerned Unit / Division / Region / Business Group of BHEL. Without prejudice to the seat/venue of the Conciliation being at the location of concerned BHEL Unit / Division / Region / Business Group, the IEC after consulting the Parties may decide to hold the proceedings at any other place/venue to facilitate the proceedings. Unless, Parties agree to conduct Conciliation at BHEL premises, the venue is to be arranged by either Party alternately.

- 24.** The parties will bear their own costs including cost of presenting their cases/evidence/witness(es)/expert(s) on their behalf. The parties agree to rely upon documentary evidence in support of their claims and not to bring any oral evidence in IEC proceedings.
- 25.** If any witness(es) or expert(s) is/are, with the consent of the parties, called upon to appear at the instance of the IEC in connection with the matter, then, the costs towards such witness(es)/expert(s) shall be determined by the IEC with the consent of the Parties and the cost so determined shall be borne equally by the Parties.
- 26.** The other expenditures/costs in connection with the Conciliation proceedings as well as the IEC's fees and expenses shall be shared by the Parties equally.
- 27.** Out of the lump sum fees of Rs 75,000/- for Sitting Fees, 50% shall be payable after the first meeting of the IEC and the remaining 50% of the Sitting Fees shall be payable only after termination of the conciliation proceedings in terms of para 22 hereinabove.
- 28.** The travelling, transportation and stay at outstation shall be arranged by concerned Unit as per entitlements as per Serial No. 4 of the Table at para 23 above, and in case such arrangements are not made by the BHEL Unit, the same shall be reimbursed to the IEC on actuals limited to their entitlement as per Serial No. 4 of the Table at Para 23 above against supporting documents. The IEC Member(s) shall submit necessary invoice for claiming the fees/reimbursements.

- 29.** The Parties shall keep confidential all matters relating to the conciliation proceedings. Confidentiality shall extend also to the settlement agreement, except where its disclosure is necessary for purposes of its implementation and enforcement or as required by or under a law or as per directions of a Court/Governmental authority/ regulatory body, as the case may be.
- 30.** The Parties shall not rely upon or introduce as evidence in any further arbitral or judicial proceedings, whether or not such proceedings relate to the Disputes that is the subject of the Conciliation proceedings:
- a.** Views expressed or suggestions made by the other party in respect of a possible settlement of the Disputes;
 - b.** admissions made by the other party in the course of the Conciliator proceedings;
 - c.** proposals made by the Conciliator;
 - d.** The fact that the other Party had indicated his willingness to accept a proposal for settlement made by the Conciliator.
- 31.** The Parties shall not present the Conciliator(s) as witness in any Alternative Dispute Resolution or Judicial proceedings in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
- 32.** None of the Conciliators shall act as an arbitrator or as a representative or counsel of a Party in any arbitral or judicial proceeding in respect of a Disputes that is/was the subject of that particular Conciliation proceeding.
- 33.** The Parties shall not initiate, during the Conciliation proceedings, any arbitral or judicial proceedings in respect of a Disputes that is the subject matter of the Conciliation proceedings except that a Party may initiate arbitral or judicial proceedings where, in his opinion, such proceedings are necessary for preserving his rights including for preventing expiry of period of limitation. Unless terminated as per the provisions of this Scheme, the Conciliation proceedings shall continue notwithstanding the commencement of the arbitral or judicial proceedings and the arbitral or judicial proceedings shall be primarily for the purpose of preserving rights including preventing expiry of period of limitation.
- 34.** The official language of Conciliation proceedings under this Scheme shall be English unless the Parties agree to some other language.

Format 5 to BHEL Conciliation Scheme, 2018
STATEMENT OF CLAIMS/COUNTER CLAIMS TO BE SUBMITTED TO THE
IEC BY BOTH THE PARTIES

1. Chronology of the Disputes
2. Brief of the Contract/MoU/Agreement/LOI/LOA
3. Brief history of the Disputes:
4. Issues:
5. Details of Claim(s)/Counter Claim(s):

SI. No.	Description of claim(s)/Counter Claim	Amount (in INR)Or currency applicable in the contract	Relevant contract clause

6. Basis/Ground of claim(s)/counter claim(s) (along with relevant clause of contract)

Note– *The Statement of Claims/ Counter Claims may ideally be restricted to maximum limit of 20 pages. Relevant documents may be compiled and submitted along with the statement of Claims/ Counter Claims. The statement of Claims/ Counter Claims is to be submitted to all IEC members and to the other party by post as well as by email.*

FORMAT FOR NOTICE INVOKING CONCILIATION CLAUSE BY BHEL FOR REFERRING THE DISPUTES TO CONCILIATION THROUGH IEC

To,

M/s. (Stakeholder's name)

Subject: **NOTICE FOR INVOCATION OF THE CONCILIATION CLAUSE OF THE CONTRACT BY BHEL**

Ref: Contract No/MoU/Agreement/LOI/LOA& date _____.

Dear Sir/Madam,

As you are aware, with reference to above referred Contract/MoU/Agreement/LOI/LOA, certain disputes have arisen, which, in spite of several rounds of mutual discussions and various correspondences have remained unresolved. The brief particulars of our claims which arise out of the above- referred Contract/MoU/Agreement/LOI/LOA are reproduced hereunder:

Sl. No.	Claim description	Amount involved

As you are aware, there is a provision in the captioned Contract/MoU/Agreement/LOI/ LOA for referring disputes to conciliation.

In terms of Clause -----of Procedure i.e., Annexure ----- to the Contract/MoU /Agreement / LOI / LOA, we hereby seek your consent to refer the matter to Conciliation by Independent Experts Committee to be appointed by BHEL. You are invited to provide your consent in writing to proceed with conciliation into the above mentioned disputes within a period of 30 days from the date of this letter along with details of counter-claims, if any, which you might have with regard to the subject Contract/ MoU/ Agreement/ LOI/ LOA.

Please note that upon receipt of your consent in writing within 30 days of the date of receipt of this letter by you, BHEL shall appoint suitable person(s) from the BHEL Panel of Conciliators.

This letter is being issued without prejudice to our rights and contentions available under the contract and law.

Thanking you
Yours faithfully

Representative of BHEL

Note: The Format may be suitably modified, as required, based on facts and circumstances of the case.

**FORMAT FOR NOTICE INVOKING CONCILIATION CLAUSE BY A
STAKEHOLDER FOR REFERRING THE DISPUTES TO CONCILIATION
THROUGH IEC**

To,

BHEL (Head of the Unit/Division/Region/Business Group)

Subject: **NOTICE FOR INVOCATION OF THE CONCILIATION CLAUSE OF THE
CONTRACT BY A STAKEHOLDER**

Ref: Contract No/MoU/Agreement/LOI/LOA& date _____.

Dear Sir/Madam,

As you are aware, with reference to above referred Contract/MoU/Agreement/LOI/LOA, certain disputes have arisen, which, in spite of several rounds of mutual discussions and various correspondences have remained unresolved. The brief particulars of our claims which have arisen out of the above-referred Contract/MoU/Agreement/LOI/LOA are enumerated hereunder:

Sl. No.	Claim description	Amount involved

As you are aware, there is a provision in the captioned Contract/MoU/Agreement/LOI/ LOA for referring inter-se disputes of the Parties to conciliation.

We wish to refer the above-said disputes to Conciliation as per the said Clause of the captioned Contract/MoU/Agreement/LOI/ LOA. In terms of Clause -----of Procedure i.e., Annexure ----- to the Contract/MoU /Agreement / LOI / LOA, we hereby invite BHEL to provide its consent in writing to proceed with conciliation into the above mentioned disputes within a period of 30 days from the date of this letter along with details of counter-claims, if any, which it might have with regard to the subject Contract/ MoU/ Agreement/ LOI/ LOA and to appoint suitable person(s) as Conciliator(s) from the BHEL Panel of Conciliators.

This letter is being issued without prejudice to our rights and contentions available under the contract and law.

Thanking you
Yours faithfully

Representative of the Stakeholder

Note: The Format may be suitably modified, as required, based on facts and circumstances of the case.

FORMAT FOR INTIMATION TO THE STAKEHOLDER ABOUT APPOINTMENT OF CONCILIATOR/IEC

To,

M/s. (Stakeholder's name)

Subject: **INTIMATION BY BHEL TO THE STAKEHOLDER AND CONCILIATOR(S) ABOUT APPOINTMENT OF CONCILIATOR/IEC**

Ref: Contract No/MoU/Agreement/LOI/LOA& date _____.

Sir,

This is with reference to letter dated ----- regarding reference of the disputes arising in connection with the subject Contract No /MoU/Agreement/LOI/LOA to conciliation and appointment of Conciliator(s).

In pursuance of the said letter, the said disputes are assigned to conciliation and the following persons are nominated as Conciliator(s) for conciliating and assisting the Parties to amicably resolve the disputes in terms of the Arbitration & Conciliation Act, 1996 and the Procedure ---- to the subject Contract/MoU/Agreement/LOI/LOA, if possible.

Name and contact details of Conciliator(s)

a)

b)

c)

You are requested to submit the Statement of Claims or Counter-Claims (strike off whichever is inapplicable) before the Conciliator(s) in Format 5 (enclosed herewith) as per the time limit as prescribed by the Conciliator(s).

Yours faithfully,

Representative of BHEL

CC: To Conciliator(s)... for Kind Information please.

Encl: As above

Note: The Format may be suitably modified, as required, based on facts and circumstances of the case.

	<u>PRE-QUALIFICATION REQUIREMENTS</u>	PE-PQ-999-145-I003
		REVISION NO. 04 DATE 29/04/2016
		SHEET NO. 1 OF 1

ENQUIRY NO: (To be filled by PG)	
PROJECT:	
PACKAGE: FLOW ORIFICE	
1.0	Supplier should be Original equipment manufacturer (OEM) for FLOW ORIFICE. “Supplier to comply to general points of PQR available at http://bhelpem.com/vensection/PMD/PMD.aspx in case supplier is not OEM , the offer shall be evaluated as per point no 1 of general points of PQR “
2.0	The Product being offered by the Supplier should be in use successfully in power plant or any other industrial application for at least 1 (One) year. Supplier to submit either of following supporting documents for the product: a. Copy of minimum 1 (One) Performance Certificate from end user / customer specifying that product is running successfully for 1 (One) year from date of commissioning. The certificate should clearly indicate date of commissioning, date of issue of certificate and name/designation of the certificate issuer. Copy of purchase order & technical parameter to be attached along with the performance certificate. OR b. Copy of repeat orders from minimum 2 (Two) different purchasers. Order received by supplier from same purchaser with a gap of minimum 2 (Two) years shall be considered as repeat order. Copy of technical parameters for each order to be attached.
3.0	Supplier to furnish experience list of last 5 years indicating customer name, purchase order reference, item supplied & year of supply to establish the continuity of business.

PREPARED BY NAME: DESIGNATION	REVIEWED BY NAME: DESIGNATION	APPROVED BY NAME: DESIGNATION
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	<u>PRE-QUALIFICATION REQUIREMENTS</u>	PE-PQ-999-145-I003
		REVISION NO. 04 DATE 29/04/2016
		SHEET NO. 1 OF 1

ENQUIRY NO: (To be filled by PG)	
PROJECT:	
PACKAGE: FLOW ORIFICE	
1.0	Supplier should be Original equipment manufacturer (OEM) for FLOW ORIFICE. “Supplier to comply to general points of PQR available at http://bhelpem.com/vensection/PMD/PMD.aspx in case supplier is not OEM , the offer shall be evaluated as per point no 1 of general points of PQR “
2.0	The Product being offered by the Supplier should be in use successfully in power plant or any other industrial application for at least 1 (One) year. Supplier to submit either of following supporting documents for the product: a. Copy of minimum 1 (One) Performance Certificate from end user / customer specifying that product is running successfully for 1 (One) year from date of commissioning. The certificate should clearly indicate date of commissioning, date of issue of certificate and name/designation of the certificate issuer. Copy of purchase order & technical parameter to be attached along with the performance certificate. OR b. Copy of repeat orders from minimum 2 (Two) different purchasers. Order received by supplier from same purchaser with a gap of minimum 2 (Two) years shall be considered as repeat order. Copy of technical parameters for each order to be attached.
3.0	Supplier to furnish experience list of last 5 years indicating customer name, purchase order reference, item supplied & year of supply to establish the continuity of business.

PREPARED BY NAME: DESIGNATION	REVIEWED BY NAME: DESIGNATION	APPROVED BY NAME: DESIGNATION
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GST related Corrigendum to GCC Rev 06

Clause Ref:	Existing Clause as:	Replaced/ New Clause as:
Clause No.4 of GCTC (General commercial terms and conditions)	TAXES AND DUTIES 4.1 EXCISE DUTY 4.1.1 Seller/ Contractor is required to ensure that excise duty including cess, if any, is quoted as per the existing tariff on the date of the offer and all benefits as per existing rules have been considered. 4.1.2 Excise duty actually incurred by Seller/ Contractor on self-manufactured items alone shall be reimbursed against documentary evidence. Excise duty paid by Purchaser on inputs, bought out items, raw materials and components consigned directly to site from sources other than Seller/ Contractor's factory/ works shall be included by the bidder in the quoted basic price. 4.1.3 If excise duty is paid under protest or dispute, it shall not be reimbursed till the dispute is settled. If the Seller/ Contractor claims/ obtains any refund of the excise duty paid, the same shall be refunded to the Purchaser immediately 4.1.4 Invoice cum Excise duty gate pass (Excise Invoice) should contain the name of the ultimate consignee as per Order/ Contract/ Special Conditions of Contract. 4.1.5 If required by Purchaser, the Seller / Contractor will provide a certificate stating that CENVAT benefit has been availed of on the inputs and the same has been passed on to the Purchaser. 4.1.6 Excise duty shall be paid at actuals against documentary evidence but restricted to the amount and percentage indicated in the Order/ Contract. 4.2 SALES TAX / VALUE ADDED TAX (VAT) 4.2.1 Central Sales Tax / Value Added Tax shall be reimbursed only if the same is paid by the Seller / Contractor to the respective Govt. authorities on direct sales by the Seller/ Contractor to the Purchaser, meeting all statutory requirements and availing all exemptions/ concessions under the respective Central Sales Tax / Value Added Tax Acts. The offer should clearly indicate CST/ VAT percentage and the total	TAXES AND DUTIES 4.1 CGST/SGST/UTGST/IGST 4.1.1 Seller/ Contractor is required to ensure that CGST/SGST/UTGST/IGST (whichever is applicable) is quoted as per the existing tariff on the date of the offer and all benefits as per existing laws have been considered. 4.1.2 It is the responsibility of the seller/contractor to issue the Tax Invoice strictly as per the format prescribed under the relevant applicable GST law (CGST Act/SGST Act/UTGST Act/IGST Act). Vendor to indicate the proper GSTN Registration/ HSN code in their tax invoice. 4.1.3 The purchaser is registered in the State of Uttar Pradesh vide following GST registration number: 09AAACB4146P22C 4.1.4 Seller/contractor is required to mention the above registration number in their tax invoice unless stated otherwise in NIT/SCC. 4.1.5 CGST/SGST/UTGST/IGST shall be paid at actuals against Tax Invoice but restricted to the amount and percentage in the order/contract

GST related Corrigendum to GCC Rev 06

	amount along with concessional form(s), if any. 4.2.2 Purchaser is registered in NOIDA, U.P. vide following Registration Numbers: Central Sales Tax Registration No. : ND – 5341151 w.e.f. 01-07-2006 UP Trade Tax Registration No. : ND – 0345307 w.e.f. 01-07-2006 UP TIN No. : 09765702874 4.2.3 Central Sales Tax/ Value Added Tax shall be reimbursed, as per tariff applicable, but restricted to the percentage and amount shown in the Order/ Contract. If it is shown as included in the quoted price/ not applicable, it will not be reimbursed by the Purchaser. 4.2.4 Purchaser proposes to make sale-in-transit under section 6 (2) (b) of Central Sales Tax Act where goods movement is inter-state. Form-C shall be issued and exchanged against Form-E1/E2 based on quarterly transactions. Seller/Contractor is required to submit his request in the format enclosed at Annexure-VI within 30 days from end of the Quarter, giving State-wise invoice details. 4.2.5 VAT invoices, in format prescribed by the respective State Sales Tax Act, have to be submitted in the name of Nodal Agency specified in Special Conditions of Contract. 4.3 SERVICE TAX 4.3.1 Service Tax paid by the Service Provider /contractor to the Government authorities directly shall only be reimbursed at actuals against documentary evidence, but restricted to the rate and amount mentioned in the order/contract. The offer should clearly indicate the percentage and the total amount of service tax. 4.3.2 Service provider/Contractor to ensure their registration for “Intended Service” to be provided, before claiming Service tax under the “intended category”. Decision of BHEL shall be final w.r.t. the “Intended category” in which the service will be falling. 4.3.3 If required by the Purchaser, the Service Provider/Contractor will provide a certificate stating that “CENVAT Benefit has been availed of on the input and the	4.2 OTHER TAXES & LEVIES 4.2.1 All taxes/duties/Cess other than CGST/SGST/UTGST/IGST shall be deemed to be included in the Ex-Works prices unless specified otherwise by the bidder in the price bid. No variation in other taxes and duties shall be payable by Purchaser. 4.3 CUSTOMS DUTY
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GST related Corrigendum to GCC Rev 06

	same has been passed on to the purchaser” or “CENVAT Benefit has not been availed of on the inputs”. 4.4 OTHER TAXES & LEVIES All taxes and duties other than Excise Duty, Sales Tax/ VAT, Service Tax shall be deemed to be included in the Ex-Works prices unless specified otherwise by the bidder in the price bid. No variation in other taxes and duties shall be payable by Purchaser. However, statutory variation in Octroi will be payable extra against documentary evidence. 4.5 CUSTOMS DUTY 4.5.1 Customs Duty element for imported items as per Special Conditions of Contract shall be included in the Ex-Works prices. No variation in customs duty and exchange rate for imported items shall be payable by Purchaser. 4.5.2 Seller/ Contractor shall arrange for his own import license, if required, since Purchaser will not provide any import license. Therefore, Seller/ Contractor alone shall be responsible for any delay in getting import license or non-availability of the same or completion of other related formalities. Purchaser shall not be responsible for any financial liability, whatsoever, on this account. 4.5.3 Essentiality Certificate or Project Authority Certificate (PAC) as per Import Policy, if required to avail concessional customs duty, shall be clearly specified in the offer. Import content (CIF value in rupees) with list of items, quantity, foreign currency, country of origin etc., shall be submitted by the bidder as part of Price bid. 4.6 DIRECT TAX 4.6.1 Purchaser shall not be liable towards income tax of whatever nature including variations thereof, arising out of this Order/ Contract, as well as tax liability of the Seller/ Contractor and his personnel.	4.3.1 Customs Duty/IGST/Goods and Services compensation cess under Goods and Services Tax (Compensation to States) Act, 2017 element for imported items as per Special Conditions of Contract shall be included in the Ex-Works prices. 4.3.2 Seller/ Contractor shall arrange for his own import license, if required, since Purchaser will not provide any import license. Therefore, Seller/ Contractor alone shall be responsible for any delay in getting import license or non-availability of the same or completion of other related formalities. Purchaser shall not be responsible for any financial liability, whatsoever, on this account. 4.3.3 Essentiality Certificate or Project Authority Certificate (PAC) as per Import Policy, if required to avail concessional customs duty, shall be clearly specified in the offer. Import content (CIF value in rupees) with list of items, quantity, foreign currency, Country of origin etc., shall be submitted by the bidder as part of Price bid. 4.4 DIRECT TAXES 4.4.1 Purchaser shall not be liable towards income tax of whatever nature including variations thereof, arising out of this Order/ Contract, as well as tax liability of the Seller/ Contractor and his personnel. 4.4.2 Deductions of Tax at source at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per statutory provisions
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GST related Corrigendum to GCC Rev 06

	4.6.2 Deductions of Tax at source at the prevailing rates shall be effected by the Purchaser before release of payment, as a statutory obligation, if applicable. TDS certificate will be issued by the Purchaser as per statutory provisions.	
	5.0 STATUTORY VARIATION 5.1 If the rates for taxes and duties in respect of the quoted materials and/ or services assumed by the Seller/ Contractor are less than the tariff prevailing at the time of tendering, Seller/ Contractor will be responsible for such under quotations. However, if the rates assumed are higher than the correct rates prevailing at the time of tendering, the difference will be to the credit of the Purchaser. 5.2 Statutory Variations in Excise Duty, Service Tax and Central Sales Tax/ Value Added Tax only on self-manufactured items/ services rendered by vendor himself on the rates prevailing at the time of delivery/ completion in comparison to the date of offer, will be to the account of the Purchaser. No other variations such as on customs duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the Purchaser. 5.3 Notwithstanding the above, where the actual completion of the supply occurs beyond the period stipulated in the Order/ Contract or any extension thereof, variations referred to above, will be limited to the rates prevailing on the dates of such agreed completion periods only. For variations after the agreed completion periods, the Seller/ Contractor alone shall bear the impact for the upward revisions and for downward revisions; purchaser shall be given the benefit of reduction in taxes/ duties. This will be without prejudice to the levy of penalty for delay in delivery/ completion schedule. 5.4 Any new tax structure (like Goods & Services Tax) as and when implemented by the Government shall become applicable in addition to or in lieu of existing tax structure.	5.0 STATUTORY VARIATION 5.1 Statutory variation for CGST/SGST/UGST/IGST is available provided the actual completion of supply does not occur beyond the period stipulated in the order/contract or any extension (without levy of penalty). 5.2 For variation after the agreed completion periods, the seller/contractor alone shall bear the impact for the upwards revisions and adjust the price in their basic price in such a manner that total price with tax matches with the ex-works with taxes of Purchase Order/Contract. For downward revisions, purchaser shall be given the benefit of reduction in CGST/SGST/UGST/IGST. This will be without prejudice to the levy of penalty for delay in delivery/completion schedule. 5.4 No other variations such as on Custom Duty, exchange rate, minimum wages, prices of controlled commodities, any other input etc. shall be payable by the purchaser.

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Clause 8	8.0 TRANSPORTATION & FREIGHT CHARGES 8.1 All dispatches shall be through road carriers approved by Purchaser/ Bank, on freight pre-paid basis. 8.2 Road permit/ entry permit, if required as per law of the State, shall be arranged by Purchaser. 8.3 Freight charges (including Service Tax) shall be payable after delivery of the goods at the project site, on receipt of MRC or receipted LR on pro-rata basis.	8.0 TRANSPORTATION & FREIGHT CHARGES 8.1 All dispatches shall be through road carriers approved by Purchaser/ Bank, on freight pre-paid basis. 8.2 Road Permit/E-way bill, if required, will be arranged by Supplier.
	9.0 TERMS OF PAYMENT 9.1 SUPPLY PACKAGES 9.1.1 Ninety percent (90%) of basic price of materials supplied, as per PO, along with 100% taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. 9.1.2 Ten percent (10%) of basic price of materials supplied will be released on pro-rata basis after receipt of Material Receipt Certificate (MRC) from project site engineer of Owner/ Purchaser, on submission of all final documents for the packages as detailed below, duly certified by Engg. Deptt. of purchaser, and submission of Form E1/ E2 against Form-C, if applicable. List of packages with required final documents is as per Annexure-X. 9.2 SUPPLY PACKAGES WITH PERFORMANCE GUARANTEE / DEMONSTRATION TEST AT SITE IN VENDOR'S SCOPE 9.2.1 Eighty Five percent (85%) of basic price of materials supplied, as per PO / approved billing schedule, along with 100% taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. 9.2.2 Ten percent (10%) of basic price of materials supplied will be released on pro-rata basis after receipt of Material Receipt Certificate (MRC) from project site engineer of Owner/ Purchaser and submission of Form E1/ E2 against Form-C, if applicable. 9.2.3 Five percent (5%) of the total basic price of materials and PG/ Demonstration test charges shall be released after submission of all final documents as per Technical	9.0 TERMS OF PAYMENT 9.1 SUPPLY PACKAGES Payment of basic price of materials supplied alongwith freight and taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. 10% of basic price of materials supplied will be retained as security deposit which will be released on pro – rata basis after receipt of Material Receipt Certificate (MRC) from project site engineer of owner/purchaser on submission of all the final documents for the packages as detailed below, duly certified by engineering department of purchaser. List of packages with required final documents is as per Annexure-X. 9.2 Supply packages with performance guarantee/demonstration test at site in vendor's scope Payment of basic price of materials supplied, as per PO/ as per approved billing schedule, along with freight and taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rate basis. 15% of basic price of materials supplied will be retained as security deposit which will be released on pro – rata basis as details below: a) 10% will be released after receipt of Material Receipt Certificate (MRC) from project site engineer of owner/purchaser.

GST related Corrigendum to GCC Rev 06

Specifications and successful completion of the Performance Guarantee (PG)/ Demonstration Test at site. Note: If the Performance Guarantee/ Demonstration Test is not conducted up to 24 months from supply completion for reasons not attributable to the vendor, then last 5% payment will be released against Bank Guarantee of an equivalent amount, valid for 12 months. This bank guarantee will be in addition to Contract Performance Bank Guarantee for 10% of the contract value (excluding taxes, duties and freight). 9.3 SUPPLY PAYMENT FOR TURNKEY PACKAGES (E&C IN VENDOR'S SCOPE) 9.3.1 Eighty Five percent (85%) of basic price of materials supplied, as per approved billing schedule, along with 100% taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. OR i) Five percent (5%) lump sum payment of total basic price (excluding taxes, duties & freight) against approval of design documents and quality plan as certified by Engineering. Design documents and quality plan shall be as defined in the Technical Specifications. ii) Eighty percent (80%) of basic price of materials supplied, as per approved billing schedule, along with 100% taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. 9.3.2 Five percent (5%) of basic price of materials supplied along with freight, if applicable, will be released on pro-rata basis after submission of Material Receipt Certificate (MRC) from project site engineer of Owner/ Purchaser and submission of Form E1/ E2 against Form-C, if applicable. Collection of Material Receipt Certificate from Site/ Owner and its submission for claiming the payment shall be the responsibility of the Seller/ Contractor. 9.3.3 Ten percent (10%) of the total basic price shall be released after i) submission of all final documents as per Technical Specifications and ii) successful completion of	b) 5% will be released after submission of final documents as per technical specification and successful completion of the performance guarantee (PG)/ Demonstration test at site. Note: If the Performance Guarantee/ Demonstration Test is not conducted up to 24 months from supply completion for reasons not attributable to the vendor, then 5% security deposit will be released against Bank Guarantee of an equivalent amount, valid for 12 months. This bank guarantee will be in addition to Contract Performance Bank Guarantee for 10% of the contract value (excluding taxes, duties and freight). 9.3 SUPPLY PAYMENT FOR TURNKEY PACKAGES (E&C IN VENDOR'S SCOPE) 9.3.1 Payment of basic price of materials supplied, as per approved billing schedule, along with freight, taxes and duties (as applicable), shall be paid against receipt of material at site on pro-rata basis. 15% of basic price of materials supplied will be retained as security deposit which will be released on pro – rata basis as details below: a) 5% will be released on pro-rata basis after submission of Material Receipt Certificate (MRC) from project site engineer of owner/purchaser. Collection of Material Receipt Certificate from site/owner and its submission for claiming the payment shall be the responsibility of the Seller/Contractor. b) 10% will be released after i) submission of all final documents as per Technical Specifications and ii) successful completion of Performance Guarantee (PG)/ Demonstration Test and handing over of the system/ package, if applicable, as per Order/ Contract
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GST related Corrigendum to GCC Rev 06

	Performance Guarantee (PG)/ Demonstration Test and handing over of the system/ package, if applicable, as per Order/ Contract. 9.4 ERECTION & COMMISSIONING PAYMENT FOR TURNKEY PACKAGES 9.4.1 Eighty percent (80%) payment on pro-rata basis for the work completed, as per approved billing schedule, shall be released by Site authorities/ Region on submission of protocols, duly signed by BHEL Site/ Owner. 9.4.2 Ten percent (10%) of the total value shall be released by Site authorities/ Region on successful commissioning of the complete system/ package. 9.4.3 Ten percent (10%) of the total value shall be released by Site authorities/ Region on successful completion of PG/ Demonstration test(s) and handing over system/ package to the Owner, as applicable. 9.5 PG TEST, INSTALLATION CHECK, SUPERVISION OF ERECTION / COMMISSIONING CHARGES 100% payment shall be released after successful completion of the activity, on Site certification. 9.6 Vendors shall submit documents for payment directly to BHEL. Payment will be released within 60 days after receipt of complete documents as per order/ contract (45 days for vendors qualified and registered as Micro or Small as per MSMED Act). To be eligible for payment as Micro and Small category, vendors shall submit annual certification for validation from designated authority under MSMED Act or Chartered Accountant within first quarter of every financial year. . <u>Note:</u> 1) For indigenous suppliers, if the documents are routed through Bank, then all bank charges will be to vendor's account. 2) Foreign bidders can opt for payment (less agency commission, if applicable) through irrevocable and unconfirmed letter of credit. In that case for	9.4 ERECTION & COMMISSIONING PAYMENT FOR TURNKEY PACKAGES 9.4.1 Eighty percent (80%) payment on pro-rata basis for the work completed, as per approved billing schedule, shall be released by Site authorities/ Region on submission of protocols, duly signed by BHEL Site/ Owner. 9.4.2 Ten percent (10%) of the total value shall be released by Site authorities/ Region on successful commissioning of the complete system/ package. 9.4.3 Ten percent (10%) of the total value shall be released by Site authorities/ Region on successful completion of PG/ Demonstration test(s) and handing over system/ package to the Owner, as applicable. 9.5 PG TEST, INSTALLATION CHECK, SUPERVISION OF ERECTION / COMMISSIONING CHARGES 100% payment shall be released after successful completion of the activity, on Site certification. 9.6 Vendors shall submit documents for payment directly to BHEL. Payment will be released within 60 days after receipt of complete documents as per order/ contract (45 days for vendors qualified and registered as Micro or Small as per MSMED Act). <u>Note:</u> 1) Vendors are required to issue Tax Invoice inclusive of PVC value (if applicable) wherever indices are available. 2) For indigenous suppliers, if the documents are routed through Bank,
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GST related Corrigendum to GCC Rev 06

	evaluation purpose, prices of foreign bidders will be loaded on account of payment through LC, equal to loading specified against 'Payment through Bank' in Annexure-VIII. No loading will be done if foreign vendors agree for 90 days usance LC or submit the documents on collection basis for payment within 90 days of submission of complete documents. 3) LC opening/ negotiation/ confirmation charges will be to vendor's account. 4) Form C/ E1/E2 are not applicable for foreign bidders. 5) In extreme case of vendors not agreeing to link 10% payment with submission of Form E1/ E2 against Form-C as above, their prices will be loaded as per Annexure-VIII. 6) Any negative PVC, if not adjusted in earlier payments, will be adjusted at the time of MRC payment. 7) Payment terms for mandatory spares shall be as per clause 9.1.	then all bank charges will be to vendor's account. 3) Foreign bidders can opt for payment (less agency commission, if applicable) through irrevocable and unconfirmed letter of credit. In that case for evaluation purpose, prices of foreign bidders will be loaded on account of payment through LC, equal to loading specified against 'Payment through Bank' in Annexure-VIII. No loading will be done if foreign vendors agree for 90 days usance LC or submit the documents on collection basis for payment within 90 days of submission of complete documents. 4) LC opening/ negotiation/ confirmation charges will be to vendor's account. 5) Payment terms for mandatory spares shall be as per clause 9.1. 9.7 The applicable TDS under CGST/SGST/UGST/IGST/ Goods and Services (Compensation to States) Act will be deducted from the payments. 9.8 Other clauses 1. Vendor/Supplier will intimate & upload the Tax invoice along with LR/RR(as applicable) on web portal & intimate BHEL immediately on removal of goods from vendor/supplier works. In case of Services, Vendor is required to upload the Tax invoice on Web Portal immediately after raising the invoice. BHEL will issue the delivery order/instruction to dispatch the material to the customer as indicated in SCC. 2. All payments against Tax Invoice to vendors/contractors shall be released only after:
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GST related Corrigendum to GCC Rev 06

		a) Vendor/contractor declaring such invoice in GSTR-1 within the prescribed timeline as per the relevant Act. b) The tax component charged by the vendor in the invoice should be matched with the details uploaded by vendor in GSTR-1. c) Confirmation of payment of GST thereon by vendor on GSTN portal 3. In case, any GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry to timeline prescribed in the relevant Act for availing such ITC, or any other reasons not attributable to BHEL, tax amount shall be recoverable from the vendor/contractor along with interest levied/leviable on BHEL. 4. Wherein GST liability arises on BHEL under reverse charge, any interest levied/leviable due to any reasons not attributable to BHEL shall be recovered from the vendor/contractor.
Clause 9	9.7 DOCUMENTS TO BE SUBMITTED BY VENDOR 9.7.1 For Recognition of Dispatch Copy of the following documents by e-mail/ fax immediately on despatch: a. Invoice b. LR along with Delivery Order c. Packing List d. Insurance Intimation e. Dispatch Clearance 9.7.2 For Claiming Payments (under clause 9.1.1, 9.2.1, 9.3.1): a. Invoice – original+1 copy b. Receipted LR (signed & stamped)/ confirmation from site regarding receipt of packages/ Boxes original/ copy	9.7 All same a. to be replaced with “GST compliant invoice” in 9.7.1, 9.7.2, 9.7.3 Modification in the clause Duty drawback documents “As per applicable law” (original+1 copy.)

GST related Corrigendum to GCC Rev 06

	c. Delivery order- 2 copies d. Packing List - clearly showing number of packages, gross weight and net weight. - original+1 copy e. MDCC from BHEL/ Customer – as per SCC – 2 copies f. Guarantee Certificate – Original + 1 copy g. Insurance Intimation - 2 copies CQIR / Inspection Reports – Original+1 copy i. PVC Calculation and copy of all applicable indices, if PVC applicable. – 2 copies j. Duty drawback documents (original excise invoice, original disclaimer certificate, original certificate from excise authority for payment of excise duty), if applicable. – original + 1copy 9.7.3 For Claiming Freight Payment a. Invoice – Original + 1 copy b. Receipted LR (signed & stamped)/ confirmation from site regarding receipt of packages/ Boxes original/ copy c. Transporter’s document indicating the freight amount. Original money receipt to be submitted if required as per SCC. 9.7.4 For Claiming MRC Payment a. Invoice – Original + 1 copy b. Copy of MRC 9.7.5 For Claiming Payment for Services involving Service Tax a. Invoice as per rule 4A of Service Tax Act – Original + 1 copy b. Copy of Service Tax registration certificate c. Copy of challan for Service Tax payment	
Clause 3.0 Instruction to bidders	Total erection & commissioning charges including service tax should be minimum 20% (or as specified in NIT) 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 & commissioning charges including applicable tax but excluding freight along with GST should be minimum 20% (or as specified in NIT) 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.

GST related Corrigendum to GCC Rev 06

Clause 16.0 Instruction to bidder	For deviations w.r.t. Payment terms, Liquidated damages, Firm prices and submission of E1/ E2 forms before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII will apply.	For deviations w.r.t. Payment terms, Liquidated damages, Firm prices before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII will apply.
Clause 16.0 of GCTC	Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent of the total contract price per week or part thereof, subject to a maximum of ten (10) percent of the total contract price excluding elements of taxes, duties and freight, if the Seller/ Contractor fails to deliver any part of the ordered stores within the period stipulated in the Order/ Contract. For Turnkey packages (Supply and E&C in vendor's scope), Liquidated Damages shall be levied on the total contract value of both Supply and E&C orders (excluding taxes, duties and freight) if E&C completion of the package is delayed beyond the contractual completion date or extension thereof. Liquidated Damages will not be withheld from supply payment. LR/ GR/ RR date for indigenous supplies and AWB/ BL date for FOB contracts shall be treated as the date of dispatch for levying LD as per Clause 16. However, for indigenous supply if receipted LR date is beyond three months from the date of LR, such excess period shall also be considered for LD purpose. 2. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s)	Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent plus applicable GST of the total contract price per week or part thereof, subject to a maximum of ten (10) percent of the total contract price excluding elements of taxes, duties and freight, if the Seller/ Contractor fails to deliver any part of the ordered stores within the period stipulated in the Order/ Contract. For Turnkey packages (Supply and E&C in vendor's scope), Liquidated Damages shall be levied on the total contract value of both Supply and E&C orders (excluding taxes, duties and freight) if E&C completion of the package is delayed beyond the contractual completion date or extension thereof. Liquidated Damages will not be withheld from supply payment. LR/ GR/ RR/ eway bill date for indigenous supplies and AWB/ BL date for C&F contracts shall be treated as the date of dispatch for levying LD as per Clause 16. However, for indigenous supply if receipted LR/eway bill date is beyond three months from the date of LR/e-way bill, such excess period shall also be considered for LD purpose. 2. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s)

GST related Corrigendum to GCC Rev 06

Deviation sheet- Cost of Withdrawal	Point no-9 For deviations w.r.t. Payment terms, Liquidated damages, Firm prices and submission of E1/ E2 forms before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII of GCC, Rev-06 will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawal of deviation shall be taken as NIL.	For deviations w.r.t. Payment terms, Liquidated damages, Firm prices before claiming 10% payment, if a bidder chooses not to give any cost of withdrawal of deviation loading as per Annexure-VIII of GCC, Rev-06 will apply. For any other deviation mentioned in un-priced copy of this format submitted with Part-I bid but not mentioned in priced copy of this format submitted with Priced bid, the cost of withdrawal of deviation shall be taken as NIL.
Annexure-VI		Deleted
Annexure-VIII		Following changes in annexure-8, (remaining portion of annex-8 is same): C) LIQUIDATED DAMAGES If maximum limit asked for is 10% or 5% of Undelivered Portion – 10% value of the total quoted price including GST & freight. If maximum limit asked is less than 10 % of contract value loading shall be to the extent to which not agreed by bidder (at offered value) . E) DEVIATION TO SUBMISSION OF FORM E1/ E2 BEFORE CLAIMING 10% PAYMENT 10% of Ex-Works supply value.
New clauses:		
a) In case of discrepancy in CGST/SGST/UTGST/IGST rate corresponding to HSN ;code and quotes rates, the evaluation shall be done on quoted price and correct CGST/SGST/UTGST/IGST rate shall be considered for ordering (limited to quoted FOR Site Price) b) The bidder should have been registered with the appropriate authority under relevant GST laws. c) The bidder to specify in their offer (part 1 bid) the category of registration under GST i.e. registered dealer and composite dealer d) No CGST/SGST/UTGST/IGST will be reimbursed to composite dealer. In the event of any GST quoted by composite dealer, the same shall be considered for evaluation purpose. However, the ordering will be done without considering the tax. e) In the event of any change in the status of vendor from composite to regular dealer after the submission of the bid but before the supply, no reimbursement of CGST/SGST/UTGST/IGST will be made. However, the vendor has to raise the invoice strictly, as per the law, by adjusting their ex-works price.		

**TECHNICAL SPECIFICATION
FOR
FLOW ORIFICE ASSEMBLY with
ACCESSORIES
(RATE CONTRACT)**

VOLUME - IIB

SECTIONS-C & D

SPECIFICATION No: PE-TS-20-145-I105A



**BHARAT HEAVY ELECTRICALS LIMITED
POWER SECTOR
PROJECT ENGINEERING MANAGEMENT DIVISION
NOIDA, INDIA**



Technical specification for
Flow Orifice Assembly with Accessories
 (RATE CONTRACT)

SPEC NO.: PE-TS-20-145-I105A

VOLUME II B

REV. NO. 00

DATE 15.03.19

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Technical specification for
Flow Orifice Assembly with Accessories
 (RATE CONTRACT)

SPEC NO.: PE-TS-20-145-I105A

VOLUME II B

SECTION C

REV. NO. 00

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SECTION – C

- **SPECIFIC TECHNICAL REQUIREMENTS**
 - **CUSTOMER's SPECIFICATION**
 - **DATA SHEETS – A**
 - **DATA SHEETS – C**
 - **QUALITY PLAN**
 - **BOQ-MAIN SUPPLY**
 - **BOQ-SPARES**

	Technical specification for Flow Orifice Assembly with Accessories (RATE CONTRACT)		SPEC NO.: PE-TS-20-145-I105A
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SPECIFIC TECHNICAL REQUIREMENTS

1.0 This specification is intended for finalization of rate contract between BHEL-PEM and Bidder. Standard technical detail as indicated in the specification shall be agreed upon between BHEL-PEM and Bidder. Project specific technical detail shall be made available to the bidder along with project enquiry.

2.0 This specification covers the Design, Manufacture, Calibration (at approved labs), Inspection and testing at manufacturer's works, proper packing for transportation and delivery to site of the complete Orifice Plate assembly, Start-up/Commissioning Spares as mentioned in different sections of this specification.

3.0 The bids shall be evaluated as per NIT. Ordering shall be done separately for each project.

4.0 The quality plan enclosed forms the minimum requirement but not limited to be adhered to by the bidder.

5.0 GENERAL INSTRUCTIONS

- I. It is not the intent here to specify all the details of design and manufacture. However, the equipment shall conform in all respects to high standard of design, engineering and workmanship and shall be capable of performing the required duties in a manner acceptable to the customer / consultant, who will interpret the meaning of drawing and specification and shall be entitled to reject any component or material which in his judgment is not in full accordance herewith.
- II. The omission of specific reference to any component / accessory necessary for the proper performance of the equipment's shall not relieve the supplier of the responsibility of providing such facilities to complete the supply within the quoted prices.
- III. BHEL's / Customer representatives shall be given access to the shop in which the equipment's are being manufactured or tested and all test records shall be made available to them.
- IV. The Equipment covered under this specification shall not be dispatched unless the same have been finally inspected, accepted and Material Dispatch Clearance Certificate (MDCC) is issued by BHEL / Customer.
- V. **The bidder to quote for items as per price schedule attached. The quantity as mentioned in the BOQ is only for evaluation purpose. However actual ordered quantity may vary from project to project throughout the year.**
- VI. Rates quoted by bidder shall be valid for a period of 2 years from the date of issue of rate contract for the equipment.
- VII. During rate contract in force; any other BHEL unit may also make use of rates if their specification is identical to spec of rate contract.
- VIII. Inspection shall be carried out in line with preapproved project specific drawings/data sheet/QP.

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IX.	Quality plan to be duly signed and stamped and to be furnished along with the bid as a token of acceptance. <u>Any deviation w.r.t Quality Plan shall not be acceptable and bid / offer shall be rejected.</u>
X.	Wherever in data sheet more than one options are marked, bidder to comply for all the options. However, bidder to note that one option shall be selected by BHEL for a specific project and the same shall be supplied by bidder without any commercial implication with respect to rate contract.
XI.	Scope of supply shall include flow element orifice assembly, stub nipples, root valves, pair of gasket, spares etc. as indicated in the specification.
6.0	<u>Bidder to note that thickness of the pipe for various sizes may vary from project to project. Same shall be informed during project specific order. No commercial implication shall be acceptable for the same.</u>
7.0	<u>Bidder to note that CALIBRATION TEST is required to be conducted on one type per size for a specific project and the requirement shall be informed during project specific order. BHEL reserves the right to withdraw the calibration test for any project based on customer requirements.</u>
8.0	<u>For vertical installation of Orifices (if any), the S-bent impulse pipe shall be supplied by bidder without any commercial implication. The same shall be informed by BHEL during project specific order.</u>
9.0	<u>Process pressure, temperature & flow may vary for a particular service from project to project. Bidder to comply with these process parameters without any commercial implication. Maximum possible design pressure & temperature shall be informed during project specific order.</u>
10.0	<u>Extra pressure tapping (in addition to THREE pair no's tapping) shall be provided in case to case basis for a specific project (if required) by the bidder without any commercial implication. Associated accessories for this particular extra tapping like root valve & nipple shall be supplied by the bidder as per the unit price quoted in the price format.</u>
11.0	<u>If extra Root Valves, Nipples etc are to be provided, same shall be supplied by the bidder as per the unit price quoted in the price format.</u>

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12.0 Inspection will be conducted by BHEL and/or their authorized representatives as per the agreed inspection schedule. The inspection schedule will be submitted by the bidder for BHEL's approval at contract stage. The cost of all tests and inspections will be deemed to have been included in the rate contract. For all the type tests "Type Test Certificates" shall be furnished. In the absence of the same, such Type Tests shall be arranged at the Vendor's works in the presence of BHEL and/or their authorized representatives or in independent Test House/ Laboratory approved by BHEL.

13.0 Sea/Air worthy packing (if applicable) for a specific project shall be provided by the bidder without any commercial implication. Same shall be informed by BHEL during project specific order. Inspection of the sea/air worthy packing shall be done as per the project specific sea/air worthy packing specification by Customer/BHEL/BHEL appointed Inspection party.

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CUSTOMER'S SPECIFICATION

Same shall be informed by BHEL during project specific order (if any)

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Tag No. : ORIFICE ASSEMBLY AS PER TYPE “A” OF THE PRICE FORMAT

Date Sheet No. 1

DATA SHEET – A		
ELEMENT	SERVICE MAKE : MODEL TYPE STANDARD* DESIGN# MATERIAL BETA RATIO BORE DIAMETER VENT HOLE DRAIN HOLE	SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT [] BS-1042 / [] ISO 5167 SQUARE EDGE SS316 0.4 to 0.7 BIDDER TO FURNISH DURING PROJECT YES NO
END CONNECTION	TYPE FLANGE TYPE FLANGE RATING : MATERIAL TAPPING LOCATION NUMBER OF TAPPINGS ROOT VALVE: QTY : SIZE : TYPE : MATERIAL : RATING NIPPLE: QTY : SIZE : MATERIAL : RATING	[] FLANGED, [] BUTT WELD END WELDNECK ANSI-300 : ASTM A105 ON FLANGE 3 PAIR 06 : 15 NB : GLOBE TYPE : SS316 : ANSI # 900 06 : 15NB : SS316 : SCH.80 250mm Long
PROCESS DATA	FLUID* FLOW (T/HR) PRESSURE (KG/CM ² (A)) TEMPERATURE (DEG. C.) MAX. ALLOWABLE PRESS LOSS DESIGN PRESS : TEMP DIFF. PRESS AT MAX FLOW	[] CONDENSATE / [] DMCW / [] CW / [] ACW / [] RAW WATER MAXIMUM NORMAL MINIMUM SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT
PIPE LINE DATA	PIPE SIZE (OD X THK) mm PIPE MATERIAL* BORE DIAMETER MIN. AVAILABLE STRAIGHT LENGTH UPSTREAM:DOWNSTREAM FLOW DIRECTION*	<u>AS PER PRICE SCHEDULE</u> [] SA106GR.B / [] SA106GR.C / [] CS AS PER IS 2062 GR.B / [] CS AS PER IS 1239 BIDDER TO FURNISH DURING PROJECT 15D 10D : 5D [] HORIZONTAL / [] VERTICAL ^{\$}
OTHER DATA	APPROX. WEIGHT OF ASSEMBLY COMMISSIONING SPARE	BIDDER TO FURNISH DURING PROJECT ONE PAIR OF GASKET FOR EACH ORIFICE ASSEMBLY
PACKING	SEA WORTHY PACKING*	[] YES / [] NO

\$ S-bent to be provided for vertical flow direction

* Project specific data shall be informed by BHEL during project ordering

Carrier ring design shall be provided (if required in a specific project) for line size <=2 inches

BIDDER TO QUOTE IN COLUMN “A” OF PRICE FORMAT FOR DETAILS SPECIFIED ABOVE

BIDDER TO NOTE THE FOLLOWING FOR EACH ORIFICE ASSEMBLY:

A) In case additional pair of tappings is required, extra 2 no's root valves & 2 no's nipples per pair of tappings shall be supplied by the bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D & E.

B) In case design pressure is greater than 40 Kg/cm², extra 2 no's root valves & 2 no's nipples per pair of tappings shall be supplied by bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D & E.

The above shall be informed by BHEL during project specific ordering

बी एच ई रत्न BHEL	Technical specification for Flow Orifice Assembly with Accessories (RATE CONTRACT)		SPECIFICATION NO.: PE-TS-20-145-I105A	
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Tag No. : ORIFICE ASSEMBLY AS PER TYPE “B” OF THE PRICE FORMAT

Date Sheet No. 2

DATA SHEET – A		
ELEMENT	SERVICE MAKE : MODEL TYPE STANDARD* DESIGN# MATERIAL BETA RATIO BORE DIAMETER VENT HOLE DRAIN HOLE	SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT ☐ BS-1042 / ☐ ISO 5167 SQUARE EDGE SS316 0.4 to 0.7 BIDDER TO FURNISH DURING PROJECT YES NO
END CONNECTION	TYPE FLANGE TYPE FLANGE RATING : MATERIAL TAPPING LOCATION NUMBER OF TAPPINGS ROOT VALVE: QTY : SIZE : TYPE : MATERIAL : RATING NIPPLE: QTY : SIZE : MATERIAL : RATING	☐ FLANGED, ☐ BUTT WELD END WELDNECK ANSI-300 : ASTM A182 F304 ON FLANGE 3 PAIR 06 : 15 NB : GLOBE TYPE : SS316 : ANSI # 900 06 : 15NB : SS316 : SCH.80 250mm Long
PROCESS DATA	FLUID* FLOW (T/HR) PRESSURE (KG/CM ² (A)) TEMPERATURE (DEG. C.) MAX. ALLOWABLE PRESS LOSS DESIGN PRESS : TEMP DIFF. PRESS AT MAX FLOW	☐ CONDENSATE / ☐ DMCW / ☐ CW / ☐ ACW / ☐ DMW MAXIMUM NORMAL MINIMUM SHALL BE FURNISHED DURING PROJECT BIDDER TO FURNISH DURING PROJECT
PIPE LINE DATA	PIPE SIZE (OD X THK) mm PIPE MATERIAL BORE DIAMETER MIN. AVAILABLE STRAIGHT LENGTH UPSTREAM:DOWNSTREAM FLOW DIRECTION*	<u>AS PER PRICE SCHEDULE</u> SA312TP304 BIDDER TO FURNISH DURING PROJECT 15D 10D : 5D ☐ HORIZONTAL / ☐ VERTICAL\$
OTHER DATA	APPROX. WEIGHT OF ASSEMBLY COMMISSIONING SPARE	BIDDER TO FURNISH DURING PROJECT ONE PAIR OF GASKET FOR EACH ORIFICE ASSEMBLY
PACKING	SEA WORTHY PACKING*	☐ YES / ☐ NO

\$ S-bent to be provided for vertical flow direction

* Project specific data shall be informed by BHEL during project ordering

Carrier ring design shall be provided (if required in a specific project) for line size <=2 inches

BIDDER TO QUOTE IN COLUMN “B” OF PRICE FORMAT FOR DETAILS SPECIFIED ABOVE

BIDDER TO NOTE THE FOLLOWING FOR EACH ORIFICE ASSEMBLY:

A) In case additional pair of tappings is required, extra 2 no's root valves & 2 no's nipples per pair of tappings shall be supplied by the bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D & E.

B) In case design pressure is greater than 40 Kg/cm², extra 2 no's root valves & 2 no's nipples per pair of tappings shall be supplied by bidder. Additional price for the same shall be as per unit price quoted in the price schedule under column D & E.

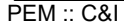
The above shall be informed by BHEL during project specific ordering

बी एच ई एल BHEL	Technical specification for Flow Orifice Assembly with Accessories (RATE CONTRACT)		SPECIFICATION NO.: PE-TS-20-145-I105A	
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Date Sheet No. :

DATA SHEET – C			
ELEMENT	SERVICE MAKE : MODEL TYPE STANDARD DESIGN MATERIAL BETA RATIO BORE DIAMETER VENT HOLE DRAIN HOLE		
END CONNECTION	TYPE FLANGE TYPE FLANGE RATING : MATERIAL TAPPING LOCATION NUMBER OF TAPPINGS ROOT VALVE: QTY : SIZE : TYPE : MATERIAL : RATING NIPPLE: QTY : SIZE : MATERIAL : RATING		
PROCESS DATA	FLUID FLOW (T/HR) PRESSURE (KG/CM ² (A)) TEMPERATURE (DEG. C.) MAX. ALLOWABLE PRESS LOSS DESIGN PRESS : TEMP DIFF. PRESS AT MAX FLOW	MAXIMUM	NORMAL MINIMUM
PIPE LINE DATA	PIPE SIZE (OD X THK) mm PIPE MATERIAL BORE DIAMETER MIN. AVAILABLE STRAIGHT LENGTH UPSTREAM:DOWNSTREAM FLOW DIRECTION		
OTHER DATA	APPROX. WEIGHT OF ASSEMBLY COMMISSIONING SPARE		
PACKING	SEA WORTHY PACKING		



QUALITY PLAN NO.:			
VOLUME	IIB		
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SHEET	1	OF	2

Sl. No.	Component / operation	Characteristics Checked	* Category	Type/Method of Check	Extent of Check	Reference documents	Acceptance Norms	Format of Records	Agency ^{\$}			Remarks
									P	W	V	
1.0	MATERIAL											
1.1	Orifice Plate	1. Physical, Chemical properties	MA	Physical, Chemical Tests	One / Plate OR One/ Heat	AP / DS / SP	AP / DS / SP	Lab Report	3/2	---	2,1	IBR certification (if applicable) to be verified by BHEL
		2. Dimensions	MA	Measurement	100%	AP	AP	IR	3/2	---	1	
1.2	Flanges A. Forgings	Chemical,Mech Properties, UT & Heat Treatment	MA	Chem & Mech UT test	Sample	Material Spec as per ASTM A 388 for UT	ANSI B 16.34	MTC,UT cert,HT cert	3/2	---	1	
	B. Machining	Dimensions	MA	Measurement	100 %	AP / DS	AP / DS	IR	3/2	---	1	
2.0	IN PROCESS Machine	1. Dimension	MA	Measurement	100%	AP	AP	IR	3/2	2	2	
		2. Surface finish	MA	Visual	100%	-----	Mirror Finish	-----	3/2	2	---	
		3. Surface flaw on machined surface	MA	Penetrant test	100%	ASTM 165 / IS:3658	No surface flaw	IR / TC	3/2	2	1	
3.0	ASSEMBLY and FINAL INSPECTION	1. Overall dimensions	MA	Measurement	100%	AP	AP	IR	3/2	2,1	---	
		2. Marking, Tag no. Direction of flow	MA	Visual	100%	AP / DS	AP / DS	IR	3/2	2	1	
		3. Calibration	MA	Performance Test	One per type	-----	SP	TC	3/2	---	1	
		4. Painting	MA	Visual	100%	SP / MS	SP / MS	IR / MR	3/2	---	1	
		5. Root valve BOQ	MA	Measurement	100%	AP / DS	AP / DS	IR	2	---	1	
LEGEND: * CR - Critical characteristics IR - Inspection Reports DS – Data Sheet MR- Manufacturer records \$ P - Agency Performing the Test. 1- BHEL 4.-Customer/ MA - Major characteristics TC - Test Certificates SP – Tech. Spec. MS- Manufacturer standards W - Agency Witnessing the Test. 2 – Vendor Consultant MI - Minor characteristics AP – Approved Drawings/doc V - Agency Verifying the Test. 3- Sub-vendor												

 PEM :: C&I	STANDARD QUALITY PLAN FOR FLOW ORIFICE ASSEMBLY							QUALITY PLAN NO.:				
								VOLUME IIB				
								SECTION C				
								REV. NO. 00		DATE:		
								SHEET 1		OF 2		
Sl. No.	Component / operation	Characteristics Checked	* Category	Type/Method of Check	Extent of Check	Reference documents	Acceptance Norms	Format of Records	Agency \$			Remarks
									P	W	V	
4.0	PACKING	Soundness of Packing against transit damage	MA	Visual	100%	SP / MS	SP / MS	----	3/2	----	----	Refer Note 4

NOTE:

1. All test reports & dimension reports shall be verified by BHEL wherever verification is by BHEL at the time of Final Inspection.
2. Positive material identification testing shall be performed by vendor and the same shall be witnessed by BHEL (if required).
3. Minimum 2 coats of primer paint to be applied before dispatch.
4. CALIBRATION Test to be carried out at IIT-DELHI / FCRI or BHEL approved laboratory.
5. Sea Worthy packing (if applicable) shall be provided by vendor without any commercial implication.

LEGEND: * CR - Critical characteristics IR - Inspection Reports DS – Data Sheet MR- Manufacturer records \$ P - Agency Performing the Test. 1- BHEL 4.-Customer/
 MA - Major characteristics TC - Test Certificates SP – Tech. Spec. MS- Manufacturer standards W - Agency Witnessing the Test. 2 – Vendor Consultant
 MI - Minor characteristics AP – Approved Drawings/doc V - Agency Verifying the Test. 3- Sub-vendor

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BILL OF QUANTITY-MAIN SUPPLY

BOQ FOR RATE CONTRACT of ORIFICE ASSEMBLY (2019-20)								
SL NO	DESCRIPTION	A		B		C	D	E
		Complete Orifice assembly with pipe line material of SA106GRB / SA106GRC / CS AS PER IS 2062 GR B/CARBON STEEL ERW, IS: 1239 and flange material of ASTM A 105		Complete Orifice assembly with pipe line material of SA312TP304 and flange material of ASTM A 182 F304		PAIR OF GASKET	NIPPLE 15Nb, SS316, 250mm long	ROOT VALVE SS316 15Nb # 900
	PIPE SIZE	A1	A4	B1	B4	C1	D1	E1
		SCHEDULE OF PRICES for Complete Orifice assembly with THREE (3) pairs of tapping, accessories like pair of gasket, Pressure take-off points, Root valves, Nipples etc and commissioning spare of 1 no. pair of gasket for each assembly		SCHEDULE OF PRICES for Complete Orifice assembly with THREE (3) pairs of tapping, accessories like pair of gasket, Pressure take-off points, Root valves, Nipples etc and commissioning spare of 1 no. pair of gasket for each assembly		Additional items to be included based on project specific requirements (Item shall be applicable for any line size as mentioned in column A or B)		
		QTY	No.	QTY	No.	QTY	QTY	QTY
1	40" (1000 NB)	1	1	X	X	1	312	312
2	36" (900 NB)	4	2					
3	32" (800 NB)	8	5					
4	28" (700 NB)	11	4					
5	24" (600 NB)	1	1					
6	20" (500 NB)	7	3					
7	18" (450 NB)	21	9	1	1			
8	16" (400 NB)	8	6	1	1			
9	14" (350 NB)	11	4	1	1			
10	12" (300 NB)	58	13	1	1			
11	10" (250 NB)	14	10	1	1			
12	8" (200 NB)	8	5	5	2			
13	6" (150 NB)	7	5	4	3			
14	4" (100 NB)	4	4	19	11			
15	< 4" (<100 NB)	1	1	1	1			



Technical specification for
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BILL OF QUANTITY-SPARES

[A] LIST OF COMMISSIONING SPARES

ONE PAIR OF GASKET FOR EACH ORIFICE ASSEMBLY
 (As specified in each datasheet)

[B] LIST OF MANDATORY SPARES

NONE



Technical specification for
Flow Orifice Assembly with Accessories
(RATE CONTRACT)

SPEC NO.: PE-TS-20-145-I105A

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SECTION – D

EQUIPMENT SPECIFICATION



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1.0 SCOPE

This specification covers the design, manufacture, calibration, inspection and testing at the manufacturer's works, proper packing for transportation and delivery to site of flow measuring devices (orifices) for use in Utility/Captive Power Station/Combined Cycle Station.

2.0 CODES AND STANDARDS

2.1 All the equipment specified herein shall comply with the requirements of the latest issue of the relevant National and International standards.

2.2 The Design and Materials used for the components shall also comply with the relevant National and International standards.

2.3 As a minimum requirement, ISO 5167 / BS 1042 standard shall be complied with for Flow Orifices.

3.0 TECHNICAL REQUIREMENTS

The orifice plates shall be used as the primary flow sensing elements. These sensing elements shall provide a safe and reliable means of creating differential pressure for use in flow measurement.

3.1 Orifice Plates

The orifice plate assemblies shall conform to the following requirements unless specified otherwise in the corresponding data sheets.

3.1.1 Type:

The Orifice plates shall be of concentric type, designed and manufactured as per BS-1042 / ISO 5167. The data sheet enclosed specifies the requirements of each orifice plate assembly. The bidder shall calculate the Beta ratio and validate suitability of the selected design for the specified application, Vent holes, if required for the specified duty shall be located at the top and drain holes at the bottom of the orifice.

3.1.2 Material: The material of the Orifice plates shall be stainless steel type SS 316, unless otherwise specified.

3.1.3 Orifice Plate thickness shall be ≥ 3 mm (min.) for pipes having diameter ≤ 250 mm and shall be ≥ 6 mm (min.) for pipes having diameter up to 500 mm and shall be ≥ 10 mm (min.) for pipes having diameter up to 1000mm unless otherwise specified for a specific project.

3.1.4 Assembly: Orifice plates shall be supplied as complete assemblies, along with companion flanges on both sides having proper end connection for welding on to the associated pipe at site, gaskets, nuts & bolts. The carrier ring assembly shall be supplied along with corner taps for orifice assembly having sizes ≤ 2 inches, if required in a specific project. End flanges along with Counter flanges shall be provided as per requirement. Concentric Square edge orifice shall be provided with downstream beveled edge.

Each flow orifice assembly shall be provided with minimum THREE pairs of pressure tapping complete with associated root valves, suitable for the service conditions. The pressure tapping shall be provided either on the carrier ring or on the companion flanges as the case may be.

Extra Root Valve shall be provided for normal pressure above 40 Kg/cm².

Extra pressure tapping (other than the THREE tapping's mentioned above) complete with associated root valves and other accessories shall be provided in case to case basis for a specific project if required.



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Each orifice plate or the carrier ring assembly (as the case may be) will also be provided with an extended handle. The Tag No. and duty will be permanently marked on both the sides of this handle.

3.1.5 Flanges: The flanges shall conform to latest revisions of ANSI B 16.5 / ASME B16.36 / ASME B16.47 (B). The companion flange and the carrier ring material shall be same as that of the main pipe. These shall be manufactured from forged material. Companion flanges shall be suitably rated for the specified service conditions.

3.1.6 Hydraulic test pressure for Assembly shall be 1.5 times of the design pressure at normal temperature

3.1.7 While machining the ID to maintain a uniform internal diameter, care shall be taken to ensure the minimum thickness of the branch pipe as per IBR regulations.

3.2 Guarantee & Performance

The guarantee for the flow orifice assemblies shall be for 12 months continuous operation from the date of commissioning.

4.0 TESTS & INSPECTION

4.1 The equipment covered under this specification shall be subject to vendor's quality plan to be approved by the purchaser before start of manufacturing. To ensure that quality is in-built in each equipment the quality assurance system manual indicating the system followed by the vendor shall be submitted to purchaser for his review.

4.2 The quality plan forming part of this specification shall be the minimum requirements for the vendor's quality plan to be submitted with the offer. The vendor shall give at least 15 days written notice to purchaser for witnessing the tests/inspection at various stages. The expenses for all such tests/inspection shall be to manufacturer's account except for the expenses of purchaser's representatives witnessing the tests. The purchaser shall attend such tests/inspection within 15 days failing which the manufacturer may proceed with the tests which shall be deemed to have been made in purchaser's presence and shall furnish relevant test certificates to the purchaser.

4.3 One orifice plate of each type and size for each project unless specified shall be tested and calibrated by the bidder at customer/BHEL approved laboratory, within his quoted price. Details of the calibration test i.e., type of test, equipment's employed etc. shall be submitted in the bid.

4.4 IBR certification, if required for the specified service shall be obtained by the successful bidder from the concerned authority for submission to the purchaser.

4.5 The Standard QP is included in this specification to enable bidder to understand the extent of inspection and testing requirements to execute this job. The successful bidder has to follow the agreed QP, taking care of customer requirements mentioned in Sec-C and submit QP for final approval by BHEL / Customer.

5.0 DRAWINGS & DOCUMENTS

(A) For RATE CONTRACT: Following documents shall be submitted:

- a) Quality plan duly signed and stamped.
- b) Datasheets duly signed and stamped.
- c) Schedule of submission of Drg. /Doc, Manufacture, Inspection and Dispatch signed and stamped.
- d) Unpriced bid format of Price Schedule.



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(B) After the award of project specific contract :

The documentation as listed below to be submitted, separately for respective projects.

3 sets of the following documents + 3 sets of CDs to be submitted for Approval:

- Assembly drawing of all type of Flow Element assemblies complete with all accessories indicating detailed dimensions, BOM and weights.
- Flow Element Edge preparation details.
- Installation drawings for the flow elements.
- Technical Data sheet-C completely filled-up.
- Quality Plan duly signed and stamped.
- Bore size calculations for Flow orifices for all the conditions indicated in the data sheets.
- Differential Pressure Vs Flow, curve for each Orifice.
- All relevant catalogues for the models of the Flow Element Assemblies as well as accessories finalized.
- Bar chart to indicate the time schedule for procurement, manufacture, testing and dispatch.

(C) Final documentation for a project:

Final documentation shall contain 10 sets with 5 CD-ROMS of each of the following:

- Category –I & IV Approved final drawings/data sheets, Bore sizing calculations, DP Vs Flow Curve for each Orifice.
- Verified test certificates
- Approved Quality Plan
- Calibrations Reports
- Quality Inspection Report
- Operation & Maintenance Manuals for Flow Element Assemblies and all the accessories (Containing storage & commissioning instructions).

6.0 PACKING & MARKING

6.1 Packing: Each orifice plate assembly and the associated accessories shall be packed properly with adequate protection against friction, stresses, vibrations and shocks during transportation. Each packing shall have markings as per Purchase Order / Special Condition of the Contract (SCC).

6.2 Marking: A SS name plate shall be permanently fixed on each equipment. Each flow element assembly shall be identified with the following information:

- Tag Number
- Service
- Element Material
- Beta ratio
- Line size & thickness
- Direction of flow

7.0 APPLICABLE DATA SHEET FORMS

This document shall be read with one or more of the following data sheet forms:

- Data sheet A for Flow-Orifice: DS-"X" (X=1 to 2)