VENDOR REGISTRATION

FOR

VARIOUS TYPES OF WORKS BEING EXECUTED

BY

BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR, NORTHERN REGION REGIONAL SERVICE CENTRE NOIDA

APPLICATION FORM, PROCEDURE & FORMATS FOR REGISTRATION



BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

POWER SECTOR – NORTHERN REGION,

REGIONAL SERVICE CENTRE NOIDA

4TH FLOOR

ADVANT NAVIS BUSINESS PARK

PLOT NO. 07, SECTOR - 142,

DISTT. GAUTAM BUDH NAGAR, NOIDA – 201 305 (UP) INDIA



BHARAT HEAVY ELECTRICALS LIMITED (A GOVERNMENT OF INDIA UNDERTAKING) POWER SECTOR – NORTHERN REGION, REGIONAL SERVICE CENTRE NOIDA 4TH FLOOR

ADVANT NAVIS BUSINESS PARK
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APPLICATION FORM, PROCEDURE & FORMATS FOR REGISTRATION

LAST DATE FOR SUBMISSION:- Please obtain updated information from web sites (www.bhel.com \rightarrow Tender Notification \rightarrow)

| THIS APPLICATION FORM IS ISSUED TO: |
|-------------------------------------|
| M/s |
| |
| |
| |
| |

PLEASE NOTE:

THIS APPLICATION FORM IS NOT TRANSFERABLE.

For Bharat Heavy Electricals Limited Sr Dy. General Manager /RSC SCT Place: NOIDA

Date

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NOTICE FOR VENDOR REGISTRATION

BHARAT HEAVY ELECTRICALS LIMITED, NORTHERN REGION, REGIONAL SERVICE CENTRE NOIDA herein invites application from experienced and reputed vendors for Registration for works as listed in Section-I of this document

- Issue of VENDOR REGISTRATION document: from the date of release of advertisement
- Scrutiny of documents and VENDOR REGISTRATION shall be done on QUARTERLY basis in April, July, October and January of every year. However BHEL may choose to scrutinise on continuous/on-going basis

Please visit our following web sites for complete details, procedure for submission etc:-

> www.bhel.com → Tender Notification

GENERAL

1) Timing of issue of Documents:

VENDOR REGISTRATION Application documents will be issued from BHEL PSNR RSC NOIDA office from 10:00 AM to 4:00 PM on all working days.

Complete details of VENDOR REGISTRATION hosted in BHEL web page (as given above) can be directly downloaded and used for submission of Application Forms.

2) Holidays:

Issue of application form shall not take place on National Holidays, holidays declared by the Central or State Governments, Sundays, second and last Saturdays of the month.

3) Fulfilment of Basic Criteria:

Vendors shall have to meet the Criteria stipulated in the Application documents in order to be considered for Registration.

4) VENDOR REGISTRATION Application Processing Charges:

APPLICATION PROCESSING CHARGES @ RS 5000/- plus service tax as applicable shall be made by Account Payee Demand draft in favour of "Bharat Heavy Electricals Limited" payable at NOIDA along with submission of filled up Application.

5) Other:

- ➤ BHEL takes no responsibility for any delay/loss of documents or correspondences sent by courier/post.
- All corrigenda, addenda, amendments and clarifications to the VENDOR REGISTRATION will be hosted in web page (www.bhel.com) and shall not be published in the newspapers. Interested Vendors shall keep themselves updated with all such amendments.
- **BHEL** reserves the right to:

delete, modify, rename etc any of the Categories, Codes, Conditions, procedures etc given in the Registration documents

* reject any application on the basis of unsatisfactory performance of the vendor in any ongoing job or any similar job in the last seven years or for furnishing false

information/declaration in the application

with hold issue of Application for Registration and also subsequently the Tender documents to any Empanelled Vendor, and also annul the Registration process without

assigning any reasons whatsoever.

lacktriangle obtain confirmation from the principals, Owner to verify the contents of the

supporting documents submitted by the applicant

> Procedure for submission of application and evaluation by BHEL is detailed in the documents

> Detailed verification shall be carried out by BHEL later. However additional information as

and when required by BHEL shall be produced by the applicant.

IMPORTANT NOTE:

1. Applications submitted after month of SEPTEMBER of any year shall necessarily include AUDITED ACCOUNTS for the PREVIOUS FINANCIAL YEAR (ie Applications submitted after

30/09/2015, Audited Accounts of FY 14-15 shall have to be submitted, and so on)

2. THIS VENDOR REGISTRATION ENDEAVOUR IS ONLY FOR WORKS AND **NOT FOR SUPPLIES**

Sr. DY. GENERAL MANAGER /SCT

BHEL:PSNR: RSC: NOIDA

CHAPTER-1

INTRODUCTION

About BHEL

Bharat Heavy Electricals Limited, a Public Sector Undertaking, is the largest Engineering and manufacturing enterprise in India in the energy-related/infrastructure sector, today. BHEL was established more than 50 years ago when its first plant was set up at Bhopal, ushering in the indigenous Heavy Electrical Equipment Industry in India- a dream that has been more than realised with a well-recognised track record of performance. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77.

BHEL has acquired certifications to the Quality Management Systems (ISO 9001), Environmental Management Systems (ISO 14001) and Occupational Health & Safety Management Systems (OHSAS 18001) and is well on its journey towards Total Quality Management.

BHEL has installed equipments for over 90,000 MW of power generation- for utilities, Captive and Industrial users.

BHEL's operations are organised around three business sectors, namely Power, Industry and overseas Business.

To serve the customer better, 4 Power Sector regions were formed as Business Centres. Power Sector-NORTHERN Region (PS-NR) headquartered at NOIDA & having three service centres primarily covers the states of Uttar Pradesh, Rajasthan, Punjab, Haryana, Himachal Pradesh, Jammu & Kashmir, Uttrakand etc in the Installation of Power plants.

Power Sector-Northern Region RSC Noida now proposes to empanel eligible vendors for execution of various types of works as detailed in the documents herein. Vendors desirous of Registration may submit their application.

VENDOR REGISTRATION

The formats for VENDOR REGISTRATION are based on numerical markings/weightages on the basis of information furnished for the following aspects

- Organisational Soundness
- Quality
- Technical Capability.

A ready reckoner list of "Categories" for VENDOR REGISTRATION is attached

CHAPTER-2

GUIDELINES FOR FILLING UP VENDOR REGISTRATION FORM and OTHER CONDITIONS

- This VENDOR REGISTRATION methodology has been devised for easy data capturing, analysis and for eventual Registration. The evaluation process has been made transparent; weightages in the form of points are assigned to most of the data being requested. Vendors are requested to go through the entire procedure and fill up all information asked for and attach all the documents/evidences as specified against each.
- 2. The VENDOR REGISTRATION Form has the following 8 Sections

Section-I: CATEGORIES FOR VENDOR REGISTRATION.

- i. This section contains the entire list of "CATEGORIES" for which vendors are proposed to be empanelled through this endeavour.
- ii. Kindly tick (v) against the relevant "CATEGORY" for which the Applicant wants to be Empanelled.
- iii. For each of the "CATEGORY" an applicable "Basic Qualifying Requirement" is indicated which needs to be fulfilled in order to be considered for Registration.
- iv. For each of the "CATEGORY" a separate "Work Experience Format" is to be filled up.

Section-II: COMPANY PROFILE AND GENERAL INFORMATION

As the title suggests, this chapter captures data on the profile of the company and other general information to assess the Organisational soundness and financial strengths. The formats request for specific information so as to make the assessment objectively.

Kindly read each column/row carefully and provide complete and precise information in the space provided along with supporting documents if any. Attach separate sheet in case the space provided is insufficient.

Section-III: RESOURCES OWNED BY THE COMPANY

In this section, the vendors are required to indicate the following

- Tools & Plants, Machinery owned by the Company
- Inspection, Measuring and Testing Equipments owned by the Company
- Tie ups or Rate contracts for services which the Company may like to inform/disclose

Section-IV: WORK EXPERIENCE

- i. The format for capturing the "WORK EXPERIENCE" for each of the "Categories" as defined by the applicable "Basic Qualifying Requirement" is detailed herein. The Vendor has to fill up the specified "Work Experience Format" for the particular Category for which he has ticked (V) for Registration in fulfilment of the applicable Basic Qualifying Requirement.
- ii. For each of the Work experience format filled up, the following needs to be attached in support of possession of applicable "Basic Qualifying Requirement".

- a) Self-attested Copy of Work Order/Award letter and allied documents containing interalia (a) Brief Description of work, (b) Value of Contract (c) Time schedule (d) Detailed Scope of work
- b) Completion Certificates (Any one of the following):
- 1) Self-attested copies of Work Completion Certificates issued by Owner or agency who has awarded the contract. BHEL reserves the right to verify the authenticity of the document from the originator. Hence kindly see that all contractual details are available in the completion certificates to lend easy verification if required.
- 2) Self-attested copies of Protocol signed by Client and Owner, indicating the completion/achievement/execution of the Milestone achieved.
- 3) Self-attested copies of "Final Bill" verified by Client/Customer which indicates the Quantum of work not less than that specified in Basic QR.
- 4) Documentary evidence issued by Owner/Client, indicating the progress of Work achieved not less than that specified in the Basic QR even if the total contract is not completed/closed.

NOTE: Please attach only relevant documents for each "WORK EXPERIENCE" format being filled up and submitted.

Section-V: VENDOR EVALUATION

This section has 4 parts and deals with the Evaluation Procedure for VENDOR REGISTRATION:

- Part A : Organisational Soundness
- Part B : Quality
- > Part C : Technical Capability
- > Part D : Registration criteria and Recommendation for VENDOR REGISTRATION

Vendors are evaluated against specified parameters for three (3) aspects viz Organisational Soundness, Quality and Technical Capability as detailed in Part A, B & C. The Registration criteria and the final Recommendation for VENDOR REGISTRATION are defined in Part D.

Section-VI: BASIC QUALIFYING REQUIREMENT

- i. The "Basic Qualifying Requirement" lists out the Technical Competence required to carry out the subject job. The entire list of applicable "Basic Qualifying Requirements" for all the "Category" are detailed herein.
- ii. Applicable "Basic Qualification Requirement" as indicated against each "Category" needs to be fulfilled in order to be considered for Registration.

3. GENERAL

- i. Applicants desirous of **applying for more than one** "Category" may kindly refer "PROCEDURE FOR SUBMISSION"
- ii. Please fill up the form neatly and clearly in BLOCK LETTERS
- iii. All columns are to be filled up. Do not leave any column blank. If a particular item is not pertinent to your Organisation, please write "Not applicable" or "N.A".

- iv. Kindly provide correct, complete and precise information in the designated column or space provide therein. Please attach separate sheet in case the space provided is insufficient
- v. Incomplete, partially complete, not clearly filled forms giving in correct information are liable to be rejected without any consideration.
- vi. Any information/clarification required by BHEL during evaluation must be provided expeditiously
- vii. Submission of this Registration forms do not automatically guarantee for Registration in BHEL. BHEL also does not take any responsibility for loss of any Application form in transit.
- viii. BHEL reserves the right to call for additional information and/or check, verify all the information furnished in the application. BHEL also reserves the right to inspect all premises / facilities to confirm the authenticity of information furnished / capabilities mentioned in the application.
- ix. BHEL reserves the right to reject applications on the basis of unsatisfactory performance of ongoing job or any similar job in the last seven (7) years or for furnishing false information/declaration in the application.
- x. BHEL reserves the right to reject any or all the applications without assigning any reasons whatsoever.
- xi. Please fill up the Check list
- xii. BHEL's decision shall be final on all matters
- xiii. Bidder to note that Application for Registration with conditions unacceptable to BHEL shall be rejected.

4. CLARIFICATION:

Any clarification with respect to VENDOR REGISTRATION may be obtained from

Mr. V K Rai, Sr DGM/SCT-RSC BHEL PSNR, NOIDA

Phone: 0120-6748116, Fax: 0120-6748344

Email vkrai@bhelpsnr.co.in

Mr. Sandeep Mehra, Sr Engineer/Services BHEL PSNR, NOIDA

Phone : 0120-6748376, Fax: 0120-6748344 Email : <u>sandeep_mehra@bhelpsnr.co.in</u>

5. EVALUATION PERIOD:

Scrutiny of applications shall normally commence in intervals of three months as per following schedule:

- April of every year: For applications received from 1st January to 31st March
- ➤ July of every year : For applications received from 1st April to 30th June
- > October of every year: For applications received from 1st July to 30th of September
- > January of every year: For applications received from 1st October to 31st December

CHAPTER-3

PROCEDURE FOR SUBMISSION

- 1. The vendors are required to submit the Application form and relevant annexures in a sealed cover as per procedure given below:
 - i. Sign / stamp all pages of this booklet and fill up all pages
 - ii. Use additional sheets (duly signed & stamped) wherever necessary
 - iii. Enclose relevant supporting documents/Registration certificates etc as called for in the application form
 - iv. Use "Check list "CHAPTER-4" ensure all requirements are met
- 2. Enclosures for Envelope/Sealed Cover
- a) This envelope shall be prominently super scribed as follows
- "APPLICATION FOR VENDOR REGISTRATION FOR SERVICES & R&M JOBS OF PSNR"
- b) The following shall be enclosed in this envelope
 - i. Application Form for Registration
 - ii. Signed Copy of VENDOR REGISTRATION Document Issue form
 - iii. Signed Chapter-3 (Procedure for submission)
 - iv. Signed Chapter-4 (Check List)
 - v. Declaration by Authorised Representative along with copy of valid Power of Attorney
 - vi. Filled up Section-I (Filled up "CATEGORIES FOR VENDOR REGISTRATION")
 - vii. Filled up Section-II (COMPANY PROFILE & ORGANISATIONAL INFORMATION) along with all relevant enclosures/documents
 - viii. Filled up Section-III (Part A, B & C Resources owned by Company), along with documents/attachments if any
 - ix. Filled up Section-IV (formats for "WORK EXPERIENCE") for each "CATEGORY" for which Registration is sought, along with all relevant enclosures/attachments
 - x. Signed Section-V (Part A, B, C & D EVALUATION sheets)
 - xi. Signed Section-VI (BASIC REQUIREMENTS)
 - xii. Signed Section VII (Similar nature works for each category)
 - xiii. Signed Section VIII (LIST OF EXPECTED MAJOR T &P & IMTEs)
- 3. Vendors desirous of Registration for more than one "CATEGORY":
 - ➤ Tick (v) against all the required "CODES" in Section-I (CATEGORIES FOR VENDOR REGISTRATION)
- **4**. **NOTE for 2 and 3:** On Evaluation and if found acceptable, BHEL at its discretion may empanel the Vendor for all/any "CATEGORY".
- 5. The Applications of the vendors who are on the banned list as also The Applications of the vendors, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com

CHAPTER-4

CHECK LIST

| SI No | PARTICULARS / DETAILS / ENCLOSURES | Tick applic | |
|------------|---|----------------|----|
| AAA | APPLICATION PROCESSING CHARGES of Rs 5000/- plus service tax by way of DD in favour of Bharat Heavy Electricals Limited, payable at NOIDA enclosed (if documents downloaded from website) | Yes | No |
| BBB | Signed Copy of Vendor Registration Document Issue form (if documents obtained from BHEL Office) | Yes | No |
| CCC | Signed 'NOTICE for VENDOR REGISTRATION' | Yes | No |
| Chapter-2 | Signed Chapter-2 (GUIDELINES FOR FILLING UP APPLICATION FORM & OTHER CONDITIONS) | Yes | No |
| Chapter-3 | Signed Chapter-3 (PROCEDURE FOR SUBMISSION) | Yes | No |
| Chapter-4 | Signed Chapter-4 (CHECK LIST) | Yes | No |
| Chapter-5 | 'APPLICATION FOR REGISTRATION' (signed by Authorised Applicant) enclosed | Yes | No |
| Chapter-6 | 'DECLARATION BY AUTHORISED APPLICANT' along with valid Power of Attorney enclosed | Yes | No |
| Section-I | Filled up Section-I (CATEGORIES FOR VENDOR REGISTRATION) detailing the list of categories for which Registration is sought, is enclosed with the Application for Registration | Yes | No |
| Section-II | Filled up Section-II (COMPANY PROFILE & ORGANISATIONAL INFORMATION) along with all relevant enclosures/documents | Yes | No |
| 1.1.2 | Certificate of Incorporation | Yes | No |
| 1.2 | Memorandum and articles of association OR Society Rules OR Partnership Deed OR Professional Tax Registration and Municipal Registration | | No |
| 1.2.2 | Director/Partner/Owner/Proprietor Information furnished | | No |
| 1.3 | Registration Particulars | | |
| 1.3 a | INCOME TAX PERMANENT ACCOUNT Number | | No |
| 1.3 b | Service Tax Registration Number | | No |
| 1.3 c | PF Registration Number | Yes | No |
| 1.3 d | ESCIC Registration Number | Yes | No |
| 1.3 d-i | Sales Tax VAT Registration – Uttar Pradesh | Yes | No |
| 1.3 d-ii | Sales Tax VAT Registration – Uttarakhand | Yes | No |
| 1.3 d-iii | Sales Tax VAT Registration – Rajasthan | Yes | No |
| 1.3 d-iv | Sales Tax VAT Registration – Delhi | Yes | No |
| 1.3 d-v | Sales Tax VAT Registration – Punjab | Yes | No |
| 1.3 d-vi | Sales Tax VAT Registration – Haryana | Yes | No |
| 1.3 d-vii | Sales Tax VAT Registration – Himachal Pradesh | Yes | No |
| 1.3 d-ix | Sales Tax VAT Registration -Any Other States | Yes | No |
| 1.3 e | CPWD/Government Organisation | | No |
| 1.3 f | Geological Survey Of India/Equivalent | | No |
| 1.3 g | IBR | | No |
| 1.3 h | Contractor ship Licence for Electrical Works (from any State/Union Territory) | Yes | No |
| 1.4 A | Organization Strength indicated | Yes | No |
| 1.4 B | List of Key persons on rolls of Company indicated | Yes | No |

| 1.5 | Registration particulars with BHEL Regions/Other Organizations | | |
|---------------------------|---|-----|----------|
| 1.5 i | BHEL PSWR | Yes | No |
| 1.5 ii | BHEL PSER | Yes | No |
| 1.5 iii | BHEL PSSR | Yes | No |
| 1.5 iv | BHEL PSNR | Yes | No |
| 1.5 v | Electricity Boards | Yes | No |
| 1.5 vi | NTPC/Other PSU/Private Sector | Yes | No |
| 1.5 vii | PWD/Railways | Yes | No |
| 1.5 B | Bank particulars endorsed by Bank submitted | Yes | No |
| 1.6 A | Accreditation documentation for ISO 9000 | Yes | No |
| 1.6 B | Accreditation documentation for ISO 14000 | Yes | No |
| 1.6 C | Accreditation documentation for OHSAS 18000 | Yes | No |
| 1.7 | Financial information along with copy of audited Annual Accounts for last 3 FINANCIAL YEARS | Yes | No |
| Section-III, Part A | Filled up format for 'T&P and MACHINERY OWNED BY COMPANY' | Yes | No |
| Section-III, Part B | Filled up format for 'INSPECTION, MEASURING & TESTING EQUIPMENTS OWNED BY COMPANY' | Yes | No |
| Section-III, Part C | Filled up format for 'TIE UPS ARRANGED BY COMPANY FOR PROVIDING VARIOUS SERVICES' | Yes | No |
| Section-IV | Work Experience Formats submitted for all Categories for which Registration sought | Yes | No |
| Section-V, Part A | Signed format for 'VENDOR EVALUATION – ORGANISATIONAL SOUNDNESS' | Yes | No |
| Section-V, Part B | Signed format for 'VENDOR EVALUATION – QUALITY' | Yes | No |
| Section-V, Part C | Signed format for 'VENDOR EVALUATION – TECHNICAL COMPETENCE' | Yes | No |
| Section-V, Part D | Signed format for 'VENDOR EVALUATION – FINAL RECOMMENDATION' | Yes | No |
| Section-VI, VII & VIII | Signed 'BASIC REQUIREMENTS', Similar Nature of Work for each Category and List of expected Major T &P & IMTES | Yes | No |
| DDD | COMMON | Yes | No |
| 1 | All pages/sheets being submitted by are signed by the authorised signatory | Yes | No |
| 2 | Whether copies of detailed Work Orders (with BOQ) and Completion Certificates in support of possession of 'BASIC REQUIREMENT' furnished | Yes | No |
| 3 | Whether contractor has left any job unfinished?. If so, give reasons. | Yes | No |
| 4 | Whether any client has terminated the contractor's work before completion?. If so, furnish reasons for the same | Yes | No |
| | | | <u> </u> |

Note:

- Strike off or tick 'yes' or 'no', as applicable
- This check list is only for ease of reference and to aid the vendor in compiling and despatching the documents. Items/documents not listed in the above checklist do not absolve the vendor from submission of the same if required as per the requirements of the Vendor Registration process.
- ** Further vendors shall get registered(Sales Tax VAT registration) in other States in which work is to be done.

CHAPTER-5

Application for Registration

To,

Sr DGM /SCT
BHARAT HEAVY ELECTRICALS LIMITED
(A Govt. of India Undertaking)
POWER SECTOR – NORTHERN REGION,
REGIONAL SERVICE CENTRE NOIDA
4TH FLOOR
ADVANT NAVIS BUSINESS PARK
PLOT NO. 07 , SECTOR - 142 ,
DISTT. GAUTAM BUDH NAGAR, NOIDA – 201 301.INDIA

Dear Sir,

SUB: Application for VENDOR REGISTRATION

I/we hereby submit our application for Registration with BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR-NORTHERN REGION, NOIDA. The "Categories" of works for which Registration is sought have been ticked (V) as listed in "SECTION-I. All documents as per "Procedure for Submission" and "Checklist" have been enclosed.

I/we have carefully perused the application documents and I/we hereby give our unqualified acceptance to the procedure adopted by BHEL for Registration. I also understand that BHEL reserves the right to with hold my application for Registration, issue Tender documents to any empanelled vendor, and also annul the Registration process without assigning any reasons whatsoever.

I/we shall submit additional documents whenever asked for by BHEL..

I am also enclosing the "Declaration by Authorised Applicant" along with valid power of Attorney

SIGNATURE OF AUTHORISED APPLICANT

PLACE:

DATE:

Enclosures:

- i) Declaration by Authorised Applicant
- ii) All other documents for VENDOR REGISTRATION along with enclosures/attachments

CHAPTER-6

DECLARATION BY AUTHORISED APPLICANT (To be given on Company letter head)

| 1 | Name of Authorised Applicant of the company seeking Registration | |
|---|--|--|
| 2 | Designation of Applicant | |
| 3 | Name of Company for which seeking Registration | |
| 4 | Head office Address Mobile No Tel No Fax No Email Web site | |

I hereby certify that all information and data furnished by me with regard to Vendor Registration/Registration are true and complete to the best of my knowledge. I further certify that I am duly authorised representative of the above mentioned company and a valid Power of Attorney to this effect is enclosed.

Signature of Authorised Applicant

With name and address

Place:

Date:

SECTION-I

(CATEGORIES FOR VENDOR REGISTRATION)

| | Category | Code | Applied for | Fill |
|-------|--|------|--------------|--------|
| S.No. | | | registration | Yes/No |
| 1. | Boiler & Auxiliaries. | BLR | Yes/No | |
| 2. | Turbine, Condenser & Generator Thermal /Gas/ Nuclear) (STG) | STG | Yes/No | |
| 3. | Hydro Turbine & Generator | HTG | Yes/No | |
| 4. | Chemical Cleaning (Boiler, Condenser, other Heat Exchanger) | CHC | Yes/No | |

SECTION-II

BHARAT HEAVY ELECTRICALS LIMITED

VENDOR REGISTRATION FORM

COMPANY PROFILE & ORGANISATIONAL INFORMATION

1.1 GENERAL INFORMATION

| SI No | Detail/Particulars | Remarks by BHEL,if |
|-------|--|--------------------|
| | | any |
| 1.1.1 | Name of Company seeking Registration:- | |
| 1.1.1 | Name of Company Seeking Registration | |
| | | |
| | | |
| | | |
| | Date of Incorporation/Establishment :- | |
| | (5) | |
| 1.1.2 | (Please attach Certificate of Incorporation) | |
| 1.1.3 | Registered Office Address:- | |
| | | |
| | | |
| | ➤ Tel No : | |
| | Fax No: | |
| | Email ID: | |
| 111 | > Web site: | |
| 1.1.4 | Head Office Address:- | |
| | | |
| | | |
| | Tel No: | |
| | Fax No :Email ID: | |
| | > Web site : | |
| 1.1.5 | Mailing Address:- | |
| | | |
| | | |
| | ➤ Tel No : | |
| | Fax No : | |
| | Email ID: | |
| | > Web site : | |
| 1.1.6 | Officer to be contacted for clarification on Vendor Registration:- | |
| | Name & Address | |
| | Traine a riaginess | |
| | | |
| | ➤ Tel No : | |
| | Fax No: | |
| | Email ID: | |
| | | |

| | | Remarks by BHEL |
|-------|--|-----------------|
| 1.1.7 | Branches:- | |
| i | Address:- | |
| | Contact Person: | |
| | ➤ Tel No : | |
| | Fax No : | |
| | > Email ID : | |
| ii | Address:- | |
| | Contact Person: | |
| | > Tel No : | |
| | Fax No : | |
| | > Email ID : | |
| iii | Address:- | |
| | Contact Person: | |
| | ➤ Tel No : | |
| | Fax No : | |
| | > Email ID : | |
| 1.1.8 | Sister Concerns if any:- | |
| i | Address:- | |
| | Contact Person: | |
| | ➤ Tel No : | |
| | Fax No : | |
| | > Email ID : | |
| ii | Web site : Address:- | |
| " | | |
| | Contact Person: | |
| | > Tel No : | |
| | Fax No : | |
| | <pre>> Email ID : > Web site :</pre> | |
| iii | Web site : Address:- | |
| 111 | Address | |
| | > Contact Person: | |
| | ➤ Tel No : | |
| | > Fax No : | |
| | > Email ID : | |
| | ➤ Web site : | |

1.2 OWNERSHIP INFORMATION

| 1.2. | TYPE OF COMPANY | (please tick | Documents to be submitted | Remarks by |
|------|---------------------------|--------------------|---------------------------------|--------------|
| 1 | | "√" <u>any one</u> | | BHEL, if any |
| | | applicable) | | |
| i | Govt of India Undertaking | | | |
| ii | State Govt Undertaking | | | |
| iii | Public Limited Company | | Memorandum and Articles of | |
| "" | Public Limited Company | | Association | |
| iv | Private Limited Company | | Memorandum and Articles of | |
| IV | Frivate Limited Company | | Association | |
| V | Co-operative Society | | Society Rules and Byelaws | |
| vi | Partnership Firm | | Partnership deed | |
| viii | Dranriatarchin | | Professional Tax Registration & | |
| vii | Proprietorship | | Municipal Registration | |
| viii | Any Other (specify) | | Supporting documents | |

| 1.2. | DIRECTOR/PARTNER/OWNER/PROPRIETO R INFORMATION | Position Held In Company | Remarks by BHEL, if any |
|------|--|--------------------------|----------------------------|
| | | | |
| i | | | |
| ii | | | |
| iii | | | |
| iv | | | |

1.2.3 DIRECTORS / PARTNERS, IF RELATED TO ANY BHEL EMPLOYEE:

| 1 | NAME: | |
|---|---------------------|--|
| 2 | STAFF NO.: | |
| 3 | DESIGNATION: | |
| 4 | Unit & DEPARTMENT : | |
| 5 | RELATIONSHIP: | |

1.2.4 IF ANY EX-BHEL PERSONNEL IS EMPLOYED BY THE COMPANY, MENTION HIS / HER DETAILS OF LAST POSTING.

| 1 | NAME: | |
|---|---------------------|--|
| 2 | STAFF NO. : | |
| 3 | DESIGNATION : | |
| 4 | Unit & DEPARTMENT : | |
| 5 | RELATIONSHIP: | |

1.3 REGISTRATION PARTICULARS

| SI No | Description (PLEASE INDICATE PARTICULARS IN THE SPACE PROVIDED FOR | Required for | Documents to be | Remarks by BHEL, if any. |
|----------|---|-----------------------------------|------------------------|-----------------------------|
| | EACH) | | submitted | |
| а | INCOME TAX (PERMANENT AC NO):- | All categories | Copy of Certificate | |
| b | SERVICE TAX REGISTRATION | All Categories | Copy of Certificate | |
| С | Sales Tax VAT Registration Number and Date: | | | |
| | 1. UTTAR PRADESH:- | As applicable | Copy of Certificate | |
| | 2. UTTARAKHAND:- | As applicable | Copy of Certificate | |
| | 3. RAJASTHAN :- | All categories | Copy of Certificate | |
| | 4. DELHI:- | As applicable | Copy of Certificate | |
| | 5. PUNJAB :- | As applicable | Copy of Certificate | |
| | 6. HARYANA :- | As applicable | Copy of Certificate | |
| | 7. HIMACHAL PRADESH :- | As applicable | Copy of Certificate | |
| | 8. Any Other States | As applicable | Copy of Certificate | |
| d | PF Registration | All categories | Copy of Certificate | |
| е | ESIC Registration | All categories | Copy of Certificate | |
| f | CPWD/Government Organisation | As applicable | Copy of Certificate | |
| g | Geological Survey Of India/Equivalent | For Geo Tech Investigationsetc | Copy of Certificate | |
| h | IBR | For Boiler and IBR Piping | Copy of Certificate | |
| i | Contractorship License for Electrical Works (from any State/Union Territory of India) | For Electrical Works | Copy of Certificate | |
| 1.4 | MANPOWER | 1 | 1 | Remarks by BHEL, if any |
| Α | Organisation Strength (In number): (please submit Organisation Chart) | | | |

| В | List of Key Persons on rolls of the Company | | | |
|-----|---|------------------------------|----------------------------|--|
| | Category | No of persons in the Company | Remarks by BHEL, if any | |
| i | Resident Managers/Resident Engineers | | | |
| ii | Site Engineers (Erection & Commissioning) | | | |
| iii | Site Engineers (Quality) | | | |
| iv | Site Safety Co-ordinators | | | |
| V | Site Supervisors | | | |
| vi | Skilled Workmen | | | |
| vii | Others | | | |

1.4 OTHER PARTICULARS

| A | Registration with | Registration/ | Registration/ | Document to | Remarks by |
|-----|--|------------------------|-------------------------|----------------------|--------------|
| | BHEL and Other Firms | Registration Number | Registration valid upto | be submitted | BHEL, if any |
| i | BHEL/Northern Region | | | Documentary evidence | |
| ii | BHEL/Eastern Region | | | Documentary evidence | |
| iii | BHEL Southern Region | | | Documentary evidence | |
| iv | BHEL Western Region | | | Documentary evidence | |
| V | Electricity Boards | | | Documentary evidence | |
| vi | NTPC/other Public Sector/Private Sector | | | Documentary evidence | |
| vii | PWD/Railways | | | Documentary evidence | |

| BANKING DETAILS OF COMPANY | | | | | | | |
|----------------------------|--|---------------------|--------------|--|--|--|--|
| Informat | ion of Bank Account of Company | Document to be | Remarks by | | | | |
| | | submitted | BHEL, if any | | | | |
| The foll | lowing information of Bank Account of the | Information of Bank | | | | | |
| Compar | ny, duly endorsed by the Bank (required for | Account of the | | | | | |
| Electror | nic Fund Transfer –EFT/RTGS) is to be | Company, duly | | | | | |
| submitt | ed | endorsed by the | | | | | |
| | | Bank | | | | | |
| 1. | Name of the Company | | | | | | |
| 2. | Name of Bank | | | | | | |
| 3. | Name of Bank Branch | | | | | | |
| 4. | City/Place | | | | | | |
| 5. | Account Number | | | | | | |
| 6. | Account type | | | | | | |
| 7. | IFSC code of the Bank Branch | | | | | | |
| 8. | MICR Code of the Bank Branch | | | | | | |
| NOTE: | | | | | | | |
| (i) Vendo | ors who have already submitted the above | | | | | | |
| inform | nation are requested to submit a copy of the | | | | | | |
| same | | | | | | | |

| 1.6 | QUALITY SYSTEMS | Certificate Number and Valid upto | Document to be submitted | Remarks by BHEL, if any |
|-----|-----------------------------------|-----------------------------------|--|----------------------------|
| A | Accreditation to ISO 9001:2008 | | Copy of accreditation certificate OR Copy of 'Table of Contents' of 'Quality Manual' | |
| В | Accreditation to ISO 14001:2004 | | Copy of accreditation certificate OR Copy of 'Table of Contents' of 'Quality Manual' | |
| С | Accreditation to OHSAS 18000:2007 | | Copy of accreditation certificate OR Copy of 'Table of Contents' of 'Quality Manual' | |
| D | In house Quality Systems | | Copy of quality manual. | |

1.7 FINANCIAL INFORMATION FOR THE PREVIOUS THREE YEARS Note: This sheet must be signed by CA with stamp & registration no.

| SI No | Financial Information | Financia | Remarks by BHEL | | |
|-------|---|-----------------|--------------------|----------|--|
| | | Year | Value in Rupees | in lakhs | |
| i | NET WORTH (Latest) Paid up Share Capital# + Reserves | | | | |
| ii | (For the Latest FY) SALES/TURN OVER | | | | |
| " | (Last three Financial Years) | | | | |
| | | Average | | | |
| iii | CASH PROFIT (PAT + Non Cash Expenditure viz Depreciation) | | | | |
| | (Last three Financial Years) | | | | |
| iv | Current Ratio = (Current Assets/ Current Liabilities) | | | | |
| V | Quick Ratio = (Current Assets - Inventories)/ Current Liabilities | | | | |
| vi | Whether vendor has been refe (If 'YES' enclose details) | erred to BIFR/N | CLT | YES/NO | |
| vii | Whether vendor is a potential sick Company (If 'YES' enclose details) YES/NO | | | | |
| viii | Copies of Audited Annual Accounts (Balance Sheet, P&L Account, Cash flow statement) for the last three (3) years to be submitted. | | | | |
| ix | Status of Tax assessments done under various laws(Income Tax, VAT/Sales Tax, Excise & Service Tax, Custom) and detail of disputes pending, if any, with these authorities to be submitted | | | | |

Legend:

#: Share Capital OR Partnership Capital OR Proprietor Capital as the case may be.

(Sign of CA with Reg No. & Stamp)

SECTION-III

RESOURCES OWNED BY THE COMPANY

A) TOOLS & PLANTS, MACHINERY OWNED BY COMPANY

| SL NO | Description of T&P, Machinery | Make | Capacity | Year | Quantity | Remarks |
|-------|----------------------------------|------|----------|------|----------|---------|
| | | | | | | |
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^{1.} Please indicate all important T&Ps, Machinery owned by Company.

^{2.} Please use additional sheets if required.

B) INSPECTION, MEASURING AND TESTING EQUIPMENTS OWNED BY COMPANY

| SL NO | Description of T&P, | Make | Capacity | Year | Quantity | Remarks |
|-------|---------------------|------|----------|------|----------|---------|
| | Machinery | | | | | |
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- 1. Please indicate all important Inspection, Measuring and Testing Equipments owned by Company.
- 2. Please use additional sheets, if required.

C) TIE UPS or RATE CONTRACTS ENTERED INTO BY THE COMPANY FOR PROVIDING VARIOUS SERVICES WHICH THE COMPANY PROPOSES TO INDICATE

| SL | SERVICES FOR WHICH TIE Ups / RATE | PLEASE INDICATE WHETHER SHORT | Remarks |
|----|-----------------------------------|-------------------------------|---------|
| NO | CONTRACTS ENTERED FOR PROVIDING | TERM (1 YEAR) OR LONG TERM | |
| | SERVICES | (ABOVE 1 YEAR) | |
| | | | |
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^{1.} Please indicate all important Tie Ups enterd by Compnay for providing various services

^{2.} Please use additional sheets if required

SECTION - IV:

FORMAT NO: WE-1

(use separate sheet for each CATEGORY/CODE)

WORK EXPERIENCE (in the last 7 years period ending on the date of submission of Application)

(use additional sheets if required)

| CATEGORY | CODE |
|----------|------|
| | |
| | |
| | |

| SI | Full Postal Address | Brief description of Work & | Work Order No | Value of | Time | Contractual | Actual | Present | Documents |
|----|---------------------|-----------------------------|---------------|--------------------|----------------|-------------|------------|------------------------|---------------------------------------|
| no | of Client and | Quantities | and date | Contract in | schedule | Date of | date of | Status | attached in |
| | Officer in Charge | | | Rupees in Lakhs | (in months) | Completion | completion | (of ongoing job) | support of columns (i) to viii) |
| | (i) | (ii) | (iii) | (iv) | (v) | (vi) | (vii) | (viii) | (ix) |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |

(use additional sheets if required)

SECTION-V

VENDOR EVALUATION

Part A: ORGANISATIONAL SOUNDNESS

| SI. No. | PARAMETER | QUALIFICATION CRITERIA | EVALUATION BY BHEL |
|------------|--|--|---|
| 1 | NET WORTH: (from audited figures for the LATEST FINANCIAL YEAR) | Positive networth | (Yes/No) |
| 2 | SALES/TURN OVER: (from Audited Accounts of last three FINANCIAL YEARS) | Average annual Turn Over of last three years should be more than 30% estimated value of work | Code & Category: i ii iii iiv v vii viii |
| 3 | Current Ratio = (Current Assets/ Current Liabilities) OR Quick Ratio = (Current Assets – Inventries)/ Current Liabilities | Current Ratio > 1.5 :1 OR Quick Ratio > 1: 1.75 | |
| 4 | BIFR/NCLT case OR "SICK" | Should NOT have been referred to BIFR/NCLT or declared "SICK" by any Statutory Authority | |
| 5 | Value of Work up to which Qualified | Avg Annual Turnover/0.3 | |
| 6 | Remarks if any : | | ı |
| | Signature of evaluation | committee: | |
| | QUALIFIED | NOT QUALIFIED | |

SECTION-V VENDOR EVALUATION

Part B: QUALITY:

| SI | | | | | |
|----|--|---|------------------------|--|--|
| no | PARAMETER | QUALIFICATION CRITERIA | EVALUATION BY BHEL | | |
| 1 | Ability to deliver Quality Services in terms of Evidence of Quality Assuarance within the Organisation on the basis of various information available in the application OR on reports from existing Sites OR reports from Previous Works | 1. Submission of Completion Reports 2. Worked with any Units/Power Sector Regions for similar jobs/works 3. VENDOR having business with 3 or more Customers 4. Having continuous business in the last 3 years 5. Having ISO 9001, ISO 14001 & OHSAS 18001 certification | | | |
| | NOTE: If any three of the above treated as qualified for Par | | re met, the VENDOR may | | |
| 2 | VENDOR evaluation for QUALITY (tick which ever applicable) | | | | |
| | QUALIFIED | | NOT QUALIFIED | | |
| 3 | Remarks if any : | | | | |
| 4 | Signature of evaluation comm | nittee: | | | |

SECTION – V VENDOR EVALUATION

Part C: TECHNICAL:

| <u>P</u> | Part C: TECHNICAL: | | | | |
|----------|---|---|--------------------|--|--|
| SI no | PARAMETER | QUALIFICATION CRITERIA | EVALUATION BY BHEL | | |
| 1 | BASIC REQUIREMENT | Should fulfil the "BASIC REQUIREMENT' for the subject CATEGORY for which Registration is sought | iiiii | | |
| | | Note: To be evaluated for every 'CATEGORY' for which 'Registration' sought and given suitable code. | iv | | |
| | | | V | | |
| | | | vi | | |
| | | | vii | | |
| 2 | Adequacy of T&P, Machinery (owned by the Company) | Adequately available OR Available for the major part | YES/NO | | |
| 3 | Adequacy of Inspection, Measuring and Testing Equipments (owned by the Company) | Adequately available OR Available for the major part | YES/NO | | |
| 4 | Remarks if any : | | | | |
| 5 | QUALIFIED Signature of evalua | tion committee | NOT QUALIFIED | | |
| 5 | Jigilatule Ol evalua | tion committee | | | |

SECTION-V VENDOR EVALUATION

| Part D: FINAL RECOMMENDATION | | |
|------------------------------|--|--|
| Name of VENDOR : | | |

Table-1 CRITERIA for VENDOR REGISTRATION (for each CATEGORY)

| | Evaluation of Vendor | ASSESSMENT CRITERIA | | |
|-------|----------------------|--|-----------|----------------------|
| SI no | for Registration | Organisational Soundness | Quality | Technical Capability |
| 1 | RECOMMENDED | QUALIFIED | QUALIFIED | QUALIFIED |
| 2 | NOT RECOMMENDED | IF NOT QUALIFIED FOR EVEN ANY ONE OF THE ABOVE ASPECTS | | |

Table-2 RECOMMENDATION FOR REGISTRATION OF VENDOR

| SI No | CATEGORY | CODE | Recommendation of BHEL |
|----------|-------------------------------|------|------------------------|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| Signa | ture of evaluation committee: | | |
| | | | |
| | | | |
| | | | |
| | | | |

Section-VI

Basic Qualifying Requirements for PART-C (TECHNICAL) For Individual Category:

1. Boiler & Auxiliaries (BLR):

Vendor who wish to register should have executed, during last Seven years, as on the date of submission of Application form Major Overhauling of Boiler & Aux. works i.e. work of Boiler Pressure Parts, Non-Pressure parts, rotary parts etc in utility power plant of rating 60 MW and above (not the industrial boiler or captive power plant) as per the following:

- 1. One single work of similar nature valuing INR 60.00 Lacs or above "OR"
- 2. Two works of similar nature valuing each of INR 37.50.00 Lacs or above "OR"
- 3. Three works of similar nature valuing each of INR Rs. 30.00 Lacs above

2. Turbine & Generator (Thermal/Gas/Nuclear) (STG)

Vendor who wish to register should have executed, during last Seven years, as on the date of submission of Application form Major Overhauling of Turbine, Generator & Aux. works (any of Thermal, Gas or Nuclear) i.e. work of overhauling of HP/IP/LP turbine, Bearing inspection, Generator mechanical & electrical work, and their aux. etc in utility power plant of rating 60 MW and above (not the industrial or captive power plant) as per the following:

- 1. One single work of similar nature valuing INR 26.40.00 Lacs or above "OR"
- 2. Two works of similar nature valuing each of INR 16.50 Lacs or above "OR"
- 3. Three works of similar nature valuing each of INR Rs 13.20 Lacs above

3. Hydro Turbine & Generator (HTG)

Vendor who wish to register should have executed, during last Seven years, as on the date of submission of Application form Major Overhauling of Hydro turbine & Generators and their aux., in-situ repair of underwater parts (runner, guide vanes, pivot rings etc) i.e in utility power plant of rating 10 MW and above (not the industrial boiler or captive power plant) as per the following:

- 1. One single work of similar nature valuing INR 52.00 Lacs or above "OR"
- 2. Two works of similar nature valuing each of INR 32.50 Lacs or above "OR"
- 3. Three works of similar nature valuing each of INR Rs 26.00 Lacs above

4. Chemical Cleaning (Boiler, Condenser, other Heat Exchanger) (CC)

Vendor who wish to register should have executed, during last Seven years, as on the date of submission of Application form Chemical cleaning (Acid cleaning/EDTA cleaning) work of Boiler in utility power plant of rating 60 MW and above (not the industrial boiler or captive power plant) as per the following:

- 1. One single work of similar nature valuing INR 20.00 Lacs or above "OR"
- 2. Two works of similar nature valuing each of INR 12.50 Lacs or above "OR"
- 3. Three works of similar nature valuing each of INR Rs 10.00 Lacs above

Explanatory Notes for Basic Qualifying Requirements

- 1. In Basic Qualifying Requirements mentioned in section VI as above, the word 'Executed 'means the bidder should have achieved the criteria, specified in the QR, even if the total contract has not been completed or closed.
- 2. If the Qualifying work is executed in the last seven years period, as specified above, even if it has been started earlier, the same will also be considered meeting the qualifying requirements.
- 3. For QR, Similar Nature Means: Similar nature works for each category refer Section VII.
- 4. For above QR, value of work means for single Unit work. If there is a single order for multiple Units then value of works shall be considered by dividing the same by no. of Units.
- 5. AMC/ ARC or routine maintenance type jobs shall not be considered as similar jobs for respective category.
- 6. Attach relevant documents, meeting above requirements.

Section VII

Similar nature works for each category

BOILER AND AUXILIARIES (BLR)

- 1. Overhauling and minor repair of pressure parts viz. water walls, economizers and superheaters, reheaters including high pressure welding.
- 2. Replacement of water wall, economizer, superheater, reheater, etc.
- 3. Servicing/minor repairing/replacement of high pressure valves.
- 4. Overhauling/minor repair/modification of rotary air heaters.
- 5. Replacement of tubular air heater-lower, middle and upper blocks, retubing.
- 6. Overhauling of fans, pumps.
- 7. Overhauling of ball mills/tube mills.
- 8. Overhauling of bowl mills/hammer mills.
- 9. Overhauling/minor repair of raw coal feeders and variators.
- 10. Replacement/minor repair of raw coal feeders rotary and chain type and their variators.
- 11. Overhauling of pulverized coal feeders and variators.
- 12. Replacement/minor repair of coal lines-straight and bend portions.
- 13. Turnikets, screw conveyor coal chutes, RC bunkers, PC bunkers, etc.
- 14. Replacement of oil and coal burner nozzle boxes, connecting ducts, tilting mechanism, oil burner and oil system, etc.
- 15. Overhauling/minor repair of air ducts, gates and dampers.
- 16. Minor repair/overhauling of mechanical precipitators.
- 17. Overhauling/revamping of electrostatic precipitators (mechanical).
- 18. Servicing of boiler drum internals, gauge glasses and connecting valves.
- 19. Replacement/minor repair of high pressure line drains and air vents, various connecting pipes, main steam line, feed water line and all other lines.
- 20. Overhauling of mud drums, checking/replacement of orifice plates.
- 21. Overhauling of controlled circulation pumps and their motors.
- 22. Inspection and minor repair of all supports and hangers of pipes, ducts, etc.
- 23. All type of refractory, insulation and cladding works.
- 24. Various types of fabrication works including stainless steel fabrication.
- 25. Radiography, heat treatment, etc. of high pressure welding joints and their NDT.
- 26. Overhauling of soot blowers.
- 27. Minor repair/replacement of boiler casing, structure, etc.
- 28. Overhauling of ash handling system, slag conveyor, etc.
- 29. Refractory brick lining, plastering, insulation brick lining, etc. of boiler.
- 30. Thermal mineral wool/pad insulation with proper aluminium cladding.

 OR

ETC/R&M of Boiler & Aux. of Rating 60MW & above in Power Plant projects.

Turbine, Condenser & Generator Thermal /Gas/ Nuclear) (STG)

a) OVERHAULING OF STEAM TURBINE OTHER THAN KWU DESIGN

- 1. Dismantling and assembly of crossover pipes.
- 2. Loosening of studs of parting plane of LPC, lift LP cylinder.
- 3. Lifting of pedestal cover and barring gear.
- 4. Heat loosening of HP and MP outer cover parting plane studs / bolts, lift HP and MP outer casing. Heat loosening of HP and MP inner casing parting plane studs / bolts.
- 5. Lift HP and MP inner casing and upper carriers of MP cylinders.
- 6. Dismantle / test LP Heaters.
- 7. Decouple HP/MP, MP/LP, LP/Generator Rotors and check alignments.
- 8. Lift bearing tops and check clearances and interference.
- 9. Check rotor run out and journal slopes.
- 10. Check steam flow path clearances and thrust float.
- 11. Lift HP, MP and LP rotors.
- 12. Remove all bottom diaphragms, liners, etc.
- 13. Overturn top casings.
- 14. Clean all casing parting planes and check thermal distortion of individual casing by hand scrapper.
- 15. Replacement of gland sealing fins on rotors. The job of rotor fin cutting is to be carried out with safety and proper precautions.
- 16. Rectify thermal distortion, if any, and ensure perfect matching of all individual casing parting plane.
- 17. Clean all turbine parts including casing, rotors, diaphragms, etc. (Sand blasting will be carried out, wherever necessary).
- 18. UT and DPT of bearings including generator bearings (1 to 7).
- 19. Revisioning / reconditioning / colour matching of all seven bearings, including replacement, wherever required.
- 20. Alignment of rotors and finalising the position of bearings and slope checking including generator bearings.
- 21. Assemble thrust bearing and check/ adjust thrust float.
- 22. Centering of all diaphragms and other internals.
- 23. Check / adjust steam flow path clearances, seal clearances, thermal clearances, etc.
- 24. Box up LP casing and tighten fasteners.
- 25. Box up HP and MP inner casings and heat tighten fasteners.
- 26. Assemble LP heaters in the LP casing.
- 27. Box up HP and MP outer casings and heat tighten fasteners.
- 28. Check final alignment and do necessary corrections, if needed. Couple rotors after reaming, if required including generator and LP coupling and generator bearings.
- 29. Overhauling of HPQC, IPQC, IVs and governing valves, extraction NRVs including their servomotors.
- 30. Check/ adjust bearing oil clearances and interferences.
- 31. Revisioning of MOP and governing system.
- 32. Cleaning and overhauling of oil injector.
- 33. Overhauling of turning gear.
- 34. Setting all seven bearings for oil flushing and normalising thereafter to put machine on turning gear.
- 35. Check / adjust governing characteristics.
- 36. Steam rolling and checking over speed protections.

37. Trim balancing, if required.

b) OVERHAULING OF STEAM TURBINE OF KWU DESIGN

HP MODULE OVERHAUL

- 1. Removal and disposal of thermal insulation from HP turbine. Dismantling of steam inlet and exhaust piping. Opening of breech nuts. Lifting of HP module from pedestals and placing it on stands.
- 2. Dismantling of removed HP module. Loosening of PP studs. Cleaning/alumina blasting/sand blasting/wet sand blasting of turbine internals. Revisioning of rotor and casing.
- 3. Centering of barrel in outer casing and assembly of the complete casing. Replacement of keys, as required. Maintaining axial and radial clearances. Machining of fins, if required.
- 4. Lifting the barrel and placing it in horizontal position, removal of locking devices and supporting the rotor on fixture. Fitting of seals and outer glands. Shifting of HP module from fixture to pedestals.
- 5. Connection of all piping. Roll check, bump check, horn drop test and connection.

HP MODULE REPLACEMENT

- 1. Lifting of old module from pedestals and placing it on fixture.
- 2. Shifting of new HP module to pedestals after removing all preservation coatings/covers/caps on casing and rotor. Removal of transportation device after loading the rotor on the bearings.
- 3. Removal of emergency governor shaft from the old module and its fitting / centering on rotor of new module including in-situ servicing of both overspeed strikers.
- 4. Connection of all piping with casing to be carried out including in-situ drilling of locating pin holes in the inlet insert. Horn drop test, roll check and bump check of new module to be carried out before and after connection of piping and corrected.

IP MODULE

- 1. Removal of complete IP turbine insulation and its disposal. Dismantling of inlet, gland sealing steam and extraction lines of top casing after properly supporting them, including cutting, if required.
- 2. Dismantling of exhaust steam lines from top casing and glands. Heat loosening of joint bolts and lifting of top half of IP inner and outer casings. Measure axial, radial and shaft seal clearances and radial, facial runout of IP couplings. Removal of IP rotor and IP inner casing.
- 3. Cleaning/alumina blasting/sand blasting/wet sand blasting of IP turbine internals. Checking of parting plane gaps of inner and outer casing and rectifications. Replacement of gland fins, as reqd.
- 4. Box-up of IP inner and outer casings, roll check, bump check and heat tightening of joint bolts. Box up of front, gland boxes. Assembly of inlet, gland steam, extraction lines and exhaust steam pipes.

LP MODULE

- 1. Removal of LP gland box upper halves and checking of seal clearances. Loosening of LP casing parting plane bolts and lifting of outer casing. Removal of LP inner-outer and inner-inner casing top halves. Checking and rectification of axial and radial clearances of LP casing/rotor.
- 2. Lifting of LP rotor and placement of rotor on stands after supporting properly.
- 3. Checking for looseness of lades of LP rotor and DP testing, wherever necessary. Rectification of loose blades, if any. Inspection of LPT expansion bellows, LPT inlet pipe (LHS & RHS), bellow protection pipe welding seams and LP casing to pedestal expansion bellows by DPT.
- 4. Cleaning/alumina blasting/sand blasting/wet sand blasting of LP turbine internals. Check parting plane gaps and ovality of inner-inner and inner-outer casings and rectification.
- 5. Placement of LP rotor back in position after cleaning work. Box-up of LP inner-inner and inner-outer casings, roll check and correction. Box-up of LP outer casing after complete

inspection of condenser internal (steam space). Setting of gland box clearances, key clearances and assembly of gland boxes including replacement of segments, if required and making of clearances.

BEARING INSPECTION

- 1. Removal of bearing 1 to 7 pedestal covers and bearing T/H after checking yoke key clearances. Coupled and free runout checks of all rotors and couplings.
- 2. Decoupling of HP/MOP. Overhauling of MOP. DPT and UT of MOP bearings and replacement of worn-out / damaged parts, reassembly, realignment and coupling.
- 3. Measurement of catenary of TG rotors using pot levels and corrections. Roll check and bump check of HP, IP and LP casings. Swing check at HP front. Decoupling of HP-IP and IP-LP rotors, measuring alignment of rotors. Inspection, NDT and revisioning of all TG bearings. Inspection and rectification of contact between torus and support. Revisioning of thrust bearing, adjustment of thrust float.
- 4. Alignment of HP/IP and IP/LP rotors. Coupling of rotors including reaming/honing and machining of new coupling bolts. Roll check, bump check, horn drop test and centering of HP, IP and LP casings. Adjustment of axial and radial keys and packers, if reqd, incl. machining, matching and lubrication.
- 5. Resetting of all bearings, oil catchers and pedestal oil guard rings, repair/replacement of sealing strips as per requirement. Dismantling, overhaul and adjustment of overspeed trip device and thrust bearing trip device. Barring gear nozzle removal, repair/replacement of fins and reassembly.
- 6. Box-up of TG bearings 1 to 7. Preparation for oil flushing, cleaning of oil filters, basket strainers, duplex filters and resetting of throttles on completion of the flushing.
- 7. Assistance in steam rolling and synchronization and attending to any defects observed during the same. Assistance in trim balancing of the machine.

<u>VALVES – HP, IP, LP BYPASS, SPRAY VALVES AND SERVOMOTORS</u>

- 1. Removal and dismantling of the valves and actuator assembly after measuring valve travel.
- 2. Cleaning and inspection of valves, valve stems, studs, bushes and pilot seat including NDT and checking of valve stems runout. Rectification/replacement of components, if required.
- 3. Inspection of all sealing faces at the valve sets, back seat, sealing ring, etc. and stop valve servomotor disc top and rectification, as necessary.
- 4. Inspection of back seat bushings, spacer rings, gland packings and servomotor oil seal rings.
- 5. Assembly of complete valves including servomotors and connection of all piping. Checking of valves for any leaks and proper functioning. Measurement of valve stem lifts/travel/compression. Adjustment of valves during final setting.

VALVES - HP BYPASS AND SPRAY VALVES AND SERVOMOTORS

- 1. Remove insulation, cutting of spray line and decoupling of the valve. Dismantling of the valve.
- 2. Check condition of the strainer, valve cone and valve seat. Repair/replace the worn-out/damaged parts, if required. Lapping of seat in position. Seat cutting, if required.
- 3. Assemble the valve back and weld the spray line. Root run to be TIG welded. Revisioning of servomotors/actuators and servovalves of the HPBP valves and spray valves including pilot valves. Associated oil piping shall be taken up for oil flushing. Coupling and commissioning of the valve.

MS AND HRH STRAINERS

1. Cutting of strainer drain lines, dismantling of main steam and HRH strainers, inspection/NDT, cleaning and rectification, replacement of gaskets and reassembly, TIG welding of strainer drain lines, rectification after radiography, if required.

GOVERNING AND LP BYPASS RACKS

1. Revisioning of all the components, feedback assemblies, their inspection and cleaning. Replacement of components, O-Rings, oil seals and other parts, if required. Commissioning and resetting of Governing and LP Bypass Racks vis-à-vis respective stop and control valves, CRH NRVs, water injection valves, etc. to design values.

CONDENSATE EXTRACTION PUMPS AND CIRCULATING WATER PUMPS

- 1. Complete dismantling of the pump including decoupling. Piping disconnection and recording of pre-dismantling float, etc. Cleaning, inspection and revisioning of all components. Check runout of shafts. Clearance checking of stage sleeve and cutlass rubber bearings.
- 2. Clearance checking of stage bush and restriction bush. Repair/replacement of the worn-out/damaged parts. Proper locking of wear rings, bearing bushes, etc. by screws. Assembly of the pump and head gear. Checking of axial float and centering. Assembly of the bearing housing with bearings, oil filling after flushing of the housing. Boxing up of the pump. Assembly of gland. Installation of the motor, alignment with pump, coupling and trial run of the pump.

c) OVERHAULING OF ALL TURBOGENERATOR

- 1. Checking coupled runout and bearing yoke clearance. Decouple and check LP-Generator alignment.
- 2. Removal of oil pipelines. Dismantling of hydrogen seals of both sides and checking of seal liners. Replacement of seal liners, if required.
- 3. Removal of end shields and fan shields of both sides. Removal of fan blades of both sides.
- 4. Removal of brush gear assembly and bearing no. 7. Reassembly of bearing no. 7 and brush gear including alignment with slip rings.
- 5. Threading out of generator rotor after checking air gap, magnetic centre& demagnetization of rotor.
- Removal of hydrogen coolers, cleaning of tubes and conducting hydraulic test. Face matching of coolers and water box. Reassembly of the hydrogen coolers including replacement of gaskets.
- 7. Assistance in checking of RTDs of stator winding/slot. Replacement of RTDs wherever possible.
- 8. Replacement of generator stator bushing and gaskets, if required. Asbestos fibre cementing of terminal bushing, if required.
- 9. UT/DP testing of bearings and replacement, if required.
- 10. Rotor purge test, air tightness test and replacement of washers of all the four inner and outer current carrying bolts. Removal/refitting of fan hub. Replacement of slip ring, if required.
- 11. DP test of rotor retaining rings.
- 12. Inspection, checking, tightness of core bar nuts and their locking. Checking and removal of technological bolts, if any.
- 13. Checking tightness of overhang bracket bolts and busbar support bracket bolts and their locking.
- 14. Checking condition of Teflon tubes, water header and insulating box cover and replacement, if reqd.
- 15. Inspection of stator winding and measurement of radial deflection movement of the stator wedges and retightening, if required.
- 16. Hydraulic testing of stator winding. Attending to failure of minor nature noticed.
- 17. ELCID test on stator core. Minor rectification and retest of ELCID.
- 18. Clearing of blockages in stator winding by reverse flow of water in winding.
- 19. PI value checking and its improvement, if necessary.

- 20. Epoxy injection on the overhang portion of the stator winding and spray varnish on stator and rotor.
- 21. Rotor threading in. Insertion of hydrogen coolers and fixing of U-Bends.
- 22. Measurement and rectification of LP-Generator coupling facial runout.
- 23. LP-Generator alignment and coupling including reaming/honing and machining of new bolts and replacement of bolts, if required. Checking and correction of coupled runout.
- 24. Measurement of final air gap and magnetic centre and correction, if required.
- 25. Mounting of fan blades and assembly of end shield, seal body, fan shields and seal body pipelines including replacement of gaskets in gas and oil system lines connected to stator body.
- 26. Checking of auxiliary shaft runout and correction, if necessary.
- 27. Assembly of bearings. Checking of oil clearances of bearing and setting of bearing pad and yoke keys. Box-up of bearing pedestals 5, 6 and 7.
- 28. Revisioning of DPRV A & B and restting of relief valves of seal oil pumps.
- 29. Preparation for oil flushing.
- 30. Gas tightness test of generator after final box-up. The scope will be limited to inspection of end shield joints, seal body joints, hydrogen coolers, flanges and prechambers only.
- 31. Removal of brushless exciter, wherever provided.
- 32. Electrical checking/testing of diodes, fuses and replacement, etc.
- 33. Checking of bearing insulation and rectification, if required.

d) OVERHAULING OF SIEMENS DESIGN GAS TURBINES

- 1. Compressor/turbine washing. Mark and remove insulation. Spray/apply anti-seize compound on bolts and nuts. Open all manholes and check for abnormalities. Disconnect fuel oil/gas pipelines. Disconnect electrical and instrumentation equipment. Measure backlash of turning gear and undo all blow-off pipes. Measure radial clearances of turbine blades.
- 2. Removal of intermediate shaft cover/suction cone/inlet. Check coupled runout of both the couplings. Decouple turbine/intermediate shaft and intermediate shaft/generator, check alignment and conduct bump check. Provide supports under the centre casing. Take out all centre/guide pins.
- 3. Removal of combustion chambers after opening the flange bolts.
- 4. Grind off exhaust casing liners. Open bolts of centre and exhaust casings and lifting of top halves.
- 5. Dismantle all piping connections and burners on both CCs. Take out all gas and oil valves. Conduct pneumatic testing of all ball valves. Opening of bolts of domes of both CCs. Lift off top domes and flame tubes of both CCs. Remove diagonal swirlers and inspect for damages. Inspection of burner insert rings for damage and removal of the same, if required.
- 6. Inspection of tiles and tile holders of both flame tubes. Replacement of damaged tiles/tile holders.
- 7. Take out mixing chambers from combustion chambers, if required. Open K-Ring and lift off top half.
- 8. Apply/spray anti-rust compound on all blade carriers. Provision of jack bolts for the blade carriers. Opening of bolts of carriers and lifting of the top halves. Lift off stuffing box and compressor/turbine bearings. Measurement of axial/radial blade clearances of turbine/compressor stages.
- 9. Fix inner casing with clamps to rotor. Lift the turbine rotor and shift to upending device.
- 10. Upend the rotor from horizontal to vertical position. Prepare platform on all four sides.
- 11. Unclamp/relieve rotor. Record deflection of tie rod. Dismantle rotor including inner casing.
- 12. Remove the intermediate shaft. Remove the turning gear device from compressor bearings.
- 13. Remove centre guides of the lower half carriers and take out the lower halves. Dismantling of the turbine stationary/rotor blades of stages 1/2. Dismantling compressor diaphragms from top carriers.
- 14. NDT works on bearings, tie-rod, compressor bladed rotor discs, turbine blades, etc. including supply of DP test kits, MPI testing kit, MPI fluids and UT kits.
- 15. Repair/reconditioning of the inner casing, mixing chambers and flame tubes.
- 16. Reconditioning and assembly of turbine/compressor blades.
- 17. Assembly of rotor & tightening of the rotor tie-rod. Assembly of compressor diaphragms in carriers.
- 18. Overhaul of blow-off valves and oil pumps. Overhaul of turning gear/overspeed tripping device.
- 19. Insert lower halves of turbine/compressor blade carriers. Install turbine/compressor bearings after checking clearances. Insert the intermediate shaft in position. Insert K-Ring bottom half in position.
- 20. Assembly of flame tube and top domes of both CCs, assembly of burners and pipings.
- 21. Turn rotor from vertical to horizontal position and shift to TG hall and insert rotor in position. Make inner casing free from rotor. Prepare bearings for jacking oil. Turn rotor and grind turbine blades.
- 22. Bump check and measurement of axial/radial clearances. Box-up and assembly of the blade carriers. Assembly of K-Ring. Assemble the shaft gland box and turbine bearings. Box-up and

- assembly of the centre casing/exhaust casing. Assemble the combustion chambers to centre casing.
- 23. Measurement of radial clearances and centering. Alignment of turbine, intermediate shaft, generator rotors. Coupling of all rotors including stretching of bolts by hydraulic device.
- 24. Assembly of turning gear/overspeed tripping device. Welding of exhaust casing liners.
- 25. Fixing of the instruments and adjustment of guide vanes. Fixing of air intake casing, suction cone and intermediate shaft cover. Insert all lower centre guides.
- 26. Lube oil tank cleaning/ oil flushing. Fixing of blow-off valves/pipes. Final checks and closing of manholes.

e) OVERHAULING AND CLEANING OF CONDENSER BY HIGH PRESSURE JET, RETUBING, ETC.

- 1. Erection of scaffolding and opening of gates.
- 2. Erection and commissioning of temporary high pressure jet system including supply of all equipment.
- 3. Cleaning of the condenser tubes by high pressure jet.
- Conducting hydraulic test and plugging of leaking tubes.
- 5. Dismantling of scaffolding, temporary system and normalizing.
- 6. Condenser retubing:
- 7. Erection of scaffolding and dismantling.
- 8. Removal of old damaged tubes.
- 9. Cleaning of holes.
- 10. Insertion of tubes, cutting, expansion and flaring.
- 11. Hydraulic testing.
- 12. Normalisation of system.

f) Spray Insulation of the turbine including supply and application.

- 1. Sodium silicate spray/calcium silicate type thermal insulation of HP, MP and LP cylinders and valves as per BHEL/Manufacturer's specifications.
- 2. Thermal mineral wool/pad insulation with proper aluminium cladding of transfer pipe, omega pipes, cross-over pipes and 2 metre length of all other pipelines connected with turbine bottom cylinders.
- 3. Temperature ratings of transfer and omega pipes is 5350C and that of cross-over pipes is 2500C.
- 4. Ceramic pad insulation of turbine casings as per specifications.

OR

ETC/R&M of TG & Aux. of Rating 60MW & above in Power Plant projects.

Note: Any one out of Part a), b), c) & d) must be fulfilled for registration in above category.

Hydro Turbine & Generator (HTG)

a) Overhauling of Hydro Turbine & Generator

- 1. In-situ repair of underwater parts in hydro turbines involving components like runner blades, runner hub, runner chamber, draft tube cone, guide vanes, pivot ring, top cover liner, shaft sealing system, etc. and epoxy grouting of draft tube and runner chamber.
- 2. In-situ repair of stator winding in hydro generators.
- 3. Major overhauling/renovation of complete hydro generating sets including turbine as well as generator and their auxiliaries that shall involve the general maintenance of all dismantled components besides repair. Likely items earmarked for replacement are all rubber seals, Orings, all fasteners, top/middle/bottom guide vane bushes, guide vane cup seals, neoprene rubber seals, grease lubricant system, shear pins, shaft sleeve, loose insulation material, epoxy paints, etc.
- 4. Repair of old turbine runner assembly.
- 5. Repair of old guide vanes.
- 6. Overhauling of governing system (both electrical and mechanical cubicles).
- 7. Overhauling of excitation system.

OR

ETC/R&M of hydro turbine & generator of 5MW or above capacity.

b) Fabrication/ Repair/ Machining Hydro Turbine Components (MCN)

- 1. Transportation of the components to & fro works of the subcontractor/vendor.
- 2. Transit insurance & insurance during performance of contract at the works for a sum assured that shall be indicated by BHEL on case to case basis.
- 3. FABRICATION/REPAIR/MACHINING of various components of Steam Turbine (Viz: Gland Body, Diaphragm, Guide wheels, Labyrinth, Casing etc) as per drawing/instruction of BHEL, In situ/ at the works of the vendor.
- 4. FABRICATION/REPAIR/MACHINING of various components of Steam Generator (Viz: Mills, Fans, Flanges, Labyrinth, Casing etc) as per drawing/instruction of BHEL, In situ/at the works of the vendor.
- 5. Reverse engineering of the components wherever required based on OGA Drawing, actual physical configuration or instructions of BHEL on case to case basis.
- 6. FABRICATION/REPAIR/MACHINING of Hydro Turbine Runners (Francis, Kaplan, Pelton wheel) of the rating 6.0MW and above , as high as 150 MW.
- 7. FABRICATION/REPAIR/MACHINING of Hydro Turbine Components (Viz: Top Cover, Labyrinth, Pivot Ring, Guide Vanes, Bushes, Bearing body, Spiral Casing, Mirror Disc, Thrust Bearing Frames etc)
- 8. FABRICATION/REPAIR/MACHINING of Hydro Turbine shaft at various locations as per requirement.
- 9. Heat treatment of the components wherever required as per procedure.
- 10. Casting of Blades/Vanes and other Hydro machine components or tie up for the same with reputed casting firms in India & abroad.
- 11. Machining/Fabrication/Repair/Casting etc should be done as per the accuracy specified in the drawing/as per direction of BHEL.
- 12. Heat treatment facility or tie up for the same should be available at their disposal.
- 13. The parties should be able to perform HVOF coating of Components through their own facility or through tie up with reputed firms in this area.

Note: Part a) must be fulfilled for registration in above category.

Chemical Cleaning (Boiler, Condenser, other Heat Exchanger) (CHC)

- 1. Erection of scaffolding/platforms.
- Preparation of the condenserboiler for chemical cleaning and normalizing afterwards. For boiler This may include opening of drum and removal of internals, fixing of plugs in superheater /safety valve and other openings in the drum, connecting temporary system on the main boiler after removal of internals of ECO NRV, cutting of hand holes in ring headers, etc.
- 3. Erection of temporary system, including supply of all equipment i.e. pumps, pipelines, tank, etc.
- 4. Establishing a temporary testing facility at site.
- 5. Establishing system and disposal of waste as per statutory requirements.
- 6. Normalising of the system.
- 7. Arrangement of chemicals, if required.

Note: Similar nature of works described for each category as above is only to give brief idea for quantum of work involved in each category. Vendor must understand above criteria for each category before applying and attach relevant supporting document i.e. copy of detailed work order involving activities as mentioned in above section VII for each category as a major part.

Section VIII <u>LIST OF EXPECTED MAJOR T &P & IMTES</u>

| S. NO. | T &P & IMTES DESCRIPTION | AVAILABLE YES/NO | QUANTITY AVAILABLE |
|-----------|--|---------------------|-----------------------|
| 1 | TORQUE WRENCH OF VARIOUS SIZES FROM :5PSI TO 150PSI. | 163/110 | AVAILABLE |
| 2 | SPANNERS: 5MM TO 95 MM WITH RATCHET FACILITY (D- | | |
| | SHAPE/SOCKETS/RING-SHAPE) | | |
| 3 | HAMMERS: 1.2 KG TO 5 KG | | |
| 4 | MALLETS/NYLON HAMMERS/WOODEN HAMMERS | | |
| 5 | SCREW JACKS: UPTO100MT | | |
| 6 | HYD-JACKS: 5MT TO 50 MT WITH PUMPING UNITS | | |
| 7 | WELDING GENERATORS: UP TO 320AMPS CAPACITY | | |
| 8 | WELDING TRANSFORMERS WITH RECTIFIER UNITS | | |
| 9 | INSULATED WELDING TORCH & GADGETS | | |
| 10 | GQ-4 GRINDING MACHINE | | |
| 11 | AG-7, AG-5 GRINDING MACHINE | | |
| 12 | FF-2/FLEXIBLE GRINDER | | |
| 13 | PISTOL GRINDERS | | |
| 14 | ELECTRIC WINCH CAPACITY:5MT & 10MT | | |
| 15 | HAND REAMERS : DIA UPTO :25.0 MM | | |
| 16 | TAPSETS: UP TO M20 THREADED HOLE | | |
| 17 | HAND DRILL MACHINE: UPTO Dia:10.00MM | | |
| 18 | MAGNETIC BASE-POST DRILL MACHINE: UPTO Dia : 40MM | | |
| 19 | VERNIER CALLIPERS: UPTO 300 MM LENGTH | | |
| 20 | INSIDE MICROMETERS: UPTO 1.5 MTRS LENGTH | | |
| 21 | OUTSIDE MICROMETERS: UPTO 500 MM | | |
| 22 | DEPTH MICROMETER | | |
| 23 | FEELER GUAGES :MIN:0.03MM TO 1.00MM | | |
| 24 | DIAL GUAGES-LEAST COUNT:0.01MM | | |
| 25 | CHAIN BLOCKS/PULLING DEVICE : MIN:2MT MAX:25MT | | |
| 26 | MULTI-SHEEVE PULLY UPTO 25 MT | | |
| 27 | SLINGS UPTO PAYLOAD CAPACITY: 10 MT | | |
| 28 | LEVEL INSTRUMENT: ACCURACY UPTO: 0.025MM/MTR | | |
| 29 | MEASURING TAPES: UPTO: 30MTR | | |
| 30 | STEEL-SCALES: UPTO: 1MTR | | |
| 31 | LOW VOLTAGE (24VOLTS) POWER SUPPLY SOURCE | | |
| 32 | INSULATED PLIERS FOR ELECTRICAL WORK PLIERS | | |
| | (NOSE PLIER/CROCODILE PLIER) | | |
| 33 | FILES OF ALL CATEGORY | | |
| 34 | VICE: 100MM X 300 MM | | |
| 35 | CUTTING TORCH WITH ADAPTERS | | |
| 36 | CRIMPING TOOLS | | |
| 37 | SCREW-DRIVERS: UP TO 8.0 MM | | |
| 38 | SLIP GAUGE | | |
| 39 | DIAL BORE GAUGE | | |
| 40 | TELESCOPIC GAUGE | | |
| 41 | TAPER GAUGE | | |