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|  | <b>PRE-QUALIFICATION REQUIREMENTS FOR<br/>OIL FILLED SERVICE TRANSFORMER</b> | PE-PQ-999-302-E001              |
|                                                                                   |                                                                              | REVISION NO. 03 DATE 29/04/2016 |
|                                                                                   |                                                                              | SHEET NO. 1 OF 1                |

**ITEMS :** Oil filled service transformers

**Range of transformers :** 500 – 10000 kVA; HV wdg : 66/33/11/6.6/3.3 kV; LV wdg : 11/6.6/3.3/0.415 kV

The complete range is divided into 2 categories and the vendor can be considered for evaluation for the complete range or either of the 2 categories :

**Cat 1** – LV service transformers; 500-2500 kVA (LV wdg. - 415V)

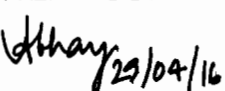
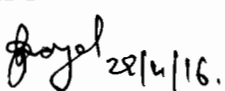
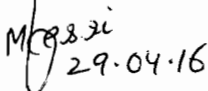
**Cat 2** – MV service transformers; above 2.0 MVA & upto 10 MVA (LV wdg - 3.3kV & above)

**SCOPE:** Supply : YES; Erection & Commissioning : NO;

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
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| 1 | Availability of type test certificates (including short circuit test) conducted at independent Lab or witnessed by third party for at least one design for the applicable category of transformers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2 | Vendor should be designer & manufacturer of oil filled service transformers for the applicable category.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 3 | In-house capability to carry out all routine and type tests as per IS (other than short circuit, degree of protection & impulse tests which can be conducted at Govt. Lab/ Govt. approved Independent lab) for the applicable category of transformers.                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 4 | <p>Option -1 : Performance certificates for min. 2 years of trouble free operation at minimum 2 different installations/sites for the applicable category of transformers. Performance certificate should be from end user only.</p> <p>OR</p> <p>Option-2 : Repeat orders received from two different purchasers/end users for the applicable category of transformers during last 5 years provided the gap between award of two PO's is minimum 2 years.</p> <p>OR</p> <p>Option-3 : 1 no. performance certificate (as per Option-1) and 1 no. repeat order (as per Option-2).</p> <p>OR</p> <p>Option-4 : Successful execution of a major order from BHEL-PEM for the applicable category of transformers.</p> |
| 5 | <p>Minimum no. of transformers supplied in the last 10 years from the date of application for registration or date of techno- commercial bid opening (as applicable):</p> <ul style="list-style-type: none"> <li>- 50 nos. in Category 1 with at least 20 nos. in range of 1000 to 2500 kVA</li> <li>- 20 nos. in Category 2</li> </ul>                                                                                                                                                                                                                                                                                                                                                                           |
| 6 | Minimum two (2) nos. purchase orders for the applicable category of transformers shall be submitted which should not be more than five(5) years old from the date of application for registration or date of techno- commercial bid opening (as applicable) for establishing continuity in business.                                                                                                                                                                                                                                                                                                                                                                                                              |

**NOTE:**

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".

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## General Points of PQR

1. Offers of the JV companies/ Joint Bidders/ bidders having collaboration/ licensing agreement/ MOU/ Indian subsidiaries shall be evaluated as follows:
  - a. If bidder happens to be an Indian subsidiaries of foreign OEM, then the credentials of the foreign OEM can also be considered for meeting PQR.
  - b. If bidder happens to be the Joint Venture Company, then the credentials of any of JV partners can be also considered for meeting PQR.
  - c. If bidder happens to bid jointly with their partner, then credentials of both the partners will be considered for meeting PQR as per distribution of the work. In all such cases, lead bidder as specified in bid documents shall be responsible for overall execution of the contract and all guarantee/ warranty.
  - d. If bidder happens to be the having valid collaboration agreement/ MOU/ licensing agreement with some other company, then the credentials of collaborator/ MOU partner/ licensing company can also be considered for meeting PQR.

Note: If bidder(s) qualifies on the basis of credentials of his principal/ JV partner/ Collaborator/ joint bidder etc., then the principal/ JV partner/ Collaborator/ MOU partner/ joint bidder shall be responsible for overall design vetting and warranty/ guarantee of the package. The scope matrix clearly defining their respective roles including design vetting, manufacturing of critical component, E&C etc. etc. and warranty/ guarantee shall be submitted along with the offer.

2. Bidder to note that the arrangement of bidding (joint bid partners/ collaborator/ MOU partner/ licensing company etc.) once offered to BHEL as a part of bidding documents cannot be changed till the execution of the project.
3. Consideration of offer shall be subject to customer's approval of bidders, if applicable.
4. Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
5. Any other project specific requirement shall be as per Annexure-I and bidder shall submit relevant supporting documents.
6. Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder/collaborators to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.
7. After satisfactory fulfillment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

**BHEL PEM –ELECTRICAL**  
**PRE-QUALIFYING REQUIREMENTS FOR**  
**OIL FILLED SERVICE TRANSFORMER**  
**ANNEXURE -1**  
**PROJECT SPECIFIC CRITERIA AGAINST ENQUIRY**

**PROJECT: 1X660 MW PANKI TPS**

1. Bidder should have manufactured & supplied at least two numbers (one each at two different installations i.e. two different project sites or two different contracts) of at least highest offered rating oil filled transformers (i.e. at least 11/3.45 kV,10 MVA) which should have been in successful operation for a period of at least two (2) years prior to the date of 02.11.2015.
2. Bidder should have his own facilities for conducting all routine and type tests as per IS: 2026 (except short circuit test, degree of protection & impulse tests which can be conducted at Govt. Lab/ Govt. approved independent lab).
3. The similar type & rating of transformer considered for the above (1) should have been successfully short circuit tested.

NOTE- In case of any conflicts of this Project Specific PQR with Main PQR, Vendor to furnish document meeting the stringent requirement between main PQR and project specific PQR.

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