



EOI: BPCL/CGD/Empanelment



BHARAT PETROLEUM CORPORATION LIMITED

(A Government of India Enterprise)

Expression of Interest for undertaking feasibility studies for City Gas Distribution Projects

Applications are invited from reputed and competent consultants with sound technical and financial capabilities, having specialized experience of carrying out the jobs of demand estimation, field engineering survey, City Gas Distribution network (CGDN) design and detailed feasibility report including financial analysis.

The detailed scope of work is enclosed as **Annexure I**.

Applicants are requested to send all the relevant documents in a sealed envelope, super scribing “**Empanelment of consultants for undertaking CGD feasibility studies**” of this notice to:-

General Manager (Gas),
Bharat Petroleum Corporation Ltd.
ECE House, 28-A, K. G. Marg,
Connaught Place, New Delhi – 110 001

Applicants should go through the entire EOI document for more details.

The consultants qualifying the criteria as mentioned in **Annexure II** need only apply. Non-submission of any of the relevant documents pertaining to this EOI/incomplete document can lead to rejection for the Empanelment process.

This notice is only for the purpose of empanelment of consultants and BPCL may invite financial bids for assigning the jobs from time to time from the empanelled consultants on such terms and conditions as deemed fit.

BPCL reserves the right to accept or reject any or all applications without assigning any reasons whatsoever thereof.

for **Bharat Petroleum Corporation Limited**
GM (Gas)



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BHARAT PETROLEUM CORPORATION LIMITED
General Manager (Gas), New Delhi
ECE House, 28- A KG Marg,
New Delhi - 110001
TEL NO: 0120-2474146; 2474369. FAX NO. 0120-2474380

Expression of Interest for undertaking feasibility studies for City Gas Distribution Projects

TENDER NO. BPCL/CGD/2016-Empanelment

Published on: 23/04/2016

Expression of Interests is invited from the interested applicants for the empanelment for undertaking city gas distribution projects as per the terms and conditions mentioned in Annexure I (scope of work) & Annexure II (Qualifying Criteria).

- 1) Eligible Applicants as per Annexure II are invited to submit the relevant documents for the Empanelment for undertaking the City Gas Distribution Projects. The Documents are to be submitted in hard copy only.
- 2) **Relevant documents** as mentioned in the below table are to be submitted in physical form (off-line) in a sealed envelope super scribing **“Empanelment of consultants for undertaking CGD feasibility studies”** have to be submitted at:-

General Manager (Gas),
Bharat Petroleum Corporation Ltd.
ECE House, 28A, K. G. Marg,
Connaught Place, New Delhi – 110 001

List of documents is as follows:-



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Sr No	Particulars	Remarks
1	Powers of Attorney for the Authorized Signatory	To be provided by applicant
2	Stamped and signed copy of this EOI document, EOI: BPCL/CGD/Empanelment	Applicant has to get it stamped and signed from the authorized signatory and give it to BPCL
3	Documents with regards to the Qualification Criteria for empanelment as described in Annexure II & Annexure III	Applicants are advised to go through Annexure II for understanding the documents required.
4	No Deviation Confirmation	Attachment no: 1
5	Details of relationship with BPCL director as per format	Attachment no: 2
6	Declaration A,B & C by Applicant	Attachment no: 3

Note that the main envelope super scribing “**Empanelment of consultants for undertaking CGD feasibility studies**” will have two envelopes – one containing the original copy and one containing the photocopy of all the documents.

- 3) Only those consultant(s) would be empanelled who have submitted all the documents and who satisfy the qualifying criteria which will be established by the detailed evaluation of the documents by BPCL.
- 4) For revising the panel in future, BPCL may ask for any of the documents mentioned in this EOI or any other documents so as to make any addition (s) /deletion (s) in the panel made.
- 5) BPCL reserves the right to withdraw or cancel this Empanelment process at its sole discretion and without assigning any reason whatsoever and in which case, the applicant shall have no right whatsoever to either claim for the appointment in the panel or seek reimbursement of any costs.



Scope of Work for Applicants applying for the Empanelment process for undertaking CGD network feasibility studies for a defined Geographical Area (GA)

Scope of work shall include the following:-

1. DEMAND ESTIMATION

A. Objective

- i. Assessment of demand of natural gas for a City Gas Distribution Network (CGDN) during economic life of the project (25 years) in the geographical area (GA) defined as per the Petroleum & Natural Gas Regulatory Board (PNGRB) bid or by BPCL, as the case may be, over different categories of customers taking into account:
 - a. Switch over from alternative fuels based on economics, including due to mandate by local government or any other statutory body.
 - b. Economic growth parameters (GDP, Industrial Growth, etc.) available in public domain.
 - c. Any other relevant factor(s) including gas allocation policy of the Government of India (GoI), available sources of supply and proposed connectivity of the CGDN to an existing or proposed natural gas transmission pipeline.
- ii. Realisable demand of natural gas to be estimated under optimistic, pessimistic and realistic scenarios.
- iii. Capturing Consultant's discussions with key stake holders, such as, anchor load industries, Industrial associations, large commercial complex on acceptability of natural gas in the region.
- iv. Recommendations on most likely natural gas realizable demand scenario.

Demand estimation to conform to PNGRB's regulations on 'Authorizing Entities to Lay, Build, Operate, or Expand City or Natural Gas Distribution Networks' & GoI policies

B. Scope of work: Market Survey & Demand Estimation

- i. Collection of the relevant geographical, demographic and economic data for a defined geographical area (GA) and the Charge Areas (CAs).



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- ii. Determination of the relevant census data including determination of household population over the GA (including the charge areas and each Mandal/ Taluka / Municipal Ward) and estimates of growth over the economic life of the project.
- iii. To collect primary and secondary data based on energy types, classification and their usage in the GA and establish the present natural gas demand potential and forecast the realizable demand for natural gas over the economic life of the project considering annual growth, economics of switch over from alternative fuels and newer applications, over the following consumption segments-
 - a. Domestic
 - b. Commercial
 - c. Industrial
 - d. Transport
- iv. To adopt appropriate statistical tools in arriving at a representative sample size for each category of customers, collect raw data in suitably designed survey format (to be approved by BPCL) and present analysis of the results of the survey.
- v. To consider the development plans of the local Government or development authority's plan document for identifying major industrial areas, industrial parks, Special Economic Zones (SEZs), development or industrial corridors, commercial zones, office/ administrative blocks, bazaars, aerodromes, railway/ bus stations, malls/ plazas, housing estates and any major energy consuming areas in the GA.
- vi. For commercial and industrial demand survey, segregation of fuel consumption over type of customers. For anchor load customers, customer contact details and result of interviews as per pre-approved questionnaire on all relevant aspects, like, willingness to use natural gas to be analysed.
- vii. All assumptions, including use of bulletins of Industrial association/ body and other publications considered in demand projections are to be stated upfront.
- viii. Demand from consumer segments need to be further categorized by size and end-use as per the basis approved by BPCL.
- ix. Demand for CNG to be analyzed over different types of vehicles operating in the GA considering average daily trip distance, mileage, willingness to convert based economics & interactions with transport unions, study of traffic pattern within and outside the GA, local transport authority's plans, location of retail outlets of oil marketing companies and other relevant factors.
- x. To collect relevant data, analyse and form an independent view on the likely impact of the following on the demand for CNG in the GA-



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- a. any notification of the Judiciary, Central/ State Govt or Local body for any mandatory conversion of vehicles to CNG as fuel
 - b. Plans for setting-up of MRTS in the GA
 - c. Development of national/ state highways/ waterways
 - d. Impact of existing or proposed CGDNs in areas contiguous to the GA
 - e. Any other relevant factor.
- xi. The Consultant would be required to submit a draft report of the findings, analysis including backups along with the soft copy of the data sheets with formulae linkages. Any modification and revision in the draft report shall be required to be completed as required by BPCL and final report is to be submitted after due consultations.
- xii. The Consultant may take the assistance of a local surveyor or survey agency, duly approved by BPCL, to carry out survey based on the approved sample size for each consumer segment. The Consultant, however, has to ensure that the market surveyor carries out the task accurately and shall be responsible for the accuracy of the data collation and analysis.



2. FIELD ENGINEERING SURVEY, CGD NETWORK DESIGN & COST ESTIMATION

A. Scope of Work :

Field engineering survey/ design of CGD network including cost estimation for the GA over economic life of the project considering:

- i. Demand assessed: Assessment of demand of natural gas (including CNG) during economic life of project (25 years) in the geographical area (GA) defined.
- ii. Gas sourcing & pipeline connectivity
 - a. Feasible gas sourcing option : Identify potential sources of supply of natural gas both domestic gas and R-LNG considering:
 - i. Government policy
 - ii. Affordable price
 - iii. Connectivity of the GA with natural Gas pipeline(s) or LNG tank truck or any other mode
 - b. To identify potential sources (over time horizon, quantity, price, location and supplier) of natural gas to feed the requirement of the CGDN.
 - c. To study the transmission pipeline connectivity to the GA considering existing transmission pipeline(s) and in case of proposed, indicating the likely date of commissioning of the said transmission pipeline (s).
 - d. To evaluate setting of the proposed City Gate Station (s) in the GA considering the most optimal route and natural gas pipeline tariffs.
- iii. Mapping and phasing of requisite infrastructure, equipments and facilities considering gas demand from various categories of customers over the economic life of the project and with due consideration for
 - a. Peak loads
 - b. Redundancies
 - c. Contractual obligations for booking of pipeline capacity for sourcing of gas and its transmission till city gate station
 - d. Approved technology and practices as per the notified technical and safety standards, including specifications of the PNGRB.



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The basic purpose of design is to estimate the Capex and Opex besides fulfilling the requirement of the regulations of PNGRB. Since the objective is not for procurement of materials or services and construction of the facilities at this stage, the specification of material and services is to be limited to achieve this end.

- iv. Development of Bill of materials (with +/- 10% accuracy) based on the above mapping and phasing exercise in the formats approved by BPCL using MS Excel Software tool for-
 - a. Designing the layout of the steel pipeline network reaching each charge area of the GA as per PNGRBs regulations and meeting the technical standards defined
 - b. Estimation of yearly Capex for each of the phases separately reflecting cost of each of the facility/ equipment-type with complete rate break-up over material and labour/ laying/ erection cost components, including applicable taxes and levies and CENVAT Credit available.
 - c. To identify and evaluate design alternatives with respective Cost-benefit analysis, while designing the CGD Network adopting relevant & latest technology.
 - d. Optimization of CGD network infrastructure design using standard software under various demand scenarios by adopting least cost approach for estimating Capex & Opex.
 - e. Estimates of activity-based yearly Opex required for operation and maintenance, including replacement of the CGD Network infrastructure optimized over the economic life of the project considering latest rates (with break-up over basic cost, freight, duties and taxes).

The primary objective is to configure the CGDN in the most optimal manner and arrive at realistic Capex and Opex numbers and resource deployment plan during the project life. Redundancy of equipment and supply e.g. ring-mains, reliability of equipment and services, health, safety, security and environment (HSSE) issues to be clearly spelled out with cost effective solutions. Special attention is to be given to large areas covered in the GA and to appropriately address all issues in technical, commercial and HSSE terms including crossing over water bodies and climatic conditions akin to the region.



3. **DETAILED FEASIBILITY REPORT INCLUDING FINANCIAL ANALYSIS**

The inputs shall be provided by BPCL based on the studies submitted by its consultants for-

- i. Demand estimation and sourcing of natural gas.
- ii. Field engineering survey, CGD network design/ infrastructure design & cost estimation.

Financial feasibility model is to be developed using **Microsoft Excel software tools** and should be updatable for changes in inputs, assumptions and any other parameters, including simulation of any scenario. All assumptions need to be specified along with their justifications.

A. Scope of Work

Determination of the financial feasibility of the CGD project considering demand estimates, CGD Network design, Capex and Opex by calculation of:

- a. Internal Rate of Return in the project, including Project and Equity IRRs
- b. NPV of the project
- c. Estimated yearly profit / (loss) over economic life of the project and year-end Balance Sheets
- d. Financial ratios and margin analysis
- e. Adoption of optimum financing pattern and dividend policy
- f. Estimated P&L Accounts
- g. Estimated Balance sheets
- h. Cash flows
- i. Working capital requirements

Financial Feasibility as above is to be determined separately for each of the following:

- a. Overall project
- b. Regulated and non-regulated activities as per the relevant PNGRB regulations
- c. Product-wise (PNG domestic, industrial, commercial and CNG) by following sound basis for allocation of Capex and Opex over various cost heads.

B. Scenario building:

Build relevant business scenarios and carry-out risk analysis by examining the impact of variations in costs, prices, tax & duties, economic parameters, supply and other risks (including competition) on project's financial feasibility.

C. Sensitivity & Impact Analysis:



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To clearly enumerate the assumptions made in the estimates, financial analysis, work out and report the effect of variation of critical parameters, individually and in combination on the overall financial viability and indices thereof, e.g. IRR (Project and Equity), ROI, payback period, etc.

D. Modularity:

All data is to be tabulated in a modular manner precisely narrating the assumptions (with justification) including conversion factors. Financial analysis to be done in such a way that PV calculation as per PNGRB's bid evaluation method based on all the four criteria are fully linked with data and computations.

E. Usage of tools for analyzing financial viability:

Developing financial model in MS Excel with formulae linkages incorporating estimated natural gas demand, Capex, Opex, prices and all other relevant parameters. All formulae to be incorporated and suitably linked across such excel sheets/ files/ models. The financial model so developed shall be validated for accuracy and Scenario building and is required to be submitted to BPCL before the submission of final report.

Note:-

The scope of work has been made considering broadly the requirements for BPCL during the bidding for City Gas Distribution projects. This scope should not be considered sacrosanct and changes can be made in the scope when the actual tender is floated for giving assignments for which the e-bidding procedure would be undertaken as and when required.



Annexure II

1. Qualifying Criteria for Empanelment:-

Applicants have to fulfill criteria given below (criterion 1.1, 1.2 & 1.3 individually under this Annexure II) and are required to submit the documents against each qualifying criteria:-

1.1 Number of completed assignments during last 3 financial years (FY 2013-2014, 2014-2015, 2015-2016) should be at least 3. Completed assignment should be in the following areas:-

- i) City Gas Distribution Network, and/ or**
- ii) Natural gas or petroleum product pipeline**

The assignments should include the following three activities on a combined basis:-

- I. Demand estimation
- II. Field engineering survey, design & cost estimation
- III. Detailed Feasibility Report including Financial Analysis

Notes:-

- a. Completion of an assignment means that the consultant has assumed overall responsibility of completion of the all the above three activities of the assignment.
- b. Activities i) & ii) mentioned above could have been outsourced by the applicant but the activity iii) should have necessarily been undertaken by the applicant in-house. In case activity iii) has been outsourced by the applicant, the assignment will not be considered for evaluation.
- c. In case of outsourcing of activity i) and/ or ii), only those assignments for which consultant had taken the overall responsibility of completion of the assignment would be considered for evaluation.
- d. If an applicant has taken an assignment prior to FY 2013-2014, that is prior to 1st April, 2013 but has completed the assignment between 1st April 2013 and 31st March, 2016 (both dates inclusive) which is to be established by the relevant proof, then this assignment(s) would be considered for evaluation.



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- 1.2** Value of completed assignments (which has the same meaning as explained in Criterion 1) during last 3 years on a cumulative basis (FY 2013-2014, 2014-2015, 2015-2016) should be at least Rs. 42.25 lakhs for applying for the empanelment.

With regards to criterion 1.1 & 1.2 above, the bidder shall submit a copy of Work Order and Completion Certificate and also a Chartered Accountant certificate in the format given in Annexure III.

- 1.3** Applicant should be a company registered under Company's Act 2013. Registration certificate of the company has to be provided in this regard.

- 1.4** Applicant should not be an entity, including its associate, which is

- a) Laying, Building or Operating any city gas distribution network; or
- b) Had participated in any of the bid rounds for CGD Network conducted by the PNGRB; or
- c) Had applied to the PNGRB for grant of an authorization for laying, building, operating of a CGD Network directly or through its Associates.

This needs to be certified by the authorized signatory of the Company in an Affidavit on the Company's letter head. This declaration shall be verifiable from the records & database of the PNGRB and any false statement would lead to rejection of the applicant for award of the tender as well as from the empanelment.

"Associate" means a company as defined under the Companies Act 2013

2. Other Terms & Conditions

- i. Consultant shall allow BPCL to check with its clients to assess the veracity of claim of experience and also to inspect the tools proposed to be used by the consultant. The consultants should furnish further details on fulfilling qualifying criteria should BPCL ask for the same any time during pendency of this empanelment.
- ii. If any time during the validity of this empanelment, it is found that the consultant has misrepresented or hidden facts on qualifying criteria, or if there is any change in the status of the consultant, thereby, not fulfilling the qualifying criteria anymore, consultant's empanelment would be terminated.



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- iii. Empanelment of the consultants does not guarantee any award of assignment / contract.



Annexure III

(The applicant shall provide certificate from their Chartered Accountant on letter head of the CA firm for the number and value of assignments, duly signed and sealed as per the format provided herein.)

CHARTERED ACCOUNTANTS CERTIFICATE FOR NUMBER AND VALUE OF ASSIGNMENT

This is to certify that M/s. _____ has done _____ number of assignments in the financial years 2013-14, 2014-15, 2015-16 (till 31st March 2016) cumulatively and the value of these assignments cumulatively is Rs _____ Lakh. It is further certified that these assignments are from the areas of City Gas Distribution Network and/ or natural gas or petroleum product pipeline and they include activities of :-

- i) Demand estimation
- ii) Field engineering survey, design & cost estimation
- iii) Detailed Feasibility Report including Financial Analysis

In these assignments M/s _____ has assumed overall responsibility of completion of the all the activities of the assignment. In respect of each of these assignments, activity iii), i.e., Detailed Feasibility Report including Financial Analysis, was NOT outsourced to any other sub-contractor/ entity and in case the activities i) and ii) were outsourced, the entire responsibility of completion of all the three activities of the assignment was taken up by M/s _____.

Enclosures:

- 1. copy of work order
- 2. completion certificate in support of above criteria.

Date:

For (Name of Accounting Firm)

Place:

Name of Partner

Seal of the Firm:

Chartered Accountant

Membership Number



NO DEVIATION CONFIRMATION

To,

General Manager, Gas
Bharat Petroleum Corp. Ltd.
1st Floor, ECE House,
28-A, KG Marg
New Delhi- 110001

Dear Sir,

We understand that any deviation/ exception in any form may result in rejection of bid submitted by us to BPCL against tender enquiry No. Tender No.dtd.....

In view of the above, we certify that we have not taken any deviation/ exception anywhere in the bid submitted by us and we agree that if any deviation/ exception is considered or noticed afterward our bid may be rejected summarily without given any reason.

Name and signature of bidder's authorized signatory

Date

Place

Office Seal



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Attachment: 2

DETAILS OF RELATIONSHIP WITH BPCL DIRECTORS

1. Name of the Company responding to the tender:
2. Address of: (a) Registered Office: (b) Principal office:
3. State whether the Company is a Pvt. Ltd. Co. or Public Co. or Co-operative Society.
4. Names of Directors of the Company/Co-operative Society
5. State whether any of the Director of the Tenderer/Company is a Director of BPCL:
Yes/No
6. If answer is 'Yes' to Sr. No.5, state the name(s) of the BPCL's Director.
7. State whether any of the Director of the Tenderer Company is related to any of the Directors of BPCL: Yes/No
8. If 'Yes' to (7) state the name(s) of BPCL's Director & the concerned Director's (of the tenderer Co.) relationship with him/her.

*Strike out whichever is not applicable.

**DATE / PLACE
TENDERER:**

SIGNATURE OF



Declaration by Tenderer

DECLARATION 'A'

We declare that we have complied with and have not violated any clause of the standard Agreement

Place: Signature & Seal

Date:

DECLARATION 'B'

We declare that we do not have any employee who is related to any officer of the Corporation / Central / State Government

OR

We have the following employees working with us who are near relatives of the officers of the Corporation / Central / State Government.

Name of the employee; Name & designation of the officer of the Corporation /Central / State Government:

1. _____
2. _____
3. _____
4. _____

Place: Signature & Seal

Date:

Strike off whichever is not applicable

DECLARATION 'C'

The Tenderer is required to state whether he is a relative of any Director of our Corporation or the tenderer is a firm in which Director of our Corporation or his relative is a partner or is any other partner of such a firm or alternatively the Tenderer is a private company in which Director of our Corporation is member or Director, (the list of relative(s) for this purpose is given overleaf)

Place: Signature & Seal

Date:

N.B: Strike off whichever is not applicable. If the Contractor employs any person subsequent to signing the above declaration and the employee so appointed happen to be near relatives of the Officer of the Corporation/Central/State Government, the Contractor should submit another declaration furnishing the names of such employees who is/are related to the Officer/s of the Corporation/Central/State Government.

(Pl refer to the enclosed list of relatives)



LIST OF RELATIVES

A person shall be deemed to be a relative of another, if any and only if, i) He / She / They are members of Hindu Undivided family or ii) He / She / They are Husband & Wife or iii) The one is related to the other in the manner indicated below.

1. Father
2. Mother (including Step Mother)
3. Son (including Step Son)
4. Son's Wife
5. Daughter (including Step Daughter)
6. Father's Father
7. Father's Mother
8. Mother's Mother
9. Mother's Father
10. Son's Son
11. Son Son's Wife
12. Son's Daughter
13. Son's Daughter's Husband
14. Daughter's Husband
15. Daughter's Son
16. Daughter's Son's Wife
17. Daughter's Daughter
18. Daughter's Daughter's Husband
19. Brother (including Step Brother)
20. Brother's Wife.
21. Sister (including Step Sister)
22. Sister's Husband

April 27, 2016

Corrigendum - 1 to EOI: BPCL/CGD/Empanelment

1. With reference to the press advertisement in Times of India (TOI)/ Nava Bharat for the Appointment/Empanelment of Consultants, BPCL would also undertake Detailed Feasibility Report (DFR)/ Detailed Project Report (DPR) for City Gas Distribution (CGD) Projects for select Geographical Areas (GAs) authorized by PNGRB. Details of the EOI/ tender(s) for these assignments would be shortly given on our website.

Consultant(s) are advised to refer our website <https://www.bharatpetroleum.in/tender/view-tenders.aspx> → Search Tenders by Departments [Gas] for details pertaining to the EOI/ tender(s).

For clarifications call 011-23322825 or email: z_bpclng@bharatpetroleum.in

2. Under Annexure II Clause 1, Qualifying Criteria for Empanelment, entire paragraph is replaced by following:-

“Applicants have to fulfill criteria given below (each criterion given below individually under this Annexure II) and are required to submit the documents against the following criteria:-“

3. With regards to criterion 1.1 under Annexure II (Qualifying Criteria for empanelment), if a consultant has completed assignments (refer the definition of completion of assignments under Note (a) of criterion 1.1 under Annexure II) for various Geographical Areas (GAs) in a single work order, then each GA will be considered as a separate assignment.

4. Criterion 1.2 under Annexure II, the entire clause is replaced as follows:-

“Value of completed assignments (which has the same meaning as explained in Criterion 1) during last 3 years on a cumulative basis (FY 2013-2014, 2014-2015, 2015-2016) should be at least Rs. 42.25 lakhs.

With regards to criterion 1.1 & 1.2 above, the bidder shall submit a copy of Work Order/LOA and Completion Certificate and also a Chartered Accountant certificate in the format given in Annexure III. **Consultant can also submit a copy of the invoice and the details of the payments made which are to certified by the Chartered Accountant in case the Completion Certificate is not available.”**

April 28, 2016

Corrigendum – 2 to EOI: BPCL/CGD/Empanelment

1. Point no. 2 of the Corrigendum 1 should be read as follows:-

Under Clause 1 of Annexure II (Qualifying Criteria for Empanelment), the statement given as “Applicants have to fulfill criteria given below (criterion 1.1, 1.2 & 1.3 individually under this Annexure II) and are required to submit the documents against each qualifying criteria:- “ is replaced as “Applicants have to fulfill all the criteria (criterion 1.1, 1.2, 1.3 & 1.4 individually) under this Annexure II and are required to submit the documents given against each qualifying criterion as follows:-“.