



REVISED GUIDELINES FOR QUALIFYING REQUIREMENTS FOR BIDDERS OF BALANCE OF PLANT FOR COAL/ LIGNITE BASED THERMAL POWER STATIONS



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FOREWORD

The CEA document “Guidelines for Qualifying Requirements for Bidders of Balance of Plant for Coal/Lignite based Thermal Power Stations, 2010”, has been a guiding document for generating utilities to define their Qualification Requirement (QR) for bidders of Balance of Plant (BoP) for coal/lignite based Thermal Power Stations on EPC basis (Section-I) as well as on individual BoP package basis (Section-II) since, 2010.

However, recently bidders have been facing the issue of erosion of Vendor Base in critical packages due to low business opportunities in the Thermal Power Sector and stringent Qualification Requirement of customers hampering growth of new vendors. Keeping this in view, CEA “Guidelines for Qualifying Requirements for Bidders of Balance of Plant for Coal/Lignite based Thermal Power Stations, 2010” have been reviewed with the aim to encourage participation and widen the vendor base for thermal power plants.

CEA held elaborate deliberations with major stakeholders of power sector and an effort has been made to incorporate relevant changes to make the guidelines more inclusive. The revised guidelines reflect broad consensus of technical experts in this field.

The notable changes brought about in the present CEA Guidelines of 2010 are bifurcation of Coal Handling Plant and Ash Handling Plant packages and introduction of additional route of collaboration/association with Design Agency in respect of various BoP packages etc. Further, requirement of sourcing of equipment in line with Make in India policies of Government of India has been introduced in the revised guidelines.

I do hope that utilities, EPC contractors, as well as vendors of various BoP packages would find the revised guidelines useful and its adoption would help in achieving our objective of improved vendor base. However, these revised guidelines may be reviewed, if required, after one year.

New Delhi
September, 2023


(Praveen Gupta)

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SECTION I

GUIDELINES FOR QUALIFYING REQUIREMENTS FOR BIDDERS OF BALANCE OF PLANT FOR COAL/LIGNITE BASED THERMAL POWER STATIONS ON EPC BASIS



**GUIDELINES FOR QUALIFYING REQUIREMENTS FOR BIDDERS OF
BALANCE OF PLANT FOR COAL/ LIGNITE BASED THERMAL POWER
STATIONS ON EPC BASIS**

- 1.(i) The bidder should have executed contracts on engineering, procurement and construction (EPC) basis for at least one (1) no. coal based/lignite based/power plant of installed capacity not less than 250 MW which has been commissioned during the last 10 years and has been in successful operation for at least one(1) year (from the date of achieving full load) as on 7 days prior to the date of opening of the bid. The scope of work of such reference plant should have necessarily included design, engineering, supply, erection and commissioning (or supervision of erection and commissioning) on turnkey basis (with all associated mechanical, electrical, civil and structural works) of either:
- (a) Main power plant equipment (Boiler - Turbine-generator or Gas Turbine- HRSG - STG) with all associated integral auxiliaries.
- Or
- (b) Coal/lignite handling plant, ash handling plant, cooling tower and water system (water treatment/waste water treatment, DM plant and circulating water system) of a coal / lignite based power plant.
- (ii) Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 (i) above is met by one of the promoters or jointly by more than one promoter. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the JVC. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
2. The bidder can submit the bid in his individual capacity or in consortium with other partner(s). In case of consortium, number of consortium partners should be limited to six (6). International consortium partner is also acceptable. One of the consortium partners shall be the consortium leader. The consortium leader should either have executed any one of the items of Paragraph 1 (i) (b) or single EPC project of contract value of at least Rs. 300 crore in the area of power, steel, fertilizer or any other process industry. Each consortium partner should have experience of at least one(1) of the following BoP packages in power plant or industries (Steel / Aluminium / Zinc or Copper plant / Gas or



Nuclear plant / Municipal water treatment & distribution system) and shall meet the qualifying requirements indicated in the Annexure as applicable:

1. Coal handling plant.
2. Ash handling plant.
3. Induced draft cooling tower.
4. Natural draft cooling tower.
5. DM plant.
6. Pre-treatment plant.
7. Effluent treatment plant.

The consortium partners shall be jointly and severally responsible for the execution of the contract. The consortium agreement shall be furnished clarifying the split up of scope between consortium partners. Any of the members in a bidding consortium shall not separately participate as an independent bidder, as a member of any other consortium or as a promoter of JV company in the same bidding process.

3. The performance bank guarantee shall be as under:

i) **In case of individual firm including JVC:** 10 % of contract value.

ii) **In case of consortium comprising two or more members (leader + one or more consortium partners):** Total performance bank guarantee (PBG) shall be 15 % of contract value which shall be divided between consortium leader and consortium partners as under:

a) Consortium leader shall give PBG for at least 10 % of contract value.

b) Balance 5 % PBG shall be divided between consortium leader and consortium partners at the discretion of consortium leader. However, each consortium partner shall give PBG for at least 1 % of total contract value.

4. The average annual turnover of the bidder should be at least Rs. 400 crore and that of consortium leader should be at least Rs. 100 crore during the preceding three consecutive years, as applicable. Net worth of the bidder/consortium leader as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.

¹5. The bidder shall comply with following criteria for selection of sub-vendor :

- i) Sub-vendor to be appointed by the successful bidder for executing various systems should have executed at least one (1) project of similar type as per annexure. The selection of sub-vendor by the successful bidder shall be subject to approval of the Purchaser.

¹ Note: This shall be included as part of sub vendor selection criteria in the specification and not as part of QR for bidders of BoP package on EPC basis.



- i) The major equipment to be supplied shall be sourced from reputed manufacturers who have supplied minimum one (1) number of such equipment in the area of power, steel, fertilizer or any other process industry which should have been in successful operation for at least one (1) year prior to date of issue of letter of award to Bidder.
 - ii) All equipment to be supplied by successful bidder/sub-vendor shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT and Ministry of Power.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, the consortium members:
- i) have adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) have adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) have an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



ANNEXURE

QUALIFYING REQUIREMENTS FOR VARIOUS BALANCE OF PLANT PACKAGES FOR SELECTION OF SUB-VENDOR BY EPC BIDDER

1.0 COAL HANDLING PLANT:

Bidder/Sub vendor should have executed at least one(1) number integrated bulk material handling plant of minimum 1000 Metric tonnes² per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity (essentially comprising of conveying and crushing) including mechanical and electrical works involving design, manufacture (or got manufactured), supply, erection & commissioning (or supervision of erection and commissioning) which should have been in successful operation for at least one(1) year prior to date of issue of letter of award.

OR

Bidder/Sub vendor who has only conveying experience of any bulk material handling plant of minimum 1000 Metric tonnes² per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity including mechanical and electrical works involving design, manufacture, supply, erection & commissioning (or supervision of erection and commissioning) which should have been in successful operation for at least one(1) year prior to date of issue of letter of award, should have collaborated/ associated with a design agency who has designed at least one(1) number integrated bulk material handling plant (essentially comprising of conveying and crushing) of 1000 Metric tonnes² per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

In such a case, the bidder shall be required to furnish a letter of support from the design agency for successful performance of Coal Handling Plant. The format for the same is attached as Annexure-A.

2.0 ASH HANDLING PLANT:

2.1 Bidder/Sub-vendor(s) should have executed at least one(1) ash handling plant involving design, engineering, manufacture (or got manufactured), supply, erected & commissioned (or supervised erection and commissioning) comprising the following systems which should have been in successful operation for at least one(1) year prior to date of issue of letter of award.

- (a). Bottom ash handling system comprising jet pump system in conjunction with water impounded bottom ash hopper or submerged scraper chain conveyor system designed

²Insert a value equal to proposed CHP plant's rated capacity if the proposed plant rated capacity is less than 1000 M TPH.



for following conveying capacities in TPH (dry ash basis) or more for coal/lignite fired boilers.

Jet Pump System : 50 TPH (Dry ash basis) or more per Jet pump

Submerged Scraper Chain conveyor: 20 TPH (Dry ash basis) or more per scraper chain conveyor

(b) Pneumatic fly ash handling system for conveying fly ash from ESPs of a coal/lignite fired boiler by either:

Pressure conveying system designed for 30 TPH or more conveying capacity.

OR

Vacuum conveying system designed for 30 TPH or more per stream

AND

Pneumatic fly ash transportation system for transporting fly ash from a coal/lignite fired boiler unit having capacity of not less than 20 TPH for a conveying distance of not less than 500 m.

(c) Ash slurry disposal system comprising ash slurry pumps and piping for handling not less than 40 TPH ash (Dry ash basis) for coal/lignite fired boiler.

Note: In case bidder/sub-vendor is not meeting requirement of water impounded bottom ash hopper referred under clause 2.1(a) then bidder shall collaborate with the design agency for vetting/carrying out the design and engineering activity of water impounded bottom ash hopper referred under para 2.1 (a). Design agency for water impounded bottom ash hopper can be either bottom ash system supplier meeting the qualification of clause 2.1(a) or reputed/renowned Indian Technical Institution.

In such a case, the bidder shall be required to furnish a letter of support from the Design agency for successful performance of water impounded bottom ash hopper. The format for the same is attached as Annexure-A.

2.2 Bidder/Sub-vendor who is a supplier of ash handling systems but does not meet the requirements under clause 2.1 in full can also participate provided it has executed at least the following systems of ash handling plant involving design, engineering, manufacturing (or got manufactured), supply, erected & commissioned (or supervised erection and commissioning) :

(a) One (1) Bottom ash handling system comprising either a jet pump system in conjunction with water impounded Bottom Ash Hopper or submerged scraper chain conveyor system or dry bottom ash system.

(b) One(1) Fly Ash Handling System for conveying fly ash from ESPs in dry form involving pneumatic conveying systems of vacuum or pressure type or in wet (slurry) form.

The systems mentioned at 2.2 (a) and (b) above should have been in successful operation in at least one (1) plant for at least one (1) year prior to date of issue of letter of award and have been installed for coal/lignite fired boiler units generating not less than 40 TPH of ash per boiler.

AND



Collaborate(s)/associate(s) with party (ies) who meet(s) either the total requirement or the balance part under clause 2.1 above for which the bidder/sub-vendor himself is not able to meet.

Note: In case bidder/sub-vendor is not meeting requirement of water impounded bottom ash hopper referred under clause 2.2(a) then bidder shall collaborate with the design agency for vetting/carrying out the design and engineering activity of water impounded bottom ash hopper. Design agency for water impounded bottom ash hopper can be either bottom ash system supplier meeting the qualification of clause 2.2(a) or reputed/renowned Indian Technical Institution.

In such a case, the bidder shall be required to furnish a letter of support from the design agency for successful performance of water impounded bottom ash hopper. The format for the same is attached as Annexure-A.

3.0 INDUCED DRAFT COOLING TOWER (IDCT):

3.1 Bidder/Sub-vendor should have designed, constructed and commissioned at least one (1) number Induced Draught Cooling Tower(IDCT) in RCC or Pultruded Fiberglass Reinforced Plastic(FRP) Construction of capacity not less than 13000m³/hr which should have been in successful operation for at least one (1) year prior to date of issue of letter of award. The reference IDCT should be of the same type i.e. counter flow or cross flow and of the same construction i.e. RCC construction or FRP construction as being offered by bidder/sub-vendor.

3.2 In case the reference IDCT was designed by a party other than the bidder/sub vendor, the bidder shall collaborate with a design agency, which has independently designed an IDCT of same type as being offered of capacity not less than 13,000 m³/hr in RCC or Pultruded FRP construction and which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

Further, if such design agency has not carried out the engineering activities by itself in respect of the reference IDCT against which the design agency is seeking the qualification, then the bidder shall collaborate with an engineering agency which should have engineered an IDCT of same type as being offered of capacity not less than 13,000 m³/hr in RCC or Pultruded FRP construction and which should have been in successful operation for at least one(1) year prior to the date of issue of letter of award.

3.3 In case the reference IDCT is of different construction as being offered by the bidder/sub-vendor, the bidder shall collaborate with a structural design agency, which has independently designed structure of IDCT of the same construction as being offered by the bidder/sub-vendor of capacity not less than 13,000 m³/hr and which should have been in successful operation for at least one (1) year prior to the date of issue of letter of award.

In case of 3.2 and 3.3, the bidder shall be required to furnish a letter of technical support from the IDCT design agency/structural design agency/ engineering agency (as



applicable) for successful performance of IDCT. The format for the same is attached as Annexure-A.

4.0 NATURAL DRAFT COOLING TOWER (NDCT):

Bidder/Sub-vendor should have designed, constructed and commissioned at least one(1) number Natural Draught Cooling Tower(NDCT) in RCC Construction with cooling water flow not less than 25,000 m³/hr which should have been in successful operation for at least one (1) year prior to the date of issue of letter of award.

In case the reference NDCT has been designed by a party other than the bidder/sub vendor, the bidder shall collaborate with a design agency, which has independently designed a NDCT of capacity not less than 25,000 m³/hr in RCC construction and which should have been in successful operation for at least one (1) year prior to the date of issue of letter of award.

In such a case, bidder shall be required to furnish a letter of support from the NDCT design agency for successful performance of NDCT. The format for the same is attached as Annexure-A.

5.0 DEMINERALIZING (DM) PLANT:

Bidder/Sub-vendor should have designed, supplied, erected and commissioned at least one (1) number of ion exchange based demineralizing (DM) plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

OR

In case, the bidder/sub-vendor offers reverse osmosis with mixed bed combination plant for production of DM water, the bidder/sub-vendor should have designed, supplied, erected and commissioned at least one (1) number reverse osmosis with mixed bed combination plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

6.0 PRE-TREATMENT PLANT:

Bidder/Sub-vendor should have designed, supplied, erected and commissioned (or supervised erection and commissioning) of at least one (1) number Pre-Treatment Plant (PTP) / Effluent Treatment Plant (ETP), including civil works, with a total capacity of at least 1000 m³/hr comprising of clarifiers/tube settlers/thickeners or a combination thereof which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.



7.0 EFFLUENT TREATMENT PLANT:

Bidder/Sub-vendor should have designed, supplied, erected and commissioned at least one (1) number Pre-Treatment Plant (PTP) / Effluent Treatment Plant (ETP), having a capacity of at least 300 m³/hr comprising of clarifiers/ tube settlers/ thickeners or a combination thereof, which should have been in successful operation for at least one(1) year prior to date of issue of letter of award.

8.0 CONDENSATE POLISHING UNIT(CPU):

8.1 Bidder/Sub-vendor should have designed, supplied, erected and commissioned at least one (1) number Condensate Polishing Unit (CPU) of mixed bed, deep bed type consisting of service vessel of minimum capacity of 500 m³/hr which should have been in successful operation for a period of at least one (1) year prior to date of issue of letter of award. The reference CPU should have external regeneration system, incorporating the same resin separation and regeneration process as being offered by the bidder /sub-vendor.

8.2 Bidder/Sub vendor who does not meet the above requirement at paragraph 8.1 can also participate in association/collaboration with a firm which fully meets the requirement at 8.1 above provided the bidder/sub-vendor has designed, supplied, erected and commissioned at least one(1) number of ion exchange based demineralizing(DM) plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

In such a case, the bidder shall be required to furnish a letter of support from the association/collaboration firm for successful performance of CPU. The format for the same is attached as Annexure-A.

9.0 CHIMNEY:

Bidder/Sub vendor should have designed/got designed, constructed and commissioned at least one (1) number RCC chimney using slip form shuttering for at least 100 m height³, which should have been in successful operation for at least one(1) year prior to date of issue of letter of award.

In case the reference chimney has been designed by a party other than the bidder/sub vendor, the bidder/sub vendor shall collaborate with a design agency, which has independently designed at least one (1) number RCC chimney using slip form shuttering for at least 100 m height³, which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

³Chimney height shall be 150 m in case FGD is not envisaged.



In such a case, bidder/sub vendor shall be required to furnish a letter of support from the design agency for successful performance of chimney. The format for the same is attached as Annexure-A.

10.0 STACKER CUM RECLAIMER (in case it is excluded from CHP Package):

Bidder/Sub vendor should have designed, manufacture (or got manufactured), supplied, erected & commissioned (or supervised erection and commissioning) at least one (1) number Stacker cum Reclaimer of rated capacity of 1000(stacking) and 1000 (reclaiming) Metric tonnes per hour (or above) for coal or other mineral of equivalent volumetric capacity which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

11.0 TANDEM/TWIN WAGON TIPPLER (in case it is part of supply of CHP package):

Bidder/Sub vendor should have designed, manufactured (or got manufactured), supplied, erected & commissioned (or supervised erection and commissioning) at least one (1) number Tandem/ Twin wagon tippler suitable for tipping 25 tips/hour of Indian Railway Wagons used for transportation of coal or other minerals as per latest RDSO guidelines which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

OR

Bidder/Sub vendor who has previously not supplied any Tandem/Twin wagon tippler can also qualify provided the bidder/sub vendor should have manufactured (or got manufactured), supplied, erected & commissioned (or supervised erection and commissioning) including all associated mechanical, structural steel works and electrical works of at least one (1) number side discharge wagon tippler / rotary type wagon tippler suitable for tipping as per latest RDSO guidelines which should have been in successful operation for at least one (1) year prior to date of issue of letter of award

AND

Bidder/Sub vendor collaborates with any of the reputed Original Equipment Manufacturers (OEMs) who has designed at least one (1) number Tandem/Twin wagon tippler in India or internationally which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.

In such a case, the bidder/sub vendor shall be required to furnish a letter of support from the OEM i.e. design agency for successful performance of Tandem/Twin wagon tippler. The format for the same is attached as Annexure-A.

12.0 SWITCHYARD / SUB-STATION*:

Bidder/Sub vendor should have designed, supplied, erected and commissioned (or supervised erection and commissioning of) at least one(1) number 220/400/765 kV** Switchyard/ Sub-Station which should have been in successful operation for at least one (1) year prior to date of issue of letter of award.



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- * Optional in case switchyard is part of BoP bid
- ** As applicable (To be decided by the project developer company)

SECTION II

GUIDELINES FOR QUALIFYING REQUIREMENTS FOR BIDDERS OF INDIVIDUAL PACKAGES OF BALANCE OF PLANT FOR COAL/LIGNITE BASED THERMAL POWER STATIONS



1
COAL HANDLING PLANT

1. (i) Bidder should have executed one (1) number integrated bulk material handling plant of minimum 1000 Metric tonnes⁴ per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity (essentially comprising of conveying and crushing) including mechanical and electrical works involving design, manufacture (or got manufactured), supply, erection & commissioning (or supervision of erection and commissioning) which should have been in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid.

OR

Bidder who has only conveying experience of any bulk material handling plant of minimum 1000 Metric tonnes⁴ per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity including mechanical and electrical works involving design, manufacture, supply, erection & commissioning (or supervision of erection and commissioning) which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid, should have collaborated/ associated with a design agency who has designed at least one(1) number integrated bulk material handling plant (essentially comprising of conveying and crushing) of 1000 Metric tonnes⁴ per hour rated capacity or above for coal or other minerals of equivalent volumetric capacity which should have been in successful operation for at least one (1) as on 7 days prior to the date of opening of the bid.

In such a case, the bidder shall be required to furnish a letter of support from the design agency for successful performance of Coal Handling Plant. The format for the same is attached as Annexure-A.

AND

- (ii) Bidder should have designed and executed:

- a) Industrial buildings with finishing works and underground structures like hoppers & tunnels involving deep excavation, dewatering and bulk reinforced cement concrete work (Minimum 20,000 m³ in a single contract in one(1) year) during last seven years from the date of bid opening.
and
- b) Minimum 4000 metric tons of fabrication and erection of structural steel in a single contract in one (1) year during last five years from the date of bid opening.

⁴ Insert a value equal to proposed CHP plant's rated capacity if the proposed plant rated capacity is less than 1000 M TPH.



2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder who meets the requirements of only paragraph 1 (i) above can also participate provided he associates/ collaborates with a single firm which fully meets the requirements specified at paragraph 1(ii) above. In such a case the bidder shall furnish undertaking jointly executed by him and his associate for successful performance of the relevant system along with the bid. In case of award, associate for civil & structural works shall be required to furnish bank guarantee for 5.0 % (five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder.
4. Bidder who does not meet the requirements at paragraphs 1 (i) & (ii) above can also submit bids in association/ collaboration with a firm which fully meets the requirements at 1 (i) above provided he (the bidder) has executed in the last 10 years projects (including engineering, procurement, erection and commissioning or supervision of erection and commissioning) in the area of power, steel, fertilizer, cement or any other process industry with the total value of such projects being Rs. ...⁵ or more. At least one (1) of such projects should have a contract value of Rs. ...⁶ or more. These projects shall be in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid. In such a case, the collaborator/ associate shall be required to furnish bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him and his collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.
5. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 50 crores. Net worth of the bidder

⁵ Insert a value equal to 100 % of the estimate contract price.

⁶ Insert a value equal to 50 % of the estimated contract price.



as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.

6. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
7. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



2

ASH HANDLING PLANT

1. (i) Bidder should have executed at least one(1) ash handling plant involving design, engineering, manufacture (or got manufactured), supply, erected & commissioned (or supervised erection and commissioning) of commissioning comprising the following systems which should have been in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid.

(a) Bottom ash handling system comprising jet pump system in conjunction with water impounded bottom ash hopper or submerged scraper chain conveyor system designed for following conveying capacities in TPH (dry ash basis) or more for coal/lignite fired boilers.

Jet Pump System: 50 TPH (Dry ash basis) or more per Jet pump

Submerged Scrapper Chain conveyor: 20 TPH (Dry ash basis) or more per scrapper chain conveyor

(b) Pneumatic fly ash handling system for conveying fly ash from ESPs of a coal/lignite fired boiler by either:

Pressure conveying system designed for 30 TPH or more conveying capacity.

OR

Vacuum conveying system designed for 30 TPH or more per stream

AND

Pneumatic fly ash transportation system for transporting fly ash from a coal/lignite fired boiler unit having capacity of not less than 20 TPH for a conveying distance of not less than 500m.

(c) Ash slurry disposal system comprising ash slurry pumps and piping for handling not less than 40 TPH ash (Dry ash basis) for coal/lignite fired boiler.

Note: In case bidder is not meeting requirement of water impounded bottom ash hopper referred under clause 1(i)(a) then bidder shall engage the design agency for vetting/carrying out the design and Engineering activity of water impounded bottom ash hopper referred under para 1(i) (a). Design agency for water impounded bottom ash hopper can be either bottom ash system supplier meeting the qualification of clause 1(i) (a) or reputed/renowned Indian Technical Institution.

In such a case, the bidder shall be required to furnish a letter of support from the design agency for successful performance of water impounded bottom ash hopper. The format for the same is attached as Annexure-A.

(ii) Bidder who is a supplier of ash handling systems but does not meet the requirements under clause 1(i) in full can also participate provided it has executed at least the following systems of ash handling plant involving design, engineering,



manufacturing (or got manufactured), supply, erection and commissioning (or supervised of erection and commissioning) :

- (a) One (1) Bottom ash handling system comprising either a jet pump system in conjunction with water impounded Bottom Ash Hopper or submerged scraper chain conveyor system or dry bottom ash system.
- (b) One (1) Fly Ash Handling System for conveying fly ash from ESPs in dry form involving pneumatic conveying systems of vacuum or pressure type or in wet (slurry) form.

The systems mentioned at 1(ii) (a) and (b) above should have been in successful operation in at least one (1) plant for at least one (1) year as on 7 days prior to the date of opening of the bid and have been installed for coal/lignite fired boiler units generating not less than 40 TPH of ash per boiler.

AND

Collaborate(s)/associate(s) with party (ies) who meet(s) either the total requirement or the balance part under clause 1(i) above for which the bidder/sub-vendor himself is not able to meet.

Note: In case bidder/sub-vendor is not meeting requirement of water impounded bottom ash hopper referred under clause 1 (ii)(a) then bidder shall engage the design agency for vetting/carrying out the design and engineering activity of water impounded bottom ash hopper. Design agency for water impounded bottom ash hopper can be either bottom ash system supplier meeting the qualification of clause 1 (ii)(a) or reputed/renowned Indian Technical Institution.

In such a case, the bidder shall be required to furnish a letter of support from the design agency for successful performance of water impounded bottom ash hopper. The format for the same is attached as Annexure-A.

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 (i) above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder which does not meet the requirements at paragraph 1 above can also submit bids in association/ collaboration with a firm which fully meets the requirements at



- 1 (i) above provided the bidder has executed in the last 10 years projects (including supplies and erection) in the area of power, steel, cement, fertilizer or any other process industry with the total value of such projects being Rs.....⁷ or more. At least one (1) of such projects should have a contract value of Rs.⁸ or more. These projects shall be in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid. In such a case, the collaborator/ associate shall be required to furnish on demand bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him & his collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.
4. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 25 crores. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/associate:
- i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.

⁷Insert a value equal to 100 % of the estimated contract price.

⁸Insert a value equal to 50 % of the estimated contract price.



INDUCED DRAFT COOLING TOWER

- 1.(i) The bidder should have designed, constructed and commissioned at least one (1) number Induced Draught Cooling Tower(IDCT) in RCC or Pultruded Fiberglass Reinforced Plastic(FRP) Construction of capacity not less than 13000m³/hr which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid. The reference IDCT should be of the same type i.e. counter flow or cross flow and of the same construction i.e. RCC construction or FRP construction as being offered by bidder.
- (ii) In case the reference IDCT was designed by a party other than the bidder, the bidder shall collaborate with an IDCT designer, who has independently designed an IDCT of same type as being offered of capacity not less than 13,000 m³/hr in RCC or Pultruded FRP construction and which should have been in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid.

Further, if such designer has not carried out the engineering activities by itself in respect of the reference IDCT against which the designer is seeking the qualification, then the bidder shall collaborate with an engineering firm which should have engineered an IDCT of same type as being offered of capacity not less than 13,000 m³/hr in RCC or Pultruded FRP construction and which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

- (iii) In case the reference IDCT is of different construction as being offered by the bidder,the bidder shall collaborate with an IDCT structural designer, who has independently designed structure of IDCT of the same construction as being offered by the bidder of capacity not less than 13,000 m³/hr and which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

In case of 1(ii) and 1(iii), the bidder shall be required to furnish a letter of technical support from the cooling tower designer/structural designer/ engineering firm (as applicable) for successful performance of IDCT. The format for the same is attached as Annexure-A.

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under the Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be



required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.

3. Bidder which does not meet the above requirement at paragraph 1, can also participate and submit bids in association/ collaboration with a firm which fully meets the requirements at paragraph 1 above provided the bidder has executed in the last 10 years projects involving RCC structures with average annual turnover of Rs. 50 crore. At least one (1) of such projects should have a contract value of Rs. 15 crore or more. In such a case, the collaborator/ associate shall be required to furnish on demand bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him and his collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.
4. The average annual turnover of the bidder in the preceding three (3) financial years as on the date of bid opening, shall not be less than Rs. 25 crore on the date of bid opening. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/ associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



NATURAL DRAFT COOLING TOWER

1. Bidder should have designed, constructed and commissioned at least one(1) number Natural Draught Cooling Tower(NDCT) in RCC Construction with cooling water flow not less than 25,000 m³/hr which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

In case the reference NDCT has been designed by a party other than the bidder, the bidder shall collaborate with a NDCT designer, who has independently designed a NDCT as being offered of capacity not less than 25,000 m³/hr in RCC construction and which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

In such a case, bidder shall be required to furnish a letter of support from the NDCT designer for successful performance of NDCT. The format for the same is attached as Annexure-A.

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under the Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder which does not meet the above requirement at paragraph 1, can also submit bids in association/ collaboration with a firm which fully meets the requirements at paragraph 1 above provided the bidder has executed in the last 10 years, projects involving RCC works of tall structures using slip/jump form shuttering with average annual turnover of Rs. 100 crore. At least one(1) of such projects should have a contract value of Rs. 25 crore or more. In such a case, the collaborator/ associate shall be required to furnish bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him & his collaborator/ associate along with the bid towards the bidder



and collaborator / associate being jointly and severally responsible for successful performance of the contract.

4. The average annual turnover of the bidder in the preceding three (3) financial years as on the date of bid opening, shall not be less than Rs. 50 crore on the date of bid opening. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
5. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/ system as required by the bidding documents.



DEMINERALIZATION PLANT

1. Bidder should have designed, supplied, erected and commissioned at least one (1) number of ion exchange based demineralizing(DM) plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid.

OR

In case, the bidder offers reverse osmosis with mixed bed combination plant for production of DM water, the bidder should have designed, supplied, erected and commissioned at least one (1) number reverse osmosis with mixed bed combination plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder who does not meet the above requirements at paragraph 1 can also participate provided he has executed in the last 10 years projects (including engineering, procurement, erection and commissioning or supervision of erection and commissioning) in the area of power, steel, fertilizer or any other process industry with the total value of such projects being Rs. 100 crore or more. At least one(1) of such projects should have a contract value of Rs. 25 crore or more. These projects shall be in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid. Such a bidder will have to submit bids in association/collaboration with a firm who fully meets the requirements at 1 above. In such a case, the collaborator/associate shall be required to furnish on demand bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him & his



collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.

4. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 10 crores. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents. The bidders should submit their profit & loss account and balance sheet for the last three (3) years.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the Bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



6

PRE -TREATMENT PLANT

1. Bidder should have designed, supplied, erected and commissioned (or supervised erection and commissioning) of at least one (1) number Pre-Treatment Plant (PTP) / Effluent Treatment Plant(ETP), including civil works, each with a total capacity of at least 1000 m³/hr comprising of clarifiers/ tube settlers/ thickeners or a combination thereof which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.
2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder which does not meet the above requirements at paragraph 1 can also submit bids in association/ collaboration with a firm which fully meets the requirements at 1 above provided the bidder has executed in the last 10 years projects (including supplies, erection and commissioning or supervision of erection and commissioning) in the area of power, steel, fertilizer or any other process industry with the total value of such projects being Rs. 100 crore or more. At least one(1) of such projects should have a contract value of Rs. 25 crore or more. These projects shall be in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid. In such a case, the collaborator/ associate shall be required to furnish bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him and his collaborator/ associate along with the bid towards the bidder and collaborator/ associate being jointly and severally responsible for successful performance of the contract.
4. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 25 crores. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the



paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.

5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the Bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



7

EFFLUENT TREATMENT PLANT

1. Bidder should have designed, supplied, erected and commissioned at least one (1) number Pre-Treatment Plant (PTP) / Effluent Treatment Plant(ETP), having a capacity of at least 300 m³/hr comprising of clarifiers/ tube settlers/ thickeners or a combination thereof ,which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.
2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder which does not meet the above requirements at paragraph 1 can also submit bids in association/ collaboration with a firm which fully meets the requirements at 1 above provided the bidder has executed in the last 10 years projects (including supplies, erection and commissioning or supervision of erection and commissioning) in the area of power, steel, fertilizer or any other process industry with the total value of such projects being Rs. 100 crore or more. At least one (1) of such projects should have a contract value of Rs. 25 crore or more. These projects shall be in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid. In such a case, the collaborator/associate shall be required to furnish bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him & his collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.
4. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 10 crores. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the



paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one(1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.

5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/ associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



8

CONDENSATE POLISHING UNIT

1. Bidder should have designed, supplied, erected and commissioned at least one (1) number Condensate Polishing Unit (CPU) of mixed bed, deep bed type consisting of service vessel of minimum capacity of 500 m³/hr which should have been in successful operation for a period of at least one (1) year as on 7 days prior to the date of opening of the bid. The reference CPU should have external regeneration system, incorporating the same resin separation and regeneration process as being offered by the bidder.

OR

Bidder who does not meet the above requirement at paragraph 1 above can also participate in association/collaboration with a firm which fully meets the requirement at 1 above provided the bidder has designed, supplied, erected and commissioned at least one(1) number of ion exchange based demineralizing(DM) plant of minimum capacity of 60 m³/hr consisting of at least one (1) stream capable of producing outlet water quality with silica and conductivity not more than 0.02 ppm as SiO₂ and 0.2 micro mho/cm respectively which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

In such a case, the bidder shall be required to furnish a letter of support from the association/collaboration firm for successful performance of CPU. The format for the same is attached as Annexure-A

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JVcompany is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. Bidder which does not meet the above requirements at paragraph 1 can also submit bids in association/ collaboration with a firm which fully meets the requirements at 1 above provided the bidder has executed in the last 10 years projects (including supplies, erection and commissioning or supervision of erection and commissioning) in the area of power, steel, fertilizer or any other process industry with the total value of such projects being Rs. 100 crore or more. At least one (1) of



such projects should have a contract value of Rs. 25 crore or more. These projects shall be in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid. In such a case, the collaborator/associate shall be required to furnish bank guarantee for 5 % (Five percent) of contract price of the package in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The bidder would furnish undertaking jointly executed by him & his collaborator/ associate along with the bid towards the bidder and collaborator / associate being jointly and severally responsible for successful performance of the contract.

4. The average annual turnover of the bidder in the preceding three financial years on the date of bid opening shall not be less than Rs. 10 crores. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
5. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.
6. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/ associate:
 - i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



9

CHIMNEY

1. Bidder should have designed/got designed, constructed and commissioned at least one (1) number RCC chimney using slip form shuttering for at least 100 m height⁹, which should have been in successful operation for at least one(1) year as on 7 days prior to the date of opening of the bid.

In case the reference chimney has been designed by a party other than the bidder, the bidder shall collaborate with a chimney designer, who has independently designed at least one (1) number RCC chimney using slip form shuttering for at least 100 m height⁹, which should have been in successful operation for at least one (1) year as on 7 days prior to the date of opening of the bid.

In such a case, bidder shall be required to furnish a letter of support from the chimney designer for successful performance of chimney. The format for the same is attached as Annexure-A.

2. Alternatively, the bidder shall be a joint venture company incorporated in India and registered under Companies Act 1956, provided that eligibility criteria mentioned at paragraph 1 above is met by one(1) of the promoters. Each promoter company on the basis of whom the joint venture company gets qualified shall have minimum 26 % equity in the JV company. The equity shall be locked in at least for a period of 5 years from date of bid opening or till the completion of the warranty period of the project whichever is later. The bidder and the promoter company (ies) on whose strength the JV company is qualified, shall be jointly and severally liable for the execution of the contract and an undertaking to this effect shall be submitted along with the bid. In case of award, the said promoter company (ies) shall be required to give separate on demand bank guarantee for an amount equal to 1 % of the total contract price in addition to the contract performance guarantee of 10 % of contract value to be furnished by the bidder. The JVC partner on whose experience the qualification is sought shall not be allowed to bid independently or as a member in a consortium for this bid.
3. The average annual turnover of the bidder in the preceding three (3) financial years as on the date of bid opening, shall not be less than Rs. 25 crores on the date of bid opening. Net worth of the bidder as on the last day of the preceding financial year shall not be less than 100 % of the paid up share capital. In case, bidder is a JVC and does not meet these requirements, the financial capability (average annual turnover) of at least one (1) of the JVC partners on whose experience the qualification is sought, shall meet the above turnover requirement.
4. The bidder shall comply with extant provisions of Public Procurement-Make in India Order issued by DPIIT/Ministry of Power while sourcing of any of the equipment.

⁹Chimney height shall be 150 m in case FGD is not envisaged.



5. The bidder shall provide satisfactory evidence that he and/or, where applicable, his collaborator/ associate:
- i) has adequate financial stability and status to meet the financial obligations pursuant to the works covered in the bidding documents.
 - ii) has adequate capability and capacity to perform the work properly and expeditiously within the time period specified. The evidence shall specifically cover, with written details, the installed manufacturing and/or fabrication capacities to meet the requirements appropriate to the works covered in his bid. The details of alternative arrangements to be organized by the bidder for this purpose and which shall meet the employer's approval shall be furnished.
 - iii) has an adequate field service organization to provide the necessary field erection and management services required to successfully erect, test and commission the equipment/system as required by the bidding documents.



ANNEXURE - A

**LETTER OF SUPPORT FOR SATISFACTORY PERFORMANCE OF.....
(name of BoP Package)**

To:

Sub: Letter of Support submitted from.....(name of the Collaborator) undertaking the responsibility for satisfactory performance of (name of BoP Package).

Dear Sirs,

1. In accordance with the Award of the Contract by..... (name of the bidder), we the aforesaid (design/engineering activities/structural design) Provider, (M/s.....) shall be fully responsible for the satisfactory performance of the..... (name of BoP Package).
2. Further, the manner of achieving the objective set forth in point 1 above shall be as follows, for (name of BoP Package).
 - a) We shall be fully responsible for design, engineering & commissioning and extending all necessary support for putting into satisfactory operation and carrying out the Guarantee Tests for (name of BoP Package) to the satisfaction of the employer.
 - b) We shall depute technical experts to Bidder's/ sub-vendor's works for supervision during manufacturing, assembly, inspection, as and when required by employer. We shall participate in site erection, commissioning and final testing (as and when necessary) of the (name of BoP Package).
 - c) We shall participate in Technical Co-ordination meetings (TCMs) from time to time, as and when required by Employer.
 - d) We shall promptly carry out all the corrective measure and shall promptly provide corrected design and shall undertake replacements, rectifications or modifications to (name of BoP Package) as and when required by employer in case the (name of BoP Package) fails to demonstrate successful performance as per contract at site.
3. We,(design/engineering activities/structural design) provider do hereby undertake and confirm that this Letter of Support shall be valid up to the end of the defect liability period of contract.

Signature of the Authorised Representative:



REVISED GUIDELINES FOR QUALIFYING REQUIREMENTS FOR BIDDERS OF BALANCE OF
PLANT FOR COAL/ LIGNITE BASED THERMAL POWER STATIONS

For M/s
(Collaborator)

Name
Designation
Date.....
Common Seal of the Company