

	TECHNICAL SPECIFICATION INDUCED DRAFT COOLING TOWER 3 X 800 MW NLC TALABIRA TPP	PE-TS-511-165-W001
		Rev. No. 00
		Date : 10.09.2025

PRE QUALIFICATION REQUIREMENT (TECHNICAL)

Pre-Qualifying Requirements (Technical) of IDCT Package

Technical PQR
3.02.03.01: The Bidder should have designed, engineered, constructed and commissioned at least one (1) number Induced Draught Cooling Tower (IDCT) in RCC Construction of capacity not less than 13000m³/hr which should have been in successful operation for at least one (1) year. The reference Cooling Towers should be of the same type i.e. counter flow as is being offered by the bidder and of the same construction type i.e. RCC construction as being offered by the bidder. In case the reference cooling tower was designed by a party other than the bidder, the bidder shall employ a cooling tower Design Agency, who has independently designed an Induced Draught Cooling Tower of same type as being offered of capacity not less than 13,000 Cu.M/Hr in RCC construction and which should have been in successful operation for at least one (1) year. Further, if such design agency has not carried out the engineering activities by itself in respect of the system of the reference installation against which the design agency is seeking the qualification, then the engineering of the package shall be carried out by an Engineering firm who should have engineered an Induced Draught Cooling Tower of same type & construction as being offered of capacity not less than 13,000 Cu.M/Hr in RCC construction and which should have been in successful operation for at least one (1) year. In such a case, the bidder shall be required to furnish a letter of technical support from the Cooling Tower Design agency and Engineering firm (as applicable) for successful performance of Cooling Tower system. This letter of technical support should be submitted to Purchaser prior to the placement of order on approved bidder.
(OR) 3.02.03.02: The bidder should be a wholly or partially (with minimum 51% holding) held Indian subsidiary of a firm who in turn meets the requirements of clause 3.02.03.01 above. Further, the bidder on its own or along with its holding company should have executed/ be executing at least one contract involving design, engineering, construction and commissioning of at least one (1) number Induced Draft Cooling Tower in RCC Construction of capacity not less than 6500m³/hr. In such a case, the bidder should furnish a letter of technical support from Holding company for successful performance of Cooling Towers. This letter of technical support should be submitted to BHEL along with the bid.
(OR) 3.02.03.03: The bidder who has independently constructed RCC cooling towers can also participate along with it's Holding company/Collaborator/Associate who in turn meets the requirements of clause 3.02.03.01 above. In such a case, the bidder shall be required to furnish a Deed of Joint Undertaking executed by the bidder and it's Holding company/Collaborator/Associate for the successful performance of Cooling Tower. The Deed of Joint Undertaking (DJU) shall be submitted at the time of placement of order on the approved bidder. In case of award, Bidder and it's Holding company/ Collaborator/ Associate shall each be required to furnish an on-demand bank guarantee for INR 60 million (Sixty Million only) to NLC India Limited in addition to the contract performance security to be furnished by the bidder.

Notes:

“design by itself” means that tower(s) of reference plant must have been designed by the Bidder's own engineers. Tower(s) designed by Consultant/ collaborator/ associate of the Contractor shall not be considered.

General notes of the PQR are as under:

1. Bidder to submit supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.
2. Notwithstanding anything stated above, BHEL/Customer reserves the right to assess the capabilities and capacity of the bidder to perform the contract, should the circumstances warrant such assessment in overall interest of BHEL/Customer.
3. Consideration of offer shall be subject to customer's approval of bidder.
4. After satisfactory fulfilment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all other terms of the tender.

**FORMAT FOR LETTER OF SUPPORT FOR SATISFACTORY PERFORMANCE OF
COOLING TOWER FOR NLC TALABIRA THERMAL POWER PROJECT- (3X800MW)**

TO

[The Purchaser Name & Address]

Sub: Letter of Technical Support submitted from (name of Design Agency*/
Engineering firm */ Holding Company*) undertaking the responsibility for satisfactory
performance of(Name of the equipment/system)

Dear Sirs,

1. In accordance with the Award of the Contract by (Name of the Contractor) to M/s.
..... (Name of the sub-contractor), we the aforesaid Design Agency*/Engineering firm
/Holding Company, (M/s.....) shall be fully responsible for the satisfactory performance
of the(Name of the equipment/ system).
2. Further, the manner of achieving the objective set forth in point 1 above shall be as follows
For(Name of the equipment/system):
 - (a) We shall be fully responsible for design, engineering & commissioning and
extending all necessary support for putting in to satisfactory operation and
carrying out the Guarantee test for (Name of the equipment / system*) to the
satisfaction of the Purchaser.
 - (b) We shall depute technical experts to Contractor's/Sub-Contractor work for
supervision during manufacturing, assembly, inspection, as and when required
by Purchaser. We shall participate in site erection, commissioning and final
testing (as and when necessary) of the (Name of the equipment/
system).
 - (c) We shall participate in Technical Co-ordination meetings (TCMs) from time to time, as
and when required by Purchaser.
 - (d) We shall promptly carryout all the corrective measures and shall promptly provide
corrected design and shall undertake replacements, rectifications or
modifications to the equipment/system* as and when required by Purchaser
in case the equipment/system* fails to demonstrate successful performance as per
contract at site.
3. We, the Design Agency*/Engineering firm */Holding Company* do hereby undertake and
confirm that this Letter of Technical Support shall be valid for a period of seven
(7) years or up to the end of warranty period of the contract.

Signature of the Authorised Representatives:

For M/s
(Design Agency*/Engineering firm */Holding
Company*)

Name:

Designation:

Date:

Common Seal of the Company

*: Strike off whichever is not applicable.

Signature of authorized signatory.....

Annexure to Sub QR for IDCT – Details of reference Cooling Tower

QR / PROVENNESS OF COOLING TOWER

I.(A) Details of RCC Induced Draught Cooling Towers (as per clause 3.02.03.01 of Section-II, Vol-IIA of Contract Documents)

In support of Sub-Qualifying Requirements of Clause 3.02.03.01 of Section-II, Vol-IIA of contract Document, we confirm that We/our Sub-contractor have designed, engineered, constructed and commissioned at least one (1) number of Induced Draft Cooling tower in RCC construction of capacity not less than 13,000 m³/h and which has been in successful operation for at least one (1) year.

We/our Sub-contractor further confirm that the reference cooling tower is of the same type, i.e. counter flow type cooling tower as is being offered by us/our sub-contractor.

The details of the reference cooling tower is furnished below:

Sl.	Description/Details PlantNo.	
1.	Description of Work and Name of Client	.....
2.	Location/Address of the Plant/works	.....
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc.)	.....
4.	No. of Cooling Towers	.....
5.	Capacity of each Cooling Tower (Cu.M/hr.)	.....
6.	Type of Cooling Towers	.....
7.	Type of Construction	.....
8.	Whether scope of works included	
	(a) Design of Cooling Towers by Contractor / its Sub-contractor	YES*/NO*
	(b) Engineering & Construction of Cooling towers	YES*/NO*
	(c) Commissioning of Cooling towers	YES*/NO*
9.	Date of Commissioning of the Cooling tower	

Signature of authorized signatory.....

10. Certificate from client to substantiate Contractor's QR data is Enclosed at Annexure..... YES*/NO*
11. Whether the reference cooling tower at sl no:1 is designed by the Contractor/sub contractor YES*/NO*
- 12a. Whether the reference cooling tower at sl. No. 1 is got designed by contractor/ subcontractor. YES*/NO*
- 12b. Name of the Design agency of the reference Cooling tower
- 12c. Whether the reference cooling tower is Engineered by the design agency YES*/NO*
- 12d. Name of the Engineering firm who has engineered the reference cooling tower
13. Whether Documentary evidence certificate(s) from client enclosed for the above data YES*/NO*
14. We confirm to submit a letter of technical support at the time of placement of order on our contractor.

● *Strike off whichever is not applicable.

Date : (Signature).....

Place : (Printed Name)

(Designation).....

(Common Seal)

(Contractor / Sub-Contractor)

Signature of authorized signatory.....

I.(B) Details of RCC Induced draught Cooling Towers (as per clause 3.02 .03.02 of Section-II, Vol-IIA of Contract Documents

In terms of clause no. 3.02.03.02 of Section-II, Vol-IIA, we/our sub-contractor confirm that, we/our sub-contractor a wholly or partially (with minimum 51% holding) held Indian subsidiary of a firm who in turn meets the requirements of clause 3.02.03.01of Sub-Section-II,Vol-IIA. Further, we/our sub-contractor either on its own or along with its holding company have executed / are executing at least one contract involving design, engineering, construction and commissioning of at least one (1) number Counter flow Induced Draught Cooling Tower in RCC Construction of capacity not less than 6500m³/hr.

We/our Sub-contractor further confirm that the reference cooling tower is of the same type, i.e. counter flow type cooling tower as is being offered by us/our sub-contractor.

We/our sub-contractor also enclose letter of technical support from holding company for successful performance of Induced Draught Cooling Towers as per the format enclosed.

The details of the reference cooling tower is furnished below:

Sl. No.	Description/Details	Plant
1.	Description of Work and Name of Client	.....
2.	Location / Address of the Plant / works	.....
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc.)	.....
4.	No.of Cooling Towers	.....
5.	Capacity of each Cooling Tower (Cu.M/hr.)	.....
6.	Type of Cooling Towers	.....
7.	Type of Construction	.....
8.	Whether scope of works included	
	(a) Design of Cooling Towers by Contractor / its Sub-contractor YES*/NO* (Name of Designer)	
	(b) Engineering &Constructionof Cooling towers	YES*/NO*
	(c) Commissioning of Cooling towers	YES*/NO*
9.	Date of Commissioning of the Cooling tower	

Signature of authorized signatory.....

10. Certificate from client to substantiate Contractor's QR data is Enclosed at Annexure..... YES*/NO*
11. Whether the reference cooling tower at sl no.1 is designed by the Contractor's own engineers YES*/NO*
12. Whether the reference cooling tower atsl.No.1 is designed by Sub-contractor own engineers YES*/NO*
13. Whether Documentary evidence / certificate(s)from client enclosed for the above data Yes*/No*
14. We confirm to submit a letter of technical support at the time of placement of order on our sub-contractor

● *Strike off whichever is not applicable.

Date:

Place:

(Signature).....
 (Printed Name).....
 (Designation).....
 (Common Seal)

(Contractor / Sub contractor)

Signature of authorized signatory.....

I. (C) Details of Induceddraught Cooling Towers (as per clause 3.02.03.03 of Section-II, Vol-IIA of Bidding Documents)

In support of Sub-Qualifying Requirements of Clause 3.02.03.03 of Section-II, Vol-IIA of Bidding Document, we confirm that We/our Sub-contractor have independently constructed RCC cooling towers and our Holding company*/Collaborator*/Associate* fulfils the requirements in Clause 3.02.03.01 of Section-II, Vol-IIA.

We shall furnish a Deed of Joint Undertaking executed by us/ our sub-contractor and Holding company/Collaborator/Associate for the successful performance of Cooling Tower, as per the format enclosed with the bidding documents. The Deed of Joint Undertaking (DJU) shall be submitted to purchaser along with an on demand bank-guarantee at the time of placement of order on the approved sub-contractor.

The details of the reference cooling tower is furnished below:

S.No.	Description	Details
1.	Description of Work and Name of Client	.....
2.	Location/Address of the Plant/works	.....
3.	Address of the Client (including Contact Person Name, Telephone No, e-mail etc.)	.....
4.	No. of Cooling Towers	.....
5.	Type of Construction	.....
6.	Details of ref cooling tower of Holding company /Collaborator/ Associate as per clause 3.02.03.01	
7.	Documentary evidence / Certificate from client to substantiate Bidder's QR data is enclosed at Annexure to this Attachment –II (a)	YES*/NO*

* Strike off whichever is not applicable.

Date: (Signature).....

Place: (Printed Name)

(Designation).....

(Common Seal)

(Contractor/ Sub contractor)

Signature of authorized signatory.....

**FORM OF DEED OF JOINT UNDERTAKING TO BE PROVIDED
FOR INDUCED DRAFT COOLING TOWER AS PER CLAUSE 3.02.03.03 OF
TECHNICAL SPECIFICATIONS (SECTION -II / VOLUME IIA)**

(ON NON-JUDICIAL STAMP PAPER OF APPROPRIATE VALUE)

DEED OF JOINT UNDERTAKING TO BE EXECUTED BY CONTRACTOR/ SUB-CONTRACTOR AND ITS HOLDING COMPANY/ SUBSIDIARY/ COLLABORATOR/ ASSOCIATE FOR SUCCESSFUL PERFORMANCE OF COOLING TOWER MEETING THE REQUIREMENTS STIPULATED IN THE TECHNICAL SPECIFICATION.

The DEED OF JOINT UNDERTAKING executed this day of Two thousand..... by M/s (CONTRACTOR/SUB CONTRACTOR) (hereinafter called the CONTRACTOR/SUB CONTRACTOR, which expression shall include its successors, administrators, executors and permitted assigns)

AND

The DEED OF JOINT UNDERTAKING executed this day of Two thousand by M/s (HOLDING COMPANY/SUBSIDIARY/COLLABORATOR/ASSOCIATE) a Company incorporated under having its Registered Office at (hereinafter called the HOLDING COMPANY/SUBSIDIARY/COLLABORATOR/ASSOCIATE, which expression shall include its successors, administrators, executors and permitted assigns)

AND

in favour of NLC INDIA Ltd., A Government of India Enterprise, incorporated under the Companies Act, having its Registered Office at No.135, EVR PERIYAR HIGH ROAD, KILPAUK, CHENNAI – 600 010, INDIA ("Purchaser" which expression shall include its successors, administrators, executors and assigns).

WHEREAS, the Purchaser invited Bids for design, engineering, manufacture, supply, transportation to site, construction, installation, testing, commissioning and conductance of guarantee tests for the EPC Package for NLC Talabira Thermal Power Project (3X 800 MW) (hereinafter referred to as "Plant") vide its Bidding Document No. CO CONTS/0015K/NTTPP/EPC/e-contrs/2020 dt.18.11.2020, which interalia include Cooling tower(s).

WHEREAS M/s BHEL (Contractor) has submitted its proposal in response to the aforesaid invitation for Bid by the Purchaser for EPC package for NLC Talabira Thermal Power Project (3X 800 MW) against the Purchaser's bidding document no. CO CONTS/0015K/NTTPP/EPC/e-contrs/2020 dt.18.11.2020 interalia including design, engineering, manufacturing, supply, transportation to site, installation, testing and commissioning (including trial operation and performance and guarantee test) of cooling tower(s).

AND WHEREAS vide clause 3.02.03.03 of technical specifications (Section-II, Volume-IIA), it has been specified that Contractor/ sub-contractor who has independently constructed RCC cooling towers can also participate along with its Holding company/Subsidiary/Collaborator/Associate who in turn meets the requirements of clause 3.02.03.01 of TECHNICAL SPECIFICATIONS (SECTION-II, VOLUME-II-A).

Signature of authorized signatory.....

NOW THEREFORE, THIS DEED WITNESSETH AS UNDER:

1. We the Contractor/ sub-contractor and our Holding company/ Subsidiary/ Collaborator/ Associate, do hereby declare and undertake that we shall be jointly and severally responsible to the Purchaser for the successful performance of the Cooling tower(s).
2. In case of any breach of the Contract by the contractor /its sub-contractor, we the Holding company/Subsidiary/ Collaborator / Associate do hereby undertake, declare and confirm that we shall be fully responsible for the successful performance of the cooling tower(s) and undertake to carry out all the obligations and responsibilities under this Deed of Joint Undertaking in order to discharge the Contractor/ sub-contractor obligations stipulated under the Contract. Further, if the Purchaser sustains any loss or damage on account of any breach of the Contract for the cooling tower, we undertake to promptly indemnify and pay such loss/damages caused to the Purchaser on its written demand without any demur, reservation, Contest or protest in any manner whatsoever. This is without prejudice to any rights of the Purchaser against the contractor/sub-contractor under the Contract and/or guarantees. It shall not be necessary or obligatory for the Purchaser to first proceed against the contractor/sub-contractor before proceeding against the Holding company/Subsidiary / Collaborator / Associate nor any extension of time or any relaxation given by the Purchaser to the contractor/sub-contractor shall prejudice any rights of the Purchaser under this Deed of Joint Undertaking to proceed against the Holding company/Subsidiary / Collaborator / Associate. The liability of the contractor, his sub-contractor and the Holding company/ Collaborator / Associate shall be limited to an amount equal to 100% of the value of the contract** between the contractor and the sub-supplier for the equipments/systems.
3. Without prejudice to the generality of the Undertaking in paragraph 1 above, the manner of achieving the objective set forth in paragraph 1 above shall be as follows:
 - (a) We, Holding company/Subsidiary / Collaborator / Associate shall ensure that complete design, manufacturing, quality assurance and installation of the cooling tower(s) is carried out in line with drawings and procedures and shall be fully responsible for its compliance so as to ensure satisfactory, reliable, safe and trouble free performance of cooling tower(s). Further, we, Holding company/Subsidiary / Collaborator / Associate shall extend our quality surveillance /supervision / quality control to the contractor/sub-contractor during Design, engineering, erection, commissioning and performance testing of cooling tower(s). Further, Holding company/ Collaborator / Associate shall depute their technical experts from time to time to the contractor/sub-contractor works / Purchaser's project site as required by the Purchaser and agreed to by contractor/sub-contractor to facilitate the successful performance of the cooling tower(s) as stipulated in the aforesaid Contract. Further, Holding company/Subsidiary / Collaborator / Associate shall ensure proper design, manufacture installation, testing and successful performance of the cooling tower under the said contract in accordance with stipulations of Bidding Documents and if necessary, Holding company/Subsidiary / Collaborator / Associate shall advise the contractor/sub-contractor suitable modifications of design and implement necessary corrective measures to discharge the obligations under the contract.
 - (b) In the event the contractor/sub-contractor fail to demonstrate that the cooling tower(s) meet the guaranteed parameters and demonstration parameters as specified in the contract, Holding company/Subsidiary / Collaborator / Associate shall promptly carry out all the corrective measures related to engineering services at their own expense and shall promptly provide corrected design to the Purchaser.
 - (c) Implementation of the corrected design and all other necessary repairs, replacements, rectification or modifications to the cooling tower(s) and payment of financial liabilities and penalties and fulfilment of all other contractual obligations as provided under the contract shall be the joint and several responsibilities of the contractor/sub-contractor and Holding company/Subsidiary / Collaborator / Associate.

Signature of authorized signatory.....

4. We, the contractor/sub-contractor and Holding company/Subsidiary / Collaborator / Associate do hereby undertake and confirm that this Undertaking shall be irrevocable and shall not be revoked till ninety (90) days after the end of the warranty period of the last equipment covered under the Contract and further stipulate that the Undertaking herein contained shall terminate after ninety (90) days of satisfactory completion of such warranty period. In case of delay in completion of warranty period, the validity of this Deed of Joint Undertaking shall be extended by such period of delay. We further agree that this Undertaking shall be without any prejudice to the various liabilities of the Contractor including Contract Performance Security as well as other obligations of the Contractor in terms of the Contract.
5. The Contractor/sub-contractor will be fully responsible for the quality of all the equipment/main assemblies/components manufactured at their works or at their contractors' works or constructed at site, and their repair or replacement, if necessary, for incorporation in the Plant and timely delivery thereof to meet the completion schedule under the Contract.
6. In case of Award, in addition to the Contract Performance Security for the contract, Contractor/ sub Contractor and the Holding company/Subsidiary / Collaborator / Associate shall each be required to furnish an on demand bank guarantee in favour of the Purchaser as per provisions of the bidding documents. The value of such Bank Guarantee shall be equal to **INR 60 million (Indian Rupees Sixty Million only)** and it shall be guarantee towards the faithful performance/compliance of this Deed of Joint Undertaking in accordance with the terms and conditions specified herein. The bank guarantee shall be unconditional, irrevocable and valid till ninety (90) days beyond the end of warranty period of the last equipment covered under the Contract. In case of delay in completion of the warranty period, the validity of this Bank Guarantee shall be extended by the period of such delay. The guarantee amount shall be promptly paid to the Purchaser on demand without any demur, reservation, protest or contest.
7. Any dispute that may arise in connection with this Deed of Joint Undertaking shall be settled as per arbitration procedure/rules mentioned in the Contract Documents. This Deed of Joint Undertaking shall be construed and interpreted in accordance with the Laws of India.
8. We, Holding company/Subsidiary / Collaborator / Associate and contractor /sub-contractor agree that this Undertaking shall form an integral part of the Contracts from the date of signing of this Deed of Joint Undertaking. We further agree that this Undertaking shall continue to be forceable till its validity.
9. That this Deed of Joint Undertaking shall be operative from the effective date of signing of this Deed of Joint Undertaking.

IN WITNESS WHEREOF, Holding company/Subsidiary / Collaborator / Associate and contractor / sub-contractor through their authorised representatives, have executed these presents and affixed common seal of their respective companies, on the day, month and year first mentioned above.

WITNESS

.....

1. For M/s.....

(Holding company/Subsidiary / Collaborator / Associate)

Signature of authorized signatory.....

.....
(Signature of the Authorised representative)
Name
(Official Address)
Designation
Common Seal of the Company.....

WITNESS

.....

2. For M/s

.....
(*Sub-Contractor)

.....
(Signature of the Authorised representative)
Name
(Official Address)
Designation
Common Seal of the Company.....

WITNESS

.....

3. For M/s

.....
(Contractor)

.....
(Signature of the Authorised representative)
Name
(Official Address)
Designation
Common Seal of the Company.....

WITNESS

.....

4. For M/s

.....
(JV company/Subsidiary company)

.....
(Signature of the Authorised representative)
Name
(Official Address)
Designation
Common Seal of the Company.....

Note:

- 1) Power of Attorney of the executants of this DJU is to be furnished.
- 2) * Strike out, whichever is not applicable.
- 3) ** Copy of priced purchase order for the equipment shall be furnished by contractor.

Signature of authorized signatory.....