

हरियाणा HARYANA

W 452726

## MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding (MOU) made and entered into on the day of **31<sup>st</sup> October 2023**, in Vishakhapatnam.

BETWEEN

**NTPC LIMITED**, a Company incorporated under the Companies Act 1956, having its registered office at NTPC Bhawan, Core-7, Scope Complex, 7-Institutional Area, Lodhi Road, New Delhi-110003 (hereinafter called "NTPC" which expression shall, unless the context otherwise specifies, means and include its successors and permitted assigns) of the First Part.

AND

**National Council for Cement and Building Materials (NCCBM)**, 34 Km Stone, Delhi-Mathura Road (NH-2), Ballabgarh-121004, Haryana, India (hereinafter referred to as "NCCBM-Ballabgarh" which expression shall, unless the context otherwise specifies, mean and include its successors and permitted assigns) of the Second Part.

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PREM CHAND STAMP VENDOR  
Ballabhath

20 OCT 2023



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NTPC and NCCBM-Ballabgarh may be referred to individually as "Party" and collectively as "Parties".

Whereas NTPC Limited is India's premier power generation company, which was set up in 1975 to accelerate power development in India. It is emerging as an 'Integrated Power Major', with a significant presence in the entire value chain of power generation business. The present installed capacity of NTPC is more than 73,000 MW (including JVs & subsidiary company).

NCCBM Established in 1962 as a Society registered under Societies Registration Act, 1860 as Cement Research Institute of India and redesigned as National Council for Cement and Building Materials in April 1985, is an apex body under the administrative control of the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Govt. of India, devoted to Research, Technology Development and Transfer, Project Consultancy, Calibration, Testing & Quality Control, Continuing Education and Industrial Services in the field of Cement and Building Materials Industries. The entire range of NCCBM services are delivered by six Corporate Centres through its four units geographically located in Ballabgarh, Hyderabad, Ahmedabad and Bhubaneswar. The main laboratories of the Council are located at Ballabgarh, about 35 kms south of New Delhi.

Whereas NTPC, on the basis of discussions with NCCBM-Ballabgarh, is desirous of collaborating with NCCBM-Ballabgarh in carrying out the "Condition assessment of civil structures in NTPC power stations situated at different parts of the country" (hereinafter called **the 'Site'**), and NCCBM-Ballabgarh is willing to enter into such MOU with NTPC for its Stations (Sites), as per the scope of the work and other terms detailed hereunder:

Now therefore in consideration of the premises and mutual covenants hereinafter contained, the parties hereto agree as follows:

Two handwritten signatures in blue ink are present. The signature on the left is longer and more stylized, while the one on the right is shorter and more compact.

## **1.0 DEFINITIONS AND INTERPRETATION:**

### **1.1 Definitions:**

When used herein, the defined terms set forth under this shall have the following meanings:

“RCC” means Reinforced Cement Concrete

“Condition assessment” means assessment study of RCC and steel structures based on nondestructive and destructive tests and data analysis.

“Technical specification” means enabling document consisting of detailed methodology with relevant codes which shall form the part of contract document

“Preliminary inspection” means inspection to be carried out by NCCBM-Ballabgarh for preparation of project proposal

“Need - based service as per station/site requirement” (Under Annexure—II) means service to be requisitioned by NTPC Stations (Site) to attend to specific problems related to the structural system.

### **1.2 Interpretation:**

(a) The headings used in the MOU are for convenience only and do not affect the interpretation of this MOU.

(b) Unless the context otherwise requires, words importing the singular include the plural and vice versa.

(c) The terms “clause” or “sub-clause” refers to the specified “clause” or “subclause”, as the case may be, of this MOU.

(d) Annexure to this MOU shall constitute an integral part of this MOU.

## **2.0 OBJECTIVES OF THE MOU:**

The MOU details the terms and conditions, financial arrangements, modalities of the Project, responsibilities and obligations of NTPC and NCCBM-Ballabgarh pertaining



to the Project.

Based on this MOU, NTPC may approach NCCBM-Ballabgarh for condition assessment and related jobs of Concrete/RCC structures in NTPC Power Station/Site (s).

### **3.0 SCOPE OF THE MOU:**

Broad Scope of this MOU covers the condition assessment of Civil structures in NTPC Power Stations spread across different parts of the country and provide recommendations for suitable repair and remedial measures for restoration and rehabilitation of such structures to ensure the structural integrity and restoration of life and health of such affected **Concrete/Reinforced Cement Concrete (RCC) structures.**

The broad Scope of Work is further elaborated in **Annexure-I, Annexure-II, Annexure-III,** and in **Modalities of Project execution and financial arrangements (Clause-5.0) below.**

### **4.0 REPRESENTATIONS AND WARRANTIES:**

Each of the Parties severally represents and warrants to the other as of the date hereof that:

- a) It is permitted by its respective charter and documents bringing it into existence/incorporating documents, to enter into this MOU and is not restrained, prevented, or inhibited by any contract or arrangement to which it is a Party from entering into this MOU or undertaking the obligations herein contained.
- b) Its signatory to the MOU is duly authorized by the Party for and on whose behalf he is signing this MOU to execute the same in a manner binding upon the said Party and all approvals and procedures necessary for vesting such authority in him have been duly obtained and complied with.



- c) It has obtained all corporate authorizations and all other applicable Governmental, statutory and regulatory consents, licenses, authorizations, waivers, or exemptions required to empower it to enter into this MOU and to perform its obligations under this MOU.

**5.0 MODALITIES OF PROJECT EXECUTION AND FINANCIAL ARRANGEMENTS:**

NCCBM-Ballabgarh shall undertake assessment study as per Annexure- I & II. Detailed modalities are as follows:

**5.1 Part 1a and 2 a. of Annexure-II**

For preliminary visit Scientist(s) shall be deputed to NTPC site based on the specific request from the Site/Head of O&M/C&M/Station. The visiting charges will be as per Table-I below:

Table-I: Details of Preliminary Inspection Charges

a)	Visit Charges for inspection (Per day per scientist)	₹30,000/- (Applicable Taxes extra) (Visit to be conducted by Min. Scientist -B level)
b)	Basis of Visit Charges	Actual number of day inclusive of the day of travel (from the date of leaving their place of residence till date of return to the respective place of residence)
c).	Contingency Per visit	NA
d).	Validity of the Scientist Charges & Contingency per visit	Effective from the date of signing of MOU and shall be valid for the entire duration of MOU including the extension period.

In addition to visiting charges the travel of NCCBM scientists by air (Economy class) or other applicable modes of travel and connecting road travel from the airport to the site, local hospitality including transport, boarding, and lodging shall be provided by NTPC. Visiting Charges will be as per actual number of




days including the days of travel and these charges shall be as per CSIR norms and uniformly applicable to all such assignments.

Scientist(s) shall carry out the preliminary inspection and the visit charges including the air/train ticket for travel shall be arranged by NTPC prior to the visit. NTPC shall make the necessary arrangements required for inspection.

In case, the to-and-fro conveyance between residence/NCCBM office and airport/railway station is arranged by NCCBM then the charges as per actuals shall be reimbursed by NTPC.

Site visit charges shall be paid to the institute against an invoice.

For advance payments, no security (eg. Bank Guarantee, etc.) shall be provided by NCCBM.

Payment shall be in the form of a Demand Draft or by online transfer to the bank account of NCCBM-Ballabgarh.

### **5.2 Part 1b,c,d ,e and 2 b,c,d,e of Annexure-II**

Detailed investigation shall be carried out upon approval from NTPC (Site) of the Project proposal submitted by NCCBM-Ballabgarh. The Project proposal shall have detailed scope, the extent and type of tests to be carried out, input data to be furnished by NTPC, charges for detailed investigation and Project report, duration of the Project and terms and conditions. Post repair assessment / investigations, if required, will be carried out as separate Project based on request from NTPC.

### **5.3 Time Schedule for Report Submission (For scope as per Clause No. 5.1)**

NCCBM to visit the site for the **preliminary** assessment as per MOU, preferably within **two** weeks time from the date of receipt of payment from NTPC and submit the report within **four** weeks from the Site visit.



## 6.0 TERM, EXTENSION AND TERMINATION:

### 6.1 Term and extension

This MOU shall come into effect from the date of its signing and will remain in force for a period of **2 Years with a provision of extension for another 2 years**. Its validity can be extended by mutual agreement between both parties.

### 6.2 Termination

This MOU shall terminate:

- (a) By mutual written consent of the Parties.
- (b) If either of the Parties shall have committed or knowingly permitted a material breach of any of the conditions herein contained, the Party not in breach (the "Non defaulting Party") may serve on the Party in breach ("the Defaulting Party") a notice specifying the material breach in writing and requiring it within ninety (90) days to make good the same in the case of a material breach capable of being made good, or to promptly pay to the Non-defaulting Party reasonable compensation in the case of a material breach not capable of being good and if the Defaulting Party shall not within ninety (90) days aforesaid comply with the said notice, then on the expiry of the said notice period, the non-defaulting party shall have a right, besides other remedies to terminate this MOU.
- (c) No right or remedy contained in this MOU is intended to be exclusive of any other right or remedy and each and every right or remedy given herein shall be cumulative and in addition to any other right or remedy now or hereafter existing in law or equity.
- (d) It is expressly agreed that the provisions of clause 7 pertaining to confidentiality shall survive up to two years after the termination or expiration of this MOU.
- (e) Upon expiration or termination of this MOU for any reason whatsoever it shall not automatically release the other Party hereto from any liability





and/or obligations which at the time of such expiration or termination has already accrued to the other Party, nor will it affect in any way the survival of any other right, duty or obligation of any Party hereto which is expressly stated elsewhere in this MOU to survive such expiration or termination.

## 7.0 CONFIDENTIALITY:

The parties to the extent of their respective rights to do so, shall exchange such technical information and data as are reasonably required of each party to perform its obligations and responsibilities under this MOU. Each party agrees to keep in confidence and to use the same degree of care as it uses with respect to its own proprietary data to prevent the disclosure to third parties of all technical information, data and confidential business information (hereinafter called "Data) received by one Party from the other Party.

Data exchanged by the parties under this MOU shall not be used for any other purpose, except the purpose set out under this MOU.

Exchange, use and maintaining confidentiality of data shall be mutually discussed and agreed to by the parties.

The preceding provision of confidentiality and restrictions on use of data shall not apply to:

- (a) Information in the public domain or information which subsequently enters into public domain without committing breach of this Article.
- (b) Information in possession of the party at the time of disclosure and which was not acquired, directly or indirectly from the other party.
- (c) Information that a party is required to disclose under law, rules, or regulations to any judicial, regulatory or other authorities.
- (d) Information provided to Consultants/advisors (from Government or non-government agencies from India and abroad,), provided they in turn sign a similar undertaking of confidentiality.



## **8.0 AMENDMENTS :**

No amendment or modification to this MOU shall be valid unless the same is made in writing by both the parties or their authorized representatives and specifically stating the same to be an amendment to this MOU. The modifications/changes shall be effective from the date on which they are made/executed unless otherwise agreed to.

## **9.0 ASSIGNMENT :**

This MOU would be binding upon and would inure to the benefit of the Parties, their successors and permitted assigns and neither this MOU nor any interest herein nor any rights or obligations hereunder may be assigned or transferred in whole or in part by any Party without the prior written consent of the other Party.

## **10.0 GENERAL PROVISIONS:**

In case of extreme emergencies of structural failures at Site, NCCBM-Ballabgarh shall carry out inspection without waiting for receipt of charges for inspection and suggest investigations to be carried out at the Site through appropriate Project proposal with cost (payable to NCCBM) without any delay to avoid further deterioration of the structures. Upon approval from NTPC, NCCBM will carry out the investigations.

NCCBM will always strive to meet the requirement of NTPC expeditiously subject to the commitments on hand and availability of logistics support.

During the course of this MOU whatever content, Project Report, proposal, design is/are developed, made or created ('Works') by NCCBM-Ballabgarh for NTPC, all the intellectual property rights therein, if any, will be jointly held by NCCBM-Ballabgarh and NTPC.

The publications, if any, made based on methodologies developed would be in the names of NCCBM-Ballabgarh scientists. The support of NTPC will be duly acknowledged. The names of Stations/Sites will not be disclosed in the publication except with the written permission of NTPC.



## 11.0 ARBITRATION:

In the event of any dispute or difference arise between the parties thereto, such dispute or difference shall be resolved amicably by mutual consultation by the parties, failing which such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No 05/0003/2019-FTS-10937 dated 14.12.2022, and any other instructions/guidelines issued subsequently from time to time.

## 12.0 FORCE MAJEURE:

- (a) Neither of the parties hereto shall be considered in default in performance under the contract if such performance is prevented or delayed by events such as (including but not limited to) war, civil war, (whether declared or not) civil commotion, insurgency, hostilities, revolution, riots, strikes, lockouts, conflagration, epidemics, accidents, fire, flood, droughts, earthquake or any act of God or causes beyond the reasonable control of the party affected.
- (b) Upon the occurrence of any such event of Force Majeure, the affected party shall give notice in writing within a maximum period of five (5) working days to the other party, specifying the nature of the event, the effect of the event on the affected party's performance and the estimated duration of the event.
- (c) Soon after the causes of force majeure has ceased, the affected party whose ability to perform its obligation has been affected shall notify the other party within a maximum period of ten days of such cessation and of the actual delay occurred in the affected activity, adducing necessary evidence in support thereof. From the date of occurrence of Force majeure, the obligations of the party affected shall be suspended during the continuance of any disability resulting there from having been removed and the agreed time of completion of the respective obligation under this MOU shall stand extended by a period equal to the period of delay occasioned by such events.



(d) Should one or both parties be prevented from fulfilling the obligations by reason of force majeure lasting for a period more than one month, the two parties shall consult each other and decide on the future course of action. If the Parties cannot mutually decide the future course of action, the particular job for that site shall stand terminated. In case of termination of work due to force majeure conditions, NTPC shall pay NCCBM towards all work done by NCCBM on their part up to the date of happening of the force majeure events. NCCBM on their part will submit the report of the project upto that stage with available data, analysis result etc.

(e) No party shall be liable for any claim for any loss, damage, or compensation whatsoever arising out of failure to carry out the terms of this MOU to the extent such failure has been caused or contributed to by one or more events of Force Majeure.

(f) Where such impossibility of performance is partial, the said Party shall not be relieved of the performance of that part which is not so rendered impossible.

### **13.0 GOVERNING LAW AND JURISDICTION:**

This MOU shall be governed by and construed in accordance with the laws of India and the Courts of Delhi shall have exclusive jurisdiction in all matters under this MOU.

### **14.0 MISCELLANEOUS:**

#### **14.1 Partial Invalidation**

If by virtue of any law/statute/order/decision /judgment of any Court or other tribunal of competent jurisdiction any provision this MOU is declared invalid or unenforceable, it shall not affect the validity or enforceability of the remainder of this MOU and the remaining terms of the MOU shall remain in full force and effect.

#### **14.2 Waiver**

No waiver of any breach of any provision of this MOU shall constitute a waiver of any prior, concurrent or subsequent breach of the same or any other provisions hereof, and no waiver shall be effective unless made in writing and



signed by an authorized representative of the waiving Party.

#### **14.3 No Partnership/ Agency and use of Influence and Controls**

It is clearly understood and agreed by the parties that nothing contained in this MOU shall constitute or be deemed to constitute a partnership or association of persons between the Parties, and no Party shall hold himself out as an agent for the other Party, except with the express prior written consent of the other Party. If any Party acts in violation of this clause, the said Party hereby agrees to indemnify, defend and hold harmless the other Parties from and against all claims, demands, losses, damages, liabilities, lawsuits and other proceedings, judgments and awards, the reasonable costs and expenses (including, but not limited to, reasonable fees for attorneys) arising directly or indirectly, in whole or in part, out of breach of this clause by such Party, whether committed by the indemnifying Party, its employees, agents, successors or assigns.

#### **14.4 Entire MOU**

Except as otherwise agreed among the Parties, this MOU constitutes the entire MOU of the Parties as to its subject matter and supersedes any previous understanding or MOU, whether written or oral, on such subject matter.

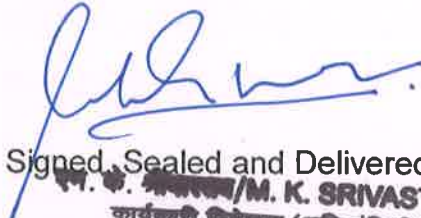
#### **15.0 NOTICE:**

**Any notice to be given under this MOU shall be in writing and shall be deemed to have been duly and properly served upon Parties hereto if delivered against acknowledgement or by e- mail /registered mail with acknowledgement due, addressed to the Parties herein at the following addresses or such changed addresses as will be duly notified by the Parties from time to time:**


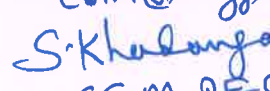



In witness thereof, the parties hereto have executed this Memorandum of Understanding through their authorized representatives.

For NTPC	For NCCBM- Ballabgarh
Executive Director (Engg) NTPC Ltd Fourth Floor, EOC, A-8A, Sector-24, NOIDA, Uttar Pradesh, India e-mail	Director General NCCBM - Ballabgarh Ballabgarh – 121004 Haryana E-mail-dg@ncbindia.com



  
Signed, Sealed and Delivered  
एन. सी. सी. लिमिटेड / M. K. SRIVASTAVA  
कार्यकारी निदेशक (अभियांत्रिकी)  
Executive Director (Engg.)  
Signature: एन. सी. सी. लिमिटेड / NTPC LIMITED  
A-8A, Sector-24, NOIDA-201301 (NOIDA)

Name: M.K. SRIVASTAVA  
Seal:  
Place: VISHAKHAPATNAM.  
Date: 31.10.2023.

Witness: 1.   
(R. SARANGAPANI)  
CGM (SM Engg), NTPC  
Witness: 2.   
S. Khadanga  
CGM PE-CIVIL

  
Signed, Sealed and Delivered  
डॉ. एल पी सिंह | Dr. L P Singh  
महानिदेशक | Director General  
Signature: एन. सी. सी. बी. एम. | N. C. C. B. M.  
बल्लभगढ़ - 121004 | Ballabgarh-121004

Name: L.P. SINGH  
Seal:  
Place: VISHAKHAPATNAM  
Date: 31.10.2023

Witness: 1.   
P.N. DISHA  
JD, HOC-CDR, NCCBM  
Witness: 2.   
NITIN CHOWDHARY  
GROUP MANAGER & PL-SAR,  
NCCBM.

## Annexure-I

The broad scope of work/services covered under this MOU shall consist of the following including testing, field study and preparation of Scope of Work, Technical Specification and providing methodology for repair and remedial works (if found necessary):

1. Condition assessment of all RCC/Concrete structures, Chimney, Coal and ash silo, Coal Bunker, (Nearing or more than 25 years) and recommendation for repair/rehabilitation of structures to mitigate problems surfaced during study.
2. Environmental /corrosion effect assessment on structures (Nearing or more than 10 years) primarily located near coastal area and remedial measures and recommendation to mitigate problems surfaced during study.
3. Study and remedial measures of structures under heavy distress due to reasons not attributable to ageing.
4. Study and failure analysis of damages caused by unforeseen incidents eg fire, collapse of structures etc. and formulation of remedial specification/report.



## Annexure – II

### Project Modalities

S.No.	Job Description
1.	<b>Condition assessment of Concrete and RCC Structure.</b>
	<ul style="list-style-type: none"><li>a. Preliminary inspection and finalization of scope for assessment study with project proposal.</li><li>b. Assessment study</li><li>c. Submission of project report</li><li>d. Preparation of technical specifications, and detailed methodology for repair</li><li>e. Expertise/visit during repair.</li><li>f. Post repair assessment/ investigations, if required.</li></ul>
2.	<b>Need based service as per station/site requirement.</b>
	<ul style="list-style-type: none"><li>a. Preliminary inspection and finalization of scope for assessment study with project proposal.</li><li>b. Assessment study</li><li>c. Submission of project report.</li><li>d. Preparation of technical specifications and detailed methodology for repair.</li><li>e. Expertise/visit during repair.</li><li>f. Post repair assessment/ investigations, if required.</li></ul>





## Annexure – III

### 1. Main Plant Area

S.No	Area
	<b>Turbine Generator (TG)</b>
1	TG foundation, BFP foundation, TG Hall structures <b>including Roof</b> , TG House column foundation
	<b>Boiler &amp; Bunker</b>
1	Boiler Supporting structure
2	Boiler column foundation
3	Mill foundations
4	PA fans foundation
5	FD fans foundations
6	ID fans foundations
7	Bottom ash hopper structure
8	Bunker bay supporting
9	Coal Bunker including hopper
10	Bunker column foundation
11	ESP and Duct Supporting
12	ESP Column foundation
13	Chimney shell, lining & hopper
14	Coal and Ash Silo

### 2. Balance of Plant area

S.No	Area
1	Crusher House, Conveyor Galleries, Track hopper, Wagon Tippler Structure, Transfer points, Tunnel etc.
2	Cooling Tower, Intake well Raw water pump house, Storage tanks, Clarifoculators, Fore bay, CW pump house, Make up water Pump house and DM plant, Softening plant, Chemical houses and fuel handling system civil & structures, Water Channels

3	RCC ducts, various RCC Water Tanks
4	Drains and trenches
5	Ash Dyke Structures, Spill way, Ash water pump house, Ash water recirculation pump house, Ash Slurry Pump House, Dry Ash Extraction and Silo, Storage Tanks, Compressor House, Trestles for transportation of Dry Ash etc.
6	All EOT Crane girders
7	All Super structures
8	Bridges

**3. Gas station specific critical structures:**

- a. WHRB with duct and structure
- b. Cross country pipelines (Fuel/Water) with support
- c. Naptha Tank
- d. Transmission line submerged structures near the plant boundary
- e. All major equipment structures and structures which are in open space of critical equipment's

Note: The list shown above is an indicative list. Any jobs beyond this Test Table would also come under the purview of this MOU.

X-X-X-X-X-X-X X-X




## Nodal Officers

### NCCBM

1. Sh P.N. Ojha, Joint Director & Head of Centre - CDR
2. Sh Nitin Chowdhary, Group Manager & PL-SAR, CDR

### NTPC

1. Sh R Sarangapani, CGM (Station Engg. & R&M)
2. Sh S G Dhabu, AGM (Station Engg.)

