



BHARAT HEAVY ELECTRICALS LIMITED
PROJECT ENGINEERING MANAGEMENT, NOIDA

Date-29-Oct-25

CORRIGENDUM- 04

PROJECT	:	3x800 MW NLC TALABIRA TPP (NTTPP)
PACKAGE	:	Induced Draft Cooling Towers (IDCT)
ENQUIRY NO	:	77/25/6133/AMI dated 16.09.2025
SUBJECT	:	Technical amendment 01

Type of Corrigendum			
Technical Corrigendum -	☐	Commercial Corrigendum -	☒

Bidders are requested to note the following

1. Technical amendment 01 to the Technical Specification is enclosed

All the other terms and conditions of the tender enquiry remain unchanged. All the bidders are requested to quote accordingly.

Yours faithfully,

For and on behalf of BHEL

Amit Kumar
Manager/BOP

	TECHNICAL SPECIFICATIONS INDUCED DRAFT COOLING TOWER	SPECN. NO.:	PE-TS-511-165-W001		
	AMENDMENT NO. 1			DATE:	29.10.2025

Bidder to note that following Field bore log details on IDCT 1, 2 & 3 locations are added in the " BOOK 2 OF 2 (CIVIL SPECIFICATION) " of Technical specification (PE-TS-511-165-W001) . Bidder to also consider these Field bore log details.

Field bore log details (BH-No. -182) on IDCT-1 location is attached.

Field bore log details (BH-No. -178) on IDCT-2 location is attached.

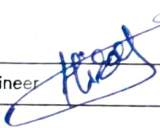
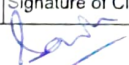
Field bore log details (BH-No. -184) on IDCT-3 location is attached.

Site Coordinate
- N 2124 E 1218
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BH:-182

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - NTTPP	Started on : -17/10/2025
Method of Boring : - Hydraulic Drilling	Completed on : -18/10/2025
Location : - Hirma	Chainage :
BH-No. - 182	Water Table :
Depth of Termination : -25.00mt	Reference Level : 199.90 m
Casing : -10.50mt	Co-ordinates : -E-0809018, N-2409974

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
0.0m	Yellowish Brown fine to v-fine grained silty clay										
0.0	← Filledup soil → (0.0m to 0.40m)		0.0m	DS	-	-	-	-			
1.00m	Brownish Reddish fine to fine grained silty Sand and clay with some fine gravels		1.00m	SPT	1	1	2	3			
2.00	← DO →		2.00m	SPT	2	2	3	5			
2.50	← DO →		2.50	UDS	-	-	-	-			
3.00	← DO →		3.00	SPT	3	4	6	9			
3.50	← DO → (0.40m to 3.90m)		3.50	UDS	-	-	-	-			
4.00	Brown Reddish fine v-fine grained silty clay and sand with some fine gravels		4.00	SPT	4	5	7	12			
4.50	← DO →		4.50	UDS	-	-	-	-			
5.00	← DO → (3.90m to 5.40m)		5.00	SPT	4	7	9	16			
Signature of Site Engineer 											
Signature of Client 											

HIRAL
KCT

G. SANKET
KUMAR

NLCIL

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - **NTTPP** Started on : - **17/10/2025**
 Method of Boring : - **Hydraulic Drilling** Completed on : **18/10/2025**
 Location : - **Hisma** Chainage :
 BH-No. - **182** Water Table :
 Depth of Termination : - **25.00m** Reference Level : **199.9m**
 Casing : Co-ordinates : **N 2124 E 1218**

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
6.00	Yellowish Brown fine to fine grained silty clay with Sand		6.00m	SPT	5	6	9	15			
6.50	← DO →		6.50m	UDS	-	-	-	-			
7.00	← DO →		7.00m	SPT	3	6	10	16			
7.50	← DO →		7.50m	UDS	-	-	-	-			
8.00	← DO →		8.00	SPT	4	5	9	14			
8.50	← DO →		8.50	UDS	-	-	-	-			
9.00	← DO →		9.00	SPT	3	4	6	10			
9.50	← DO →		9.50	UDS	-	-	-	-			
10.00	← DO →		10.00	SPT	4	6	8	14			
11.00	(5.40m to 11.70m) Yellowish Brown fine to fine grained silty Sand with some clays		11.00	UDS	-	-	-	-			
11.50	← DO →		11.50	SPT	7	8	12				
12.50	← DO →		12.50	UDS							
13.00	← DO →		13.00	SPT	5	10	12	22	-	-	NR/UDS
14.00	← DO →		14.00	SPT	6	11	14				
14.50	← DO →		14.50	UDS	7	12	18				
15.00	← DO →		15.00	SPT	12	16	22				
				SPT	14	24	35				NR/UDS

Signature of Site Engineer

Signature of Client

G. SANKET KUMAR

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - NTTP

Started on : - 17/10/2025

Method of Boring : - Hydraulic Drilling

Completed on : - 18/10/2025

Location : - Hiema

Chainage :

BH-No. - 182

Water Table :

Depth of Termination : - 25.00m

Reference Level : 199.9 m

Casing :

Co-ordinates : N 2124 E 1218

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
16.00	DO		16.00	SPT	17	32	50	82			
16.50	DO		16.50	SPT	25	$\frac{50}{6cm}$	-	>100			
17.50	DO		17.50	SPT	30	$\frac{50}{7cm}$	-	>100			
18.00	DO		18.00	SPT	34	$\frac{50}{5cm}$	-	>100			
19.00	DO		19.00	SPT	45	$\frac{50}{4cm}$	-	>100			
19.50	DO		19.50	SPT	40	$\frac{50}{5cm}$	-	>100			
20.50	DO		20.50	SPT	40	$\frac{50}{8cm}$	-	>100			
21.00	DO		21.00	SPT	80	$\frac{50}{5cm}$	-	>100			
23.00	Gray blackish fine to coarse grained weathered fractured Sand Stone Soft Rock		23.00	ROCK	-	-	-	-	26%	8.66%	
25.00	DO		25.00	ROCK	-	-	-	-	92.66%	46%	

Signature of Site Engineer

Signature of Client

HIRAL
KCTG. SANKET
KUMAR
BHEL

NLCL

D:-		Bore Hole No. - 182																				CR%	RQD%
22.4	Sr. No.	1	2	3	4	5																	
1.70	cm	5	6	8	7	13																	
23.5	Sr. No.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21						
1.70	cm	7	6	7	3	8	9	14	11	3	9	10	3	11	8	7	23						
25.00	Sr. No.																						
	cm																						
	Sr. No.																						
	cm																						
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18/10/2015

G. SANKET KUMAR

NLC12

BH:-178

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K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project :- <u>NTTPP</u>	Started on : - <u>25/10/25</u>
Method of Boring : - <u>Hydraulic Drilling</u>	Completed on : - <u>26/10/25</u>
Location : - <u>Himad</u>	Chainage : <u> </u>
BH-No. - <u>178</u>	Water Table : <u> </u>
Depth of Termination : - <u>21.00mt</u>	Reference Level : - <u>198.73</u>
Casing : <u>14.00mt</u>	Co-ordinates : <u>N-2410287, E-808804</u>

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
0.00	Yellowish Brown fine to v-fine grained silty clay etc.										
0.00	← filled up soil → (0.00m to 0.30m)		0.00m	DS	-	-	-	-			
1.00	Yellowish gray fine to v-fine silty clay		1.00m	SPT	1	1	2	3			
2.00	← DO →		2.00	SPT	1	1	2	3			
2.50	← DO → (0.30m to 2.90m)		2.50	UDS SPT	1	2	2	4	-	-	NR/UDS
3.00	Yellowish Brown fine to -v-fine grained silty clay		3.00	SPT	2	3	3	6			
3.50	← DO →		3.50	UDS	-	-	-	-			
4.00	← DO →		4.00	SPT	4	5	6	11			
4.50	← DO →		4.50	UDS	-	-	-	-			
5.00	← DO →		5.00	SPT	4	5	7	12			
5.50	← DO →		5.50	UDS	-	-	-	-			
6.00	← DO →		6.00	SPT	4	6	8	14			
6.50	← DO → (2.90m to 6.80m)		6.50	UDS	-	-	-	-			

Signature of Site Engineer

Signature of Client

Alsat
26/10/25

San
A. SANJEEV KUMAR
BAHEL

2

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - NTTP	Started on : - 25/10/25
Method of Boring : - Hydraulic Drilling	Completed on : - 26/10/25
Location : - Hitna	Chainage : -
BH No. - 178	Water Table : -
Depth of Termination : - 21.00 mt	Reference Level : - 138.72
Casing : - 14.00 mt	Co-ordinates : - N-2410284, E-808804

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
7.00	Yellowish Brown fine to v-fine grained silty clay with some fine gravels.		7.00	SPT	6	9	10	19			
7.50	DO		7.50	UDS	-	-	-	-			
8.00	DO		8.00	SPT	4	5	7	12			
8.50	DO		8.50	UDS	-	-	-	-			
9.00	DO		9.00	SPT	5	12	19	31			
9.50	DO		9.50	UDS	-	-	-	-			
10.00	DO		10.00	SPT	4	6	7	13			
11.00	(6.80m to 10.60m) Yellowish Brown fine to fine grained silty sand with some clays and gravels.		11.00	UDS	-	-	-	-			
11.50	DO		11.50	SPT	11	12	34	46			
12.50	(10.60m to 12.80m)		12.50	UDS	80	-	-	2100			
				SPT	4 cm						
13.00	Yellowish Brown fine to coarse grained sand and Balde's		13.00	SPT	80	-	-	2100			
				DS	5 cm						
14.00	DO		14.00	SPT	70	-	-	2100			
				DS	3 cm						
14.50	DO		14.50	SPT	80	-	-	2100			
	(12.80m to 15.00m)			DS	4 cm						

Signature of Site Engineer

Signature of Client

Hitna
26/10/25

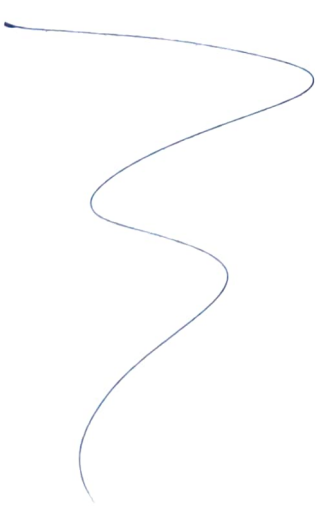
Sanjiv
G. SANKETRAM

NLCH

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - NTTP
 Method of Boring : - Hydraulic Drilling
 Location : - Himda
 BH-No. - 178
 Depth of Termination : - 21.00m
 Casing : - 14.00m

Started on : - 25/10/25
 Completed on : - 26/10/25
 Chainage :
 Water Table :
 Reference Level : - 198.22
 Co-ordinates : 18 24 02.82 E 80 8804

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
16.50	Gray blackish fine to coarse grained weathered fractured sand stone with soft rock.		16.50	Rock	-	-	-	-	28.66%	18.1	
18.00	← 20 → (15.00m to 18.30m)		18.00	Rock	-	-	-	-	39.33%	11.33	
19.50	Redish black fine to coarse weathered fractured soft rock.		19.50	Rock	-	-	-	-	45.33%	14.66	
21.00	← 20 →		21.00	Rock	-	-	-	-	96.1	90.1	
											
Signature of Site Engineer					Signature of Client						

Himda
 26/10/25

G. SANKET
 RUMAR
 BHEL

NLCIL

D:- Bore Hole No. - 178

[illegible]

Sun
G. SAIKET
KUMAR
BHIL

BH:-184

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : - <u>NTTPP</u>	Started on : - <u>10/10/2025</u>
Method of Boring : - <u>Hydraulic Drilling</u>	Completed on : - <u>11/10/2025</u>
Location : - <u>Hizma</u>	Chainage :
BH-No. - <u>184</u>	Water Table :
Depth of Termination : - <u>25.00m</u>	Reference Level : - <u>198.79</u>
Casing : - <u>12.50m</u>	Co-ordinates : <u>N-24.09928, E-808770</u>

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
0.0m	Yellowish Brown fine to v-fine, silty clay and fine gravels etc.										
0.0m	← filled up soil → (0.0m to 0.40m)		0.0m	DS	-	-	-	-			
1.0m	Yellowish Brown fine to v-fine, silty clay and fine gravels		1.0m	SPT	2	1	3	4			
2.0m	← DO →		2.00m	SPT	2	3	4	7			
2.50m	← DO →		2.50m	UDS	-	-	-	-			
3.00m	← DO →		3.00m	SPT	3	5	6	11			
3.50m	← DO → (0.40m to 3.90m)		3.50m	UDS	-	-	-	-			
4.00m	Yellowish Brown fine to v-fine, silty clay and sand with some fine gravels		4.00m	SPT	4	5	7	12			
4.50m	← DO → (3.90m to 4.80m)		4.50m	UDS	-	-	-	-			
5.00m	Yellowish Brown fine to v-fine grained sand with some clay and gravels.		5.00m	SPT	5	5	9	14			
5.50m	← DO →		5.50m	UDS	-	-	-	-			
6.00m	← DO → (4.80m to 6.90m)		6.00m	SPT	6	12	13	25			

Signature of Site Engineer

Signature of Client

Hizma
11/10/25

AP

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : <u>NTTPP</u>	Started on : <u>10/10/2025</u>
Method of Boring : <u>Hydraulic Drilling</u>	Completed on : <u>11/10/2025</u>
Location : <u>Hizma</u>	Chainage :
BH-No. <u>184</u>	Water Table :
Depth of Termination : <u>25.00mt</u>	Reference Level : <u>-198.79</u>
Casing : <u>-12.50mt</u>	Co-ordinates : <u>N-2409928, E-808770</u>

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
6.50m	Yellowish Brown fine to v-fine, silty clay and fine gravels		6.50m	UDS SPT	6	9	11	20	-	-	NR/UDS
7.00m	← DO →		7.00m	SPT	5	5	8	13			
7.50m	← DO →		7.50m	UDS SPT	4	6	7	13	-	-	NR/UDS
8.00m	← DO → (6.90m to 8.40m)		8.00m	SPT	5	6	8	14			
8.50m	Yellowish Brown fine to v-fine grained Silty Sand with some clays		8.50m	UDS SPT	5	6	9	15	-	-	NR/UDS
9.00m	← DO → (8.40m to 9.40m)		9.00m	SPT	5	6	6	12			
9.50m	Yellowish Brown fine to fine grained Sand fine gravels		9.50m	UDS SPT	5	9	9	18	-	-	NR/UDS
10.00m	← DO → (9.40m to 10.40m)		10.00m	SPT	15	$\frac{70}{10cm}$	-	>100			
11.00m	Yellowish Brown fine to M-grained Sand and Gravels		11.00m	UDS SPT	17	$\frac{50}{8cm}$	-	>100	-	-	NR/UDS
11.50m	← DO →		11.50m	SPT	16	$\frac{70}{9cm}$	-	>100			
12.50m	← DO →		12.50m	UDS SPT DS	20	$\frac{70}{7cm}$	-	>100	-	-	NR/UDS SPT
13.00m	← DO →		13.00m	SPT	24	$\frac{50}{7cm}$	-	>100			

Signature of Site Engineer

Signature of Client

Hizma
11/10/25

AK

BH:-184

K.C.T CONSULTANCY SERVICES, AHMEDABAD

Project : NTTPP	Started on : 10/10/2025
Method of Boring : - Hydraulic Drilling	Completed on : 11/10/2025
Location : - Himra	Chainage :
BH-No. - 184	Water Table :
Depth of Termination : - 25.00mt	Reference Level : 198.79
Casing : - 12.50mt	Co-ordinates : N-2409928, E-808770

Depth in m	Description	Drill Run Time	Depth of Sample in m	Types of Sample	N1	N2	N3	N Value	C.R. %	RQD	Remark
14.00m	DO		14.00m	SPT	20	70	—	>100			
14.50m	DO		14.50m	SPT	21	70	—	>100			
15.50	DO		15.50m	SPT	22	70	—	>100			
16.00m	DO		16.00m	SPT	30	70	—	>100			
17.00	DO		17.00m	SPT	80	70	—	>100			
17.50	DO		17.50m	DS	7cm	—	—	>100			
18.50	DO		18.50	SPT	80	—	—	>100			
19.00m	DO		19.50	SPT	80	—	—	>100			
(10.40m to 19.70m)			20.00m	SPT	80	—	—	>100			
20.00m	Yellowish Brown fine to V-fine grained silty sand		20.00m	SPT	80	—	—	>100			
21.00	DO		21.00m	SPT	90	—	—	>100			
21.50	DO		21.50m	SPT	90	—	—	>100			
22.50	DO		22.50m	SPT	80	—	—	>100			
23.00	DO		23.00m	SPT	80	—	—	>100			
(19.70m to 23.10m)			24.00m	Rock	—	—	—	—	97.77%	97.77%	
24.00	Gray blackish fine to coarse grained whetted fractured Sand stone		25.00	Rock	—	—	—	—	95%	90%	
25.00	DO										

Signature of Site Engineer

Signature of Client

Hydral
11/10/25

Hydral

D:- Bore Hole No. - 184																		CR%	RQD%
23.10	Sr. No.	1	2	3	4													88	97.77%
1.40	cm	19	17	15	37													0.90	
24.00	Sr. No.	5	6	7	8													95	95.1%
1.40	cm	5	55	20	15													1.00	
25.00	Sr. No.																		
	cm																		
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