

# FIELD QUALITY PLAN

for

## CABLING

(POWER & CONTROL CABLES)



NTPC - NORTH KARANPURA (3 X 660 MW)

NTPC DOC. NO. : 4410-001-215-QVE-G-066A




**BHARAT HEAVY ELEC**  
**POWER SECTOR - EA**  
**KOLKATA - 700091**

Certification signature: Digitally signed by Kailash  
<kcbcdwal@ntpc.co.in> Date: 2010.03.17  
13:37:17 IST  
Reason: I  
Location: NTPCEOC

DOCUMENT NO. : QPE:NKP:660:EL:61  
REV No.: 00

# ENDORSEMENT SHEET FOR RFQP

## REFERENCE FIELD QUALITY PLAN ( RFQP )

TO BE FILLED IN BY SUPPLIER AT THE TIME OF SUBMISSION :		To be filled in by NTPC	
PROJECT NAME	NTPC - NORTH KARANPURA	REVIEW & ENDORSEMENT BY NTPC	
CONTRACT NO.:	4410-001	PROJECT SPECIFIC QP No. ALLOTMENT	
MAIN SUPPLIER	BHEL	<b>4410-001-215-QVE-G-066A</b>	
MANUFACTURER WORKS & ADDRESS	BHEL	Rev. No.: 00 Date: 25.01.17	
ITEM / EQUIPMENT / SYSTEM / SUB-SYSTEM DETAILS i.e. MODEL TYPE/ SIZE/RATING etc.	<b>RFQP FOR CABLING (POWER &amp; CONTROL CABLES AND ACCESSORIES UPTO 33KV)</b>	(TICK APPLICABLE)	
PROJECT SPECIFIC DOC. No. ALLOTMENT	QPE:NKP:660:EL:61, REV 00		
APPROVED DOC.No. <b>RFQP/SFQP/RFQP/ SFQP</b>	0000-999-QOE-1-004, REV00	The QP is endorsed for this project without any change.	
Confirmation by Main Supplier (TICK WHICHEVER APPLICABLE)			
I. That the item/component is identical to that considered for QP approval. OR II. That there are minor changes in the item/component with respect to that considered for QP approval, III. That there are minor changes in the item/component with respect to that considered for QP approval, however the same affect the QP slightly as indicated below / in attached sheet.		✓ The QP is endorsed for this project with change as indicated  DISTRIBUTION OF ENDORSEMENT OF A) RFQP/SFQP: 1. MAIN SUPPLIER (WITH A COPY OF QP) 2. MANUFACTURER 3. RIO 4. CQA-SPL 5. CQA-O/C B) RFQP/SFQP: 1. MAIN SUPPLIER (WITH A COPY OF QP) 2. MANUFACTURER 3. CQA-O/C	
<b>CHANGES EFFECTED : NIL</b>			
 Digitally signed by A. S. Bhatnagar DN: cn=A. S. Bhatnagar, o=Indian Railways, c=IN email=a.s.bhatnagar@railways.gov.in, c=IN Date: 2017.01.25 11:38:35 +05'30'		SIGNATURE	
SIGN: (Manufacturer)		NTPC (Reviewed/Approved by/Date & Seal)	

SYSTEM EQUIPMENT: POWER & CONTROL CABLES AND ACCESSORY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: IS1255-1983 AND NTPC TECHNICAL SPECIFICATION					REVISED BY: LJ SINGH VIKRAM TALWAR S.D. SINGH O.P. NIRANJAN		APPROVED BY UR KISHORE
OP NO.: 0008-999-QO E-1-104 REV. NO.: 00 DATE: 26/03/08 PAGE: 1 OF 6 VALID UPTO: 25/03/11		CHARACTERISTICS / INSTRUMENTS	CLASS OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	REMARKS	
1.	2.	3.	4.	5.	6.	7.	8.		
1	RECEIPT & STORAGE RECEIVING INSPECTION A) COMPLETENESS OF DOCUMENTS B) CABLES ARE RECEIVED AS PER MDCC / CHP C) STRAIGHT THROUGH JOINTS & TERMINATION KITS		C	V	100%	DELIVERY CHALLAN	MDCC/CHP PACKING LIST OF DRUMS	MAIN CONTRA CTOR PERFOR MA	
1.1	VISUAL EXAMINATION A) DAMAGE TO DRUMS B) THEFT		C	V	100%	DRUMS ARE NOT DAMAGED	DRUMS ARE NOT DAMAGED	-DO-	
1.2	PROPER STORAGE	CHECK FOR PROPER STORAGE LEVEL "B"	C	V	100%	IS 1255 CL. 7.3	CABLES DRUMS ARE PLACED ON RAISED PLATFORM, HARD & WELL DRAINAGE SURFACE	-DO- IN NO CASE DRUMS SHALL NOT BE STORED IN FLAT LIE WITH FLANGE HORIZONTAL	
1.4	TRANSPORTATION TO ERECTION SITE		C	V	100%	MECHANISED SYSTEM	MECHANISED SYSTEM ENSURE SAFETY OF DRUMS & PERSONNELS		
2.0	ERECTION		B	V	100%	APPROVED CABLES SCHEDULE	APPROVED CABLES SCHEDULE	DO-	
2.01	FOR H T CABLE:- SIZE OF CABLE/ ROUTE LENGTH	V	B	V	100%	APPROVED CABLES SCHEDULE	APPROVED CABLES SCHEDULE	CABLE LENGTH IS TO BE PLANNED IN SUCH A WAY SO THAT MINIMUM STRAIGHT THROUGH JOINTS ARE MADE	

LEGEND: \* RECORDS IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.

LEGEND TO BE USED: CLASS # : A - CRITICAL, B-MAJOR, C-MINOR. \*A\* SHALL BE WITNESSED BY NTPC FQA, \*B\* SHALL BE WITNESSED BY NTPC ERECTION / CONSTRUCTION DEPT. AND \*C\* SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CH? STAGE)

FORMAT NO.: QS-01-QAJ-P-10/F4-R1

ENGG. DIV./QA&I

SYSTEM EQUIPMENT: POWER & CONTROL CABLES AND ACCESSARY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: IS1255-1983 AND NTPC TECHNICAL SPECIFICATION						REVIEWED BY: LJ SINGH Gnd VIKRAM TALWAR MD S.D. SINGH OF NARANJANG		APPROVED BY H. K. KUNDRA	
Sl- NO	ACTIVITY AND OPERATION	CHARACTERISTICS /INSTRUMENTS	CLASS# OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	REMARKS		
1.	2	3	4	5	6	7	8	9	10		
2.02	FOR LT CABLE:- SIZE OF CABLE/ ROUTE LENGTH	V	C	V	100%	-DO-	-DO-	9.1.5 CL. 5.0 NTPC section-24, table-10, sub-clause-10.1	10		
2.03	MARKING IDENTIFICATION ON CABLE DRUMS	-	C	V	100%	IS1554-1, IS7078-1 & 2	SHOULD MATCH WITH PACKING LIST	CHECK LIST			
2.04	REMOVAL OF WOODEN PLANK FROM CABLE DRUMS	-	C	MECH	100%	USE PROPER TOOL	CABLES ARE NOT DAMAGED	-DO-			
2.05	CABLE DRUMS ARE KEPT ELEVATED FROM GROUND WITH THE HELP OF CABLE DRUMS JACKS	CABLE DRUMS JACK	C	MECH	100%	IS1255 CL.8.0	CABLES DRUMS ARE NOT TOUCHED ON GROUND	-DO-			
2.06	CABLES LENGTH UNWOUNDING / PULLING TENSION	MECH	C	MECH	100%	IS1255 CL.5.0	IS1255 CL.5.0	-DO-	CABLES SHOULD NOT DAMAGE		
2.07	1.GROUND ROLLERS SHALL BE USED AT EVERY 2 METER INTERVAL. 2. CABLES SHALL NOT BE PULLED FROM END WITHOUT HAVING INTERMEDIATE PUSHING ARRANGEMENT	GROUND ROLLERS	C	MECH	100%	IS1255, CL.10.0 & NTPC TECH. SPECTS	IS1255 CABLES ARE NOT DRAGGED ON HARD GROUND	-DO-			
2.08	IN EACH CABLE RUN SOME EXTRA LENGTH SHALL BE KEPT TO ENABLE ONE LT/ TWO HT STRAIGHT THROUGH JOINTS TO BE MADE	-	C	V	100%	NTPC TECH. SPECTS	NTPC TECH. SPECTS	-DO-			
2.09	SINGLE CORE CABLE/ MULTI CORE CABLE	-	C	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ NTPC TECH. SPECTS - REFER CABLE INSTALLATION	SINGLE CORE CABLE IN TREFOIL FORMATION SHALL BE LAID WITH A DISTANCE OF FOUR TIMES THE DIAMETER OF CABLE BETWEEN TREFOIL CENTRE LINES AND CLAMPED AT EVERY TWO METRE. ALL MULTI CORE CABLES SHALL BE LAID IN "TOUCHING FORMATION"	-DO-			

LEGEND: \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION  
LEGEND TO BE USED: CLASS # : A = CRITICAL, B=MAJOR, C=MINOR; 'A' SHALL BE WITNESSED BY NTPC FQA, 'B' SHALL BE WITNESSED BY NTPC ERECTION / CONSTRUCTION DEPT. AND  
'C' SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CHP STAGE)

FORMAT NO.: QS-01-QAI-P-10/F4-R1

ENGG. DIV./QA&I



SYSTEM EQUIPMENT: POWER & CONTROL CABLES AND ACCESSARY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: ISI 255-1983 AND NTPC TECHNICAL SPECIFICATION				QF NO.: 000-999-QO E-1 REV. NO.: 00 DATE: 26/03/08 PAGE 3 OF 6 VALID UPTO: 25/03/11		REVIEWED BY: LJ SINGH VIKRAM TALWAR S.D. SINGH O.P. NIRANJAN	APPROVED BY: U.R. KHOSLA U.R. KHOSLA
SL. NO	ACTIVITY AND OPERATION	CHARACTERISTICS / INSTRUMENTS	CLASS# OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF	REMARKS
2.10	2. SECURING OF CABLES	3.	4. C	5. V	6. 100%	7. NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/NTPC TECH. SPECS REFER CABLE INSTALLATION	8. POWER & CONTROL CABLES SHALL BE SECURED FIXED TO TRAYS/ SUPPORT WITH SELF LOCKING TYPE NYLON CABLE TRAYS TYPE STRAPS WITH DE-INTERLINKING FACILITIES FOR HORIZONTAL TYAPS ARRANGEMENTS. MULTI POWER CABLES & CONTROL CABLES SHALL BE SECURED AT EVERY FIVE METER INTERVAL FOR VERTICAL TRAYS ARRANGEMENT IN INDIVIDUAL MULTICORE POWER CABLES AND CONTROL CABLES SHALL BE SECURED AT EVERY ONE METER BY NYLON CABLE STRAP.	9. Dy. General Manager (QA)	10. Dy. General Manager (QA)
2.11	CONTROL CABLES SECURING IN VERTICAL TRAYS	-	C	V	100%	-DO-	CONTROL CABLES SHALL BE BINDED TO TRAYS / SUPPORTS BY ALUMINUM STRIPS AT EVERY FIVE METER INTERVAL & AT EVERY BEND	-DO-	

LEGEND: \* RECORDS IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
 LEGEND TO BE USED: CLASS # : A = CRITICAL, B-MAJOR, C-MINOR; 'A' SHALL BE WITNESSED BY NTPC PCA, 'B' SHALL BE WITNESSED BY NTPC CONSTRUCTION DEPT. AND 'C' SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CHIP STAGE)

FORMAT NO.: QS-01-QA1-P-10/F4-R1

ENGG. DIV./QA&I

SYSTEM EQUIPMENT: POWER & CONTROL CABLES AND ACCESSARY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: ISI255-1983 AND NTPC TECHNICAL SPECIFICATION					Q.P. NO.: 0004-999-QO E-1- REV. NO.: 00 DATE: 26/03/08 PAGE 4 OF 6 VALID UPTO: 25/03/11		REVIEWED BY: LJ SINGH VIKRAM TALWAR S. SINGH O.P. NIRANJAN		APPROVED BY U.R. KHOSLA
SL NO	ACTIVITY AND OPERATION	CHARACTERISTICS /INSTRUMENTS	CLASS# OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FURNISHING UNIT NTPC Limited A-24, Sector 24, Noida-201 301 (U.P.)			
2.12	PROTECTION OF CABLES ON ROAD CROSSING	MECH	C	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ISI255	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ISI255	By General Manager (QA) NTPC Limited A-24, Sector 24, Noida-201 301 (U.P.)			
2.13	LAYING OF CONTROL CABLES AND POWER CABLES IN DIFFERENT LAYERS OF TRAYS	-DO-	C	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ISI255/ NTPC TECHNICAL SPECIFICATION REFER CABLE INSTALLATION	HT CABLES SHALL BE LAID ON TOP MOST TIER & CABLES OF SUBSEQUENT LOWER VOLTAGE GRADES ON LOWER TIERS OF TRAYS	-DO-			
2.14	IR CHECK OF CABLES	MEGGER	C	V	100%	SHOULD NOT SHOW ZERO VALUE	SHOULD NOT SHOW ZERO VALUE	-DO-			
2.15	EARTHING AND BONDING ( METAL SHEATHING, METAL SCREENING AND ARMOUR OF CABLE SHOULD BE EARTHED AT BOTH ENDS.)	MECH	B	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ NTPC TECHNICAL SPECIFICATION REFER EARTHING SYSTEM INSTALLATION	METALLIC SHEATH/SCREENS, AND ARMOUR OF MULTI-CORE CABLES SHALL BE EARTHED AT BOTH ENDS. METALLIC SHEATH AND ARMOUR OF SINGLE CORE CABLES SHALL BE EARTHED AT SWITCH/GEAR END ONLY OR AS PER APPD. CABLE SCHEDULE	-DO-			
2.16	CABLE IDENTIFICATION TAG	V	C	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/ISI255/ NTPC TECHNICAL SPECIFICATION REFER CABLE INSTALLATION	NTPC APPROVED LAY OUT DRGS /CABLES SCHEDULE/ISI255/ NTPC TECHNICAL SPECIFICATION REFER CABLE INSTALLATION	-DO-			

LEGEND: \* RECORDS IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
LEGEND TO BE USED: CLASS # : A = CRITICAL, B-MAJOR, C-MINOR; 'A' SHALL BE WITNESSED BY NTPC QA, 'B' SHALL BE WITNESSED BY NTPC ERECTION / CONSTRUCTION DEPT. AND  
'C' SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CHP STAGE)

FORMAT NO.: QS-01-QAI-P-10/F4-R1

ENGG. DIV./QA&I

SYSTEM EQUIPMENT: POWER & CONTROL CABLES AND ACCESSARY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: IS1255-1983 AND NTPC TECHNICAL SPECIFICATION					Q.P. NO.: 0000-099-QO E - I- REV. NO.: 00 DATE: 26/03/08 PAGE 5 OF 6 VALID UPTO: 25/03/11		REVIEWED BY: VIKRAM TALWAR S.D. SINGH O.P. NIRANJAN		APPROVED BY U. RAJAGURU
SL. NO	ACTIVITY AND OPERATION	CHARACTERISTICS / INSTRUMENTS	CLASS# OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAL RECORD	REMARKS		
1.	2.	3.	4.	5.	6.	7.	8.				
2.17	STRAIGHT THROUGH JOINTS & TERMINATION	V	C	V	100%	NTPC APPROVED LAY OUT DRGS./ CABLES SCHEDULED IS1255/ NTPC TECHNICAL SPECIFICATION / TERMINATION / MANUFACTURER RECOMMENDATIONS	-DO-	-DO-	1. CABLE JOINTER SHALL BE QUALIFIED TO CARRY OUT SATISFACTORY CABLE JOINTING / TERMINATION 2. CONTRACTOR SHALL FURNISH FOR REVIEW DOCUMENTARY EVIDENCE / REPORTS OF THE JOINTERS TO BE DEPLOYED AT SITE		
2.18	LT STRAIGHT THROUGH JOINTS & TERMINATION										
2.19	HT STRAIGHT THROUGH JOINTS & TERMINATION	V	B	V	100%	-DO-	-DO-	-DO-	-DO-		
2.20	G.I. CONDUITS EARTHING	MECH	C	V	100%	IS3043-1966 NTPC SPECS	IS3043-1966 NTPC SPECS	-DO-			
2.21	SEALING OF END OF CONDUITS AFTER CABLE LAYING	-DO-	C	V	100%	NTPC TECH. SPECS.	ENDS OF CONDUITS / PIPES SHALL BE SEALED WITH GLASS WOOL/CEMENT MORTAR/ PUTTY	-DO-			
2.22	CLEANING OF CABLE TRENCH & COVER THE CABLE TRENCH WITH COVERS	-DO-	C	V	100%	NTPC TECH. SPECS	REPLACE RCC/STEEL TRENCH COVERS AFTER INSTALLATION WORK	-DO-			

LEGEND: \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
LEGEND TO BE USED: CLASS # : A = CRITICAL, B=MAJOR, C=MINOR; 'A' SHALL BE WITNESSED BY NTPC FQA, 'B' SHALL BE WITNESSED BY NTPC ERECTION / CONSTRUCTION DEPTT. AND 'C' SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CHP STAGE)

FORMAT NO.: QS-01-QAI-P-10/F4-R1

ENGG. DIV/QA&I



SYSTEM EQUIPMENT; POWER & CONTROL CABLES AND ACCESSARY UP TO 33KV SUB-SYSTEM :		STANDARD FIELD QUALITY PLAN CONFORMING TO CODE: IS1255-1983 AND NTPC TECHNICAL SPECIFICATION					QF NO.: 0000-999-Q0 E - I - 004 REV. NO.: 00 DATE : 26/03/08 PAGE 6 OF 6 VALID UPTO : 25/03/11	REVIEWED BY: LJ SINGH TALWAR S.D. SINGH O.P. NIRANJAN	APPROVED BY U.R. KHOSLA	
S/L NO	ACTIVITY AND OPERATION	CHARACTERISTICS / INSTRUMENTS	CLASS OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	REMARKS	
1.	2.	3.	4.	5.	6.	7.	8.			
223	LAYING OF SAND BRICKS/ SLABS FOR BURRIED CABLES	--DO--	C	V	100%	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/IS1255	NTPC APPROVED LAY OUT DRGS / CABLES SCHEDULE/IS1255		RECEIVED / U.R. KHOSLA 9. On Central Mandar (QA) 10. On Central Mandar (QA) 11. On Central Mandar (QA) 12. On Central Mandar (QA) 13. On Central Mandar (QA) 14. On Central Mandar (QA) 15. On Central Mandar (QA) 16. On Central Mandar (QA) 17. On Central Mandar (QA) 18. On Central Mandar (QA) 19. On Central Mandar (QA) 20. On Central Mandar (QA) 21. On Central Mandar (QA) 22. On Central Mandar (QA) 23. On Central Mandar (QA) 24. On Central Mandar (QA) 25. On Central Mandar (QA) 26. On Central Mandar (QA) 27. On Central Mandar (QA) 28. On Central Mandar (QA) 29. On Central Mandar (QA) 30. On Central Mandar (QA) 31. On Central Mandar (QA) 32. On Central Mandar (QA) 33. On Central Mandar (QA) 34. On Central Mandar (QA) 35. On Central Mandar (QA) 36. On Central Mandar (QA) 37. On Central Mandar (QA) 38. On Central Mandar (QA) 39. On Central Mandar (QA) 40. On Central Mandar (QA) 41. On Central Mandar (QA) 42. On Central Mandar (QA) 43. On Central Mandar (QA) 44. On Central Mandar (QA) 45. On Central Mandar (QA) 46. On Central Mandar (QA) 47. On Central Mandar (QA) 48. On Central Mandar (QA) 49. On Central Mandar (QA) 50. On Central Mandar (QA) 51. On Central Mandar (QA) 52. On Central Mandar (QA) 53. On Central Mandar (QA) 54. On Central Mandar (QA) 55. On Central Mandar (QA) 56. On Central Mandar (QA) 57. On Central Mandar (QA) 58. On Central Mandar (QA) 59. On Central Mandar (QA) 60. On Central Mandar (QA) 61. On Central Mandar (QA) 62. On Central Mandar (QA) 63. On Central Mandar (QA) 64. On Central Mandar (QA) 65. On Central Mandar (QA) 66. On Central Mandar (QA) 67. On Central Mandar (QA) 68. On Central Mandar (QA) 69. On Central Mandar (QA) 70. On Central Mandar (QA) 71. On Central Mandar (QA) 72. On Central Mandar (QA) 73. On Central Mandar (QA) 74. On Central Mandar (QA) 75. On Central Mandar (QA) 76. On Central Mandar (QA) 77. On Central Mandar (QA) 78. On Central Mandar (QA) 79. On Central Mandar (QA) 80. On Central Mandar (QA) 81. On Central Mandar (QA) 82. On Central Mandar (QA) 83. On Central Mandar (QA) 84. On Central Mandar (QA) 85. On Central Mandar (QA) 86. On Central Mandar (QA) 87. On Central Mandar (QA) 88. On Central Mandar (QA) 89. On Central Mandar (QA) 90. On Central Mandar (QA) 91. On Central Mandar (QA) 92. On Central Mandar (QA) 93. On Central Mandar (QA) 94. On Central Mandar (QA) 95. On Central Mandar (QA) 96. On Central Mandar (QA) 97. On Central Mandar (QA) 98. On Central Mandar (QA) 99. On Central Mandar (QA) 100. On Central Mandar (QA)	SHOULD NOT BE LAID ABOVE TELECOMMU NICATION CABLE 2. CABLE PROTECTIVE COVER MAY BE MARKED BY - POWER CABLE"
3.1	ERECTION TESTS									
3.2	FOR LT CABLES									
3.3	IR TEST	MEGGER	B	MEAS	100%	IS1255	IS1255	--DO--		
3.4	DC HV TEST	HV TESTER	B	MEAS	100%	IS1255	IS1255	--DO--		
3.5	FOR HT CABLES									
3.6	IR BEFORE AND AFTER LAYING	MEGGER	A	MEAS	100%	IS1255	IS1255	--DO--		
3.7	DC HV TEST ON EACH CORE	MEGGER	A	MEAS	100%	IS1255	IS1255	--DO--		

LEGENDS USED FOR 'STORAGE LEVEL'	
"A"	OUTSIDE WITH NO PROTECTIVE COVER (OPEN SPACE / YARD ON RAISED SURFACE, PROPERLY STACKED AND FREE FROM WATER LOGGING AND LOADING / UNLIEUE WEIGHT)
"B"	OUTSIDE WITH PROTECTIVE COVER (OPEN SPACE / YARD ON RAISED SURFACE, PROPERLY STACKED AND FREE FROM WATER LOGGING AND LOADING / UNLIEUE WEIGHT, COVERED WITH PVC/TARPAULIN)
"C"	INDOOR SHELF ITEMS (STORED IN PUCCA SHED, IN STORE)
"D"	INDOOR CLEAN CONDITIONS (STORED IN PUCCA SHED, IN STORE. THE STORAGE AREA SHALL BE DRY AND FREE FROM DUST AND THERE SHALL NOT BE ACID/ CHEMICALS IN VICINITY)
"E"	INDOOR TEMPERATURE AND HUMIDITY CONTROLLED - AIR CONDITIONED (STORED IN PUCCA SHED, IN STORE WITH CONTROLLED ATMOSPHERE)

LEGEND: \* RECORDS, IDENTIFIED WITH "TICK" (✓) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION.  
LEGEND TO BE USED: CLASS A : A - CRITICAL, B-MAJOR, C-MINOR, 'A' SHALL BE WITNESSED BY NTPC FQA, 'B' SHALL BE WITNESSED BY NTPC ERECTION / CONSTRUCTION DEPTT. AND 'C' SHALL BE WITNESSED BY MAIN SUPPLIER (A & B CHECK SHALL BE NTPC CHP STAGE)

FORMAT NO.: QS-01-QAI-P-10/F4-R1

ENGG. DIV./QA&I