


FIELD QUALITY PLAN												
 <b>M/s BHEL, PESD, Hyderabad</b>		<b>ITEM : BATTERY &amp; BATTERY CHARGER</b>		<b>QP NO. :</b>		<b>PROJECT:</b>		<b>1X50MW SOLAR PV PROJECT AT MANDSAUR, MP</b>				
				<b>REV. NO. : 02</b>		<b>0</b>		<b>PACKAGE:</b>				
				<b>DATE : 04.08.2016</b>				<b>CONTRACT NO.</b>				
				<b>PAGE :</b>		<b>MAIN CONTRACTOR</b>		<b>M/S BHEL</b>				
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	D*	10		
1.0	Unloading	Unloading from truck	C	Visual	100%	Manufacturer Instruction Manual	Use proper Material Handling Equipment to avoid damages to the enclosure. Use precautions mentioned in the Manufacturer Manual	Store Register				
		Check for Quantity and identification	C	Visual	100%	Delivery challan/Packing list	No Damage/Missing Items					
2.0	Storage	Movement to storage	A	Visual	100%	Manufacturer Instruction Manual	Safe storage on elevated surface, Dry surface free from flooded water	Store Register				
		Store Handling	A	Visual	100%							
<b>BATTERY AND BATTERY CHARGER</b>												
3.0	Pre-Erection Installation	Verification of Quantity & Identification	C	Visual	100%	Purchase Order/Delivery challan/Packing list						
		Package Inspection	C	Visual	100%	Check for Manufacturer Instruction Manual	Pacackage should be in good condition i.e. without breakage or visual defects					
		Reportin of Damage/Missing itemn	C	Visual	100%	Delivery challan/Packing list	No damages or missing of items					
		Check the each Cells & Terminals for any damage	C	Visual	100%	No damage to cells	No damage to cells					
		Check Cables gland and Cable/Busbar supports are connection to station Earth	C	Visual	100%	No Losse Support/Busbar	No Losse Support/Busbar					
		Check the Identification mark on each Cells/Battery	C	Visual	100%	Cell/Battery Identification	Cell/Battery Identification					
		Check & Ensure the proper ventilation in the battery room	C	Physical	100%	Manufacturer Instruction Manual	Battery shall be installed in a room with proper ventilation					
		General Inspection for Loose terminal connection, Damaged wiring connections	B	Visual & Physical	100%	Manufacturer Instruction Manual	No Damage wiring					
		Cable/Busbar entry points in the battery room ( Cable /Bus Bar Size and Supports)	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Manufacturer Installation Manual/Approved Drawing					
		Cable Bending radius for Battery connection	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Manufacturer Installation Manual/Approved Drawing					
Inter Cell Termination, Fixing of shrouds on Inter cell connections	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Use of the proper tool for tightening . No Loose Connection							
		<b>LEGEND: * RECORDS IDENTNIFIED WUTH *TICK*(√) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMETNAION.</b> <b>LEGEND TO BE USED : CLASS#:A= CRITICAL,B=MAJOR,C=MINOR; 'A' SHALL BE WITSESSD BY NTPC FQA,'B' SHALL BE WITSESSD BY NTPC ERECTION/CONSTRUCTION DEPTT. AND 'C' SHALL BE WITSESSD BY MAIN SUPPLIER ( A&amp;B CHECK SHALL BE NTPC CHP STAGE)</b>				DOC NO						
						FOR NTPC USE						
<b>MANUFACTIRER/SUB-SUPPLIER</b>						<b>MAIN-SUPPLIER</b>		REVIEWD BY		APPROVED BY		APPROVED SEAL
<b>SIGNATURE</b>												

Pre-Erection Installation	Check for the vertically and Horizontal mounting of batteries	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Use Spirit level for acceptance			
	Leakage,Crack or Damage	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	No Leakage, Crack or Damage			
	Proper Handling of Batteries	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	No Damage			
	Check Battery Stand as per drawing dimensions, Bolt Tightness,Paint	C	Measurement	100%	Manufacturer Installation Manual/Approved Drawing	Approved Drawings			
	Assembly of battery cells over stand on an insulators	B	Physical	100%	Manufacturer Installation Manual/Approved Drawing	Manufacturer Installation Manual/Approved Drawings			
	Painting of battery stand	B	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Battery stand shall be Painted ( If Required)			
	Alignment and Levelling of Each cell	B	Visual & Physical	100%	Manufacturer Installation Manual/Approved Drawing	Battery cells shall be Aligned,To be check with Spirit Level			
	Application of Grease & Check Tightening Torque of Bus bar	B	Physical	100%	Manufacturer Installation Manual/Approved Drawing	Application of Grease,No Loose connections			
	Check for Incoming Cables/Bus Bar connection Tightening Torque to the battery	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	All connection shall be tightned with proper Troque Wrench			
	Initial filling of Electrolyte ( If applicable)	C	Visual	100%	Manufacturer Installation Manual/Approved Drawing	Filling of Electrolyte up to the required marking			
	Restoration of Electrolyte Level after Soaking Period	B	Physical	100%	Manufacturer Installation Manual/Approved Drawing	As per Manufacturer Standards			
	Verticality of Panel	B	Measurement	100%	Manufacturer Installation Manual/Approved Drawing	Erection Manual / Approved Drawing	Site Register		
	Earth Connection ,IR checking Power and Control circuits	B	Physical	100%	As per Manufacture standards	Erection Manual / Approved Drawing	Site Register		
	Charging & Discharging Cycle	A	Physical	100%	To be check physically and Charging and Discharging	To be check physically and Charging and Discharging			
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