



Service observation Checklist

Site Name: Baba Gulam Badshah	Date: 04/07/2018
Site Address: Univer City (BG. BSU) Rajouri Jammu,	Contact No: 8333048159
	Service engineer Name: Mr. Kiran Kumar
	Date of Installation:

PCU Details

PCU Make: PPS.	PCU Serial No: 1398
PCU Model: GCS. 3ϕ phase	PCU Capacity: 50. KVA

Present Operating Mode: **PCU is off condition problem is Inverte. current Limiting problem**

1. Solar Modules

Solar plant capacity:	50. KVA
No. of modules:	208. Nos
Make of module:	HBL Power System Ltd. (PV Module)
Capacity of the module:	
Condition of the modules:	good

2. DCDB/AJB

Any physical damage	NO
Voltage at AJB	240. Voltery.
Current at AJB	24.7 Amps
Remarks	

3. Earthing

Independent PCU earth Provided or not	yes
Independent Lighting Provided or not	yes
ACDB earthing provided or not	yes
Whether SPDs Installed in ACDB	yes
Whether SPDs Installed in AJB	yes
Earth pit condition/ resistance of the earth pit	yes
Physical condition of earth pit	yes
Remarks	

4. Battery

Make	2.4 - 1500 Ah Tubular LMA Battery	
Model	T 1500 H SPV	
Battery bank voltage	240. voltage.	
Battery bank Capacity Ah:	1500 Ah	
No of cells	120. cells	
Physical Condition of battery bank	good	
Acid level (if lead acid)	good	
Specific Gravity		
Present status:	Voltage: 258. V	Current: 96 Amps
Remarks:		



5. CONTROL ROOM

Check Shelter	yes
Control Room Lights	NO
Control Room Fans	NO
Fire Cylinders Available	NO
Exhaust Fan Status	NO
Earth-Neutral Voltage(at ACDB)	good
Whether MCCBs working or not	5.8 voltage
Remarks	yes

6. PCU (power Condition Unit)

Visual Inspection	yes			
ALL cards:	yes working			
Wiring inside the PCU	yes working			
Cooling Fans	yes			
PCU Analog Meters	yes			
Cleanliness of PCU	yes			
Emergency Stop	yes working			
Earth to Neutral Voltage	5.8 voltage			
Whether Actual Parameters are matching with display or not	yes			
Electrical Parameters				
	Grid	Inverter Output	Solar	Battery
Voltage(V)	RN: NA YN: NA BN: NA	RN: 240 YN: 240 BN: 240	276	258
Current(A)	R: NA Y: NA B: NA	R: 13.2 Y: 5.3 B: 2.4	97 Amps	90. Amps
Whether Logs are downloaded or not				
Whether Set points are downloaded or not				
Bidirectional Energy Meter:				
Import	58.5 Kwh			
Export	39620.4 Kwh			
Remarks				

Test Results Observed by Engineer: . Replaced . R. Phase: IGBT 300/600 AMPS & IGBT Driver Card and. Dice card , FRC cable changed new then System working good ,

Suggestions by Engineer:

M. Kisan Kumar
dt 4/7/2018

Service Engineer Name & Sign

M. Kishu
4/7/18

Sign of Customer Name & Seal

[Signature]
4/7/2018
BGSB (P) Rajouri

TO WHOM IT MAY CONCERN

DATE: 04/07/2018

THIS IS TO CERTIFY THAT THE FOLLOWINGS PCU 2X50KWP
INSTALLED AT BABA GULAM BADSHAH UNIVERSITY RAJOURI (J&K)

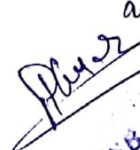
- (1) PPS PCU-1 50KWP - WORKING SATISFACTORY.
- (2) PPS PCU-2 50KWP - WORKING SATISFACTORY.

WE HEREBY CERTIFY THAT THE BOTH SOLAR PCU WORKING
SATISFACTORY AND 2X50KWP SOLAR POWER PLANT ALSO
WORKING SATISFACTORY

M/S HBL Power systems Ltd,
(Singh Gajraj Singh)

BABA GULAM BADSHAH
UNIVERSITY

Both PPS-PCU-1 & 2 50KWP
are under observation.


BGSB (U) Rajouri

FIELD SERVICE REPORT

1. Product: VRLA/MBD/LMLA/T-GEL/Others Sector: Industry/Telecom/Railway/Defence/Others
 2. Service Call No. _____ Date: 04/07/2018

3. Customer Name & Address: JAKEDAEPD
Baba Gulam Badshah
University (BG BSU) Rajouri JAMMU.
 4. Site / End User Address: Baba Gulam Badshah University
(BG BSU) Rajouri JAMMU.

5. Contact Person: Mr. Nitin Sharma Contact Person: Mr. Mahinder Salotra
 Contact No. 7006823922 Contact No. 09018351715, 9419604623 (2ofr) Contact No. # 9469075751

6. Equipment Details:
 (a) Battery/System Rating: 240V / 4x1500AH / LMLA / SP/HR- (b) Set No./Job No. 18/2012
 (c) P.O. No./Date: N/A (d) GAD No. N/A (e) Installation Date Nov-2013

7. Nature of calls: (Please tick as applicable)

(a) I&C (b) Service under warranty (c) Repairs out of warranty
 (d) AMC (e) A/T Status (f) Courtesy Visit / PM Visit

8. Battery Details:

(a) System Voltage: 240V (b) AH Capacity: 1500 AH (c) No. of Cells: 120x4=480ND
 (e) Container Type: Plain/Ribbed/HR/PPSFM (f) Cell Dimensions: _____
 (g) Terminal Type: Epoxy/Cup Type No. Of Terminals: _____

9. Power Plant / UPS/Charger Details:

(a) Make 2x50KW PPS PCU - (b) Specification/Rating: 240V DC SIP
 (c) Module Capacity: S.NO. 1398 (d) No. Of Module Working: IPP 415V 50HZ, AC -

S.No.	Parameter Settings	Recommended	Existing	After Correction
1.	Float Voltage	$2.25 \times 120 = 270V$	272V	—
2.	Boost Voltage	$2.40 \times 120 = 288V$	288V	—
3.	Current Limit	10% of Rated Capacity	150A	—
4.	Cut off Voltage Setting	$1.85 \times 120 = 222V$	222V	—
5.	Ripple Voltage	<3	<3	—

10. Power Failure details: EB not connected

(a) No. of Hours in a day: _____ (b) DG (Make/Rating): N/A (Yes / No), Working: N/A Auto/Manual/No

11. Load Details: Current: 15A Application: Solar Nature of load: Variable

12. Check list:

S. No.	Parameter	Remarks
1.	Visual checks of system/battery room against any damages/ abnormalities	<u>Exhaust not available in battery room</u>
2.	Tightness checks of electrical connections (11Nm)	<u>Checked OK</u>
3.	Measurement of individual cell Voltage/Gravity	<u>Checked OK</u>
4.	Voltage measurement of terminals w.r.t earth	<u>Checked OK</u>
5.	Temperature compensation active/inactive	<u>Inactive</u>
6.	Battery Bank: Indoor/Outdoor	<u>Indoor (shed)</u>
7.	Air Conditioner: Working/Not Working	<u>Not available</u>
8.	Whether log books maintained at site	<u>Not maintaining</u>

13. Problem Reported: PCU-1 (SNO: 1398) SOLICIT NOT WORKING

14. Brief description of work done and other observations:

- (1) Physical checked all cells & PCU found ok.
 (2) Joint visit the site along with: PPS Engineer / Mr. Clean Switch Engineer Mr. Biran Kumar & observed the PCU-1 Driver Card, IGBT 300/600 Amp 3Ø, DICC (Digital Inverter Control card) found faulty and same have been Replaced with New one.
 (3) Now both PCU 1 & 2 (SNO: 1398, 1399) working satisfactory.

15. Materials (Components/Parts/Spares) used:

- (4) On load test 5kW PCU-1 working satisfactory.
 (5) Require 06 Nos Exhaust Fans for battery room for proper ventilations of battery room.

Material Description	Qty.	Replaced/to be replaced	Replacement by Customer/HBL	Cost to be borne by Customer/HBL
(1) DRIVER CARD	01 NO	Replaced	HBL	HBL
(2) IGBT 300/600A	01 NO	Replaced	HBL	HBL
(3) 3-Phase DICC Digital Inverter Control Card	01 No	Replaced	HBL	HBL

16. Action pending after completion of call:

- (A) PRC - Robin Connector - 01 No Replaced.

210, any action pending from side.

17. Recommendations to customer:

Please maintain all charging parameters as per our O&M manual, avoid the PCU output short circuit. Otherwise driver card / IGBT can be faulty.
 (To be filled by customer)
 Require 06 Nos Exhaust Fans for battery rooms for proper ventilation.

18. After completion of service call:

(a) Status of complaint (please tick as applicable):

Successfully closed

Pending

(b) If pending, please mention the list of pending activities with your remarks

(c) Satisfaction level of customer (please tick as applicable):

i) Fully Satisfied

ii) Partially Satisfied

iii) Not Satisfied

19. Time taken for this call:

Date	04/07/2018				
Hours Spent	08 hrs				

20. Signatures

Signature			
Name & Designation with office seal	Gajraj Singh Sr. Engineer		
	Service Engineer (HBL)	Customer	End User



HBL POWER Systems Ltd.

FIELD SERVICE REPORT

CUSTOMER COPY

1. Product: NCPP/VRLA/MBD/LMLA/PE/Others Sector : Industry/Telecome/Railway/Defence

2. Service Call No. NSNN/

Date : 6/07/2018

3. Customer Name & Address:

4. Site Address:

JAKADA C/O Baba Gulam Badshah Baba Gulam Badshah University
University (BGSBU) Rajouri (S&K) (BGSBU) Rajouri (J&K)

5. Contact person: Mr. Nifin Sharma

Contact person: Mr. Md. Zafer

Tel. No. _____ Mob. No. 7006823922 Tel. No. _____ Mob. No. 9419604623

6. Equipment Details:

(a) Battery/System rating: 240v/4x1500AH/LMVA/SPV/HR (b) Set No./Job No. Log dt 11/2012

(c) P.O. No./Date : N/A (d) GAD No. _____ (e) Installation Date 15 Dec. 2013

7. Nature of calls: (Please tick as applicable)

- (a) I&C
- (b) Service under warranty
- (c) Repairs out of warranty
- (d) AMC
- (e) A/T Status
- (f) Curtsy Visit / PM Visit

8. Battery Details:

(a) System Voltage: 240v (b) AH Capacity: 1500AH X 4 (c) No. of cells: 120 X 4 = 480

(e) Container type: Plain/Ribbed/HR/PP/SFM (f) Cell Dimensions: HR - Containers

(g) Terminal type: Compression/Epoxy/Lead Bush/Cup type

9. Power plant /UPS/Charger Details:

(a) Make 2x50KW SPP PPS Make (b) Specification/Rating: INPUT 240V/DC
OP 415V 50HZ AC, 3Ø

S. No.	Parameter Settings	Recommended	Existing	After correction
1.	Float voltage	$2.25 \times 120 = 270V$	272V	—
2.	Boost voltage	$2.40 \times 120 = 288V$	288V	—
3.	Current limit	10% of Rated Cap.	150A	—
4.	Cut off voltage setting	$1.85 \times 120 = 222V$	222V	—
5.	Ripple voltage	< 3%	23%	—

10. Power Failure details: EB Not Connected

(a) No. of Hours in a day: _____ (b) Availability of Generator: Yes / NO N/A Working : Yes / NO N/A

11. Load Details: Current: 15A CAE Application: Solar Nature of load: Variable load
output load

12. Check list:

Sl No.	Parameter	Remarks
1.	Visual checks of system/battery room against any damages/ abnormalities	<u>Exhaust fans are not available in battery room</u>
2.	Tightness checks of electrical connections	<u>Checked ok</u>
3.	Measurement of individual cell voltage/gravities	<u>Checked ok</u>
4.	Voltage measurements of terminals W.r.t earth	<u>Checked ok</u>
5.	Temperature compensation active/inactive	<u>Inactive</u>
6.	Whether log book is maintained at site	<u>Not Maintaining</u>

13. Problem Reported: PCU-1 (S-NO: 1398) SOLWP NOT WORKING!

14. Brief description of work done and other observation:

- (1) Physical checked all cells & PCU Physical Condition etc.
- (2) Joint visit the site along with Cleanairtech (C) Pvt Ltd Engineer, Mr. Gagan Kumar from dt 04/07/18 to 06/07/2018 & observed PCU-1 driver card, PCB & DICE card faulty & same have been replaced with new cards
- (3) During the visit on dt 06/07/2018 observed PCU-1 off RCD RYB, N Connections loose & may be driver card faulty that problem R-112A, Y-66A B 51A 2N 9.1A
- (4) Observed off load unbalanced load R-112A, Y-66A B 51A 2N 9.1A. Kindly balance the off load.

15. Materials (components/parts/spares) used:

Material Description	Qty.	Replaced/to be replaced	Replacement by Customer/HNPS	Cost to be borne by Customer/HNPS
(1) Driver card	01N	Replaced	HBL	—
(2) PCB	01N	Replaced	HBL	—
(3) DICE card	01N	Replaced	HBL	—
(4) Ribbon connect	01	Replaced	HBL	—

16. Action pending after completion of call:

No any action pending from HBL side

17. Recommendations to customer : Please maintain balance load of off load R, Y, B for PCU-1-2. Fix to 10 nos Exhaust fans in battery room for proper ventilation of battery room.

(To be filled by customer)

18. After completion of service call:

(a) Status of complaint (Please tick as applicable):

Successfully closed Pending

(b) If pending, please mention the list of pending activities with your remarks

(c) Satisfaction level of customer (please tick as applicable):

i) Fully Satisfied ii) Partially Satisfied iii) Not Satisfied

19. Time taken for this call:

Date 04/07/2018 to 06/07/2018
Hours spent each day 8 Hours

20. Signatures

Signature	<u>Gagan Singh</u>		
Name & Designation with office seal	<u>Gagan Singh Sr Engineer</u>		
	Service Engineer (HBL) <u>9739922907</u>	Customer	End User