PHYSICAL VERIFICATION REPORT OF ON-GOING WORKS OF

"CONSTRUCTION OF 2X160 MVA, 220/132 KV AND 2X50 MVA, 132/33 KV GRID SUB STATION BISHNAH"

Monitoring Cell
Chief Minister's Secretariat

PHYSICAL VERIFICATION REPORT

(Conducted by Dy. Director, Planning on 12-11-2010)

1. Name of Project: Construction of 2X160 MVA, 220/132 KV and 2X50 MVA, 132/33 KV Grid Sub-Station Bishnah

2. Funding Agency: GOI (PMRP)

3. Executing Agency: S&O Wing of Power Development Department (PDD) & M/S UB Engineering Ltd. Pune (Turnkey basis)

4. Year of Sanction of Work: 2005-06

5. Year/ Date of Completion: 2006-07 (2 years)

6. Financial Status of Work:

(Rs. in Crores)

Sanctioned Cost	69.25
Funds Released	69.25
Expenditure Incurred (up to 10/2010)	39.21

It was reported by the Planning Section in the office of Chief Engineer, System & Operation Wing of PDD that 100% funds were released for this project along with other projects when these where sanctioned in 2005-06 under PMRP by GOI, but the sanction was revalidated year after year with extension of time period due to delay in execution.

7. Physical Status of Work:

S. No.	Major Works/ Items	% of work completed
1	Level 1: 2X160 MVA, 220/132 KV	75%
2	Level 2: 2X50 MVA, 132/33 KV	50%
3	Construction of Control Room	90% (civil works)
4	Staff quarters	90%
5	Chain-Link fencing	90%

8. Understanding the Grid Sub Station Bishnah:-

Before studying the field observations it is advisable to understand the Bishnah Grid Sub-Station its function and electrical layout:-

The Grid Sub-Station under execution at Bishnah comprises of 2 levels:-

Level 1	2X160 MVA, 220/132 KV	2 transformers of 160 MVA will step down voltage of 220 KV to 132 KV	Work allotted on Turn-key basis
Level 2	2X50 MVA, 132/33 KV	2 transformers of 50 MVA will step down voltage of 132 KV to 33 KV	Work being executed by S&O Wing of PDD

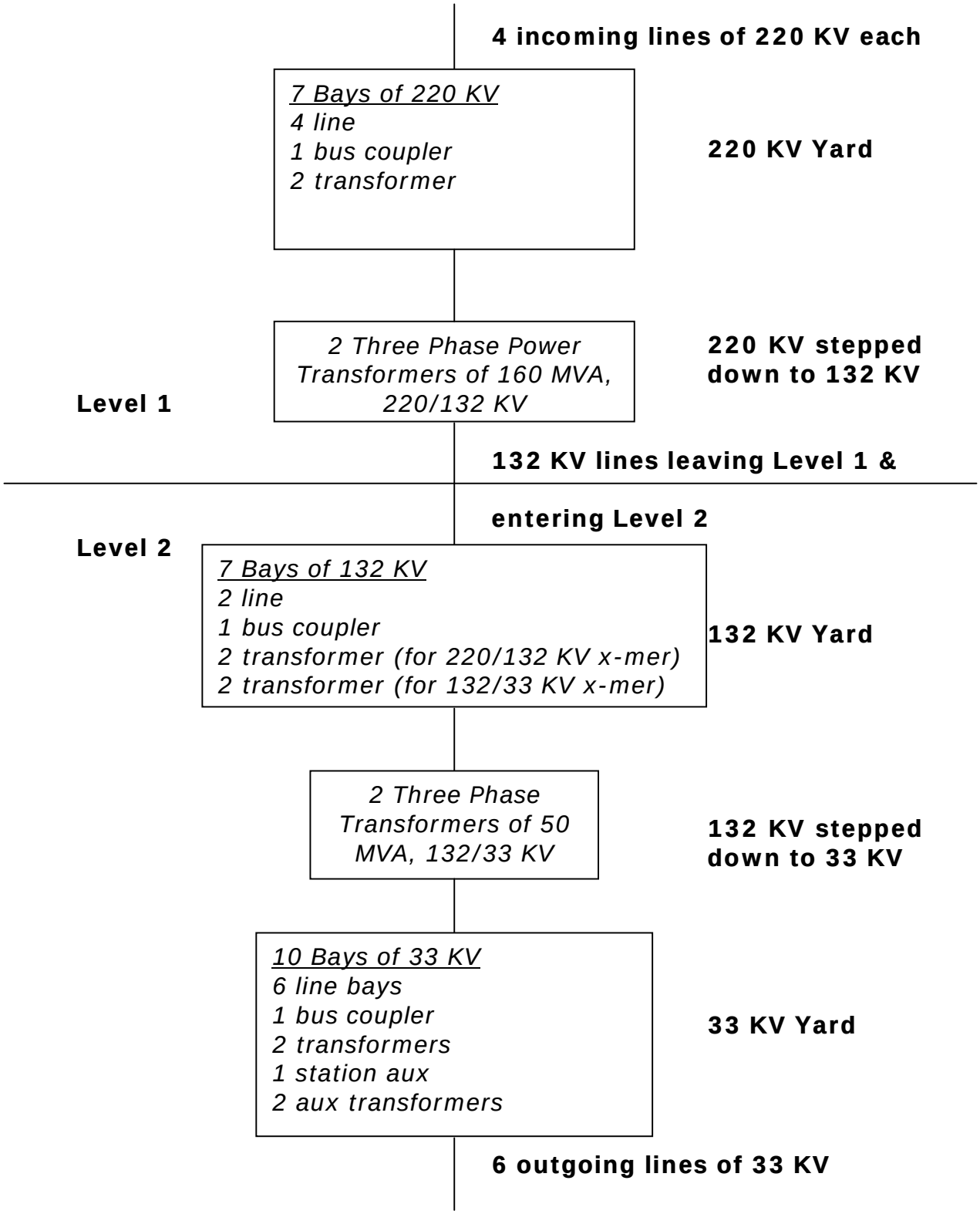
The Grid Sub Station will have 4 incoming lines of 220 KV (2 lines each from Grid Stations Burn & Hiranagar) which will enter into Level 1 where the incoming voltage of 220 KV will be stepped down to 132 KV. The 132 KV voltage will be further stepped down to 33 KV at Level 2 of the Grid Sub Station and there will be 6 out-going lines of 33 KV each which will supply power to the receiving stations of the border areas.

This Grid Sub Station at Bishnah when commissioned shall help in:-

a. Under-loading the load of the 132/33 KV grid sub station at Miran Sahib and the bigger Grid Stations of Gladni & Burn.

b. All the receiving stations in Bishnah as well as the adjoining border areas which are presently being fed from Miran Sahib grid sub station will be supplied power from the grid sub station under execution at Bishnah when it becomes functional and the people living in these areas shall benefit by way of:-
    (i) Improvement in voltage
    (ii) Minimization of faults
    (iii) Minimization of curtailments

Electrical Grid Sub Station Bishnah's Lay-out Diagram



9. Field Observations:-

a. Level 1:- The entire equipment/ material of the work assigned on turn-key basis was reported to be placed at site including the two 160 MVA transformers. Laying of foundations of equipment & Gantry in 220KV Yard was complete but laying of foundation for installation of 160 MVA transformers was 85% complete. Erection of Beams & columns in the 220 KV Yard was in progress. Laying of earth material was 85% complete. Installation of both the 160 MVA transformers was pending.

b. Level 2:- Most of the equipment/ material in this level being executed Departmentally stand acquired except one 50 MVA transformer. Column foundation of 132 KV & 33 KV Yards and Equipment foundation of 132 KV bays & 33 KV bays were 100% complete. Laying of foundations for two number, 50 MVA transformers was 100% complete. One was installed but the other was yet to be acquired. Laying of earth material was 90% complete. Laying & stringing of bus bars of 132 KV yards & 33 KV yard and transformer yard was 100% complete. In short, the yards of 132 KV was partially complete whereas that of 33 KV was nearing completion.

c. Control Room:- Civil works of the control room were 90% complete. However, the equipment & machinery were not yet installed, but some of the control equipment was placed outside the control room ready for installation.

d. Staff Quarters:- Construction work of Staff quarters was in progress. Three double storied structures were complete up to lentil level and plastering of outside walls was in progress.

e. Chain-Link Fencing:- Chain-link fencing of the outer boundaries was almost complete, however, fencing between yards which was 90% complete and this would be completed after all the major equipments/ transformers are installed.

10. Suggestions:-

a. The progress of Departmental work in Level 2 was about 75% and it was reported to be completed by March 2011. But the work of Level 1 which was being executed by Private Agencies on turn-key basis was comparatively lagging behind and could spill over to 2011-12. Even the extended period of completion of the project has lapsed. **The PDD may be asked to speedup the pace of execution and complete/ commission the project by 2010-11**.

b. There seemed to be no problem of funds. However, the AEE of PDD intimated that they would face shortage of skilled and semi-skilled staff to look after the functioning of the grid sub station as well as the others that are being developed at different locations in the State when these are commissioned. **PDD may be asked to access the requirement of skilled and semi-skilled man power in all the new up-coming grid stations and fill up all vacant posts, especially below the rank of JE and also consider expansion of staff strength and recruit the un-employed ITI electrical diploma holders who are registered with the District Employment cum Counselling Centres of the State on priority.** This would not just enable smooth working of all electrical installations in the State but will also help in creating employment opportunities for the youth.

11. Conclusion:-

The project is under execution and no major hurdles seem to exist except for the suggestions given above which PDD may address to immediately.

Physical Verification Conducted by:	Madan Gopal Sharma, Deputy Director Planning, Monitoring Cell, Chief Minister's Secretariat.
Officers of Executing Agency who accompanied:	Umesh Sharma, Assistant Executive Engineer (Electrical), S&O Wing, PDD.