ANNUAL ADMINISTRATION REPORT

2006-2007



PUNJAB STATE ELECTRICITY BOARD
PATIALA

CONTENTS

SR. NO.		CHAPTER	PAGES
		PART - I	
1		Introduction.	1-2
2.		Organisational Set-up.	3-15
3.		Generation.	16-44
4.		Transmission/Distribution System and Rural Electrification.	45-66
5.		Activities of Planning, Research, Training Technical Audit,Energy Conservation and Computerisation.	67-94
6.		Commericial Activities.	95-112
7.		Personnel & General Administration.	113-118
8.		Vigilance & Security, Fatal accidents due to electrocution to human beings, Introduction of Punjabi, Sports & Public Relations and Grievances.	119-130
9.		Development programme for the Year 2007-2008.	131-134
10.		Accounts, Finance and Audit.	135-142
		PART - II	143-144
		STATEMENTS	
1.		Details of Installed capacity of PSEB as on 31.3.2007.	145-148
2.		Details of Energy Generated and Maximum Demand in respect of various Power Houses during the year 2006-2007.	149-150
3	Part-A	Statement Showing the Power House wise Energy Generation, Auxiliary Consumption and Sourcewise Energy Purchased by PSEB during the year 2006-2007.	151-153

SR. NO.		CHAPTER	PAGES
	Part-B	Statement showing category-wise Energy Sold and Energy Sold to Common Pool Consumers during the year 2006-2007.	154-155
	Part-C	Statement of Energy Accounting/System Efficiency during the year 2006-2007.	156
4.		Abstract of Transmission and Distribution Network of Punjab State Electricity Board as on 31.3.2007.	157
5.		Statement Showing District-wise length of 11 KV and L.T. lines (in CKt Kms) as on 31.3.2007.	158
6.		Statement showing District-wise number and capacity of Distribution Transformers (in KVA) as on 31.3.2007.	159
7.	Part-A	Details of Connection released by the Board to consumers by direct Supply during the year 2006-2007.	160
	Part-B	Disctrict-wise details of Connections in Rural/ Urban areas as on 31.3.2007.	161-162
8.	Part-A	Particulars of Connected load (in KW) of the Board during the year 2006-2007.	163-164
	Part-B	District-wise details of Connected load in Rural/ Urban areas as on 31.3.2007.	165-166
9.		Circle-wise details of L.T. Shunt Capacitors installed for Agricultural and Industrial Connections as on 31.3.2007.	167-168

SR. NO.	CHAPTER	PAGES
10.	Statement showing District-wise per Capita Consumption in the State of Punjab during the year 2006-2007.	169-170
11.	Statement Showing Board's:- i) Average Connected load per Consumers. ii) Average Units sold per KW of Connected Load. iii) Average Units sold Per KW of Connected Load. iv) Average Load Factor on Connected Load basis during the year 2006-2007.	171-172
12.	Statement Showing Board's:- i) Average Revenue Per Consumer. ii) Average Revenue per K.W. of Connected Load. iii) Average Revenue Per Unit Sold during the year 2006-07.	173-174
13.	Details of Units Consumption (KWH) District-wise in Rural/Urban areas as on 31.3.2007.	175

PREFACE

It is a matter of great pleasure to present the Administration Report of P.S.E.B. for the year 2006-07.

A few of the milestone achieved are detailed below:-

* P.S.E.B. is serving 62.31 Lacs consumers in the State and about 2.4 lacs consumers have been added during the year 2006-2007.

* The 2x250 MW G.H.T.P. Stage-II, Lehra Mohabbat Project is under execution by M/s B.H.E.L. in erection, procurement and commissioning mode.

* Punjab Govt. has approved for setting up of 2 No. 1200 MW (2x600 MW) each coal based Thremal Plants at Nabha District Patiala and Talwandi Sabo (Banwala) District Mansa. The projects are to be developed on Build Own and Operate (BOO) Basis.

* 13119 Villages (including 695 No. Deras/Dhanies) have been provided with 24 hours Urban Pattern Supply during the year 2006-07. Full emphasis are being laid on Energy audit to contain T & D losses.

* Per capita consumption in the State was 975 units during 2006-2007. Plant load factors at Bathinda, Ropar and Lehra Mohabbat were 56.80%, 88.53% and 93.58%.

Other achievements of P.S.E.B. during the year 2006-07 have been highlighted in vaious statements of the Report.

With the co-operation of the officers/officials, P.S.E.B. will be rendering best services to valuable consumers during the year to come.

(Y.S. RATRA),
I.A.S. (Retd.),
CHAIRMAN,
PUNJAB STATE ELECTRICITY BOARD,
PATIALA.

CHAPTER - 1

1. INTRODUCTION

1.1 The Punjab State Electricity Board was constituted on the first day of Februrary, 1959 under section (5) (1) of the Electricity (Supply) Act, 1948. Subsequently, the Erstwhile State of Punjab was re-organised under the "Punjab Re-organisation Act, 1966" and the Board in its present form came into existence with effect from the first day of May,1967. This is the 40th Annual Report of the Punjab State Electricity Board covering the period from 1st April, 2006 to 31st March, 2007.

1.2 FUNCTIONS

The functions of the Board are prescribed in Chapter-IV of the Electricity (Supply) Act, 1948. Accordingly the Board is charged with the general duty of promoting the co-ordinated development of generation, supply and distribution of electricity within the State in most efficient and economical manner. In order to discharge this duty effectively the Board operates its own generating stations, maintain its transmission and distribution network and employs a work force of 83648 persons of all ranks to operate this system efficiently. It has full fledged Accounts & Audit Wing to ensure efficient Financial Management on commerical lines and for proper accounting of its financial transactions. As the demand for the power is such that increases at a rapid pace, the Board also under-takes planning for the future by preparing schemes, it gets them approved from appropriate authority and executes them through its construction organisation.

CHAPTER - 2

2. ORGANISATIONAL SET UP

2.1 THE BOARD

The full Board consisting of 7 members is supreme decision making authority of the Punjab State Electricity Board. All other authorities exercise power delegated to them by the Board from time to time, of the 7 member, 6 including the Chairman, are Whole Time Members and one Ex-officio member is representative of the Pb. Govt. The Board meets periodically to transact the bussiness placed before it. In the transaction of its business it is assisted by the Secretary who is responsible for presenting matters for decision by the Board, keeping a record of its decisions, circulating these decisions to the concerned quarters and for ensuring proper follow-up action. The incumbancy of Chariman and Members during the year 2006-2007 is given in Chart-I. During this year the Board held 11 meetings.

2.1.1 WHOLE TIME MEMBERS

The 6 Whole Time Members collectively are the second level of decision-making authority in the Board. Apart from this each of them has been assigned a specific area of responsibility in the Board's functioning for which he is overall incharge. The distribution of duties and functions between the Whole Time Members is decided by the Chairman from time to time. A summary of the functions assigned to each Whole Time Member is given in chart-I. During this year Whole Time Members held a total of 37 meetings including special and M.I.R.

2.1.2 THE CHAIRMAN

The Chairman is the Chief Executive of the Board, who is responsible for every aspect of its work. Any matter not specifically assigned to the full Board or Whole Time Members is decided either at his level or at a level to which he choses to delegated his power.

2.2 DEPARTMENTS

The Organisation of the Board below the level of Members is divided into 35 Departments carved on functional lines. Out of these, there are 27 Technical Departments, One Vigilance & Security and four Accounts Departments (Finance, Accounts, Audit and Cost Control & Reduction) and one pertaining to General Administration. Technical Departments are headed by Engineer-in-Chief, General Managers and Chief Engineers. The Finance, Accounts, Audit & Cost Control and Reduction Deptt. are headed by the GM/ Finance, Chief Accounts Officer, Chief Auditor & Chief Cost Control and Reduction respectively. There is ADGP for Vigilance & Security and Secretary heads personnel and General Administration. The Secretary, therefore, performs dual functions. Firstly, he assists the Board in transacting its bussiness as mentioned in para 2.1 above and secondly he is Head of the Department in his own Organisation. Organisational set up of the Board is given in Chart-2.

2.3 PUNJAB STATE ELECTRICITY ADVISORY COUNCIL & LOCAL ADVISORY COMMITTEE

Punjab State Electricity Advisory Council & Local Advisory Committee has not been constituted during 2006-2007.

PUNJAB STATE ELECTRICITY BOARD AS ON 31.3.2007 CHART-I

1.	CHAIRMAN	1. SH. Y.S. RATRA, IAS (Retd.) 1.4.2006 to 31.3.2007.	1. Matter regarding General Administration Gazetted Estt. concerning Class-I Officers and above (Except Senior Executive Engineer and AEE's), Disciplinary casses in respect of Sr., Xens shall be routed through Concerned Techinical Member to Chairman for decision. Vigilance & Security, Administrative approval for creation, upgradation, abolition/diversion, conversion etc. of Gazetted posts. Legal Matters. 2. Posting & Transfers of all Gazetted Officers (Senior Executive Engineers & equivalent level and above). 3. Matters relating to C.E./EA & Enf, Patiala. 4. Matters relating to Er-in-Chief/Chairman/Form for Redrassal of Grievances of the Consumers, Patiala. 5. Matters relating to Chief/I.R. & Welfare, Patiala. 6. All policy issues relating to Commercial and Purchase/ Procurement. 7. Matters relating to C.E./ H.R.D, Patiala. 8. Matters relating to C.E./Commercial, Patiala. 9. Matters relating to recruitment.

10. Other duties not assign to other members.

11. Director/IPC, Patiala.

12. The work relating to calling of explanations, issue of Show Cause Notices/Charge-Sheets in respect of Superintending Engineers and Sr. Executive Engineers has been entrusted to Chairman. But the in-respect of Superintending Engineers falls within the competency of WTM's. The Chairman to delete the word "Superintending Engineers" appearing Sr. No. 3 of ibid office order No. 4725 dated 4.4.2002.

13. Due to resign Member/Personnel as on dated 17.1.2007, all his duties and functions has been performed by the Chairman (Except Advances from Provident Fund in relaxation of Rules).] Except Members

2.	**ADMINISTRATIVE MEMBER**	1. SH. RAMAN BHALLA, 1.4.2006 to 31.3.2007	1. Matters relating to:- i) Public Relation ii) Sports. iii) Culture. 2. All establishment cases of Assistant Engineers & Assistant Executive Engineers. 3. Disciplinary cases in respect of AE's & A.E.Es, a committee consisting of A.M. and concerned Technical Member is constituted to decide such cases. 4. Posting & transfers of AE's /AEE's and Lineman and below ranks of Technical categories (other than ALM). 5. Establishment matters (except disciplinary cases & transfers) of Sr. Xen. 6. Industrial Relations, Labour welfare, Social & Staff Welfare and language. 7. Cases for purchase of land. 8. Cases relating to re-imbursement of medical charges (except Chief Engineers) beyond the competancy of Secretary/CEs/CAO.

Order No. 9438 dated 22.2.2005. Construction Cell was created for the construction of this Management Development Institute at Patiala and accordingly 13 No. posts were created work for construction for Management Development Institute at Patiala was not taken in hand due to restrictions imposed by Air Force Authorities that no construction may be carried out within 900 Meter distance from their Radar and our MDI site for this institute falls within this limit. Efforts are going on for reducing the limit from 900 Meter to 300 Meter as our MDI site falls beyond 300 Meter. In this regard, Air-force Authorsites, Patiala forwarded its recommandations to the Western Command, New Delhi, etc to issue NDC finally by the Ministry of Defence.

Director Estate is also performing the duties of Secretary, House Allotment Committee for allotment of houses in various colonies of PSEB at Patiala.

Duties & responsibilities of Estate Office as per Board's O/O No. 7165 dated 1.7.93 are given as under.

i) To collect land record of all the properties of the Board, compile them in proper manner so as to retrieve the same for referance when-ever required by any agency.

ii) To carry out resurveying of all sub-stations, colonies, projects of the Board.

iii) To prepare detailed land plans showing encroachments of Board's properties.

iv) To detect suplus and unused PSEB lands.

v) To act as Co-ordinating agency for declaring the land surplus.

vi) To act as nedal agency for obtaining approval for disposal of surplus lands from various agencises of PSEB and Punjab Govt.

vii) To dispose of surplus land.

viii) To provide detailed information of land records to concerned agencies for proper defence of Board's case in the courts relating to encroachments and related disputes.

ix) Allotment of Board's accommodations at Patiala in Power Colong No. I,II, & new residential colony 66 KV Grid, Patiala.

x) To deal encroachment cases of Board's property under Punjab Public premisses and Land (Eviotien & Rent Recovery) Act, 1973 once the powers of Collector are delagated by Punjab Govt.

xi) Whenever an organisation is abolished/merged with other organisation, all moveable and immovable properties shall be handed over to the Estate Organsation to be passed on to the concerned Organisation for subsequent utillization with the approvel of Competent authorityss.

xii) Preparation of Inventroy Control Register in respect of landed property of the Board and upto dating the land revene records and handing over the same to DS/PM Organisation for day to day reference and updating.

xiii) Finalisation of modalities for disposal/surplus land.

The progress of Estate Organisation during 2006-2007 is given as under :-

Revene record of 127 Nos. sub-stations was collected and resurvey work of 45 Nos. sub-stations was carried out during the year 2006-2007. Demarcation of 17 Nos. Sub-stations got done from the Revenus Deptt. & encroachments at 24 Nos. sub-stations were got removed 3 Nos. court cases have been decided in favour of PSEB and 9 Nos. court cases are being defended through Board's council.

5.10.1 FLY ASH

During the year2006-2007, the three Thermal plants of PSEB generated 14380 million units of electricity while consuming about 98.24 lac Tonnes of coal which with average ash content of 34.35% produced 33.75 Lac Tonnes of ash containing around 80% Dry Fly Ash. As per notification issued by Govt. of India the electricity boards were required to utilize 40% of total ash generated by 14.9.2006 with further increase in utilization every year. progressively so as to achieve 100% utilizaition of fly ash by 14.9.2014 Actual utilization of fly ash during the year under report by PSEB is much more than the National average Each of tis Thermal Plants exceeded the targets as given below :-

a) GGSSTP, ROPAR

While generating 9770.34 M. units, 64.70 Lac Tonnes of coal was consumed that produced around 21.86 Lac Tonnes of ash. Out of this 17.49 Lac Tonnes was dry fly ash and 4.37 Lac Tonnes was pond ash. Various cement & brick manufacturers consumed 16.97 Lac M.Tonnes of dry fly ash and 2.02 Lac MT of pond ash during the year amounting to utilization of 96.78 % of dry fly ash & 86.64% of tota ash produced.

b) GHTP, LEHRA MOHABBAT

While generating 3443.17 M. Units, 20.19 Lac Tonnes of Coal was consumed that produced around 6.96 Lac Tonnes of ash. Out of this 5.57 Lac Tonnes was dry

fly ash and 1.39 Lac Tonnes was pond ash. Various cement & brick manufacturers consumed 5.09 Lac M. Tonnes of dry fly ash and 2.02 Lac M. Tonnes of pond ash during the year amounting to utilizaiton of91.38% of dry fly ash & 73.13% of total ash produced.

c) **GNDTP, BATHINDA**

While generating 2166.13 M.units, 13.26 Lac Tonnes of Coal was consumed that produced around 4.93 Lac Tonnes of ash. Out of this 3.95 Lac Tonnes was dry fly ash 0.99 Lac Tonnes was pond ash. Various cement & brick manufacturers consumed 3.18 Lac M. Tonnes of dry fly ash and 0.14 Lac M.Tonnes of pond ash during the year amounting to utilization of 80.50% of dry fly ash & 64.6% of total ash produced.

5.11 ACTIVITIES/ACHIEVEMENTS OF IT DIRECTORATE (2006-2007)

The office of Director/Computer services (Now Director/IT) was created in the year 1985 (14.8.1985) under the administrative control of Chief Engineer/ Commercial. The allied staff such as System Analyst, Programmer, Computer Operator & KPG were created in the year 1986.

1. PSEB WEBSITE

a Maintaining/Uploading of PSEB website psebindia.org.

b The work of redevelopment, hosting and maintenance of PSEB new website was entrusted to M/S Infinite India and Phoenix on 18.7.05. Almost work has been completed by the firm. The New Website is likely to be launched in near future.

It is proposed to add some more features listed below in the scope of work of redevelopment of new website:-

a Inclusion of payment gateway.

b SMS services for complaint registrations & bill receipt.

c Inclusion of Module on Theft Malpractices in the website for reports on power theft.

2. INTERNET LEASE LINE, MAIL SERVER AND CONNECTIVITY AT HEAD OFFICE

a INTERNET leased line BSNL.

b PC connectivity in head office and internet.

c Mail server commissioned for e-mail at Pugmarks Chandigarh.

d Maintenance of PSEB Website, Mail Server and Networking in Head Office.

3. COMPUTER CENTRE ACTIVITIES

a Processing of GPF.

b Salary Pay & Accounts Section.

c Salary Bill Section.

d Inter Unit Transactions (IUT).

e Cheque Drawn Reconciliation (CRD).

f Bank Reconciliation.

g Revenue Monitoring.

h Man Power Data.

i Pension and Family Pension.

j Audit Para-issued by AG Punjab.

k Conducting exams & computer awareness tests.

l Software to collect GPF-schedule electronically developed.

m Training provided to concerned officials of Accounts for handling the packages GPF Section is receiving data of 2006-2007 through this package.

n Salary Package distributed to all distribution divisions of PSEB and implemented after giving necessary training.

4. PROCUREMENT CASES

a Two Nos. On line UPS of 5 KVA capacity procured against Purchase Order No. 273/ DIT-593 dated 10.1.07 through DGS & D rate contract.

b 40 No. Line interactive UPS of 500 VA capacity procured against purchase order No. 275DIT-593 dated 9.2.07 for various offices of PSEB through DGS & D rate contract.

c Procurement of 17 No. Line Matrix Printers of 1000 LPM Capacity for Various officers of PSEB is under process.

d Purchase Orders for procurement of 376 No. Computers, 376 No. UPS & 376 No. Dot Matrix Printers for various offices of PSEB issued to M/S HCL Infosystems LTD. Chandigarh.

e Procurement of computer consumable items for various offices of PSEB through Limited Tender Enquiry is under process.

f Procurement of antivirus software for computer system already installed is under process due to expiry of validity of pre-loaded antivirus software.

g Procurement of MS Office software for new computer systems being procured, is under process.

h Two Nos. servers of HP make supplied by the firm M/S HP India Sales Pvt. Ltd. Gurgaon through its authorized dealer M/S Targus Technologies Pvt. Ltd. Chandigarh.

5. HR DATA BASE PROJECT

a Implementation of HR project involving computerization of HR functions for about 80,000 employees (including pensioners), Approxinately 78,000 employees data has been computerized balance under process. The following modules are developed with support of consultants & Earnest Young.

b Personnel Module.

c Pension Accounting System.

d HR Data of officers/Officials.

e Disciplinary cases of Officers/Officials.

6. MAINTENANCE & AMC OF COMPUTER SYSTEMS

a AMCs for computers and peripherals procured against vairous purchase orders awarded to M/s HCL Infosystems Ltd, Chandigarh expired on 31.3.2006. The AMC has been renewed for period from 1.8.2006 to 20.7.2007.

b AMC for two Nos. Line Printers installed in the computer center awarded to M/S EDP Services, Chandigarh for the period from 20.10.2006 to 19.10.2007.

7. INVENTORY MANAGEMENT SYSTEM

Computerization of stores under CE/S&D is under process. Three firms Viz M/S HCL infotech, M/s Tally India (Pvt.) Ltd. M/S DOEACC Society have given their presentations in this regard & offers are awaited.

8. a) Hiring Services of consultants for implemetation of various IT application in PSEB.

b) Energy accounting and auditing in PSEB.

CHAPTER - 6

6. COMMERICAL ACTIVITIES

6.1 (a) DIRECTOR/SALES-1

The following Commerical circulars regarding Sales of Power were issued during 2006-2007:-

1. **CC No.6 /2006 dated 6.2.2006**

Instructions were issued regarding installation of meters in Meter Cup Board (MCBs) of the design approved by Board.

2. **CC No. 9/2006 dated 24.2.2006, 12/06 dt.17.3.06, 15/06 dt. 10.4.06, 19/06 dt. 3.5.06 & 24/06 dt. 1.6.06 & 33/06 dt. 6.7.2006.**

Instructions were issued regarding regularization of temporary tubewell connection issued during paddy season of 2005 to the applicants who had otherwise registered their applications with PSEB for release of regular tubewell connection under general category or any priority category upto 31.5.2005..

3. **CC No.13/2006 dated 17.3.2006**

Instructions were issued that new AP tubewell connection shall continue to be released on LT supply upto 30.9.2006.

4. **CC No. 14/2006 dated 31.3.2006**

In compliance of the Hon'ble Supreme Court orders dated 30.10.2002 passed in writ petition (Civil) 202 of 1995, instructions were issued that henceforth power connection to Saw Mill / Veneer/Wood based industries in the State shall not be granted unless it has been granted SSI registration by the concerned General Manger/ District Industries Centre.

5. **CC No. 16/2006 dated 17.4.2006**

To revive the sick industry & other categories of consumers OTS package introduced earlier vide CC No. 42/2002 dated 12.8.2002 & further extended vide CC. No. 50/2005 dated 28.7.2005 was extended upto 30.9.06. In this scheme consumers whose connections were disconnected temporarily/permanently upto 31.3.05 could opt for reconnection.

6. **CC No. 23/2006 dated 26.5.2006 and CC NO. 52/2006 dated 20.10.2006**

VDS for regularization of unauthorized extension in load of AP consumers was introduced w.e.f. 1.6.06. & again from 1.11.06. to 31.1.07.

7. **CC No. 25/06 dt.2.6.06, 42/06 dt. 3.8.06, 58/06 dt. 3.11.06 & 61/06 dt. 20.11.06**

Instructions were issued to the field officers to make all out efforts to clear the back log of pending applications registered upto 31.3.88 under general category & in Sub-Division where not AP T/W application registered upto 31.3.88 was pending , new AP tubewell connection can be released against test reports received against applications registered upto 31.12.90.

8. **CC No. 26/06 dt. 2.6.06, 28/06 dt. 7.6.06, 31/06 dt. 15.6.06, 44/06 dt. 8.8.06 & 50/06 dt. 29.9.06.**

On the persistent demand of the farmers, instructions were issued for release of temporary AP tubewell connections during the paddy season of 2006 which remained operational from 20.6.06 upto 15.10.06.

9 **CC No. 27/06 dated 6.6.06**

Instructions were issued regarding "ESTABLISHMENT OF FORUM FOR REDRESSAL OF GRIEVANCES OF THE CONSUMERS" under section 42 (5) of the Electricity Act 2003 called PSERC (Forum & Ombudsman) Regulation-2005.

10 **CC No. 30/06 dt, 15.6.06**

To mitigate the problems of consumers who had to stand in long queues for hours together for deposit of their Electricity Bills instructions were issued to introduce a token system at all the Cash Collection Centres of PSEB.

11. **CC No. 34/06 dt. 6.7.06 & 53/06 dt. 17.10.06**

As per Notification issued by the Govt. of Punjab for the implementation of provisions under Section-126,127 and issued 135 (2) & 152 of Electricity Act-2003, instructions were issued vide CC No. 34/06 dated 6.7.06 followed by clarification vide CC No. 53/06 dated 17.10.06.

12. **CC No. 35/06 dt. 12.7.06**

It was decided that existing rate of 9% perAnnum for payment/recovery of interest of the disputed amount shall remain operative during the year 2006-07.

13. **CC No. 37/06 dt. 18.7.06**

With a view to take concrete steps to achieve the desired targets for reduction in T&D losses, instructions were issued vide CC No. 37/06 dated 18.7.06 followed by clarification vide CC No. 67/06 dated 21.12.06 that all new connections w.e.f. 1.10.06 shall be released under HVDS only.

14. **CC No. 38/06 dt. 25.7.06**

Instructions were issued not to released any Electric connections to prospective consumers(s) where the power line(s) is passing over his/their plots till such times the line(s) are got shifted at their cost.

15. **CC No. 40/06 dt. 29.7.06, 41/06 dt. 1.8.06, 45/06 dt. 11.8.06**

Instructions regarding internal "Consumer Complaint Handing Procedure" as approved by PSERC were issued.

16. **CC No. 43/06 dt. 4.8.06**

Tubewell Policy for the year 2006-07 was issued and a target for release of 40,000 Nos new AP tubewell connections was fixed for the year 2006-07.

17. **CC No. 47/06 dt. 13.9.06**

Instructions were issued vide CC No. 47/06 dated 13.9.06 regarding appointment of Ombudsman as per notification of PSERC dated 30.8.06 in pursuance to Section-42 of the Electricity Act-2003 read with PSERC (FORUM AND OMBUDSMAN) Regarding -2005.

18. **CC No. 48/06 dt. 15.9.06**

Instruction were issued that feasibility clearance for releae of new connection/ extension in load in case where the applied load/extension in load cannot be releaed due to system/Grid constraints within a period of six months shall not be given & kept pending. However, such applications shall retain their seniority as per date of requisition.

19. **CC No. 52/06 dt. 10.10.06**

Chairman PSEB has been empowered to allow priority for release of AP tubewell connection to Gram Panchayats for irrigating Gram Panchayats land.

20. **CC No. 55/06 dt. 31.10.06**

VDS for DS/NRS category of connections was introduced for 3 months w.e.f. 1.11.06 to 31.1.07.

21. **CC No. 57/06 dt 3.11.06**

VDS for SP consumers was introduced from 7.11.06 up to 31.3.07.

22. **CC No. 59/06 dt. 10.11.06**

As per policy of State Government instructions were issued for allowing priority power connections to the farmers installing Drip/Micro Sprinkler Irrigation System on a minimum area of hectare for fruit crops or one hectare for vegetables and non horticultural crops.

23. **CC No.64/06 dt. 29.11.06**

In view of encouraging response of consumers, the matter was considered and it was decided to extend OTS upto 31.3.2007 for revival of sick industries & other categoreis of consumers. With this extension consumer whose connections stand disconnected tamporarily/permanently upto 30.9.05 could opt for reconnection under OTS package.

24. **CC No. 65/06 dt. 11.12.06**

Instructions were issued that Urban Pattern Supply at Board's cost shall be provided to the farmers/residents presently in Deras/ Dhanies/Dalit Basties, Be-chirag Villages forming a cluster of 5 or more houses situated adjoining to each other and spread over in stretch of maximum of 300 Mtrs from one end to the other end and located at a distance more than 500 Mtrs from the village Phirni without any limit by providing shingle phase, 11 KV line tapped from the nearest UPS feeder and by installing single phase 11 KV, 10 KVA distribution transformers.

25. **CC No. 66/06 dt. 19.12.06**

Clarification was issued that new tubewell connections under Chairman Priority Quota are also to be released under by providing individual small distribution transformer for each connection on single pole structure at Board's cost.

b. **DIRECTOR SALES-II**

This directorate deals with the commercial policy of PSEB in the subject of Electricity Duty, Schedule of General Charges, MMC, Meter Rentals, Power factor etc. This directorate issued the following commercial circulars during 2006-2007.

1. **CC No. 17/2006 dt. 21.4.06**

Instructions were issued for refund to be given to SC Domestic Consumers on a/c of increase in free electricity supply from 50 units per month to 200 units w.e.f. 1.9.05.

2. **CC No. 18/2006 dt. 27.4.06**

Instructions were issued regarding Meter Rentals/cost of meter and metering equipment/meter security.

3. **CC No. 29/2006 dt. 9.6.06**

Instructions were issued regarding Levy of Electricity duty.

4. **CC No. 32/2006 dt. 27.6.06**

Instructions were issued regarding refund to be given to SC domestic consumers on account of increase in free electricity supply from 50 units per month to 200 units w.e.f. 1.9.2005.

5. **CC No. 36/2006 dt. 14.7.06**

Instructions were issued regarding General conditions of tariff and Schedule of Tariff.

6. **CC No. 39/2006 dt. 27.7.06**

Instructions were issued regarding Regulation on Installation and operation of Meter.

7. **CC No. 46/2006 dt. 7.9.06**

Instructions were issued regarding exemption of Electricity Duty to existing Agri Tissue culture units.

8. **CC No. 49/2006 dt. 19.9.06**

Instructions were issued regarding load surcharge in case of NRS consumers ESR clause 86.5.

9. Cases relating to administrative approval of proposal for amendment/revision of various Regulations and Delegation of Powers.
10. Administrative approval for creation, upgradation, abolition, diversion, conversion etc. of Non-Gazetted posts (Head Office Administration.)
11. Due to resign Member/Personel as on dated 17.1.07, Advances from Provident Fund except those of Member (in relaxtion of Rules)

9. **CC No. 51/2006 dt. 4.10.06**

Instructions were issued regarding waiver of Advance Consumption Deposit on Captive Power Generation - Amendment of Sales Regulation Clause 170.3.2.11.

10. **CC No. 56/2006 dt. 31.10.06**

Instructions were issued regarding grant of free electicity for domestic purposes upto 200 units/month to the Members of scheduled castes having sanctioned load upto 1000 Watts.

11. **CC No. 60/2006 dt. 14.11.06**

Instructions were issued regarding Non availing of full sanctioned load at the the time of release of new connection/Amendment to ESR 35.

12. **CC No. 62/2006 dt. 22.11.06**

Instructions were issued regarding review of General conditions of Tariff of seasonal idustries and consequential review of tariff order for the year 2006-07.

13. **CC No. 68/2006 dt. 28.12.06**

Instructions were issued regarding grant of free electricity for domestic purposes upto 200 units per month to the member of Non SC BPL domestic consumers having sanctioned load upto 1000 Watts.

14. **CC No. 8/2007 dt. 27.2.07**

Instructions were issued regarding Facility of cluster S/Stn. sanction of contract demand.

15. **CC No. 12/2007 dt. 28.3.07**

Instructions were issued regarding to check the misuse of free power to SC & Non SC BPL DS consumers.

6.2 a) DIRECTOR/TARIFF REGULATION-I

1. ARR & Tariff petition for the year 2007-08 has not been filed yet and is likely to be filed by 31st. May 2007. A Study to introduce two part tariff on LS and Railway Traction consumers based on the data for the year 2005-2006 was carried out. Based on this study a proposal for the year 2007-2008 to introuduce two part tariff will be submitted alongwith ARR/Tariff Petition for the year 2007-08 to be filed.

Sample study of Bulk Supply consumers was carried out to analyze the consumption pattern of individual consumers based on category wise consumption. Further analysis to study its financial implication on the Board has been done and submitted to PSERC.

2. Proposal in respect of ARR for Rs. 9460 Crores for the year 2006-07 was submitted before the PSERC on 29.12.2005. The commission after scrutiny of the proposal for the ARR and Tariff Application took the petition on record on 2.1.06. The Regulatory commission issued Tariff order on 10.5.06. Net Revenue Requirement approved by the Commissin was Rs. 8551 crore against. Rs. 9460 Cr. demanded by the Board resulting in nill hike of tariff. Thus existing tariff of FY 2005-06 was made applicable for FY 2006-07. Commercial instructions in respect of implementation of new tariff for the year 2006-07 w.e.f. 1.4.2006 were issued vide CC No. 20/2006 dated 12.5.2006. The Govt. of Punjab provided subsidy of Rs. 1522.61 crore for the agriculture sector and scheduled caste domestic consumers for the year 2006-07.

(b) DIRECTOR/TARIFF-II

Information with reference to the cases defended/contested before PSERC under Tariff Regulation Cell-III is as follows:-

1) PETITIONS NO. 2/2007

This petitions were filled by PSEB before PSERC under section-23 of the EA-2003 for allowing the Board to impose power regulatory meaures for the year 2007-2008. The Hon'ble Commission in its order dt. 31.3.07 allowed the request of the PSEB subject to observations made by the Hon'ble PSERC to cause least incovenience to conumers and ensure parity between Rural and Urban power supply.

2) PETITION NO. 11/2004 and 10/2006

These petitions were filled by M/s Triveni Engg. India Ltd. New Delhi for seeking approval to long term PPAS to be entered into for Mini Hydel Projects. Last hearing of both these petitions were held on 4.5.2007 wherein the arguments were held and closed by the Hon'ble commission. The petitions have been dismissed by the Hon'ble Commission being in fructuous.

3) **PETITION NO. 12/2006**

This petition was filled by M/s Utility Powertech Ltd. Noida for seeking approval to long term PPAS to be entered into for Mini Hydel Projects. Last hearing was held on 4.5.2007 wherein the arguments were held and closed by the Hon'ble Commission being fructuous.

4) **PETITION NO. 12/2004**

This petition was filled by M/s Malwa Industries seeking grant of permission of wheeling of power under open Access provisions of EA-2003 to their sister concern M/s Malwa Cotton Spinning Mills, Ltd. (worstep). Machhiwara and M/s Malwa Cotton Spinning Mills Ltd. (Processing). The case has been decided against the firm by the Hon/ble commission on 10.1.2007. The firm has filed petition before Appellate Tribunal for Electricity New Delhi against the order of the Commission.

5) **PETITION NO. 2/2006**

This petition was filed by M/s Nahar Industries for seeking permission for wheeling of power from their unit at Amloh to their unit at Ludhiana and determination of terms, conditions and triff. PSEB has contested that at Amloh end the firm is connected PSEB Grid through a mix feader at 11 KV voltage level for which Open Access can not be allowed. Wheeling of Power is possible if the firm establishes 66 KV network at its own cost. The firm has requested that since the generation of power is under NRSE Policy the tariff under NRSE Policy only should be applied and triff as per Open Access Regulations should not be made applicable. The Commission has referred matter to Govt. of Punjab to indicate if it is ready to bear the difference in these two types of tariff. Reply from Govt. of Punjab is awaited.

6) **PETITION NO. 18/2006**

It has been filed by M/s Indian Acrylics Ltd. under Section-86 of EA-2003 for determining terms and conditions in respect of third party sale within the State of Punjab at a uniform wheeling charge as specified in NRSE Policy. Interim reply has been filed by PSEB on 21.5.2007 as NRSE Policy is under finalization by PSEB.

7) **PETITIONS NO. 8/2006**

This petition was filed by Mis GACL seeking review of order or 25.1.06 passed by the Commission in case of thier earlier petiticn No. 12/2003

seeking that the decisicn dt. 25.1.2006 should be allowed to be implemented retrospectively from April, 2005 and exemption from levy or PLEC during the period power is being wheeled is generated. The Case is under consideration. The Commission has deci8ed the petition against tne firm vide order dt. 14.8.06.The firm has move to AppellateTribunal for electricity New Delhi against Order dated 14.8.2006.

8) **PETITION NO. 3/2007**

The Pentition has been made by PSEB under section 86(1) (b) of Electricity Act, 2003 for approval of Power Purchase Agreement for purchase of power from 2X250 (+20%) MW Goindwal Sahib Thermal Power Station, Goinwal Sahib (Distt. Tarantarn) to be developed by M/s GVK Power (Goindwal Sahib) Ltd., "Paigah House", 156-59, Sardar Pated Raod, Secunderabad-500003 (AP) on 'BOO' basis. Petition admitted on 4.5.2007. The petition has been listed for hearing. Additional submissions have been made by PSEB on 21.5.2007.

9) **PETITION NO. 21/2006**

This petition has been filed by M/s Birla Plus Ltd. for inclusion of all the objections raised by the petitioner on the order dated 10.5.2006 passed by the Hon'ble Commission on the ARR of the PSE8 for the year FY 2007 and passing a speaking order on each objection raised by the petitioner. Reply to the petition has been filed by PSEB on 21.5.2007.

Information relating to Court cases being handled by Cell -IV of this Directorate is as under:-

i) Board filed Appeal No. 119 of 2006 before the Hon'ble Anpellate Tribunal For Electricity, New Delhi against PSERC Tariff Order dated 10.5.2006 for FY 2006-2007. The appeal was defended through M/S J. Sagar Associates, New Delhi.

ii) The Honcble ATE, New Delhi vide its' judgement dated 26.5.2006 dismissed both the Appeals No.54 & 55 of 2005 filed by the Board. The Board decided and filed SLP in the Hon'ble Supreme Court of India, New Delhi on 5-6th August-2006.

iii) Various Large Supply consumers &. their Associations had also filed appeals No. 4,13,14,23,25,26,35,36 of 2005 in the Hon'ble Appellate Tribunal For Electricity, New Delhi against PSERC Tariff Orders dated 14.6.2005 for FY 2005-06 and dt. 30.11.2004 for FY 2004-2005. The replies to the appeals were filed & were defended by the Board in the Tribunal through M/S J.Sagar Associates, New Delhi. The

Hon'ble Tribunal while disposing of these appeals through the same judgement (as in (i) above) dated 26.5.2006 has directed PSERC to lock into the issues like RSD Cost Allocation, Cost of Supply and Cross Subsidy, Diversion of Funds and Separate Tariff for Generation, Transmission & Distribution, Base of the above judgement PSEB file an appeal No. 4510/06 Court of India thorough Board's Counsel Sh. P.S. Bullar of (M/S J.Sagar & Associates, New Delhi) on 5-6th August 2006. The case was listed before the Hon'ble Court for preliminary hearing on 8.11.2006.

iv) SLP No. 2358-2367 of 2004 had been filed in the Hon'ble Supreme Court of India through Ms. Kadaambari, Advocate, New Delhi against judgement dated 21.11.2003 of the Hon'ble High Court of punjab & Haryana vide which the matter was remanded to PSERC to be decided afresh in view of observations made in the judgement in case of 11 No. cases filed by various Consumer/Industrial Houes/Industrial Chambers against PSERC Tariff Order dated 6.9.2002 for FY 2002-03. Hon'ble Apex Court vide its order dated 9.2.04 has stayed the hearing of the commission pursuant to the order of remand dated 21.11.03 passed by Punjab & Haryana High Court till further order. Matter is pending in the Apex Court.

v) Steel Furnace Association, Chamber of Industries & Commerce and Apex Chamber & Industries filed petitions in the Punjab & Haryana High Court against PSERC order dated 23.5.03 for FY 2003-04. The cases were defended by the Board through Sh. Gobind Goel, Advocate Chandigarh. The Hon'ble Punjab & Harayan High Court through its judgement dated 24.4.06 directed the above consumers to file their appeal in the Hon'ble Appellate Tribunal for Electricity, New Delhi on 4.7.2006.

vi) Board charged Rs. 2.08 Crores to M/s Nahar Sugar & Alied Industries Ltd., Amloh on account of parallel operation etc. against which the consumer filed petition in the PSERC. PSERC decided the case in favour of PSEB but the consumer approached Punjab & Haryana High Court. While disposing off the petition of the consumers on 8.11.2004 Hon'ble High Court directed PSERC to reconsider the case and pass fresh speaking order. However,PSEB decided to challenge the jurisdiction of Punjab Haryana High Court to entertain the above petitim of the consumer and filed SLP No. 26490/04 in the Hon'ble Supereme Court of India through Sh. R.S. Suri, Advocate. The Hon'ble Superme Court of 1ndia through its order dated 5.1.06 stayed the orders dated 8.11.2004 Passed by the Hon'ble High Court of Punjab & Haryana.The Hon 'ble Superme Court of India passed another

but subsequent the order on 9.10.06 setting aside Hon 'ble High Court Order and parties were directed to file appeal before the Hon'ble Appellate Tribunal for Electricity, New Delhi. The consumer has file appeal in the Hon'able Appellate Tribunal for Electricity ,vide AFR No. 1349 of 2006 (i. A 189/06). The Appeal listed before the Hon'ble Tribunal for arguments on 20.3.07. The Advocate informed to this office vide his letter date. 23.3.07 that the matter was argued at length and judement has been reserved.

vii) M/s Khanna Paper Mills (P) Ltd., Amritsar also filed a petition in the PSERC against levy of parallel operation charges, PSERC vide just order dated 23.7.04 decided the Case in favour of PSEB but the consumer filed petition before the Hon'ble Punjab' Haryana High Court, Chandigarh. The Hon'ble High Court on 8.11.04 passed order and directed PSERC to reconsider the case and pass fresh speaking order. However, PSEB decided to Challenge the jurisdiction of Punjab & Haryana High Court to entertain the above petition of the consumer and filled SLP No. 26409/04 in the Hon'ble Supreme Court of India throgh Sh. R.S. Suri, Advocate. The Hon'ble Supreme Court of India through its order dated 5.1.05 statyed the orders dt. 8.11.2004 passed by the Hon'ble High Court of Punjab & Haryana.

viii) After having comments of the PSEB, Govt of Punjab Issued notifications relating to Commerical/Sales matters as per provisions in the Electricity Act-2003:-

i)	Section-126	Designation of Officers of PSEB as Assessing Officers for LT & HT consumers
ii)	Section-127	Designation of Officers of State Govt. as Appellate Authority.
iii)	Section-135 (2)	Authorization of Officers of PSEB to enter Consumer premises for checking/inspecting.
iv)	Section-152 (1)	Amendment of Compounding Charges under Sub-section (i) of Section 152 of Electricity Act-2003.
v)	Section-153	Establishment of Special Court under Section-153 of EA-2003-regarding theft cases.
vi)	Section-127	To send the action taken report in view of Notification regarding authorisation of Divisional Commisioners, ADC (Gen.) and SDM to hearing of appeals under Section -127 of Electricity Act-2003.

6.3 DIRECTOR/BILLING

Billing Directorate, PSEB, has been assigned the work of preparation of Electricity Bills of Domestic, NRS, SP, MS and L.S. Categories of Consumers. There are 3 No. Centralized Billing Cells, 3 No. Computer Cells and one No. Computer Service Cell under this Directorate.

a) CENTERALIZED BILLING CELLS

There are three No. Centralized Billing Cells located one each at Patiala, Ludhiana and Jalandhar which prepare bills of Large Supply and Bulk Supply consumers on Computers of the Board. There are a Total of 4513 No. L.S. and 335 No. B.S. consumers ending 3/2007.

Preparation of Ledgers has been started in some of the Circles of PSEB and it will shortly be implemented in other circles as well.

b) COMPUTER CELLS

i) There are Three Computer Cells, one each at Bathinda, Ludhiana and Amritsar for the preparation of bills of Domestic, NRS, SP and MS Consumers. Bills are prepared by M/s DOEACC at Chandigarh and Ludhiana.

ii) Presently, all the bills of DS, NRS, SP, AP, (16 circles) and M.S.Consumers in these Cells are being prepared on Computers from outside agencies. The No. of such computerized consumers ending 3/2007 for D.S. Consumers is 4243705 NRS-743507, SP-81878, A.P-810674 (16 circles) & MS 20906.

iii) Computer Cells Chandigarh is co-ordinating with M/s DOEACC for day to day work.

c) STREAMLINING THE WORK OF 3 CENTRALIZED BILLING CELLS

The work regarding bill preparation of LS/BS Consumers by 3 CBCs. is being streamlined by upgrading the Computer Hardware & Networking the 3 CBCs and development of new software in ORACLE platform. Ledgers of LS/BS have been started in come of the Circle.

d) PREPARATION OF A.P. LEDGERS ON COMPUTERS

All the AP Bills have been computerized except in 3 Circles (No. AP Bills in Amritsar City Circle.) All the Bills in Tarn Taran and East Circle Ludhiana will be

computerized in the month of May. However in Ludhiana Suburban Cirlcle, the process has started and will be completed by june 2007.

e) **COMPUTERISED CASH COLLECTIONS**

The computerized cash collection scheme has been started in 350 sub Divn. of different Circles. Computerized Cash Collection in left over 132 Sub Divns. of PSEB will probably be completed within six months. Work Order-cum-Purchase Orders have been placed on the firms.

f) **INSTALLATION OF BILL PAYMENT MACHINES**

In order to give additional facility to valued customers of PSEB ten numbers 'SEVAK' Bill Payment Machine supplied by M/S TATA into Tech New Delhi have been installed in Punjab and are working satisfactorily. However a case of out-sourcing another 25 nos such machines is under process.

g) **INTERCONNECTIVITY AT LUDHIANA**

i) Interconnectivity at Ludhiana between varous offices of CE/Central, PSEB, DD/CBC, DD/CSC and Operation Sub-Divns. of East & West Circles of Ludhiana started and working satisfactorily.

ii) **INTER CONNECTIVITY AT PATIALA**

The work order cum purchase order has been placed and work will probably be completed by the end of september, 2007.

h) Additional facility for collection of payment against energy bills at Suwidha Centre at Nawanshahar, Muktsar, Kapurthala, Banga allowed after obtaining approval from higher authorities.

i) Delivery of bills through post offices at Tarn Taran Muktsar as a Pilot project @ Rs. 3/- per bill under their special mail services has been issued.

j) Placing the work order of street light computer energy bils on M/s DOEACC Chandigarh. Software has been checked and the generation of the street light bills in one of the Circle started in 4/2007 and will be completed in phased manner in all the Circles of PSEB.

6.4 ENFORCEMENT & ACTIVITIES

The details of Enforcement Activities of the Punjab State Electricity Board during the year 2006-2007 is as under:-

Sr. No.	Details	Total No. of cases detected	Amount Charged (Rs. in Lacs)
1.	2.	3.	4.
1.	Theft of Energy		
1.	By Domestic NRS, Commercial, Industrial, Agriculture Pump-sets and Bulk supply Consumers.	8926	850.29
2.	Due to faulty Metering/ Wrong Meter connections.	6696	1049.25
3.	Increase in un-authorised load	11217	1558.87
4.	Other Misc Lapses	15538	3272.38
	Total:	**42377**	**6730.79**
5.	Total No. of connections checked	145167	
6.	No. of 'A' rolls checked	86	
7.	No. of Muster Rolls checked	24	
8.	No. of Vehicles checked	58	
9.	No. of Enquiries completed off	3	
10.	No. of complaints attended	578	
11.	No. of mass raids conducted for checking of connections.	300	
12.	Human details due to Electric current with reasons year 2006-2007.	Nil	

6.5 ITEM MANUFACTURED /TRANSFORMERS REPAIRED

The details of items manufactured and transformers repaired in the workshop of Punjab State Electricity Board under Chief Engineer/Workshop, Ludhiana during the year 2006-2007 were as under:-

a) ITEMS MANUFACTURED

Sr. No.	Discripition of items	Central Workshop Verka (Nos.)	Central Workshop Patiala (Nos.)
1	2	3	4
1.	11 K.V.G.O, Switch	4985	
2.	Reg. Eye Bolts	2095	
3.	Eye Screw Bolts	4465	
4.	Lead Seals	497500	64500
5.	Male Contacts	7518	
6.	Female Contracts	6280	
7.	'D' Streps	100	
8.	L.T. Stary Set	22427	
9.	Earth Rods	16260	
10.	'V' Shape Cross ARMs	3170	
11.	Top Hampers	9490	
12.	L.T. Fuse Units	511	
13.	L.T. Jumper Frames	65	
14.	H.V. Fuse Units	2350	
15.	Single Pole 3 Q 11 KV G.O.S.	2430	

ACHIEVEMENTS

During the month =74.14%

Ending the month =90.51%

3.	**ADMINISTRATIVE MEMBER/PERSONNEL**	1. SH. HARDIAL SINGH KAMBOJ 1.4.2006 to 17.1.2007	1. Matters relating to:- All establishment/Discplinary cases of all ranks Technical & Non-Technical equivalent to AE/AEE (other than AE/AEE). 2. All Establishment/Disciplinary Cases of Supdt. Gr-I, Supdt. Gr-II, Sr. Asstt., U.D.Cs, L.D.Cs, and all other categories of equivalent ranks of general cadre. 3. Posting and Transfers of AAE, JE, ALM & Non-Technical Categories (Other than Class-IV). 4. Redressal of Grievances. 5. Sanction for hiring of Private accommodation for Board's offices beyond the competancy of Secretary. 6. Cases concerning compensation under the Workmen Compensation Act & claims against accidents. 7. Priority/Compassionate employment Cases. 8. Advances from Provident Fund except those of Members (in relaxation of Rules).] 5.3.07 to 31.3.07 9. Cases relating to purchase of Stationery & Printing of forms beyond the Competency of Secratary, Jt. Secy./Dy. Secy., in consultation with Finance Section.

6.5 (b) TRANSFORMERS

CAPACITY WISE REPAIRED TRANSFORMERS (IN KVA) DURING THE YEAR 2006-07

Sr. No.	Name of the Office	25	50/63	100	200/250	300/400	500	1000	Total T/F/Units
1.	T.R.W. Circle, P.S.E.B, Patiala.	546	952	1138	102	10	2	_	2750/4722
2.	T.R.W. Circle, P.S.E.B, Ludhiana.	757	1739	1656	188	7	_	1	4348/7474.5
3.	T.R.W. Circle, P.S.E.B, Amritsar.	844	1492	1584	64	4	_	_	3988/6526
	Total:	**2147**	**4183**	**4378**	**354**	**21**	**2**	**1**	**11086/18722.5**

6.6 METER REPAIR

The details of meter repaired in vaious Laboratories of Punjab State Electricity Board, Position of Stock and testing of private meters under Chief Engineer/Metering during the year 2006-2007 is as under:-

Sr. No.	Type Meter	Name of M.E. Divisions					
		Ludhiana	Amritsar	Jalandhar	Patiala	Bathinda	Grand Total
a)	**TESTING /CALLIBRATION OF STOCK METERS**						
1.	Single Phase	4000	571	6026	6177	3976	20750
2.	Three Phase (Poly Phase)	595	192	793	2598	684	4862
3.	H.T./L.T.	814	234	382	276	-	1706
	Total:	**5409**	**997**	**7201**	**9051**	**4660**	**27318**
b)	**TESTING /SEALING OF PRIVATE METERS**						
1.	Single Phase	600	1853	-	5207	3774	11434
2.	Three Phase (Poly Phase)	150	104	2	680	128	1064
3.	H.T./L.T.	51	9	16	52	2	130
	Total:	**801**	**1966**	**18**	**5939**	**3904**	**12628**
c)	**REPAIR OF T & P METERS**						
1.	Single Phase	-	-	-	-	-	-
2.	Three Phase (Poly Phase)	899	1974	1707	1453	1821	7854
3.	H.T./L.T.	-	-	-	-	-	-
	Total:	**899**	**1974**	**1707**	**1453**	**1821**	**7854**

6.7 P.C.C POLES

The details of Poles Manufactured in the vaious Poles Workshops of Board under Chief Engineer / Civil Design & Const. Patiala during the year 2006-2007 were as under:-

Sr. No.	Details of Poles	Pilot work-shop at Mukatsar	Pilot work-shop at Mohali	Pilot work-shop at Sarna (Pathankot)	Grand Total
1.	P.C.C. Poles 8 Mtr.	28880	15320	15922	60122
2.	P.C.C. Poles 9 Mtr.	6560	8200	16120	30880
	Total:	**35440**	**23520**	**32042**	**91002**

CHAPTER-7

7. PERSONNEL AND GENERAL ADMINISTRATION

7.1 STRENGTH OF BOARD EMPLOYEES

The classwise sanctioned posts, both permanent and temporary existing as on 1.4.2006 to 31.3.2007 are as under:-

Sr. No.	Category of post	Staff strength as on 31.3.2006	Post created during the year 2006-07	Post abolished during the year 2006-07	Staff strength as on. 31.3.07
1.	Class I & II	2872	35	49	2858
2.	Class III	68287	200	316	68171
3.	Class IV	12639	91	111	12619
	Total :	**83798**	**326**	**476**	**83648**

i) Instructions were issued vide office letter No. 329580/330880/2P06/Vol.6 dated 12.12.2001 to regularise these daily wages workers of the Board who have completed 500 days of service and are still working as Workcharge.

ii) The next kins of those regular/workcharge workers who die due to accident, are paid Rs. One Lac under Group Insurance Scheme. Payment to 74 No. claiments under this scheme was made during the year 2006-2007.

7.2 FINANCIAL BENEFITS TO STAFF

The Board allowed the following Financial benefits/concession to its employees during the year 2006-2007 as under:-

Sr. No.	Office Order/Circular No.	Date	Financial Circular No.
1.	2.	3.	4.
1.	Grant of Dearness Allowance on revised rates to PSEB employees and dearness relief to pensioners/Family Pensioners.		
i)	45990/46034/Fin-2/2 (D.A)	2.5.06	3/2006
ii)	57479/57528/Fin-2/13 (98)	24.5.06	5/2006
iii)	109877/109926/Fin-2/9 (98) L-3	27.9.06	13/2006

1.	2.	3.	4.
iv)	120690/120739/Fin-2/2 (D.A)	13.10.06	15/2006
v)	134375/134419/Fin-2/13 (98)	14.11.06	16/2006
2.	**Regarding revival of old rate of TA/DA and L.T.C.**		
i)	53739/53778/Fin-2/8 (98) TA	22.5.06	4/2006
ii)	59776/59015/P F-27/L C-573/ Vol.6/L-2/ LTC.	29.5.06	6/2006
iii)	73710/73749/PP-27/L C-573/ Vol.6/L-1/L T C.	30.6.06	10/2006
iv)	116057/110096/Fin-2/8 (98) TA/DA.	27.9.06	14/2006
3.	**Implementation of the recommendation of the Fourth Punjab Pay Commission regarding Pension etc.**		
i)	62570/62609/Fin-2/9 (98) Loose	1.6.06	7/2006
4.	**Regarding grant of incentive, Hardship Allowances, Hydel Allowances and Generation Allowances etc. on Hydel and Thermal Projects.**		
i)	0/0 No. 450/Fin-2/4 (HRA)/Loose	23.6.06	8/2006
ii)	0/0 No. 451/Fin-743/Loose	23.6.06	9/2006
iii)	0/0 No. 452/Fin-2/36/93	28.7.06	11/2006
iv)	0/0 No. 455/Fin-743/Loose	26.10.06	
5.	**Regarding grant of Time Bound Promotional scales to the I.B. Employees.**		
i)	88988/89032/PRC-145	10.8.06	12/2006
6.	**Regarding grant of Commutation of Pension to the Board Employees.**		
i)	135702/135742/Fin-2/9 (98) Vol : 3	16.11.06	17/2006
7.	**Grant of Interim Relief to PSEB Employees and Pensioners.**		
i)	139844/139833/Fin-506/Vol-2	30.11.06	18/2006

8.	**Grant of fixed Medical Allowance at enhanced rates.**		
i)	140784/140823/Fin-2 (MA) 98	30.11.06	19/2006
9.	**Regarding grant of 15% House Rent Allowance of Bhatinda on the recommendations of the fourth Punjab Pay Commission**		
i)	161081/161120/Fin-2/4 (98) Vol : 2/ H R A	27.12.06	20/2006
10.	**Removal of anomaly by stepping up the pay of senior Employees drawing less pay than their Junior and regarding grant of arrear.**		
i)	7116/7157/Fin-2/29(98) Loose	17.1.07	1/2007
ii)	10719/10764/Fin-2/29(98)/ Loose	31.1.2007	2/2007
11.	**The case regarding giving scholarships to Children of/Staff for receiving Higher Education and good performance in Sports, during the year 2006-2007, the amout is as under :**		
i)	Scholarship regarding Higher Education.		Rs. 1,15,200/-
ii)	Scholarship for sports		Rs. 30.000/-

7.3 INDUSTRIAL RELATIONS

Punjab State Electricity Board is a vital organisation of the Punjab State. Industrial Relations Branch is playing a vital role to maintain cordial relations between management and employees. During the period under report various meetings were held between Employees Unions and the Board Management on different issues. Genuine demands of Unions were accepted and various union leaders were imparted training by management. Industrial relations during this period remained cordial.

7.3.1 E.P. F. (EMPLOYEES PROVIDENT FUND) ACT

This act is applicable to the work-charged, contingent, Daily wage and part time workers. Under the provisions of this Act, Board contributes equivalent to 12% of basic pay of the worker. This amount is deposited with the Regional Provident Fund Commissioner. The Provisions of this Act are enforceable from the date of

joining of any worker where monthly pay is up to Rs. 6500/-. From time to time instructions are issued to field offices for implementation of the Act. The Act contains many beneficial provisions i.e., Family Pension/EDLI/Group Insurance Scheme etc. Our field officers/officials carry out periodical inspections to ensure that provisions of the Act are complied with by all the covered units.

7.3.2 INDUSTRIAL DISPUTE ACT-1947

This Act was enacted for speedy redressal of industrial disputes to ensure industrial peace. Efforts were made to settle the industrial disputes amicably through conciliation machinery of the state provided under the Act. Many cases were settled mutually with the consent of workers.

7.3.3 EMPLOYEES STATES INSURANCE ACT/SCHEME (E.S.I.A)

This Act/Scheme is applicable to the work charge, daily wage and contigent worker drawing pay upto Rs. 7500/- and are covered under Factories Act. In PSEB, this scheme has been enforced in 52 Units and Chief Welfare Officers, Labour Welfare Officer and Assistant Labour Welfare Officers of the Board are making sincere efforts for implementation of the Act, by ensuring provision of Medical facilities, Maternity Leave, compensation and are by conducting periodical inspections in their respective areas.

7.3.4 FACTORY ACT, 1948

This act is applicable to all such Sub-Stations/Power Houses/Thermal Plants where more than 10 workers are employed and ME Laboratories/Wokshops where more than 20 workers are employed to get this Act implemented. One Chief Welfare Officer has been appointed in two Thermal Plants (GNDTP Bathinda and RTP Ropar) and Assistant Labour Welfare Officers have been posted in Op. Circles, Overtime is being paid to employees under provisions of this Act. Maternity benefits and leave facilities are also being provided to the female workers. Safety Officer has been provided where 1000 or more workmen are employed. Similarly, canteens have been provided 250 or more workers and a Medical Officer has been employed for every 500 workers.

At the end of previous year, 771 court cases were pending. During the current year i.e. 1.4.2006 to 31.3.2007, 62 cases were filed in Labour Courts/Industrial

Tribunals, Punjab. 32 cases were decided In favour of the Board, 4 cases against the Board and 188 cases were mutually settled. These cases are being handled by the Industrial Relations Branch on priority basis. Earnest timely efforts are being made to get more decisions in favour of the Board.

7.3.5 WORKERS PARTICIPATION IN MANAGEMENT

Regarding workers participation in management the PSEB held discussion with Union Leaders from time to time and a productivity council consisting of representatives from Management side and representatives of various employees unions has been formed to discuss the issues relating to improvement in the working of Board to provide better services to its valuable consumers.

7.4 SCEDULED CASTES AND BACKWARD CLASSES IN THE BOARD

The Punjab State Electricity Board has constituted a separate cell in pursuance of the policy/instructions of the Punjab Govt. regarding reservation for Scheduled Castes and Backward Classes, in every class of the employees.

The figures of employees of scheduled castes/Backward Classes as on 31.12.2006 are as under:-

Class	Total No. of Posts filled up by promotion and direct recruitment	Reserved posts		No. of Posts filled by S.C./B.C. candidates/ employees		Percentage	
		SC	BC	S.C.	B.C.	S.C.	B.C.
I	1476	213	-	228	-	15.45	-
II	682	102	-	95	-	13.93	-
III	55950	12030	2032	11892	2262	21.25	4.04
IV	9782	2201	528	2355	608	24.07	6.22

NOTE:-

Since the reservation is not applicable in the case of single cadre post as per Punjab Govt. instruction as such the post has not been included in the above data.

CHAPTER-8

8. VIGILANCE & SECURITY, FATAL ACCIDENTS DUE TO ELECTOCUTION TO HUMAN BEING, INTRODUCTION OF PUNJABI, SPORTS, PUBLIC RELATION, GRIEVANCES,

8.1 The Vigilance & Security department of the Board consists of Vigilance units and the security wing. Vigilance Unit was established vide office order No. 1597/ PSEB dated 24.5.62 and Security Wing was established vide office order No. 2944/ Cadre dated 20.7.74 in the year 1974.

a) VIGILANCE

Vigilance Wing, which is headed by D.G.P./ V & S had 94 pending enquiries of last year i.e. 2005-2006. During the year 2006-2007, 52 new investigation cases were initiated raising the total number to 146. Out of these, 20 enquiries were finalised during the year 2006-2007 and 126 enquiry cases were balance by 31.3.2007. Primary investigation of complaints has also been started since August, 1998, 330 complaints were registered during the year 2006-2007. Out of which 46 Nos. complaints were finalised and balance complaints are 284 as on 31.3.2007.

b) SECURITY WING

During the year 2006-2007, 1 D.G.P./ V&S, 1S P / V & S, 1 Deputy Director/ Vigilance, 1 Asstt. Director/Vigilance, 3 D.S.P./Asstt. Commandent, 1 Law Officer Gr. I,1 Security Officer, 2 Vigilance Inspectors, 23 Inspectors, Flying Squad, 1 Law Officer Gr. II, 6 Chief Security Inspectors, 10 Secruity Inspector, 76 Asstt. Security Inspector and 494 Security Guard and 4 Head Constables were posted in Vigilance/ Security Wing.

During the year 2006-2007 apart from all the Sub-Stations and Circles Offices, Transformer repair workshops Central/Sub stores had been provided security staff for security/purpose. These armed officers/personnel have safe-guarded the property of Board while performing their duty with devotion and hard work.

Besides this, staff of this wing is doing the security job in Anandpur Sahib Hydel Project, Nakkian Power House, Shanan Power House, Joginder Nagar. Staff of this Organisation is guarding Modhopur, Sujanpur and Sarna Hydel Power House under UBDC also.

Security Officers and staff safe guarding Guru Nanak Dev Thermal Plant with devotion and hard work under the supervision of this wing. In addition to the above, Inspectors and Constables are performing their duties for the security and assistance of employees working with Flying Squads.

Besides, all the security personnel/Vigilance inspector provide security to officers and employees of the Board, as and when required, specially during the strikes sequalling (Dharna) and rallies etc.

8.2 FATAL ACCIDENTS TO HUMAN BEING DUE TO ELECTOCUTION

Punjab State Electicity Board takes full care of adopting safety measures/ methods in its Transmission and Distribution system and new installation in projects, maintenance and operation works, Inspite of the efforts being made by PSEB in this regard, fatal accidents to human being take place, causes of which are investigated properly so that such accident do not occurs again and in many case officers/ officials are held responsible. During the year 2006-2007 there were 103 fatal accident to human beings by electrocution. There are many causes of human death cases but mains are as follows:-

1) Due to faulty electric fitting in houses.
2) Due to one end of the wire for drying the clothes being tied to some electric wire.
3) Due to inadequate clearance of H.T. and L.T. lines, along/accross the road.
4) Allowing the unauthorised workers to work or get the work done from them.
5) Due to unauthorised use of electric apparatuses by the private persons and by theft of energy intentionally.
6) Due to insufficient earth system.
7) Due to non-compliance of the rules while using electric apparatuses by the Board employees.

4.	**MEMBERS/FINANCE & ACCOUNTS**	1. SH. ANURAG AGGARWAL, I.A.S. 12.4.2006 to 31.3.2007	1. Finance and Budget, Income and Expenditure, Accounts and Audit, BankingArrangements, Loan/ Borrowings, Investment and Reserve. 2. Disciplinary cases of Deputy Chief Accounts Officers, Deputy Chief Auditors, Deputy Finance Advisors, Senior Accounts Officers and Accounts Officers/Appeals of non-gazatted establishment. i.e. A.R.A./I.A/Divisional Accountant/Ravenue Superintendent/ S.A.S. Accountant etc. whose appointing and punishing authority is Chief Accounts Officer/Chief Auditor. 3. Matters relating to establishment of Accounts Officers. 4. Posting and transfers of Accounts Officers/ Senior Accounts Officers. 5. Chief Engineer/Technical Audit and Inspection.

8) Electrocution due to own fault/carelessness of the accident victims.

9) Due to poor maintenance of the power system and carelessness of the other members of the staff.

10) Due to breakage of Jumper/Conductor of Transformer.

11) Due to Natural calamities i.e. rain with heavy wind storm etc.

12) Due to back feeding of power and where more than one feeder is sectionalised.

13) Due to operations of generators without permission by private persons and flow of current in Board's lines.

14) Due to construction of houses near 11 KV lines of the Board.

15) Due to wrong use of T&P such as ladder, gloves and safety belt etc.

16) Due to contact with breakdown line

17) Due to wrong fitting of G.O. Switch.

18) Due to tempering with Board's system.

19) Due to working on live line.

20) By contact with the broken line fallen on the ground.

21) By working on live lines without permit.

22) Due to contact of steel rods with live line during construction of the work.

ZONE WISE FATAL ACCIDENTS TO HUMAN BEINGS AND DISCIPLINARY ACTION TAKEN AGAINST THE OFFICERS/OFFICIALS OF THE BOARD DURING THE YEAR 2006-07 ARE TABULATED BELOW:-

Sr. No.	Description	Chief Engineer/ 'OP' Central Ludhiana	Chief Engineer/ 'OP' North Jalandhar	Chief Engineer/ 'OP' Border Amritsar	Chief Engineer/ 'OP' South Patiala	Chief Engineer/ 'OP' West Bathinda	Chief Engineer/ P&M Ludhiana	Total
1	2	3	4	5	6	7	8	9
1.	No. of Fatal Accidents	18	25	32	24	22	3	124
2.	Chargesheets issued	-	-	3	-	1	-	4
3.	Show cause notice issued	-	-	-	-	-	-	-
4.	Letters of warning issued	-	-	-	-	2	-	2
5.	Letters of Censure issued	-	-	-	-	-	-	-
6.	Increment stopped with future effect.	-	-	-	-	-	-	-
7.	Increment stopped without future effect.	-	-	1	-	-	-	1
8.	Cases in which no employee of PSEB was responsible	-	11	-	-	3	-	14
9.	Cases under process	18	14	28	24	16	3	103

8.3 INTRODUCTION OF PUNJABI

The Language Section has done the following jobs with a view to develop and encourage the introduction of Punjabi in the Board during the year 2006-2007.

1. CHECKING OF BOARD'S OFFICES TO PROMOTE PUNJABI LANGUAGE

To assess the quantity of work being done in Punjabi and to know how this can be increased, this Language Section check the Board's office with a view to introduce Punjabi and Co-ordinate with offices situated in the hook and corner of villages through correspondence so that every office of the Board, remained in touch with this section and to aware of the Board's instruction in respect of introduction of Punjabi. By this, these offices maintain the tendency of doing much of their work in Punjabi, offices were checked during the period under report and every step was taken to remove the draw backs observed during the checking.

2. (a) The Board is a technical organisation as such personal attention, co-operation and guidance is required to be given to the employee to do the official work in Punjabi. Some time the employees while writting Punjabi also make mistake as such difficulty is faced while reading, the writting. Keeping in view of this aspect while checking the Board's offices 125 officers/officials were imparted training regarding writing of correct Punjabi/spelling and Important Tips for writing of Punjabi were as to given to them.

b) The training to write correct Punjabi was also imparted to officers/officials who come to T.T.I, Patiala for training purpose, so that they may also contribute for spreading the Punjabi Language alongwith their official duty.

c) During this period while checking the various offices, letters/Drafts, Return performas & U.O. letters have been corrected and the officers/officials were advised that they should pay special attention for doing their official work in Punjabi.

d) Vocabulary of frequently used term/words from ਝ to ਬ were supplied through cyclostyle method to the offices of Chief Engineers/SE offices.

e) Apart from it, proof reading of the rules and regulations book of the Board which are printed in the Punjabi by the Printing & Stationery section or the Board is also done by this office.

f) At the time of preparation of Question paper for the examination which are conducted for the recruitment of candidated by the Board, both the Language officers/Translation were assigned duties.

3. FACILITIY OF TYPE/SHORTHAND TRAINING TO BOARD STAFF/ THEIR CHILDREN AND DEPENDENTS

Under the Welfare Programme of Board's employees, children/dependants of Board employees were given free training of Punjabi Short-hand and Type writing with which they availed due benefit.

4. VOCATIONAL TRAINING SCHEME

Under "Vocational Training Scheme" of Punjab Govt. Students of +1 and +2 of Victoria schools were imparted training in field of short-hand, type writing and office procedure in 21 days.

5. TRANSLATION

During the year under report administration report of the Board, C.A.G. Report 2001-02, 2004-05, 2005-06 (Commercial) and many other documents in English were translated into Punjbi. Summary of the Annual accounts of the Board was also translated into Punjabi. Punjabi Translation of the speaches of Hon'ble Governor and the Finance Minister of the Punjab to be read in the Punjab Legislative Assembly, and the English material came from OSD to the Chairman, the Members (Distribution) and the Member (Finance & Accounts), Chief Engineer/Planning, Chief Auditor, Director/Public Relation, Director/T.A. & I., Director/Tariff, Director/Personnal, Deputy Secretary/ Meetings and the different offices of the Board were translated into Punjabi and sent back to the concerned offices after getting them typed and comparing for further action. Besides this during the budget session of the Punjab Legislative Assembly held from 13.3.2007 to 29.3.2007 special duties were performed by two Language officers, Translation and the question came from the Legislative Assembly and their replies given by the Board were translated immediately at the spot.

8.4 SPORTS

The Punjab State Electricity Board has always played a leading role in the field of sports. The Punjab State Electricity Board emerged with flying colours in all the competitions of All India Inter State Electricity Board Sports and Tournaments. Achievements of Punjab State Electricity Board teams during the year 2006-2007

were as under:-

1. **ATHLETICS**

a The PSEB Athletic team has participated in the 32nd All India Inter State Electricity Board Athletic Championship held at Chandigarh from 27th July to 29th, 2006 and secured Ist position.

b In the Punjab Open Athletics championship held at Amritsar from 14.10.2006 to 16.10.2006. PSEB Athletic team secured 2nd position.

c In the 33 rd All India Inter State Electricity Board Athletics Championship held at Nellore from 28 March to 30 th March 2007. PSEB secured Ist position and got 19 Gold, 9 Silver and 2 bronze.

2. **BADMINTON**

a PSEB Badminton Team secured Ist Position in the 33rd All India Inter State Elecricity Board Badminton tournament at Vadodara from 11.1.2007 to 19.1.2007.

b In the Punjab State Badminton Championship held at Jalandhar from 10.11.2006 to 12.11.2006 the PSEB Badminton team secured 2nd position.

c Our Badminton player Sh. Lakhwinderpal Singh secured Ist position (single) in the Punjab State Ranking Tournament held at Nabha from 22.12.06 to 24.12.2006

3. **CRICKET**

a The PSEB Cricket team secured Ist position in the 32nd All India Inter State Electricity Board Cricket tournament held at Patiala from 2.6.2006 to 5.6.2006.

b Baba Farid Invitation Cricket tournament held at Faridkot from 19.9.2006 to 23.9.2006. The PSEB team secured Ist position.

c In the Narinder Mohan Memorial Cricket tournament held at Jalandhar from 3.10.2006 to 8.10.2006, the Board team secured Ist position.

d Shahid Bhagat Singh Memorial Cricket Tournament held at Amritsar from 7.10.2006 to 15.10.2006, the PSEB team secured Ist position.

4. **FOOTBALL**

a All India Gurdarshan Singh Memorial Football tournament held at Nabha from 29.10.2006 to 5.11.2006 the PSEB Football team secured Ist position.

b Sant Singh memorial Football Tournament held a Phagwara from 10.11.2006 to 12.11.2006, the PSEB secured 2nd position.

c The PSEB Football team secured 2nd position in the 32nd All India Inter State Electricity Board Footbal tournament held at Korba (Chhatisgarh) from 15.12.2006 to 29.12.2006.

d PSEB Football team secured Ist position in the 22nd All India Iron or Gold Cup Footbal tournament held at Dalli Rajla (Chhatisgarh) From 8.1.2007 to 19.1.2007.

5. HOCKEY

The PSEB Hockey team secured Ist posiiton in the 33rd All India Inter State Electricity Board Hockey tournament held at Patiala from 28.11.2006 to 30.11.2006.

6. BODY BUILDING

All India Inter State Electricity Board Body Building Championship held at Jabalpur from 2.11.2006 to 4.11.2006, the Board team secured Ist positon.

7. POWER LIFTING

All India Inter State Electricity Board Lifting Championship held at Jabalpur from 2.11.2006 to 4.11.2006, the PSEB team secured Ist position.

8. TUG OF WAR

All India Inter State Electricity Board Tug of war tournament held at Hissar from 19.11.2007 to 21.1.2007, the PSEB tem secured Ist position.

9. TABLE TENNIS

a The PSEB Table Tennis team secured Ist position in the 33rd All India Inter State Electricity Board Table Tennis tournament held at Akola (Maharashtra) from 22.11.2006 to 25.11.2006.

b The Punjab State Table Tennis Championship held at Ludhiana from 8.11.2006 to 12.11.2006 the PSEB team participated in the tournament and secured 2nd position.

10. WRESTLING

The PSEB wrestling team secured Ist position in the 33rd All India Inter State Electricity Board Wrestling Championship held at Lucknow from 1.2.2007 to 3.2.2007.

11. VOLLEYBALL

a The PSEB Volleyball team secured Ist positon in the 33rd All India Inter State Electricity Board volleyball tournment held at Nahan (HP) from 23.11.2006 to 26.11.2006.

b Open Punjab State Volleyball Championship held at Khanna from 17.12.2006 to 19.12.2006, the PSEB team secured 2nd position.

8.5 PUBLIC RELATION

Department of Public Relations of Board has done the following jobs during the year 2006-2007 to build up a strong positive image of the Board:-

1. 192 No. of press notes released in Punjabi and English Languages regarding the various activities and concessions given to different consumers of the Punjab and ensured their publication in Print and Electronic Media.
2. Press clippings of more than 35 newspapers of different languages sent to Chairman, Memebers, Secretary and other higher authorities on daily basis.
3. 506 Nos. of classified and 91 Nos. of display advertisements issued to different newspapers and other publications during the year 2006-07.
4. Press conferences and interviews were arranged of Chairman and Members of the Board.
5. From time to time various display advertisements got published in various newspapers regarding to create the awareness against theft of electricity and importance of saving of energy.
6. Publication meterial got arranged for in House Magazine Parkash of the Board.
7. To keep the higher officers well informed about the Power sector in general, newspapers and magazines were sent to the residence and offices of the senior officers.
8. The office has undertaken various kinds of photography during the year like publicity photography on occasions of Formation Day of the PSEB, Foundation/Inaugural ceremonies of various grid substations and photography on the retirement of employees of the Board.

9. Directorate has arranged cultural programmes on Foundation Day, Republic Day and Independence Day.

10. The offices also bringing out souvenirs on various occassions.

8.6 GRIVANCES CELL

Board has created a Grievances Cell during the year 1975 to redress the grievances of the Public/employees.

The Position of complaints received/disposed off during the year 2006-2007 is as under:-

Sr. No.	Description	Nos.
1	2	3
1.	No. of complaints pending as on 1.4.2006 the begining of year 2006-07.	304
2.	No. of complaints received during the year 2006-07 which were dealt by grievances cell.	3532
3.	No. of camplaints filed without action being an anonymus with in-complete address.	22
4.	No. of complaints/ representations sent to various heads of offices such as Cheif Engineer/Superintending Engineers etc. for investigation/disposal at their own level.	3179
5.	No. of complaints regarding which reports were asked from the head offices.	
	a) ADGP/V & S	31] 331
	b) Chief Engineer/Supdt. Engineer/Heads of offices	300]

1	2	3
6.	No. of reports received in respect of complaints which were disposed off by competent authority.	344
7.	No. of complaints pending in grievances cell at the end of year 2006-07 as on 31.3.07	291

CHAPTER-9

9. DEVELOPMENT PROGRAMMES FOR THE YEAR 2007-08

9.1 ANNUAL PLAN FOR THE YEAR 2007-08 IS FOR RS. 3169.65 CRORES APPROVED BY PUNJAB GOVT. AND ITS SCHEME WISE ALLOCATION IS AS UNDER:-

Sr. No.	Name of the Project/ Scheme	Allocation by PSEB & Submitted to Pb. Govt. (Rs in Crore)
1.	2.	3.
a)	**GENERATION**	
I.	**HYDRO PROJECTS**	
1.	Shahpur Kandi	50.00
2.	Mukerian HEP Stage-II	15.00
3.	Micro Hydel Project at GGSSTP Ropar	3.50
	Total :	**68.50**
II.	**THERMAL PROJECTS**	
1.	GHTP, Stage-II Lehra Mohabbat	388.00
2.	Nabha & Talwandi Sabo Thermal Plants	*800.00
	Total :	**1188.00**
III.	**RENOVATION & MODERNISATION**	
1.	Thermal Power Houses	206.75
2.	Hydro Power Houses	33.02 (23.77+9.25)
	Total :	**239.77**
b).	Transmission & Distribution works including APDRP	735.00

5.	**MEMBER/ DISTRIBUTION**	1. ER. J.S. SEKHON, 21.4.2006 to 31.3.2007	**Matters Relating to:-** 1. All Chief Engineers/Distribution. 2. Chief Engineer/R.E. and APDRP, Patiala. 3. Chief Engineer/Metering, Patiala. 4. Chief Engineer/Store and Disposal, Patiala. 5. Chief Engineer/M.M., Patiala. 6. Chief Engineer / Planning, Patiala. 7. Chief Engineer/ Workshop, Ludhiana. 8. Chief Engineer/ S.O. & C, Patiala. 9. Director/ Computer services, Patiala .

1	2	3
c)	Revamping of ME Labs and Workshops	7.00
d)	Comprehensive T&D Losses Reduction Plan	500.00
e)	Energy Conservation Projects.	50.00
f)	Release of Tubewell Connections.	240.00
g)	Urban Pattern Supply to villages (24 Hours) For additonal Deras/Dhanis	60.00
h)	Rural Electification (i) RGGVY Scheme (ii) Capacitor Banks	20.00 2.13
i)	Furniture & Petty Items for Offices	3.75
j)	Survey & Investigation	0.50
k)	Implementation of IT Plan and Staff College for training	55.00
	Grand Total :	**3169.65**

Note: * Rs. 800 Crore for initial purchase of Land shall be arranged by PSEB and this amount shall be recovered from developer(s) later on.

9.2 PROJECT UNDER DEVELOPMENT

The power plays a vital role for the development of State Industrial and Agriculture based occupations are much dependent on power. The consumption of power is increasing day by day due to the high living standard of people which has increased from 700 million units in the year 1967-68 to 34969 Million units in the year 2006-07. To meet the increasing demand of power, the work for installation of following new power projects of generation is as under:-

1. **GURU HARGOBIND THERMAL PLANT, STAGE-II, LEHRA MOHABBAT (2X250MW)**

The proposed capacity for this project is 500 MW. Its estimated cost is Rs. 1790 Crore. The work order on Turn Key basis has already been issued in favour of BHEL and the work is in progress. A sum of Rs. 450 Crores have been proposed for this project by PSEB for the year 2007-2008 . One unit of 250 MW is expected to be commissioned by 9/2007 and 2nd unit is expected to be commissioned by 12/2007.

2. **MUKERIAN HYDEL PROJECT STAGE-II (2x9=18 MW)**

3.5 K.M. long channel and 2 units of 9 MW capacity are proposed to be installed under this project. Estimated cost of this scheme is about Rs. 150 Crore. All the civil works have since been completed except construction of Main Power House Building which has been held up due to water logging. The contractor has abandoned work at site Tender have been called again for carrying out the civil works. The civil fronts may be available by December, 2007. The project will be completed within 2 years of availability of civil front.

3. **MICRO HYDEL PROJECT (GGSSTP) ROPAR (1.7 MW)**

The project stands commission of on 27.5.2007.

4. **NABHA & TALWANDI SABO (BANWALA) THERMAL PLANTS (1200 MW EACH)**

Punjab Govt. has approved for setting up of 2 No. 1200 MW (2x600) each Coal based Thermal Plants at Nabha District Patiala and Talwandi sabo (Banwala) District Mansa. The project are to be developed on Build Own&Operate (800) basis during 11th Five year Plan. Provision of Rs. 300 Crore has been made during the year 2007-2008 for initial purchase of land for both the project and will be recovered from the developers to whom projects are allotted later on.

5. **SHAHPUR KANDI HEP (168 MW)**

Govt. of Pb. Cleared the implementation of the 168 MW Shahpurkandi project and approved the original DPR with cost updated at Septembar, 2006 price lavel as Rs. 1945 Crore without IDC. It is being undertaken departmentally with PSEB share as 88.39% and that of Pb. Govt. share as 12.61%. Funds are being arranged for the project as a loan from REC/PFC.

6. RENOVATION AND MODERNIZATION

Proposals have been prepared for improvement in the working of Thermal Plants/ Hydro project i.e. increase in the life span and the addition in capacity of existing power houses. A proposal of Rs. 391.46 Crores has been made for these R & M schemes in the annual Plan of the year 2007-2008.

9.3(I) TRANSMISSION AND DISTRIBUTION SYSTEM

New lines, Sub-stations and Distribution tranformers will be installed and existing system will be upgraded to improve transmission and distribution system to supply uniterrupted power to consumers. Targets to release 1,80.000 General Service Connections and 5000 industrial connections during the year 2007-08 have been fixed and a sum of Rs. 860.00 crores has been proposed by PSEB during the year 2007-08 for these works.

(II) REGARDING RELEASE OF TUBEWELL CONNECTIONS

Punjab is an agricultural based state. Keeping in view a large number of pending applications for tubewell connections the target for the year 2007-08 has been fixed as 60000 tubewell conncections. PSEB has proposed Rs. 240 Crores for the release of tubewell connections during 2007-08.

9.4 REGARDING SUPPLYING24 HOURS URBAN PATTERN SUPPLY TO VILLAGES

Work of supplying power on urban pattern to villages including Border Area had been initiated to provide the facility at per rural areas and to encourage small scale industries in villages. Work is completed in all the villages except 3 No. Which are pending due to court cases, Further to give Urban Pattern Supply to Deras/ Dhanis comprising cluster of 5 or more houses devised with a total amount of Rs. 92 crore has been planned to be incurred during 2007-08. Out of Rs. 92 Crore 80% Funds are to be provided by Punjab Mandi Board & balance 20% by PSEB.

CHAPTER - 10

ACCOUNTS FINANCE AND ACCOUNTS AUDIT

10.1 CAPITAL STRUCTURE

The position of Assests and Liabilities of the Board as on 31.3.2007 is as under:-

10.1.1	CAPITAL & LIABILITIES	2006-2007 (Rs in Lac.)
A.	EQUITY SHARE CAPITAL	**2,94,611**
i)	LOANS	
a)	RBI Bonds	63,735
b)	Loans from State Govt.	73,211
c)	Repayment due on Govt. Loans but not paid.	2,34,280
d)	Public Loans (Bonds)	15,790
e)	Non S.L.R. Bonds	34,572
f)	Loans form R.E.C.	2,67,043
g)	Loans from L.I.C.	51,994
h)	Loan from Commercial Banks in participation with REC.	1,07,048
i)	Rural Electrification Debentures	1
j)	Repayment due but not paid	213
k)	Loan from Centrally sponsored scheme (APDRP)	9,743
l)	Loans from Power Finance Corporation	33,380
m)	Loans from G P F Accounts	5,016
n)	I.D.B.I.	145
ii)	Capital Reserve	2,775
iii)	General Reserved Consumer Contribution and Capital grants.	2,61,499
iv)	Other Current Liabilities	2,59,029
v)	Employees G.P.F. Deposits	1,66,467
vi)	Other liabilities (Interest payable & other)	684
vii)	Borrowing for working capital	2,31,668
	Total Liabilities	**21,12,904**

10.1.2 ASSETS

i)	Net fixed Assets	8,64,275
ii)	Works in progress including advances for capital works	3,28,148
iii)	Stock	48,684
iv)	Current Assets	2,36,412
v)	Subsidy recoverable from State Govt.	1,237
vi)	Other Assets	35,096
vii)	RE Subsidy pertaining to the year 1998-99 to 2001-02 written off	3,24,240
viii)	Loss	2,73,812
	Total Assets	**21,12,904**

10.2 CAPITAL EXPENDITURE

The total capital structure comprises mostly of loans which are raised from the State Govt. and other financial institutions i.e. Life Insurance Corporation, Rural Electrification Corporation, Commericial Banks. Power Finance Corporation and Loans from APDRP.

The position of sources and application of funds during the year 2006-2007 is as under:-

10.2.1 FUNDS PROVIDED BY

		2006-2007 (Rs. In Lac)
1.	Profits/(Loss) before tax (Excluding) Revenue subsidies & grants	(3,05,020)
2.	Less: Tax payment during the year	0
3.	Add: Debits to Revenue Account not requiring cash outlay	
	Depreciation Net	68,517

		(Rs. In Lacs)
4.	Amortisation of deferred cost	0
	Amortisation of Intangible Assets	0
5.	Less Credits to Revenue	0
6.	Accounts not involving Cash Receipt	
7.	Net funds from earning	(2,36,503)
8.	Receipts of Revenue Subsidies and Grants	1,42,381
9.	Contribution Grants and Subsidies towards cost of capital Assets	22,813
10.	Proceeds from disposal of fixed Assets	0
11.	Funds from Operations	(71,309)
12.	Increase/(Descrease) in working Capital	0
13.	Stocks	1,230
14.	Receivable against supply of Power	16,475
15.	Loans & Advance	(1,358)
16.	Sundry Receivable	(4,793)
	Sub Total	**11,554**
1.	Security Deposits from consumers	(13,923)
2.	Current & Accrued Liabilities	(19,947)
3.	Net Increase/(Decrease) in working Capitals	(22,316)
4.	Increase/(Decrease) in cash & Bank Balance	(147)
5.	Increase/(Decrease) in Borrowing for working Capital	(1,42,114)
6.	Funds utilized on working Capital	(1,64,577)
7.	NET FUNDS FROM OPERATIONS	93,268
8.	Funds utilized on Capital Expenditure on projects	1,86,738

		(Rs. In Lacs)
9.	Intangible Assests	2,250
10.	Deferred Costs	(443)
	Total Capital Expenditure	**1,88,545**
1.	Shortfall in Capital funds from external sources	95,277
2.	Net increase/(Decrease) in Capital Liabilities	0
	Equity Share Capital	0
	Fresh Borrowings	0
1.	State Loans	0
2.	Foreign Currency Loans/Credits	0
3.	Other Borrowings	1,64,767
	Less Repayments	
1.	State Loans	10,700
2.	Foreign Currency Loans/Credits	0
3.	Other Borrowings	66,976
4.	Net Loans	87,091
5.	Incrase/Decrease) in payments due on Capital Liabilities	10,615
	Net Increase/(Decrease) in Capital Liabilities	
6.	NET INCREASE/(DECREASE) IN INVESTMENTS	(2,429)
7.	NET CAPITAL FUNDS FROM EXTERNAL SOURCES	95,277

10.3 PROVIDENT FUND

Out of Rs. 1,66,467 lakh received from the employees on account of G.P.F (including interest thereon). A sum of Rs. 20,815 lakh has been invested in Banks and the balance amount is being utilized by the Board.

10.4 TRADING RESULTS

The trading results of the Board for the year 2006-2007 are as under:-

10.4.1 REVENUE RECEIPTS

		(Rs in lacs)
a)	Sales of Power	7,03,096
b)	Other receipts (Grants)	1
c)	Tariff compensation	1,42,380
d)	Other Income	25,403
	Total	**8,70,880**

10.4.2 REVENUE EXPENDITURE

i)	Fuel	2,43,170
ii)	Operation & Mtc. Exp. & Other Debits	29,217
iii)	Estt. and Admn. Charges	1,81,068
iv)	Depreciation	60,379
v)	Power Purchased	4,32,701
vi)	Interest on Govt. Loans	37,591
	Interest on other Loan	68,199
	Total	**1,05,790**
	Loss interest Capitalized	17,361
	Net Interest	88,429
vii)	Fringe benefit tax	456
	Total	**(10,35,420)**
viii)	Profit/(Loss)	(1,64,540)
ix)	Net Prior Period Credits (Charges)	1,901
x)	Surplus/(Deficits)	(1,62,639)
xi)	Provision for Income Tax	0
xii)	Profit/(Loss) after Tax	(1,62,639)

10.5 INTEREST CHARGES

Out of total interest of Rs. 1,05,790/-Lakh accrued on loans during the year an amout of Rs. 17,361 Lakh has been capitalized as required under the

Elecy. (Supply) (Annual Accounts) Rules, 1985 prescribed by the Govt. of India. The balance amount of interest and other finance charges in respect of all loans have been charged to the Revenue Account as required Under Section-59 of the amended Electricity (Supply) Act, 1948.

10.6 NET-PROFIT/LOSS

As per section-59 of the amended Elecy. (Supply) Act 1948, the Board has sustained a loss of Rs. 1,62,639 Lakh during this year on which average rate of return works out to (23.31%).

10.7 RATE OF RETURN

The Board had achieved the (23.31%) rate of return against the prescribed rate of return of 3% under section-59 of the amended Elecy. (Supply) Act-1948 during the year after taking into account the tariff compensation of Rs. 1,42,380 lakh on account of free supply to Agriculture sector and Scheduled Caste (Domestic) consumers as sanctioned by Govt. of Punjab.

10.8 INTERNAL AUDIT DEPARTMENT

Separate Audit Department came into existence in the year 1974 after bifurcation of Internal Audit from Accounts. This department is functioning effectively.

10.9 AUDIT OF CONSUMER'S ACCOUNT

During the checking by internal department in the year 2006-2007 a sum of Rs. 7690.55 lacs was detected as short assessment of revenue from the consumers, out of which 3355.11 lacs had been recovered and the remaining amount of Rs. 4335.44 lacs is yet to be recovered from the consumers.

10.9.1 DEFAULTING AMOUNT AND AUDIT POSITION

As per information collected by the Internal Audit Department a sum of Rs. 44906.89 lacs as defaulting amount was outstanding against the consumers upto 31.3.2007. In addition to above Rs. 9142.45 Lacs of the defaulting amount relates to East Divn. Amritsar, which also includes Rs. 8960.86 pertaining to the Municipal Corporation, Amritsar. An account of Rs. 169.04 Lacs was outstanding as per ledgers and Rs. 12.55 Lacs was outstanding other than ledgers. In addition to the above the Board in its meeting 16/01 dated 12.6.01 had decided that the defaulting amount of

the earstwhile electricity wing of the Municipal Corporation Amritsar should not be included in the evaluation report of Internal Audit Department henceforth. As such the defaulting of Rs. 9142.45 lacs has not been included in the main defaulting amount of Rs. 44906.89 Lace.

10.9.2 POSITION OF REVENUE AUDIT

As regards arrears of audit, It is lagging six months behind i.e. audit upto 30.9.2006 has been completed by 31.3.2007.

10.10. CHECKING OF WORKS ACCOUNTS

a) The checking of 188 offices was done by works audit parties during the year 2006-2007.

b) There were 420 cases of theft looting of cash accident of Board's Vehicles/ demaged to Board's properties/misuse and misappropriation of money, natural calamities/fire etc, during the year 2006-07 involving total amount of Rs. 105.51 lacs. Besides 43 cases involving of total amount of Rs. 4.82 lacs were finalized. The amount received from the Insurance Companies was Rs.Nil recovered amount from deliquent officers/officials was Rs. 0.12/-, material recovered from field offices was Rs. Nil.

c) 66 units were issued audit paras regarding deficiency of material involving an amount of Rs. 1041.79 Lacs during routine audit, copy of which was sent to their Chief Engineer, SEs.

10.11 COORDINATION WITH COMMITTEES REGARDING BOARD's OFFICES AND AUDIT/PUBLIC UNDERTAKING

During the year 2006-2007, 48 paras of C.A.G. reports 2004-2005 and 14 PDPs paras 14+3 paras of CPU reports (77th & 78th reports), 12 Nos. of questionaire on General working of PSEB, 34 Paras of Draft review on erection, Augmentation, maintenance of Sub-Stations & transmission lines in PSEB were received and all the paras have been sent to the Govt. of Punjab, A.G. Punjab and Secretary/ Power, Punjab, Chandigarh.

After considering the recommendation of High Powered Commitee constituted by the Govt. of India under the Chairmanship of Sh. S.L. Sakdhar, it was

			Matters Relating to:-
6.	**MEMBER/ GENERATION**	1. ER. H.M. JAIN, 1.4.2006 to 31.3.2007	1. Chief Engineer/Hydel Projects, Patiala. 2. Chief Engineer/Thermal Design, Patiala. 3. Chief Engineer/ O & M, GGSSTP, Ropar. 4. Chief Engineer / O & M, GNDTP, Bathinda. 5. Chief Engineer/Construction GHTP, Lehra Mohabbat. 6. Chief Engineer/ O & M, GHTP, Lehra Mohabbat. 7. Chief Engineer/ P & M, Ludhiana. 8. Chief Engineer/ Civil Design & Const, Patiala. 9. Chief Engineer/ T.L., Patiala. 10. Chief Engineer/ Sub-Station, Patiala. 11. Chief Architect, Patiala. 12. OSD/Coal Management, Patiala.

decided that the action taken by the Department regarding the reports of Comptroller and Auditor General and paras of the Public Accounts Committee/Committee on Public Undertakings be Published as a seperated item in the Annual Administration Report of the Department.

During the year 2006-2007 following PDP, paras of CAG/CPU Reports were received.

Sr. No.	Particulars	No. of Paras
1	2	3
1.	PDPs	14
2.	CAG reports 2004-05	48
3.	CPU reports (77th & 78th Reports)	14+3
4.	Questionnaire on General working of PSEB.	12
5.	Draft review on eraction, augmentation of Sub-Stations & Transmission lines in PSEB	34
	Total :	**125**

Replies to PDP Paras all the above paras have been sent to AG/Audit, Punjab/Secretary/Power, Punjab, Chandigarh & Vidhan Sabha (Committee on Public Undertaking Branch) Chandigarh.

The following No. of Audit paras (viz C.A.G/C.P.U. and PDPs paras) have been got dropped/settled during the year 2006-2007.

Sr. No.	Particulars	No. of Paras
1.	CAG Report 2001-02	40
2.	PDPs	1
3.	77th COPU Reports	2
	Total :	**43**

PART - 2

DETAILED STATEMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13
1.2	**BEAS SUTLUJ LINK PROJECT**											
1.2.1	Dehar Power Plant	6	165.000	990.000	475.000	-	-			165.000	990.000	475.000
1.2.2	Pong Power House	1	66.000	66.000	98.000	-	-			66.000	66.000	98.000
		5	66.000	330.000		-	-			66.000	330.000	
	Total 1.2			1386.000	573.000						1386.000	573.000
	Total (1)			2866.300	1256.980						2866.300	1256.980
2	**OWN POWER HOUSES**											
	HYDRO POWER HOUSES											
2.1	Shanan Power House	4	15.00	110.000	110.000	-	-	-	4	15.00	110.000	110.000
		1	50.00						1	50.00		
2.2	U.B.D.C. Power House	3	15.00	91.350	91.350	-	-		3	15.00	91.350	91.350
		3	15.45						3	15.45		
2.3	Anandpur Sahib Power House	4	33.50	134.000	134.000	-	-	-	4	33.50	134.000	134.000
2.4	Mukerian Power House	6	15.00	207.000	207.000		-	-	6	15.00	207.000	207.000
		6	19.50						6	19.50		
2.5	Ranjit Sagar Dam	4	150.00	600.000	452.400	-	-	-	4	150.00	600.000	452.400
2.6	Nidam Pur Micro Power House	2	0.40	0.800	0.800	-	-	-	2	0.40	0.800	0.800

STATEMENT NO. 1

Statement of Installed Capacity of PSEB., (MW) as on 31.3.2007

Sr.	Name of Project	Position As on 31.3.2006				Addition/Deletion during 2006-07			Position as on 31.3.2007			
		Unit (No)	Size (MW)	Installed Capacity (MW)	State's Share (MW)	Unit (No)	Size (MW)	Installed Capacity	Unit (No) (MW)	Size (MW)	Installed Capacity (MW)	State's Share (MW)
1	2	3	4	5	6	7	8	9	10	11	12	13
A	HYDRO POWER HOUSES											
1.	COMMON POOL PROJECTS											
1.1	Bhakra Nangal Complex											
1.1.1	Bhakra Left Bank Power House-	5	108.000	540.000	249.510	-	-			108.000	540.000	249.510
1.1.2	Bhakra Right Bank Power House	5	157.000	785.000	362.710	-	-			157.000	785.000	362.710
1.1.3	Ganguwal Power House	1	29.250		-	-	-			29.250	-	-
		1	24.200	77.650	35.880	-	-			24.200	77.650	35.880
		1	24.200		-	-	-			24.200	-	-
1.1.4	Kotla Power House	1	29.250		-	-	-			29.250	-	-
		1	24.200	77.650	35.880	-	-			24.200	77.650	35.880
		1	24.200		-	-	-			24.200	-	-
	Total 1.1			1480.300	683.980	-	-				1480.300	683.980

ABSTRACT OF INSTALLED CAPACITY OF PSEB (MW) AS ON 31.3.2007

A	**HYDRO**	
A.1	From Common Pool Projects Punjab's Shares	1257.000 MW
A.2	Own Hydro Power Houses	999.000 MW
	Total (A.1+A.2)	2256.000 MW
B	**THERMAL**	2130.000 MW
	Grand Total (A+B)	4386.000 MW

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* Taking Pb.'s Share from Bhakra Nangal Complex as 50.868%

** Taking Pb.'s Share from Dehar Power House as 48.000%

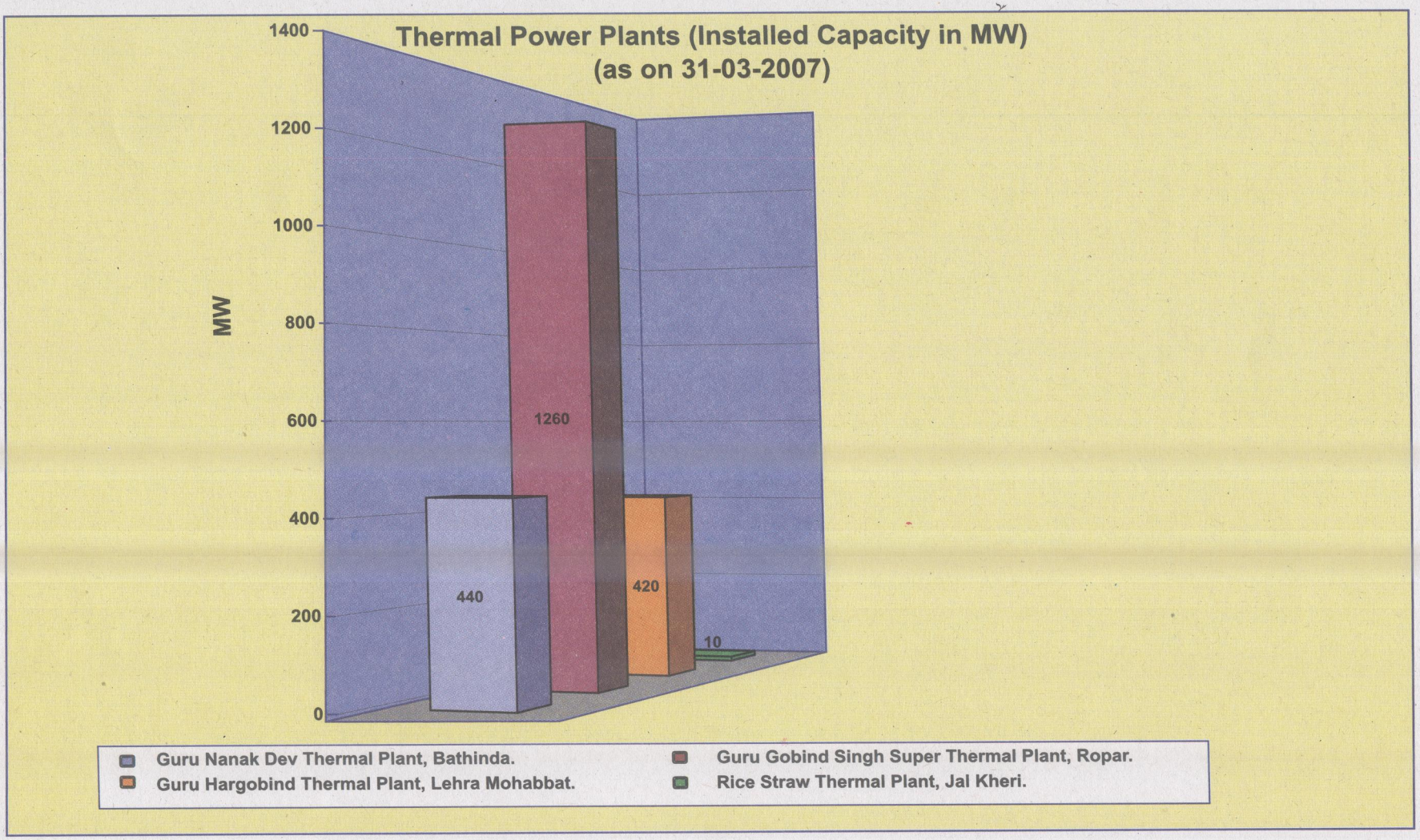
*** Taking Pb.'s Share from Pong Power House as 24.90%

**** Taking Pb.'s Share from Ranjit Sagar Dam as 75.400%

1	2	3	4	5	6	7	8	9	10	11	12	13
2.7	Daudhar Micro Power House	3	0.50	1.500	1.500	-	-	-	3	0.50	1.500	1.500
2.8	Thuhi Micro Power House	2	0.40	0.800	0.800	-	-	-	2	0.40	0.800	0.800
2.9	Rohti Micro Power House	2	0.40	0.800	0.800	-	-	-	2	0.40	0.800	0.800
	Total -2	-		1146.250	998.650	-	-	-	-	-	1146.250	998.650
	Grand Total Hydro	-	-	4012.550	2255.630	-	-	-	-	-	4012.550	2255.630
B	THERMAL POWER HOUSE											
1	Guru Nanak Dev Thermal Plant, Bhathinda	4	110.00	440.000	440.000	-	-	-	4	110.00	440.000	440.000
2.	Guru Gobind Singh Super Thermal Plant, Ropar	6	210.00	1260.000	1260.000	-	-	-	6	210.00	1260.000	1260.000
3.	Guru Har Gobind Thermal Plant, Lehra Mohabat.	2	210.00	420.000	420.000	-	-	-	2	210.00	420.000	420.000
4.	Rice Straw Thermal Power House, Jalkheri	1	10.00	10.000	10.000	-	-	-	1	10.00	10.000	10.000
	Grand Total -B			2130.000	2130.000	-	-	-			2130.000	2130.000
	Grand Total (A+B)	-	-	6142.550	4385.630	-	-	-			6142.550	4385.630

Thermal Power Plants(Installed Capacity in MW)

	(in MW)
Guru Nanak Dev Thermal Plant, Bathinda.	440
Guru Gobind Singh Super Thermal Plant, Ropar.	1260
Guru Hargobind Thermal Plant, Lehra Mohabbat.	420
Rice Straw Thermal Plant, Jalkheri.	10



STATEMENT NO.2

DETAILS OF ENERGY GENERATION & MAXIMUM DEMAND IN RESPECT OF VARIOUS POWER HOUSES DURING 2006-07

Sr. No.	Name of Power House	Installed Capacity as on 31.3.07 (MW)	Gross Energy Generated during the year (MUs)	Energy Used on Station Auxiliaries (MUs)	Net Energy sent out (MUs)	Stage Name of Unit	Muximum Demand on Station (MUs)	Date	Time hours
1	2	3	4	5	6	7	8	9	10
A	HYDRO POWER HOUSES								
1	THROUGH OWN SOURCES								
1.1	Shanan Power House	110.000	495.666	7.737	487.928		108.050	17.6.06	13.00
1.2	U.B.D.C. Power House	91.350	384.607	5.839	378.768	Stage -1			
						Unit -1	-	10.9.05	00.30
						Unit -2	-	10.9.05	00.30
						Unit -3	-	10.9.05	00.30
						Stage -2	83.500		
						Unit -1	-	06 Aug	00.30
						Unit -2	-	06.8.06	00.30
						Unit -3	-	06.08.06	00.30
1.3	Mukerian Powr House	207.000	1170.736	26.419	1144.317	PH -1	43.000		
						PH -2	44.500	23.10.06	20.00
						PH -3	58.500		
						PH -4	58.500		
1.4	Anandpur Sahib Power House	134.000	666.089	4.364	661.725	-	130.000	21.8.06	19.00
1.5	Ranjit Sagar Dam	452.400	1679.476	7.221	1672.255	-	543.600	09.8.06	00.00 to 24.00
1.6	Nidampur Micro Power House	0.800	-	-					
1.7	Daudhar Micro Power House	1.500	7.959	0	7.959	-	NA being on lease		-
1.8	Rohti Micro Power House	0.800	-	-	-	-	-	-	-
1.9	Thuhi Micro Power House	0.800	-	-	-	-	-	-	-
	Total (1)	998.650	4404.533	51.580	4352.953	-	-	-	-

1	2	3	4	5	6	7	8	9	10
2)	SHARE FROM COMMON POOL PROJECTS								
2.1	Bhakra Nangal Complex	684.000	2520.635	-	-				
2.2	Dehar Power House	475.000	1099.812	-	-				
2.3	Pong Power House	98.000	357.813	-	-				
	Total (2)	1257.000	3978.260	0	3978.260				
	Grand Total (A) Hydro (1+2)	2255.000	8382.793	51.580	8331.213				
B	THERMAL POWER HOUSES								
1	Guru Nanak Dev Thermal Plant, Bathinda.	440.000	2221.127	255.05	1966.077		310	14/04/06	16.00
2	Guru Gobind Singh Super Thermal Plant, Ropar.	1260.000	9770.340	818.356	8951.984		1260.000	11/08/06	7.00
3	Guru Har Gobind Thermal Plant, Lehra Mohabat.	420.000	3443.172	302.939	3140.233		433.000	05/10/06	06.00
4	Rice Straw Thermal Power House, Jalkheri.	10.000	-	-	-		-	-	-
	Total (B)	**2130.000**	**15424.639**	**1376.345**	**14058.294**		-	-	-
	Grand Total	**4385.650**	**23817.432**	**1427.825**	**22389.507**		-	-	-

STATEMENT - 3

(Part - A)

STATEMENT SHOWING THE POWER HOUSE WISE ENERGY GENERATION AUXILIARY CONSUMPTION AND SOURCE-WISE ENERGY IMPORT/PURCHASED BY PSEB DURING 2006-07

Sr. No.	Sources	Energy Generated (Mus)
1.	2.	3.
A.	**ENERGY GENERATION**	
A.1	**THROUGH OWN POWER HOUSES**	
	Shanan Power House	495.666
	U.B.D.C. Power House	384.607
	Anandpur Sahib Power House	666.089
	Mukerian Power House	1170.736
	Micro Power House	7.959
	Ranjit Sagar Dam	1679.476
	Guru Nanak Dev Thermal Plant, Bathinda	2221.127
	Guru Gobind Singh Super Thermal Plant, Ropar	9770.340
	Guru Hargobind Thermal Plant, Lehra Mohabat	3443.172
	Total (A.1)	19839.172
A-2	**SHARE FROM COMMON POOL PROJECTS**	
	Bhakra Nangal Complex	2520.635
	Dehar Power House	1099.812
	Pong Power House	357.813
	Total	3978.260
B	**IMPORT/PURCHASED ENERGY**	
B-1	**NHPC**	
	Baira Suil Power House	319.464
	Salal Power House	912.014
	Tanakpur Power House	69.375
	Chamera Power House I	237.710
	Chamera Power House II	161.628
	Uri	381.601
	Dhouliganga	121.824
	Total	2203.616

7.	EX-OFFICIO MEMBER	1.	SH. D.S. KALHA, I.A.S, 1.4.2006 to 31.3.2007

1.	2.		3.
	NJPC		639.195
	Tehri		69.692
	Dulhasti		5.344
		Total	714.231
	NTPC		
	Singrouli		1440.348
	Rihand Power House I		826.525
	Rihand Power House I I		860.553
	Anta (G)		314.003
	Anta (L)		28.440
	Auriya (G)		498.561
	Auriya (L)		59.152
	Dadri (GT)		736.130
	Dadri (L)		101.401
	Uchahar 1		290.033
	Uchahar 2		455.932
	Uchahar 1		36.848
	Farakha (ER)		12.992
	Kahalgaon (ER)		219.384
		Total	5880.332
B-3	**NPC**		
	Napp		108.675
	Raps 3		227.464
	Raps 4		255.431
		Total NPC	591.570
B-4	**IMPORT**		
	Ptc (at delivery point)		1667.82
	Tala through PTC		25.553
	NVVNL		747.17
	Other Traders		1105.274
		Total	3545.817
B-5	**BANKING (+)**		
	HPSEB		194.930
	Rajasthan		110.425
	UPCL		173.203

1.	2.		3.
	J & K		196.069
		Total	674.626
B-6	**PEDA, SUGAR MILLS**		190.898
	Jalkheri		42.124
	Short Term Purchase		32.744
	Unscheduled Interchange		522.196
		Total	787.962
		Grand Total (Purchase)	14398.154
C	**EXPORT**		-
	Royalty		52.878
	RSD Share		75.516
	Total		128.394
	Banking (-)		
	HPSEB		200.019
	Rajasthan		139.868
	UPCL		164.854
	J&K		210.108
		Total	714.849
	Banking through Traders		
	TNEB		93.295
	APPCC		19.498
	CPP In UP		0
	Bescom		2.26
	Total		115.053
	Sale		18.815
		Total Export	977.11
		Total Purchase	14398.154
	Transmission Losses		826.421
	Export		977.11
	Net purchase		12594.623
	Energy available		36412.055
	Auxialiary Consumption		1427.925
	Net energy available		34984.13

STATEMENT - 3

(Part - B)

STATEMENT SHOWING THE CATEGORY-WISE ENERGY SOLD IN THE STATE SOURCE-WISE EXPORT AND ENERGY SOLD TO COMMON POOL CONSUMERS DURING 2006-07

Sr. No.	Category	Energy Sold (Mus)
A.	ENERGY SOLD IN THE STATE	
A.1	GENERAL	
A-1.1	Domestic	5662.272
A-1.2	Commercial	1591.278
	Total (A.1)	**7253.550**
A-2	INDUSTRIAL	
A-2.1	Small Power	627.244
A-2.2	MEDIUM SUPPLY	
	LT	1198.347
	HT	109.020
A-2.3	LARGE SUPPLY	
	LT	42.151
	HT	7821.132
A-2.4	PUBLIC WATER WORKS	
	LT	236.570
	HT	81.093
	Total (A-2)	**10115.557**

1.	2.	3.
A-3	AGRICULTURE	8229.495
A-4	BULK & OTHER	
A-4.1	Bulk Supply	561.653
A-4.2	Street Light	127.418
A-4.3	Board's Works	20.993
	Total (A-4)	**710.064**
	Grand Total	**26308.666**
A-5.1	Theft Detected (by Enforcement & OP Org.)	217.880
A-5.2	Under Assessment due to MCOs (detected by Chief Auditor)	90.490
	Total (A-5)	**308.370**
	Total Engery Sold within the State (A-1 to A-5)	**26617.036**
B	Energy Supplied to Common Pool Consumers ie National Fertilizer Ltd. Nangal	302.060
C	Total Energy Sold (A+B) i.e Energy Sold including common pool consumers	26919.096

STATEMENT - 3
(Part - C)

STATEMENT OF ENERGY ACCOUNTING/SYSTEM IMPROVEMENT DURING 2006-07

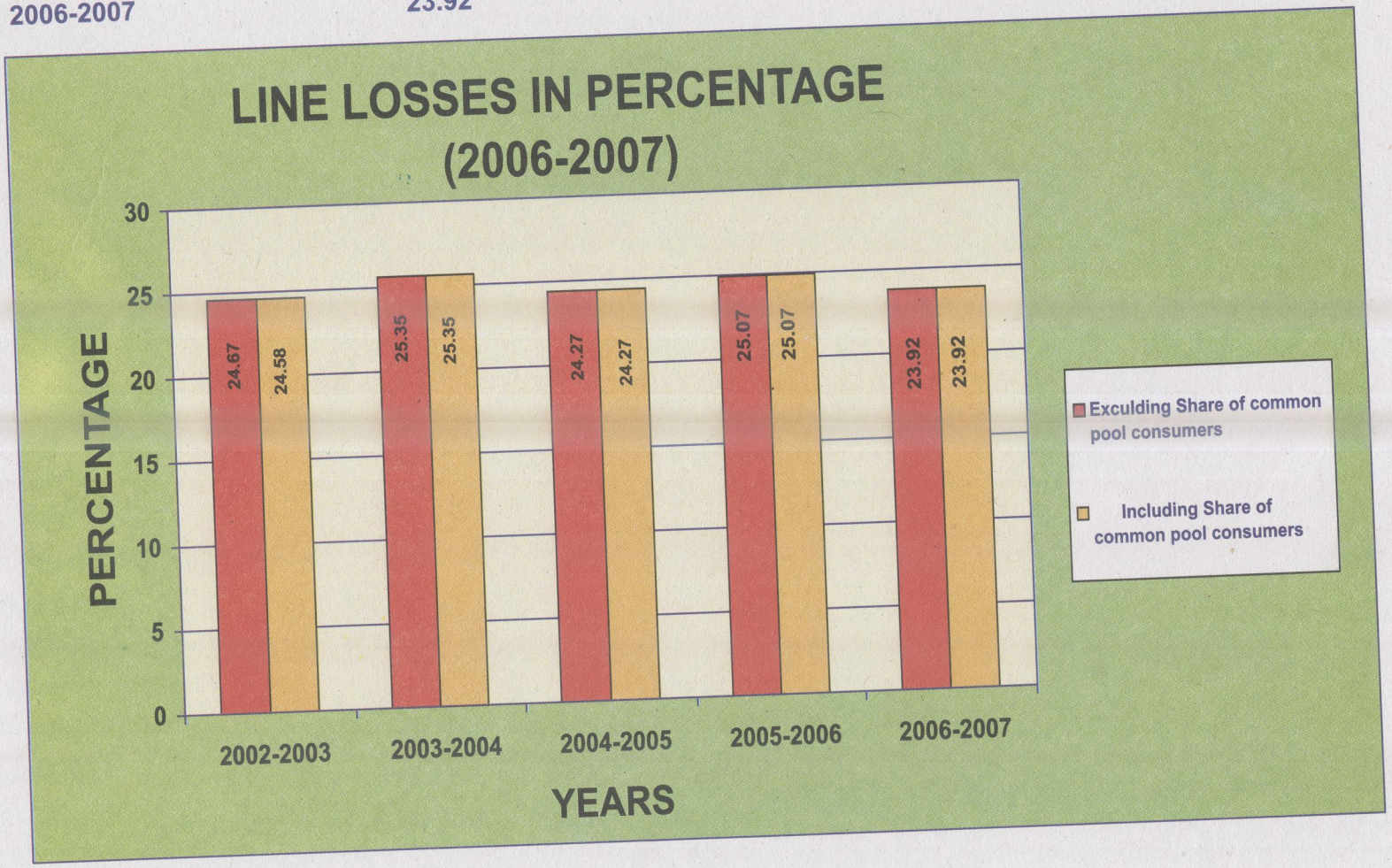
Sr. No.	Particulars	In PSEB. System (Excluding share of common pool consumers)	in Punjab State (Including share of common pool consumers)
1.	**ENERGY AVAILABILITY (MUS)**		
1.1	Energy generated from own power Houses	19839.172	19839.172
1.2	Energy received as share from common pool projects	3978.26	3978.26
1.3	Energy purchased from other Agencies	13571.733	13571.733
1.4	Energy supplied as share for common pool consumers	-	302.06
1.5	Gross energy available (1.1 to 1.4)	37389.165	37691.225
1.6	Less energy used at Power Station Auxiliaries	1427.925	1427.925
1.7	Energy sold to other State	977.11	977.11
1.8	Net energy available for sale (1.5-1.6-1.7)	34984.13	35286.19
2.	**ENERGY CONSUMPTION (MUS)**		
2.1	Total Energy Used within State of Punjab	26617.04	26617.04
2.2	Energy Export to common pool consumer	-	302.06
2.3	Total Energy sold (2.1 to 2.2)	26617.04	26919.10
3.	Balance unaccounted energy (1.8-2.3)	8367.09	8367.09
4.	% age T & D Losses $\frac{(3x100)}{108}$	23.92	23.92

** It includes-

Metered Sale	=	18079.17
AP Consumption (Assessed)	=	8229.50
Equivalent units on a/c of theft detected	=	217.88
Equivalent units on a/c of under assessment	=	90.49
TOTAL	=	26617.04

Line Losses (%)

Year	Exculding Share of common pool consumers in (%)	Including Share of common pool consumers in (%)
2002-2003	24.67	24.58
2003-2004	25.35	25.35
2004-2005	24.27	24.27
2005-2006	25.07	25.07
2006-2007	23.92	23.92



STATEMENT NO - 4

ABSTRACT OF TRANSMISSION AND DISTRIBUTION NET WORK OF P.S.E.B. AS ON 31.3.2007

(A) GRID SUB STATIONS AND CAPACITY

Sr.	Capacity Voltage	Added During 2006-07		As on 31.3.07	
		Nos.	Capacity in MVA	Nos.	Capacity in MVA
1	2	3	4	5	6
1	220 KV	1	269	47	10069.5
2	132 KV	1	321	76	4867.5
3	66 KV	27	798.25	430	9640.75
4	33 KV	-4	-18.5	93	1117.5
	(Total 1 to 4)	25	1369.75	646	25695.25
5	11 KV Distribution Transformers	22613	925	252165	16212

B TRANSMISSION AND DISTRIBUTION LINES (IN CKT. KMS)

Sr.	Voltage	Added During 2006-07	As on 31.3.07
1	2	3	4
1	220 KV	58.396	4310.524
2	132 KV	32.134	3053.305
3	66 KV	398.029	5626.345
4	33 KV	-71.05	1503.316
	Sub. Total (1 to 4)	417.509	14493.490
5	11 KV Lines	7160	123332
6	L.T. Lines	2787	173853

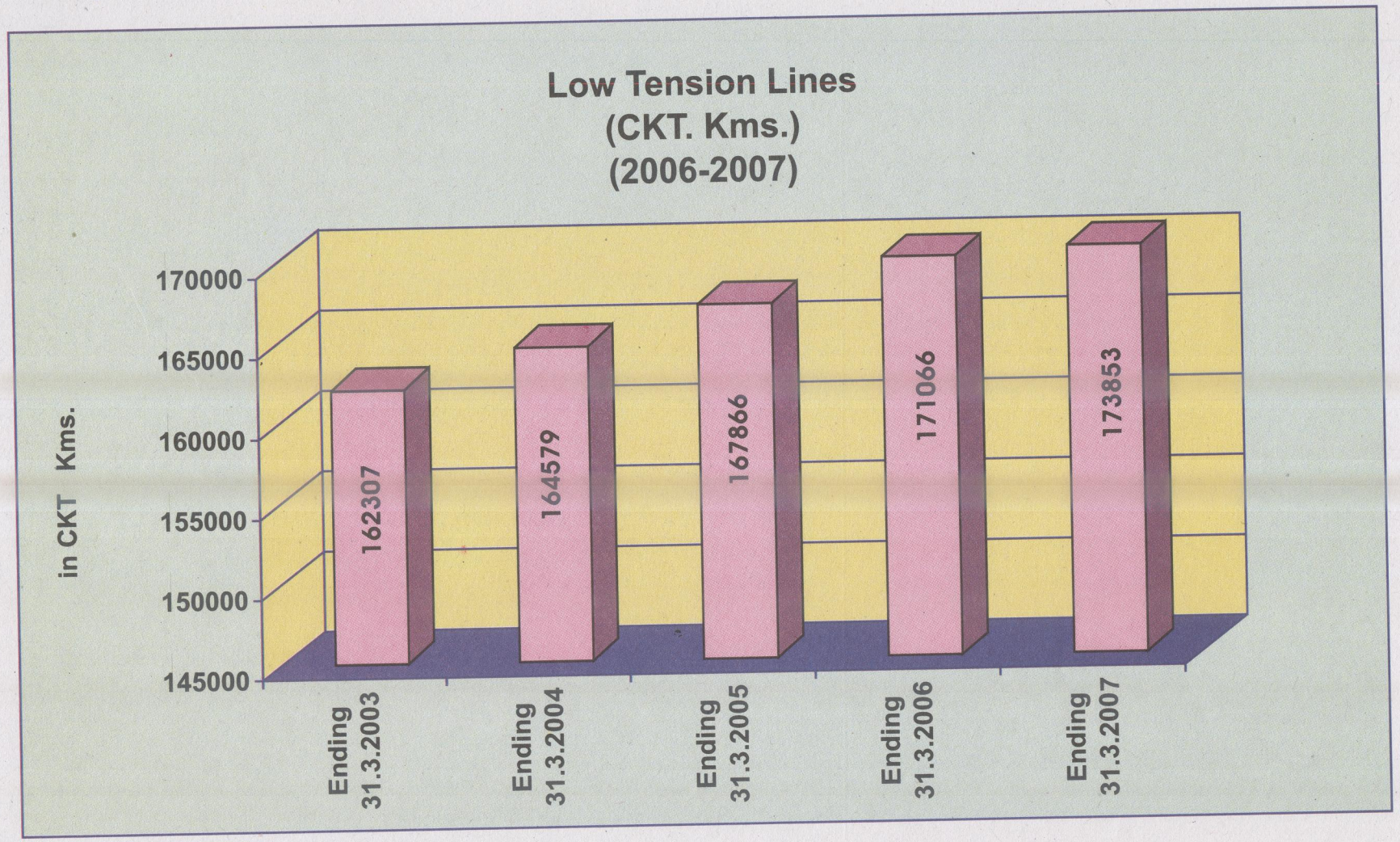
STATEMENT NO.5

STATEMENT SHOWING THE DISTRICTWISE LENGTH OF 11 KV AND L.T. LINES (IN CKT KMs) AS ON 31.3.2007

Sr. No.	Name of Distt.	11KV Lines			LT Lines		
		Position as on 31.3.06	Added During 2006-07	Position as 0n 31.3.07	Position as on 31.3.06	Added During 2006-07	Position as 0n 31.3.07
1	2	3	4	5	6	7	8
1	Amritsar	12968	561	13529	22963	356	23319
2	Bathinda	6885	380	7265	5655	101	5756
3	Faridkot	3217	196	3413	4111	- 49	4062
4	Fatehgarh Sahib	2928	162	3090	4560	37	4597
5	Ferozepur	10426	820	11246	15219	168	15387
6	Gurdaspur	6902	896	7798	11811	422	12233
7	Hoshiarpur	5951	401	6352	9343	143	9486
8	Jalandhar	7056	212	7268	12188	78	12266
9	Kapurthala	4071	189	4260	7312	63	7375
10	Ludhiana	9891	567	10458	15591	207	15798
11	Mansa	3622	365	3987	2897	131	3028
12.	Moga	6172	556	6728	9504	170	9674
13.	Mukastar	4487	165	4652	4913	77	4990
14	Nawnashahar	2261	77	2338	4109	71	4180
15	Patiala	10068	384	10452	13819	- 52	13767
16	Ropar	4037	(-) 2065	1972	5446	-1227	4219
17	Sangrur	15230	778	16008	21625	9	21634
18	Mohali	0	2388	2388	0	1884	1884
19.	Barnala	0	128	128	0	198	396
	Total :	**116172**	**7160**	**123332**	**171066**	**2787**	**173853**

Low Tension Lines in Circuit Kilometers

Ending 31.3.2003	162037
Ending 31.3.2004	164579
Ending 31.3.2005	167866
Ending 31.3.2006	171066
Ending 31.3.2007	173853



E.H.T & H.T Lines in Circuit Kilometers 2006-07

Ending on 31.3.2003	115828
Ending on 31.3.2004	119216
Ending on 31.3.2005	123371
Ending on 31.3.2006	130308
Ending on 31.3.2007	137825

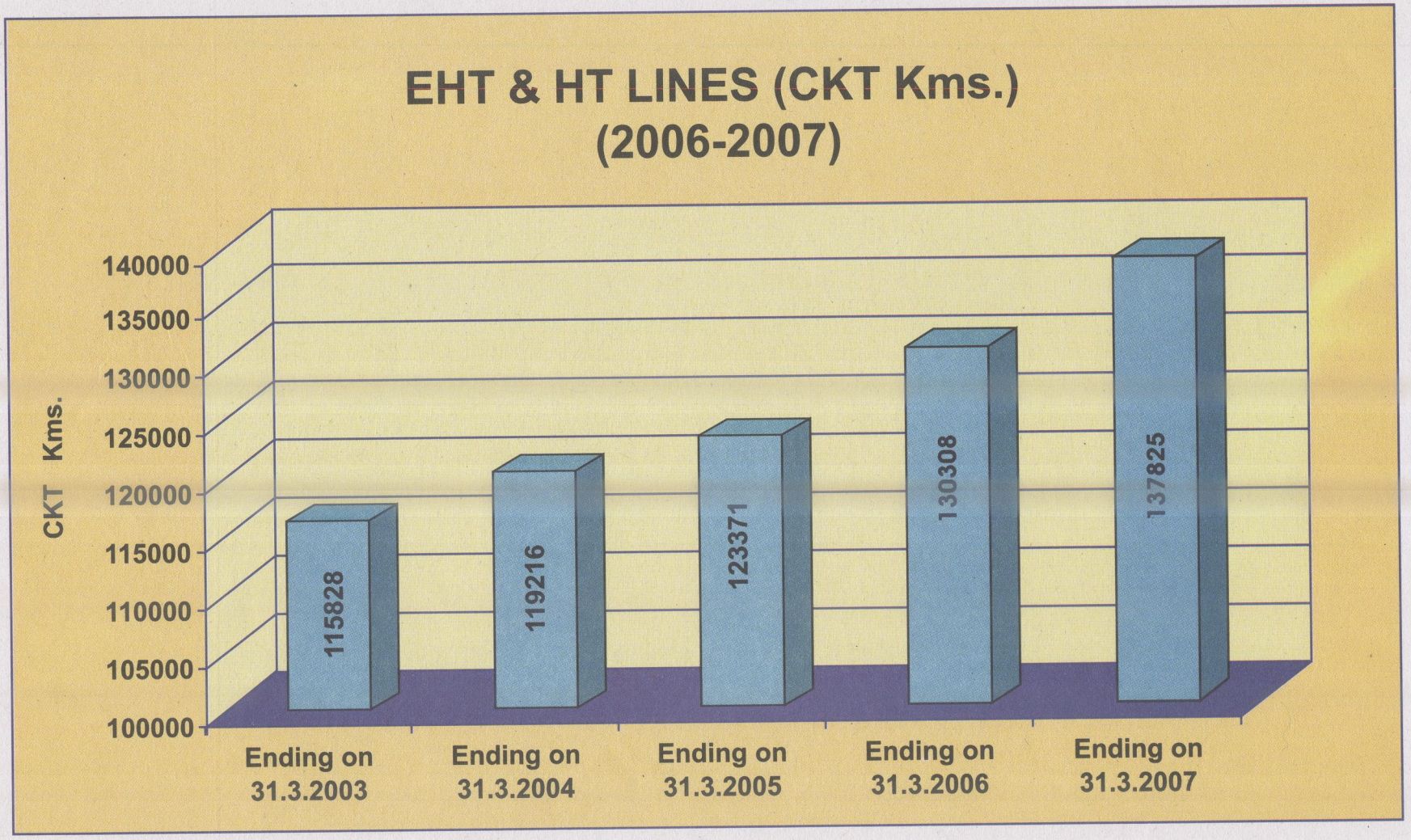


CHART-II

PUNJAB STATE ELECTRICITY BOARD

ORGANISATIONAL SET UP AS ON 31.3.2007

SR. NO.	CHAIRMAN	ADMINISTRATIVE MEMBER	MEMBER/FINANCE & ACCOUNTS	MEMBER OPERATION	MEMBER GENERATION
1.	2.	3.	4.	5.	6.
1.	SECRETARY/ BOARD, PATIALA.	1. DY DIRECTOR/ SPORTS, PATIALA.	1. GM/FINANCE, PATIALA.	1. EIC/RE& APDRP, PATIALA.	1. EIC/THERMAL DESIGN, PATIALA.
2.	DGP/V&S, PATIALA.		2. CHIEF COST CONTROLLER & REDUCTION, PATIALA.	2. CE/OPERATION, (WEST), BATHINDA.	2. EIC/SUB-STATION, PATIALA.
3.	EIC/FORM OF GRIEVANCES OF CONSUMERS PATIALA.		3. EIC/TA & I, PATIALA.	3. CE/OPERATION (CENTRAL), LUDHIANA.	3. CE/TL, PATIALA.
4.	EIC/HRD, PATIALA.		4. ALL C.A.O'S	4. CE/M.M, PATIALA.	4. CE/P&M, LUDHIANA.
5.	CE/COMMERCIAL, PATIALA.		5. CHIEF AUDITOR, PATIALA.	5. CE/PLANNING PATIALA.	5. GENERAL MANAGER, O&M, GNDTP, BATHINDA.
6.	CE/EA & ENFORCEMENT, PATIALA.			6. CE/S.O.& C, PATIALA.	6. CE/HYDEL PROJECTS, PATIALA.

STATEMENT NO. 7 (PART - A)

STATEMENT SHOWING NO. OF CONNECTIONS GIVEN TO THE CONSUMERS BY THE BOARD DURING THE YEAR 2006-07

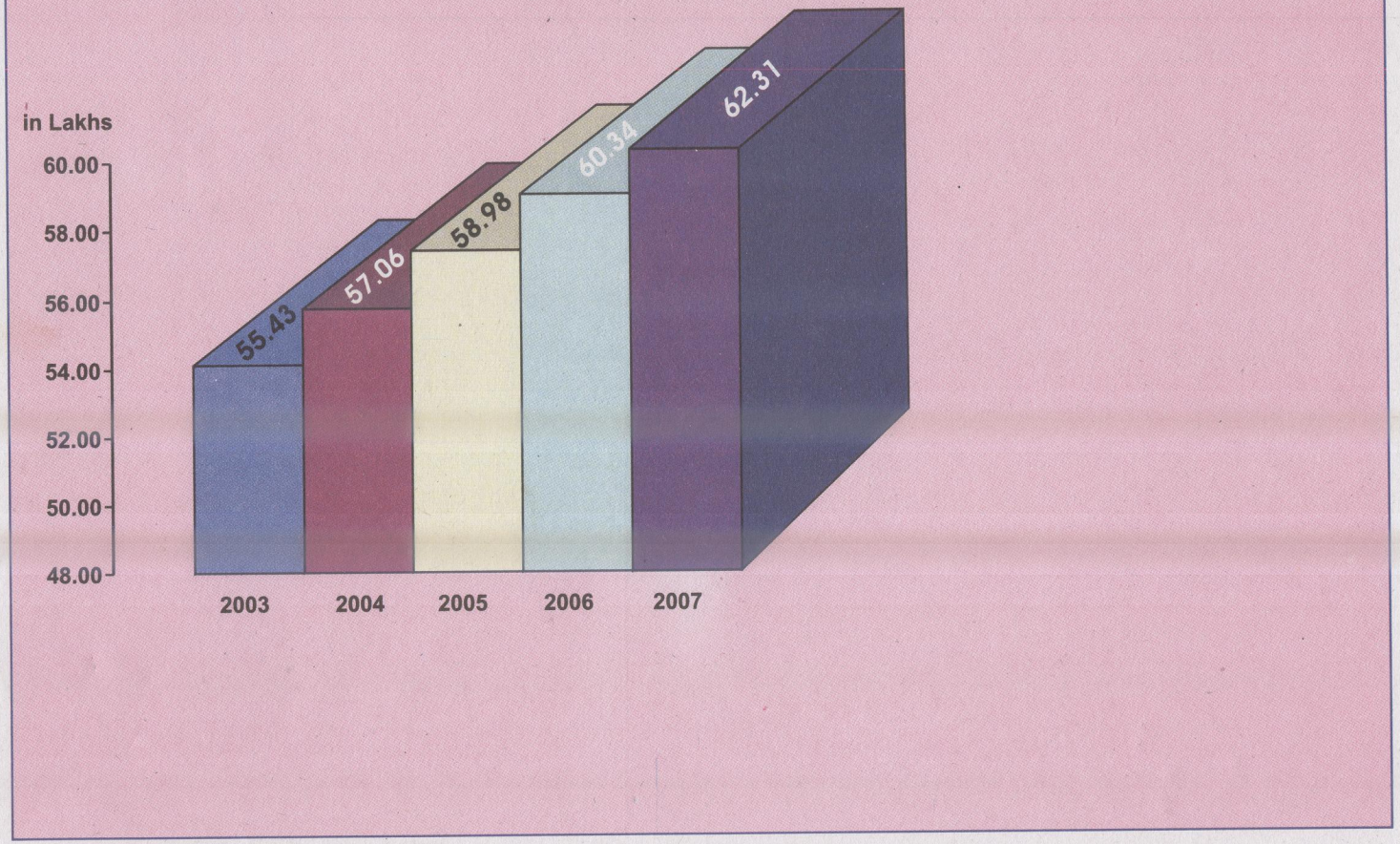
Sr. No.	Category of Consumers	Consumer As on 31.3.2006	Consumers * Added during the year 2006-07	As on 31.3.07 No. of Consumers	As on 31.3.07 % age out of Total No. of Consumers	% age increase in consumers Over last year
1	2	3	4	5	6	7
A	GENERAL					
1	Domestic	4246008	133593	4379601	70.285	3.15
2	Commercial	746484	23271	769755	12.353	3.12
	TOTAL (A)	4992492	156864	5149356	82.638	3.14
B	INDUSTRIAL					
1	Small Power	78194	-220	77974	1.251	-0.28
2	Medium Supply					
	LT	17932	759	18691	0.300	4.23
	HT	674	159	833	0.013	23.59
3	Large Supply					
	LT	86	0	86	0.001	0.00
	HT	4056	341	4397	0.071	8.41
4	Public Water Works					
	LT	6392	541	6933	0.111	8.46
	HT	63	4	67	0.001	6.35
	TOTAL (B)	107397	1584	108981	1.749	1.47
C	AGRICULTURE	931209	38930	970139	15.569	4.18
D	OTHERS					
1	Bulk Supply	487	5	492	0.008	1.03
2	Public Lighting	2068	204	2282	0.036	9.86
	TOTAL (D)	2555	209	2764	0.044	8.18
	GRAND TOTAL (A TO D)	6033653	197587	6231240	100.000	3.27

STATEMENT NO. 6

STATEMENT SHOWING THE DISTRICTWISE NUMBER OF DISTRIBUTION TRANSFORMERS AND THEIR CAPACITY (IN KVA) AS ON 31.3.2007

Sr. No.	Name of Distt.	Position as on 31.3.06		Added During 2006-07		Position as on 31.3.07	
		Nos.	Capacity (KVA)	Nos.	Capacity (KVA)	Nos.	Capacity (KVA)
1	2	3	4	5	6	7	8
1	Amritsar	29255	2106174	1611	69335	30866	2175509
2	Bathinda	8784	494024	957	29807	9741	523831
3	Faridkot	5191	284829	735	15417	5926	300246
4	Fatehgarh Sahib	6055	379544	688	31296	6743	410840
5	Ferozepur	17815	971179	2052	45772	19867	1016951
6	Gurdaspur	14667	947402	1624	87181	16291	1034583
7	Hoshiarpur	11347	649837	1100	39625	12447	689462
8	Jalandhar	17751	1408502	727	56694	18478	1465196
9	Kapurthala	8611	526411	610	32302	9221	558713
10	Ludhiana	22766	2275677	1642	158399	24408	2434076
11	Mansa	4526	249577	1010	29951	5536	279528
12	Moga	11167	658143	1631	43643	12798	701786
13	Mukastar	6453	311035	510	12720	6963	323755
14	Nawanshahar	4419	259273	318	12560	4737	271833
15	Patiala	24252	1550122	2389	79620	26641	1629742
16	Ropar	8448	583545	-3330	-286538	5118	297007
17	Sangrur	28045	1632118	3493	102674	31538	1734792
18	Branala	0	0	201	9293	201	9293
19	Mohali	0	0	4645	354601	4645	354601
	Total :	**229552**	**15287392**	**22613**	**924352**	**252165**	**16211744**

GROWTH OF CONSUMERS
(IN LAKHS)
(2006-2007)



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
C	WEST ZONE														
1	Bathinda	41994	152356	3750	745	207	317	5019	16125	21232	66737	5999	110093	47013	262449
2	Faridkot	74668	141485	2812	441	223	296	3772	10453	9858	13134	1768	35153	78440	176638
3	Ferozepur	76564	72069	2155	163	140	284	2742	8554	3722	6315	2382	20973	79306	93042
4	Mukatsar	35884	62354	2626	304	147	393	3470	9860	8735	18531	8544	45670	39334	108024
	Total (C)	229090	428264	11343	1653	717	1290	15003	44992	43547	104717	18633	211889	244093	640153
D	NORTH ZONE														
1	Jalandhar	22686	29901	6270	2603	428	466	9767	23170	44242	83034	4836	155282	32453	185183
2	Kapurthala	76783	161614	2253	271	120	224	2868	11543	5530	7071	1224	25368	79651	186982
3	Hoshiarpur	43884	70 632	2774	342	62	485	3663	14461	8108	18045	3250	43864	47547	114496
4	Nawanshehar	36536	53443	2076	285	56	256	2673	7263	5167	6505	9674	28609	39209	82052
	Total (D)	179889	315590	13373	3501	666	1431	18971	56437	63047	114855	18984	253123	198860	568713
E	BORDER ZONE														
1	Amritsar Sub.	89225	79191	6484	1086	163	237	7950	29079	19284	25200	2134	75697	77175	154888
2	Amritsar City	39	83	3629	620	29	238	4516	20713	8702	2884	1460	33759	4555	33842
3	Taran Taran	74270	127745	2720	156	41	262	3179	9373	3680	4145	1730	18928	77449	146673
4	Gurdaspur	80478	93492	5813	473	131	574	6991	18787	10589	11673	6040	47089	87467	140581
	Total (E)	224010	300511	18646	2315	364	1311	22636	77952	42255	43902	11364	175473	246646	475984
	Grand Total	970139	1835877	77974	19524	4483	7000	108981	346808	375137	712291	72469	1507703	1079120	3343580

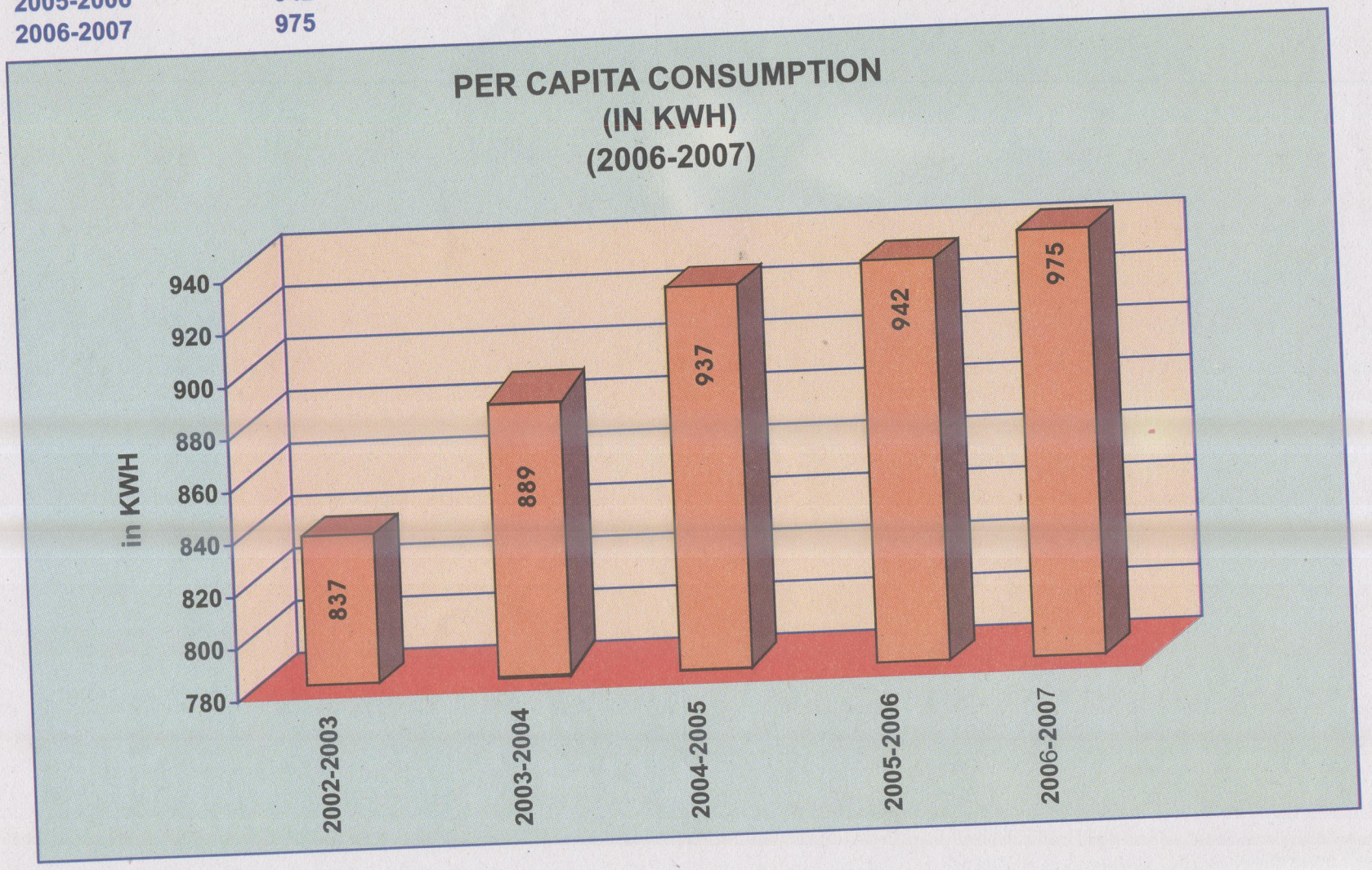
STATEMENT NO. 8 (PART- A)

STATEMENT SHOWING CONNECTED LOAD IN THE BOARD DURING THE YEAR 2006-07

Sr. No.	Category of Consumers	Connected Load As on 31.3.2006	Connected Load * Added during the year 2006-07	As on 31.3.07 Connected Load	As on 31.3.07 % age out of Total Connected Load	% age increase in consumers over last year
1	2	3	4	5	6	7
A	GENERAL					
1	Domestic	7538480	270877	7809357	37.049	3.593
2	Commercial	1931119	140704	2071823	9.829	7.286
	TOTAL (A)	9469599	411581	9881180	46.878	4.346
B	INDUSTRIAL					
1	Small Power	809759	3730	813489	3.859	0.461
2	Medium Supply					
	LT	1071751	48126	1119877	5.313	4.490
	HT	54384	14439	68823	0.327	26.550
3	Large Supply					
	LT	15480	182	15662	0.074	1.176
	HT	3361777	281416	3643193	17.284	8.371
4	Public Water Works					
	LT	105930	8940	114870	0.545	8.440
	HT	26909	508	27417	0.130	1.888
	TOTAL (B)	5445990	357341	5803331	27.532	6.562
C	AGRICULTURE	4474215	619353	5093568	24.165	13.843
D	OTHERS					
1	Bulk Supply	269730	-383	269347	1.278	-0.142
2	Public Lighting	28718	2510	31228	0.148	8.740
	TOTAL (D)	298448	2127	300575	1.426	0.713
	GRAND TOTAL (A TO D)	19688252	1390402	21078654	100.000	7.062

Per Capita Consumption (KWH)

year	(in KWh)
2002-2003	837
2003-2004	889
2004-2005	937
2005-2006	942
2006-2007	975



STATEMENT NO. 9

STATEMENT SHOWING CIRCLEWISE DETAIL OF LT SHUNT CAPACITORS INSTALLED ON AGRICULTURAL AND INDUSTRIAL CONSUMERS ENDING 31.3.2007

Sr.	Zone/Circle	Agricultural Pump Sets		Industrial Consumers (Nos.)					LT Shunt Capacitors Installed at industrial Consumers Capacity in (KVAR)					Grand Total	
		Consumers (Nos)	LT Shunt Capacitor (KVAR)	Small Power	Medium Supply	Large Supply	Public Water Works	Total (5+6+7+8)	Small Power	Medium Supply	Large Supply	Public Water Works	Total (10+11+12+13)	Consumers (Nos) (3+9)	LT Shunt Capacitors Capacity (KVAR) (4+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
A	SOUTHZONE														
1	Patiala	72389	164160	3656	1128	135	694	5613	18420	26447	26709	4274	75850	78002	240010
2	Sangrur	110742	211094	4616	1232	199	497	6544	22915	32032	70810	1988	127745	117286	338839
3	Ropar	39284	77755	2244	381	163	380	3168	9649	7841	50443	3633	71566	42452	149321
4	Mohali	9351	25533	1468	1044	303	303	3118	8393	19583	66640	3419	98035	12469	123568
5	Nuhon Colony	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total (A)	231766	478542	11984	3785	800	1874	18443	59377	85903	214602	13314	373196	250209	851738
B	CENTRAL ZONE														
1	Ludhiana East	3261	5726	6989	3731	784	346	11850	41741	61230	87027	3303	193301	15111	199027
2	Ludhiana West	5028	9995	10625	3468	412	360	14865	46219	49870	88391	5468	189948	19893	199943
3	Ludhiana Sub-Urban	51278	120852	2010	395	175	147	2727	8191	10290	15662	668	34811	54005	155663
4	Khanna	45817	176397	3004	676	565	241	4486	11897	18995	43335	1735	75962	50303	252359
	Total (B)	105384	312970	22628	8270	1936	1094	33928	108048	140385	234415	11174	494022	139312	806992

STATEMENT NO. 10

Statement showing district wise per capita consumption in the state of punjab during 2006-07

Sr. No	Name of Distt	*Population	Power Consumed (KWH)	Per Capita Consumtion (KWH/Person)
1	Amritsar	2427056	1724991206	710.73
2	Bathinda	1310261	942288181	719.16
3	Faridkot	612774	364681826	595.13
4	Fatehgarh Sahib	590705	1885471068	3191.90
5	Ferozepur	1937214	1013920503	523.39
6	Gurdaspur	2325826	1090737746	468.97
7	Hoshiarpur	1592736	1046001139	656.73
8	Jalandhar	2161784	2213237980	1023.80
9	Kapurthala	822136	792637403	964.12
10	Ludhiana	3432505	5539385620	1613.80
11	Mansa	761809	285207946	374.38
12	Moga	967317	828759598	856.726
13	Mukatsar`	855736	353148192	412.68
14	Nawansheher	621202	585153084	941.97
15	Patiala	1824741	2181133687	1195.31
16	Ropar	702291	860069881	1224.66
17	Sangrur	1620518	2599322532	1604.01
18	Tarantarna	1056664	7229902115	684.14
19	Barnala	579590	651566	1.12
20	Mohali	779878	1278965432	1639.96
	Total	26982743	26308666705	975.02

Note : * This population is based ondata provided by Economic advisor, Govt. of Punjab.

STATEMENT NO. 11

STATEMENT SHOWING BOARD'S FOLLOWING AVERAGES DURING 2006-2007

1. Average connected load per consumer.
2. Average units sold per consumer.
3. Average units sold per KW of connected load
4. Average load factor on connected load basis

Sr. No.	Category of Consumers	No. of Consumer ending March-07	Connected load(KW) ending Mar-07	Units sold during (KWH) the month	Average Connected load (KW) per Consumer	Average units (KWH) sold per Consumer	Average units sold per KW of Connected load (KWH)	Average load factor on Connected load basis (%)
1	2	3	4	5	6	7	8	9
A	GENERAL							
1	Domestic	4379601	7809357	5662272015	1.78	1292.87	725.06	8.28
2	Commercial	769755	2071823	1591277646	2.69	2067.25	768.06	8.77
	Total(A)	5149356	9881180	7253549661	1.92	1408.63	734.08	8.38
B	INDUSTRIAL							
1	Small Power	77974	813489	627243718	10.43	8044.27	771.05	8.80
2	Medium Supply							
	LT	18691	1119877	1198347145	59.92	64113.59	1070.07	12.22
	HT	833	68823	109020491	82.62	130876.94	1584.07	18.08
3	Large Supply							
	LT	86	15662	42150726	182.12	490124.72	2691.27	30.72
	HT	4397	3643193	7821132355	828.56	1778742.86	2146.78	24.51

1	2	3	4	5	6	7	8	9
4	Public Water Works							
	LT	6933	114870	236570482	16.57	34122.38	2059.46	23.51
	HT	67	27417	81092806	409.21	1210340.39	2957.76	33.76
	Total(B)	108981	5803331	10115557723	53.25	92819.46	1743.06	19.90
C	AGRICULTURE	970139	5093568	8229494659	5.25	8482.80	1615.66	18.44
D	BULK & OTHERS							
1	Bulk supply	492	269347	561653393	547.45	1141571.94	2085.24	23.80
2	Street lighting	2272	31228	127418069	13.74	56081.90	4080.25	46.58
3	Board's Works	-	-	20993200	-	-	-	-
	Total (D)	2764	300575	710064662	108.75	256897.49	2362.35	26.97
	Total (A to D)	6231240	21078654	26308666705	3.38	4222.06	1248.12	14.25
E	THEFT DETECTED AND/ UNDER ESSESSMENT	-	-	308370000		-	-	-
	Grand Total			26617036705				

Agricultural Pump Sets as on 31.3.2007(2006-2007)

	(in Nos.)
Ending 31-3-2003	857559
Ending 31-3-2004	880902
Ending 31-3-2005	912889
Ending 31-3-2006	931209
Ending 31-3-2007	970139

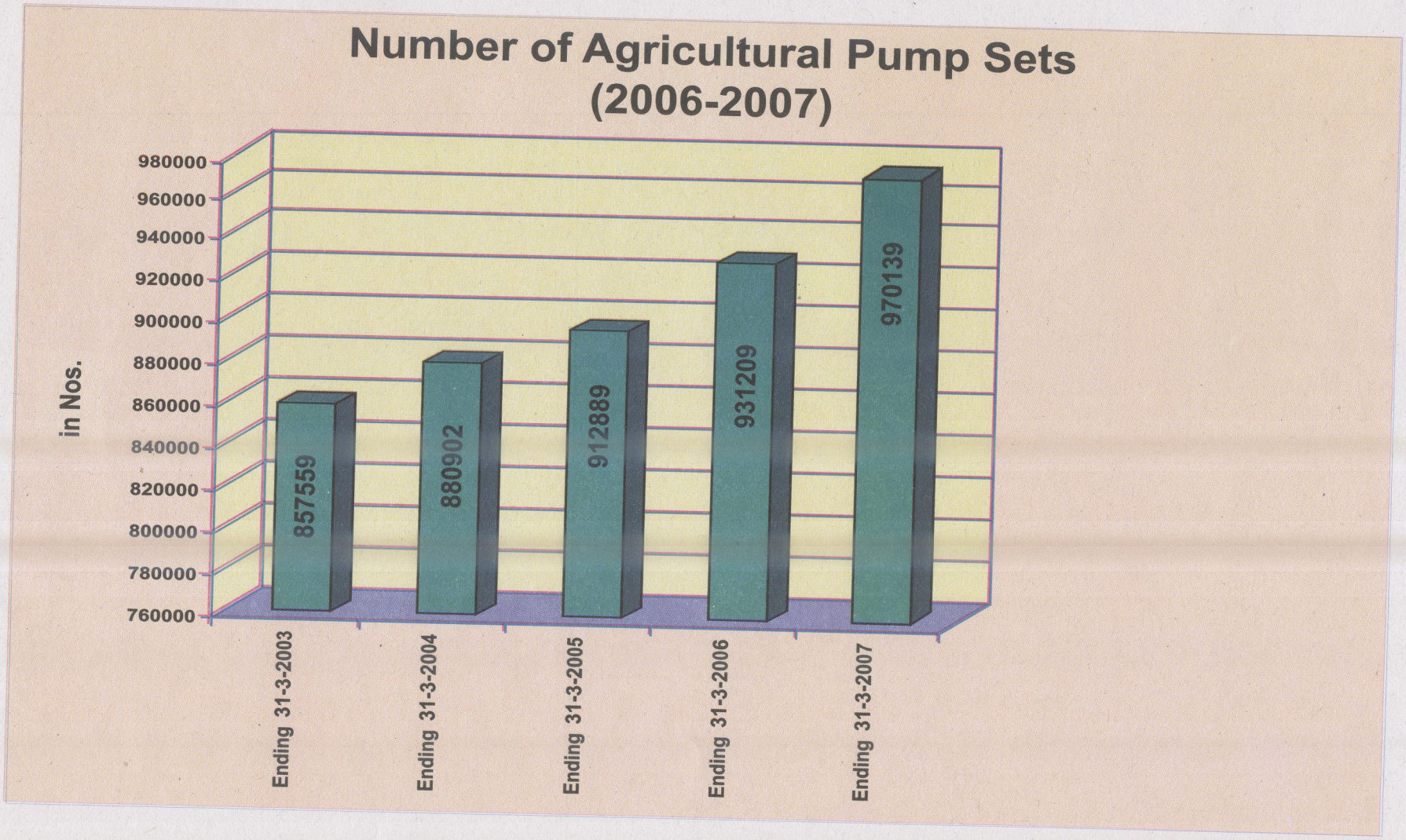


CHART-II

PUNJAB STATE ELECTRICITY BOARD

ORGANISATIONAL SET UP AS ON 31.3.2007

SR. NO.	CHAIRMAN	ADMINISTRATIVE MEMBER	MEMBER/FINANCE & ACCOUNTS	MEMBER OPERATION	MEMBER GENERATION
1.	2.	3.	4.	5.	6.
7.	CHIEF/I.R. & WELFARE, PATIALA.			7. CE/OPERATION (SOUTH), PATIALA 8. CE/OPERATION (NORTH), JALANDHAR. 9. CE/OPERATION (BORDER), AMRITSAR. 10. CE/METERING, PATIALA. 11. CE/STORE & DISPOSAL, PATIALA. 12. CE/WORKSHOP, LUDHIANA.	7. CE/O & M, GGSSTP, ROPAR. 8. CE/O & M GHTP, LEHRA MOHABBAT. 9. CE/ CONST. GHTP, LEHRA MOHABBAT 10. CE/CIVIL CONST. & DESIGN, PATIALA.

STATEMENT NO. 12

STATEMENT SHOWING BOARD'S FOLLOWING AVERAGES DURING 2006-2007

1. Average Revenue per consumer
2. Average Revenue per KW of connected load
3. Average Revenue per Unit sold

Sr. No.	Category of Consumers	No. of Consumer ending March-07	Connected load(KW) ending Mar-07	Units sold (KWH) During 2006-07	Revenue assessed from sale of power During 2006-07 (Rs. in Lacs)	Average revenue per consumer During 2006-07 (Rs.)	Average revenue per KW of connected load During 2006-07 (Rs.)	Average revenue per unit sold During 2006-07 (Paise)
1	2	3	4	5	6	7	8	9
A	GENERAL							
1	Domestic	4379601	7809357	5662272015	156242.59	3567.51	2000.71	275.9
2	Commercial	766750	2051174	1591277646	73373.28	9569.39	3577.14	461.1
	Total(A)	5146351	9860531	7253549661	229615.87	4461.72	2328.64	316.6
B	INDUSTRIAL							
1	Small Power	77974	813489	627243718	24748.9	31739.94	3042.32	394.6
2	Medium Supply	19524	1188700	1307367636	57273.53	293349.36	4818.17	438.1
3	Large Supply	4483	3658855	7863283081	295751.76	6597184.03	8083.18	376.1
4	P.W.Works	7000	142287	317663288	0	0	0.00	0
	Total(B)	108981	5803331	10115557723	377774.19	346642.25	6509.61	373.5

1	2	3	4	5	6	7	8	9
C	AGRICULTURE	970139	5093568	8229494659	2411.37	248.56	47.34	2.9
D	OTHERS							
1	Bulk & Grid supply	492	269347	561653393	21987.97	4469099.59	8163.44	391.5
2	Street lighting	2272	31228	127418069	5696.58	250729.75	18241.90	447.1
3	Board's Works	3005	20649	20993200	-	-	-	-
	Total (D)	5769	321224	710064662	27684.55	479884.73	8618.46	389.9
	Total (A-D)	6231240	21078654	26308666705	637485.98	831237.2594		
E.	THEFT & UNDER ASSESED	-	-	308370000				
F	INTER STATES							
	Miscellaneous	-	-	-	30792	-	-	-
G	OTHER STATES	-	-	-	34563.3	-	-	-
	Grand Total (A to G)	6231240	21078654	26617036705	702841.28	11279.32	3334.47	

A Misc. includes following:

1. Common Pool Consumers - 7477 Lac.
2. Meter Rent / Service rent 9295 Lac.
3. Wheeling Charges 110 Lac.
4. Misc. Charge from const. 12125 Lac.
   From Theft 1785 Lac.

B Railaway Traction included in B.S. 30792 Lac.

CHAPTER - 3

3. GENERATION

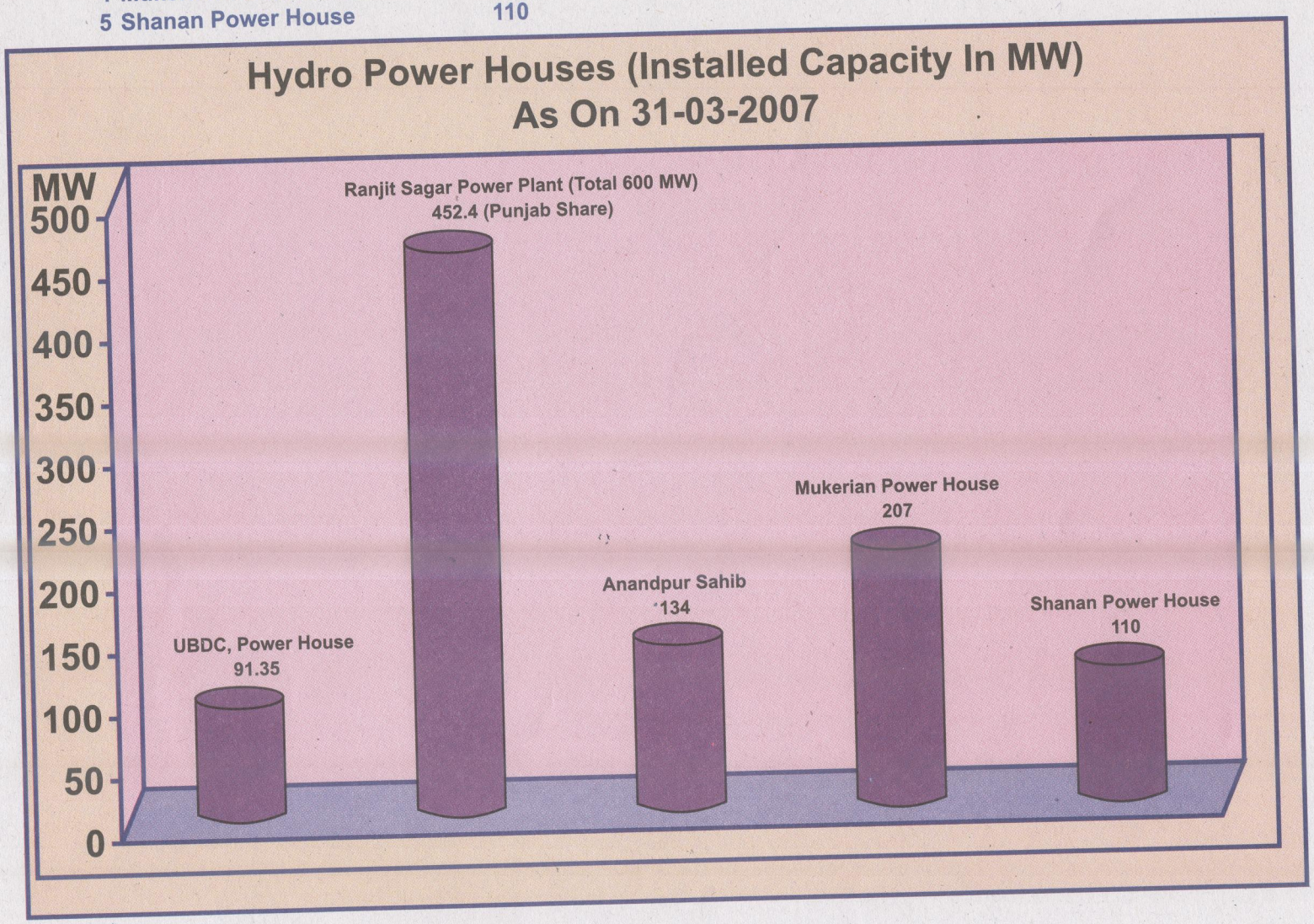
3.1 The generation capacity of the Board has been grouped into three categories:-

Sr. No.	Name of the Generating Stations	Installed capacity as on 31.3.2007 (MW)	Generation target during the year 2006-07 (MU)	Generation during the year 2006-07 (MU)	Causes of less generation than the target
1.	2.	3.	4.	5.	6.
1.	**Board's own generation station**				
a.	**Hydro Power Houses**				
a.1	Shanan Power House (4 X 15) (1 X 15)	110.000	500	495.666	
a.2	U.B.D.C Power House (3 X 15) (3 X 15.450)	91.350	380	384.607	
a.3	Ranjit Sagar Power Plant (4 X 150)	*452.400 (Total 600.000)	1150	1679.476	

* Punjab's Share

Hydro Power Houses Installed Capacity in MW)

		(in MW)
1	UBDC Power House	91.35
2	Ranjit Sagar Power Plant	452.40
3	Anandpur Sahib	134
4	Mukerian Power House	207
5	Shanan Power House	110

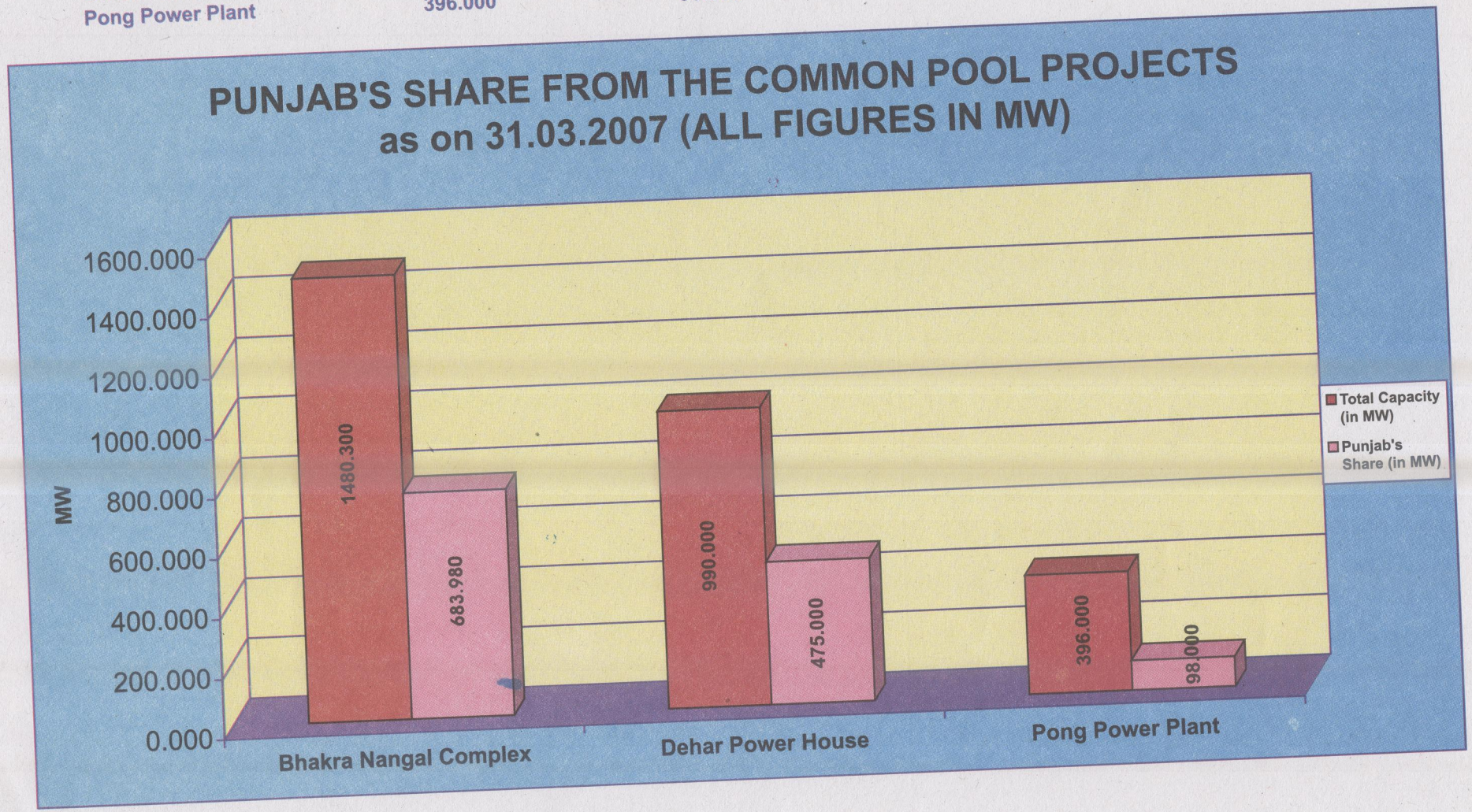


1.	2.	3.	4.	5.	6.
a.4	Anandpur Sahib Power House (4 X 33.5)	134.000	728	666.089	
a.5	Mukerian Hydel Power House (Power House No. 1 to 4 (6 X 15) (6 X 19.5)	207.000	900	1170.736	
	Total (a.1 to a.5)	**994.750**	**3658**	**4396.574**	
a.6	Micro Power Houses Nidampur Micro Power House (2x0.5)	0.800	–	–	Two machines of 500 K.W. are installed at Nidampur Power House which were designed for 4 meter head but 3 meter head was found at this power house, because of which these machines are derated and their capacity is reduced to 2X400 KW.
	Daudhar Micro Power House (3 X 0.5)	1.500	–	7.959	
	Thuhi Micro Power House (2 X 0.4)	0.800	–	–	

1.	2.	3.	4.	5.	6.
	Rohti Micro Power House (2 X 0.4)	0.800	10	-	
	Total (a.6)	3.900	10	7.959	
	Grand Total (a)	998.650	3668	4404.533	
b.	**THERMAL POWER HOUSE**				
b.1	Guru Nanak Dev Thermal Plant, Bathinda. (4 X 110)	440.000	2150	2221.127	
b.2	Guru Gobind Singh Super Thermal Plant, Ropar. (6 x 210)	1260.000	8900	9770.340	
b.3	Guru Hargobind Thermal Plant, Lehra Mohabbat. (2 X 210)	420.000	3220	3443.172	
b.4	Rice Straw Thermal Power House, Jalkheri. (1 X 10)	10.000	–	–	This project has been leased i.e. M/S.J.P.L. on 3.9.2001
	Grand Total (b)	2130.000	14270	15434.639	
	Total (1)	3128.650	17938	19839.172	

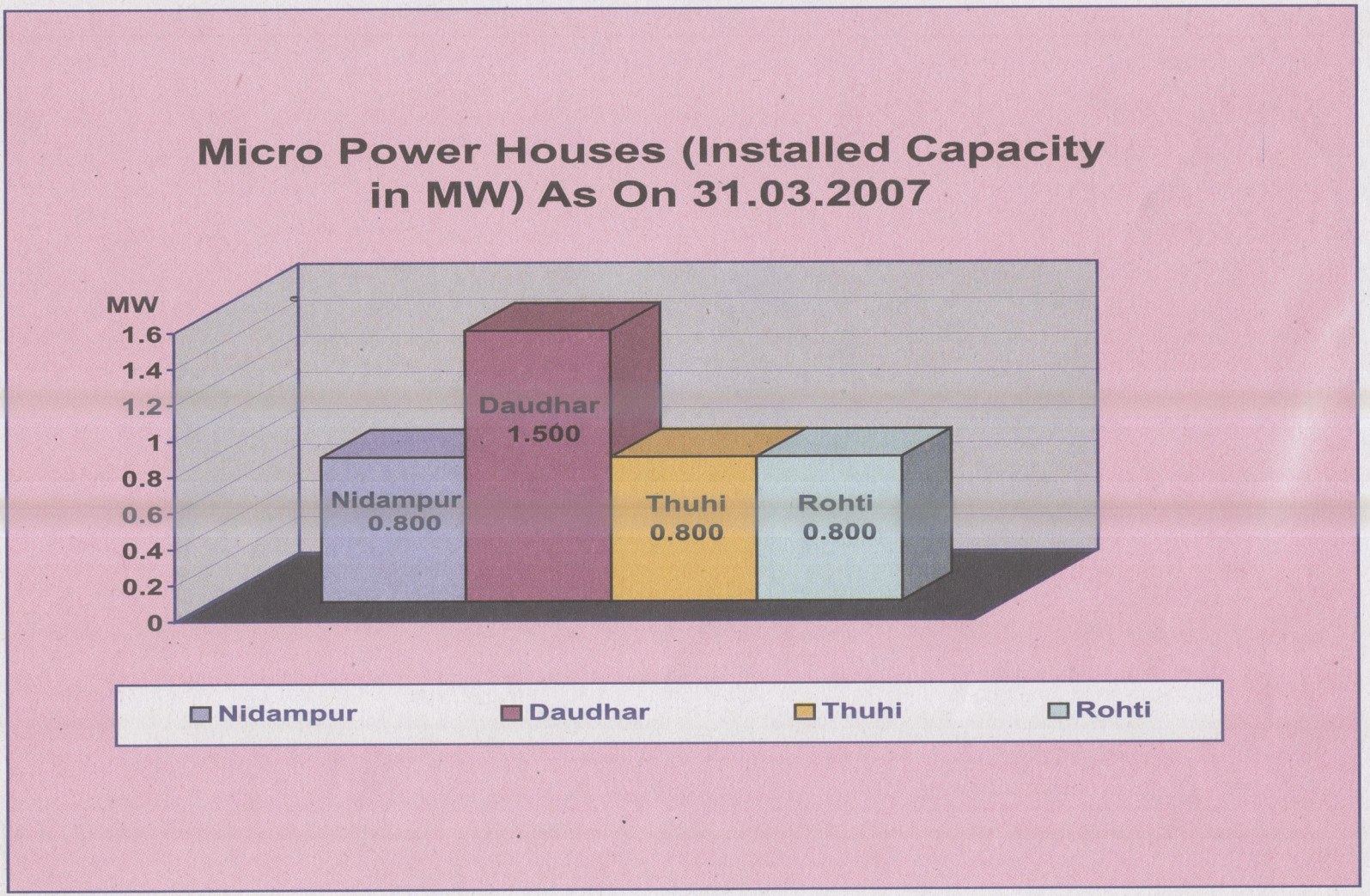
Punjab's Share from the Common Pool Projects
As on 31-03-2007 (all figures in MW)

	Total Capacity (in MW)	Punjab's Share (in MW)
Bhakra Nangal Complex	1480.300	683.980
Dehar Power House	990.000	475.000
Pong Power Plant	396.000	98.000



Micro Power Houses (Installed Capacity in MW)

		(in MW)
1	Nidampur	0.8
2	Daudhar	1.5
3	Thuhi	0.8
4	Rohti	0.8



2	Punjab's Share from the common pool Projects	Installed capacity as on 31.3.2007 (Punjab's Share) (M.W.)	Generation during the year 2006-2007 (Punjab's Share) (M.Us)
	Bhakra Nangal Complex	684.000	2520.635
	Dehar Power House	475.000	1099.812
	Pong Power Plant	98.000	357.813
	Total (2)	**1257.000**	**3978.260**

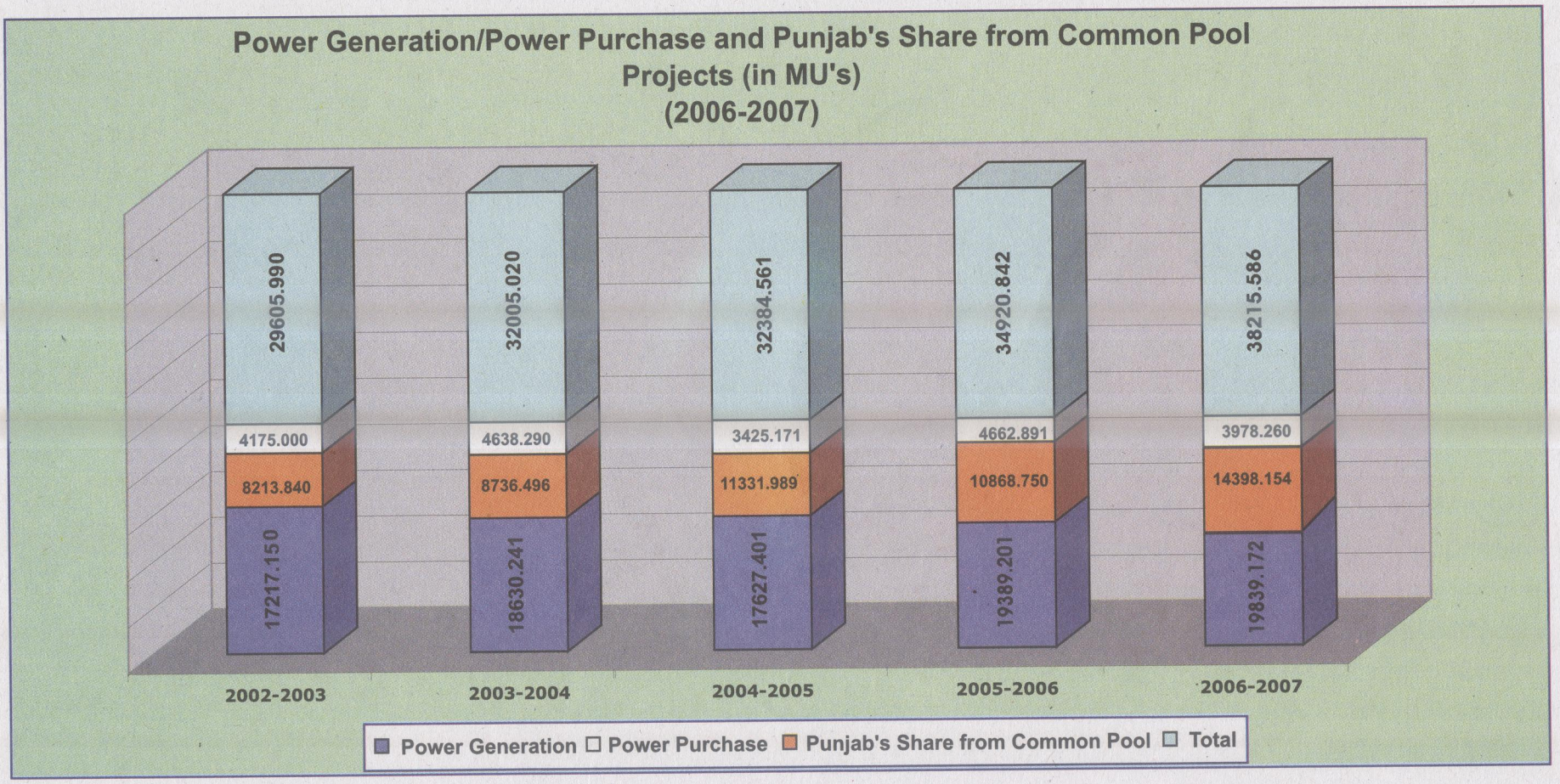
3. PURCHASE OF POWER

Punjab State Electricity Board has purchased 14398.154 M.Us. energy from other power houses during the year 2006-2007 as per details given below:-

Sr. No.	Name	Power Purchased (M.Us.)
1.	2.	3.
1.	Anta	342.473
2.	Auriaya	557.713
3.	Dadri (Gas)	837.531
4.	Singrauli	1440.348
5.	Rihand -I	826.525
6.	Rihand -II	860.553
7.	Unchahar-I	290.033
8.	Unchahar-II	455.932
9.	Unchahar-III	36.848
10.	Frakka (ER)	12.992
11.	Kahalgaon (ER)	219.384
12.	Bairasuil	319.464
13.	Salal	912.014
14.	Tanakpur	69.375
15.	Chamera-I	237.710
16.	Chamera-II	161.628
17.	Uri	381.601
18.	Dhauliganga	121.824
19.	NAPP	108.676
20.	RAPP-3	227.464
21.	RAPP-4	255.431
22.	Co-gen/NRSC	233.029

Power Generation/Power Purchase and Punjab's Share from Common Pool Projects(in MUs)

Year	Power Generation	Power Purchase	Punjab's Share from Common Pool	Total
2002-2003	17217.150	8213.840	4175.000	29605.990
2003-2004	18630.241	8736.496	4638.290	32005.020
2004-2005	17627.401	11331.989	3425.171	32384.561
2005-2006	19389.201	10868.750	4662.891	34920.842
2006-2007	19839.172	14398.154	3978.260	38215.586



1.	2.	3.
23.	Short term purchase within Punjab	32.744
24.	HPSEB (Banking)	194.930
25.	Rajasthan (Banking)	110.425
26.	UPCL (Banking)	173.203
27	J & K (Banking)	196.069
28.	NJPC	639.195
29.	Tehri	69.692
30.	PTC/Other (including Tala through PTC)	3545.818
31.	UT	522.196
32.	Dulhasti	5.344
33.	PGCIL	0
34.	ULDC	0
35.	NRLDC	0
		Total: 14398.154

4. POWER SOLD TO OTHER STATES — 977.110 (MUs)

3.2 POWER SUPPLY POSITION

Power supply position during the year 2006-2007 had been as under:-

		(M.Us.)
a)	Total Energy available from own sources.	19,839.172
b)	Total energy available from Common Pool Projects (B.B.M.B System)	3,976.260
c)	Total Energy Purchased from (Centeral Projects/other States)	14,398.154
d)	Energy Used on Auxiliaries	(-) 1,427.925
e)	Total energy sold to other states	(-) 977.110
f)	Total net energy available for sale (excluding energy sold to common pool consumers)	35,810.551

DIRECTOR/P.R.C., ABLOWAL (PATIALA)

This Directorate deals with Load Management, Scheduling and dispatch of power to various categories of consumers keeping in view its demand/availability. The work of declaring elegibal Industrial consumers as continuous process Industries and allowing peak load exemptions against additional peakload charges to the LS consumers, who request for the same is also being handled by this Directorate.

Under section 23 of the Electricity Act-2003, Punjab State Electricity Regulatory Commission vide its order dated 5.5.2006 authorised PSEB to impose power cuts, Peak load hour restriction and taking other power regulatory measures required as per demand and availability during the year 2006-2007.

General Industrial consumers (Small Power, Medium Supply and Large Supply) including Arc and Induction furnace consumers were subjected to power cuts restrictions as under:-

a) Weekly off day on General Industrial Consumers and Arc/Induction Furnace consumers fed from category -I feeders:-

Date		Restrictions
From	To	
10.4.06	6.5.06	1 day / week
10.6.06	22.6.06	1 day / week
23.6.06	29.6.06	2 days / week
30.6.06	4.7.06	1 day / week
05.7.06	28.8.06	2 days / week
29.8.06	31.8.06	1 day / week

b) Normal Peak Load Hour Restrictions on Large Supply consumers were imposed for 3 hours daily through out the year on L.S. consumers (consumers having connected load of 100 KW or above.)

c) Power Restrictions of 4 hrs. per day from 23.6.2006 to 30.8.2006 were applied on Industrial feeders fed through Category-II. But relief was given on these restrictions according to power availability and system conditions.

d) Restrictions imposed on Arc/Induction Furnaces of category II & III during the

years are as under :-

Date	Arc Furnace (Cat-II & III)	Restrictions	Induction Furnace (Cat-II & III)
10.4.06 - 6.5.06	1 day/week		1 day/week
10.6.06 - 13.6.06	1 day/week		1 day/week
14.6.06 - 14.6.06	1 day/week		2 days/week
15.6.06 - 22.6.06	1 day/week		3 days/week
23.6.06 - 29.6.06	3 days/week		3 days/week
30.6.06 - 30.6.06	1 day/week		3 days/week
01.7.06 - 06.7.06	1 day/week		3 days/week
07.7.06 - 10.7.06	7 days/week		7 days/week
11.7.06 - 14.7.06	2 days/week		7 days/week
15.7.06 - 31.7.06	2 days/week		4 days/week
01.8.06 - 12.8.06	2 days/week		2 days/week
13.8.06 - 17.8.06	2 days/week		4 days/week
18.8.06 - 24.8.06	2 days/week		7 days/week
25.8.06 - 25.8.06	2 days/week		4 days/week
26.8.06 - 31.8.06	4 days/week		4 days/week

Power supply position during the year to Agricultural pump sets, Rural area and Urban/Industrial Consumers of category-I remained as under:-

Month	3-Phase T/Well Supply (Hours/ day)	Rural Domestic Supply (Hours/ day)	Urban Industrial Category-I Supply (Hours/day)
1	2	3	4
April-2006	3.79	18.31	21.96
May-2006	5.98	23.87	23.99
June-2006	9.34	19.49	21.45
July-2006	10.2	18.13	20.42
Aug-2006	7.91	19.08	20.69
Sep-2006	7.32	23.29	23.90
Oct-2006	11.09	22.74	23.71
Nov-2006	10.50	23.08	23.89
Dec-2006	12.80	22.21	23.48

1	2	3	4
Jan-2007	10.86	21.00	22.96
Feb-2007	10.12	22.72	23.71
Mar-2007	9.26	23.70	23.92
Average	9.10	21.47	22.84

Peak demand met during the year was 6558 MW on 15.8.06 Maximum consumption demand was however observed as approx 1396.25 MU on 7.7.06.

With the introduction of ABT and Open Access in the Northern Region, trading has become main source of energy. This office looks after the work of short-term purchase/ sale of energy through trading. During the year 2006-2007 PSEB purchased 3545.818 MUs through traders at a cost of Rs. 1791.53 Cr. This energy works out to 24.63% of the total energy purchased by PSEB and its cost works out to 41.55% of the total cost of energy purchased. PSEB is usually purchasing such power through e-bids spot trading.

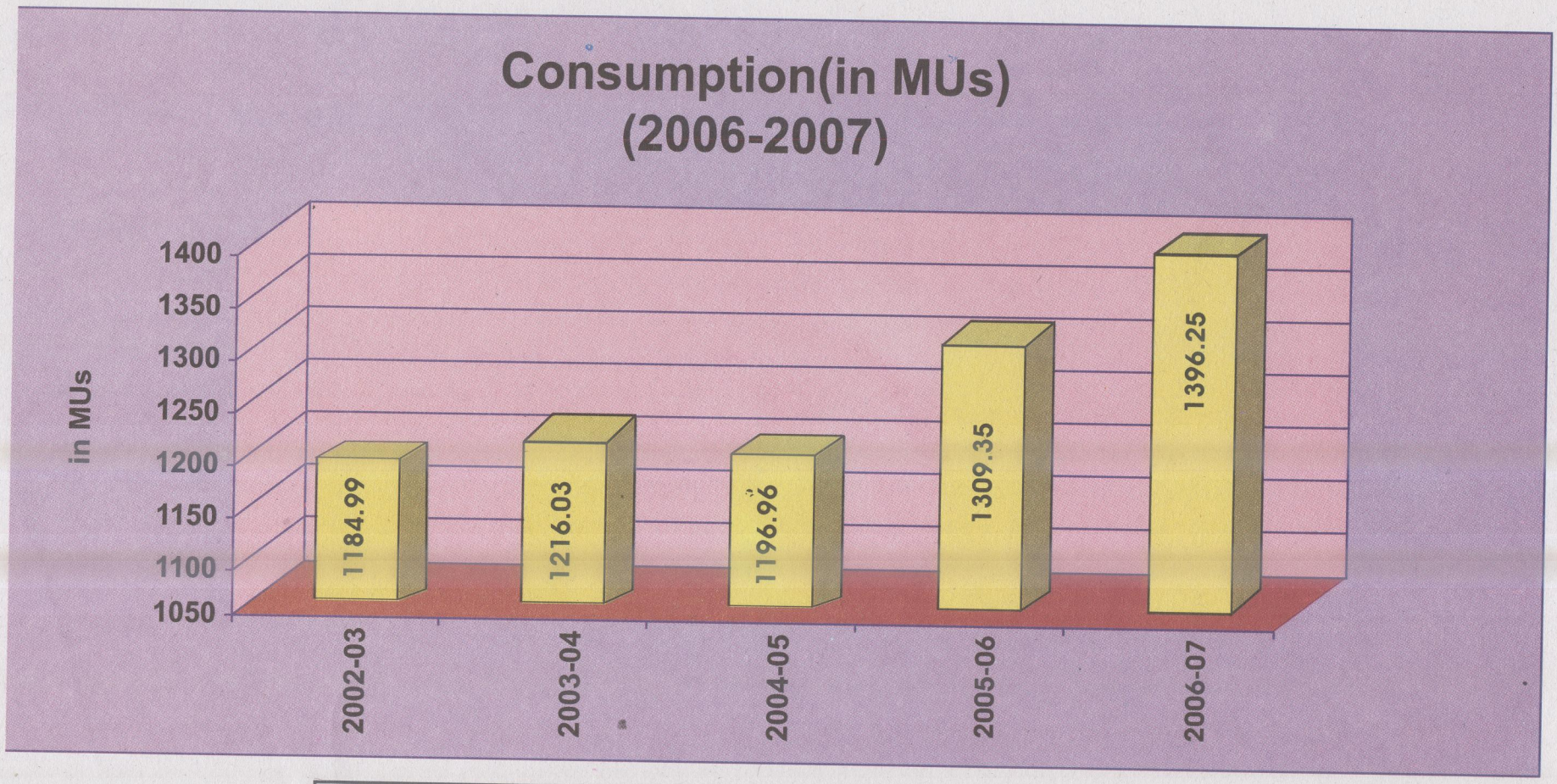
Some times the power becomes surplus due to sudden changes in weather etc. and this office arranges to sell surplus power to traders on time of the day basis. During the year 2006-2007, PSEB was able to sell 18.815 MU outside the State through traders earning Rs. 7.38 Crores for PSEB.

Total number of units available at PSEB periphery during the year 2006-2007 are 34984.13 MU. It includes 674.626 MU received through banking from HP, J&K and UPCL Energy supplied under banking to these States during the year is 714.848 MU. This will ensure availability of more Power through Banking during paddy season of 2007-08. 128.394 MUs were supplied to HP on account of Royalty & RSD share. Auxiliary consumption of Punjab's own thermal and Hydro stations was 1427.925 MU during the year. Had there been no resbrictions/Power cuts, total consumption of Punjab would have been 38785 MU. The average 3 Phase Power Supply given to tube wells during the year was 9.10 hrs. per day.

During the year 2006-2007, for the first time, this office has signed agreements with Power trading Companies for banking of Power with UP in NR and some States like Tamil Nadu, Andhra Pradesh, Mumbai, in other Regions. 115.053 MU energy has been supplied to these States which shall be received back during Paddy season of 2007. This will help in better supply to tubewell and in reduction of Power cuts during paddy season.

Power Control Centre at Ablowal, Patiala and Sub Power Control Centers at Lalton Kalan and Jamsher (Jalandhar) operate in shifts round the clock for control of Power in the state.

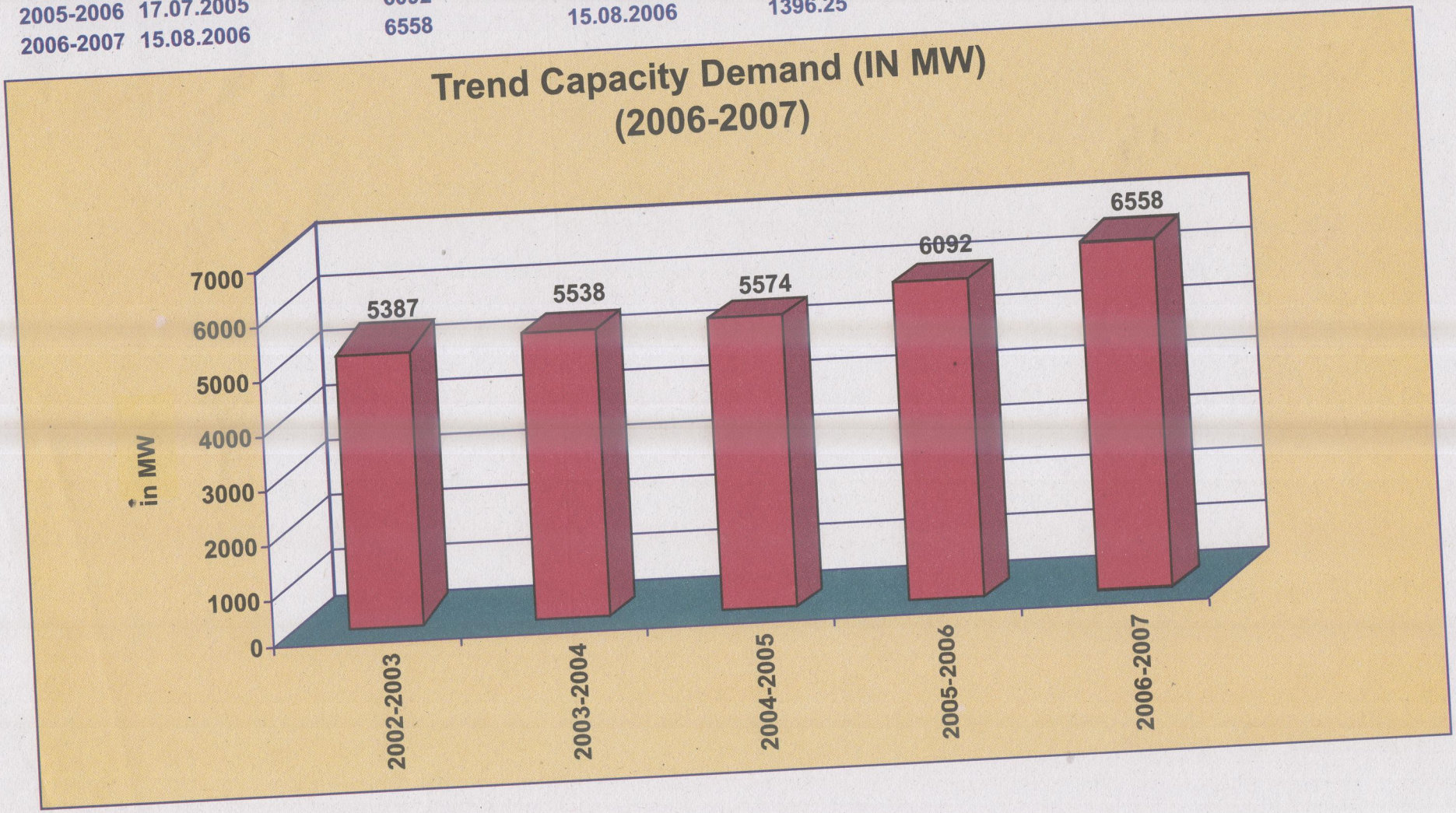
Year	Maximum Consumption(in MUs)
2002-03	1184.99
2003-04	1216.03
2004-05	1196.96
2005-06	1309.35
2006-07	1396.25



Note :- Maximum consumption in a month during the year 2006-07

Trend Capacity Demand & Consumption

Year	Date	Maximum Demand(in MW)	Date	Consumption(in MU)
2002-2003	30.06.2002	5387	03.07.2002	1184.99
2003-2004	03.06.2003	5538	11.06.2003	1216.03
2004-2005	06.07.2004	5574	10.08.2004	1196.96
2005-2006	17.07.2005	6092	17.07.2005	1309.35
2006-2007	15.08.2006	6558	15.08.2006	1396.25



3.3 PERFORMANCE OF EXISTING THERMAL POWER PLANTS

Achievements of Thermal Power Plants during the year 2006-2007 as compared to previous years were as under:-

(a) GURU NANAK DEV THERMAL PLANT, BATHINDA (4 X 110=440 MW)

	2002-03	2003-04	2004-05	2005-06		2006-07	
				(A)*	(B)**	a*	b**
1. Generation M.U)	2498.76	2551.31	1992.49	2229.27	2359.18	2189.17	2221.12
2. Plant Load Factor (%)	64.83	66.01	51.69	57.84	61.21	56.80	57.63
3a. Coal received (M.T)	1757456	1828525	1544119	1808240	--	1619631	--
b. Coal consumption (M.T)	1762950	1830084	1476983	1655873	1750439	1592834	1615788
c. Coal Consumption (Kgm. KWH)	0.71	0.71	0.74	0.74	0.74	0.73	0.73
4a. Oil received (Kilo-litre)	4664	3060	3382	5962.03	--	4732.14	--
b. Oil consumption (Kilo-litre)	3385	4223	2906	3199	4896	3318	4143
c. Oil consumption (M.L./K.W.H)	1.35	1.66	1.46	1.43	2.08	1.52	1.87
5. Auxiliary Consumption (%)	9.32	9.54	12.23	12.34	12.22	11.38	11.48
6. D.M. Water (%)	3.35	3.70	2.02	2.45	--	2.33	--

A* Excluding figures of Unit-2 during its Commissioning period post R&M(5.10.05 to 31.12.05)

B** Including figures of Unit-2 during its Commissioning period post R&M (5.10.05 to 31.12.05)

a* Excluding figures of Unit-1 during its Commissioning period (Feb. & March 2007) post R&M.

b** Including figures of Unit-1during its Commissioning period (Feb. & March 2007) post R&M.

1. GENERATION

Guru Nanak Dev Thermal Plant, Bathinda have four units, each unit of 110 MW capacity, out of which unit No. I was under shut down for Renovation and Modification w.e.f. 10.3.2006, as such the effective capacity of this plant remained 330 MW i.e. 110X3=330 MW. upto 31.3.2007. After completion of R&M work of Unit No. 1 has been test synchronized on 2.2.2007 & is under commissioning/stabilization.

The Target of generation was kept 2150 MU & the actual generation achieved was 2221.127 MU, which also include the generation of 31.95 MU of Unit No.1 during trial run/stabilization period.

The information regarding performance of the plant for the last five years i.e 2002-03 to 2006-07.

2. CONSUMPTION OF OIL AND COAL

The coal cosumption was 0.73 Kg per KWH and the consumption of oil during the year remained 1.52 ML per KWH.

3. AUXILIARY CONSUMPTION

The auxiliary consumption of plant during 2006-2007 has reduced to 11.38% than the previous year consumption of12.34%.

4. D.M. WATER

D.M. water make up during the year remained 2.225% against the target of 2.5%.

5. DRY FLY ASH COLLECTING SYSTEM

During the year 2006-2007, Ash Handling System was geared up to collect and utilize dry fly ash maximum at stage-I & II, GNDTP, Bathinda. During the year 2006-2007 total 493905 MT of dry fly ash was collected and given to M/S Gujrat Ambuja Cement Ltd. Bathinda, other cement industries and Brick Kiln units free of coal. Presently 11 Nos. Industries are taking dry fly ash from this plant total dry fly ash utilization was 64.56% of the trial ash generated at GNDTP, Bathinda. Every efforts is being made to improve further utilization of dry fly ash as per guidelines issued Notification No. SO 763 (E) dated 14.9.99 by Govt. of India, Ministry of Environment & Forests, New Delhi.

6. FIRE FIGHTING SYSTEM

The new Fire protection system under R&M scheme is under construction. The work is being executed by M/s Technofab Engineering Ltd. Faridabad vide work Order No. 1623/Th, Dated 18.3.04 and the work is likely to be completed by the end of next year.

7. WATER EFFULENT TREATMENT PLANT

New Water Effulent Treatment Plant under R&M Scheme is under construction. M/s Geo Miller & Co. Pvt. Ltd. New Delhi is executing the work vide work order No 1617 Dated 9.12.2003. The work is likely to be completed by July 2007.

8. ANNUAL AND CAPITAL REPAIR OF UNITS

Details of overhauling of units carried out during the year 2006-2007 is given below:-

Unit No.	Period of overhauling	Type of overhauling
I.	01.04.06 to 01.02.07	Unit is under commissioning after R&M
III.	14.02.07 to 17.03.07	Annual
IV.	02.01.07 to 01.02.07	Annual

During the above overhaulings of Units, the turbine, generator, pumps and other connected equipments were overhauled depatmentally. The expenditures incurred during the overhauling remained within the sanctioned estimates.

The defective equipments of these units in Boiler area such as Burner parts, Coal Air Nozzles, Coal Vapour Elbows, P.C. Lines/Vapour lines, Bends and Staight pipes etc. Demaged high-pressure tubes and bends of super heaters, water wells, economisers of Boiler furnace were replaced. Cleaning of boiler furnace and the pent house was done. The repair/replacement of machanical and electrical portion of Electrostatic Precipitators was carried out during the overhauling of the units. Maintenance of various rotating machinery was carrid out during overhauling of Units.

9. COAL HANDLING PLANT

i) The work of overhauling of wagon tippier No. 118 & its related mechanical structure etc. was got done during overhauling of Unit No. IV.

ii) The work of overhauling of conveyor 98, gearbox & its related mechanical structure etc. was got done during overhauling of Unit No. III.

10. RENOVATION & MODERNISATION OF UNITS-STAGE-II

a) At GDNTP Unit No.1, major R&M works have been completed in Feb.2007 & Unit was test synchronized in Feb., 2007.

b) For R&M works of Unit III & IV, PO's and WO's for Rs. 465.36 Crores have been placed upon M/s BHEL. Design & Drawing work is in progress, Unit No. IV will be shut down in Dec. 2007 & R&M works will be completed in Aug. 2008 and Unit No. III will be shut down in Dec. 2008 & R&M works will be completed in July 2009.

11 TRAINING PROGRAMME

During the year 2006-2007, following technical training programme/lectures were conducted for shift Engineers and various other categories of employees by Technical Training Cell.

Sr. No.	Category of training	No. of Training/ refresher lectures
1.	Refresher lectures for Shift Engineers	30 Nos.
2.	Refresher courses for DC/ APA/SSO/JE and other categories of employees working in shifts.	25 Nos.
3.	Seminar organized by various firms for Engineers & Staff working in GNDTP, Bathinda.	13 Nos.
4.	Computer training for LDC/ UDCs.	12 Nos.

Apart from above, technical training was also given by TT cell to 250 degrees holder students and 150 Nos. Diploma Holder students from various Engineers/ Polytechnic colleges.

b. GURU GOBIND SINGH SUPER THERMAL PLANT, ROPAR

This plant has six units of 210 M.W. each running on Coal. All the units are operational. Performance for the last five years is as given in the chart below:-

		2002-03	2003-04	2004-05	2005-06	2006-07	
						Target	achieved
1.	Generation (M.U.)	8245.65	8303.750	9082.662	9329.31	8900	9770.34
2.	P.L.F. (%)	74.70	75.02	82.28	84.52	80.63	88.52
3.	Coal Consumption Kg./K.W.H.	0.657	0.661	0.660	0.653	0.657	0.663
4.	Oil consumption M.L./K.W.H.	1.28	0.91	0.97	0.61	0.98	0.44
5.	Auxiliary consumption (%)	8.26	8.33	0.57	0.51	9.00	0.38
6.	Make up water (%)	3.31	3.07	2.53	2.50	2.00	1.76
7.	Station Heat Rate (Kcal/Kwh)	_	_	2535.71	2522.33	2538	2540.79
8.	Efficiency (%)	_	_	33.92	34.10	33.88	33.85

1. GENERATION

Generation of 9770.34 MUs was achieved at the plant load factor of 88.52% against the fixed target of 8900MUs. during the year 2006-2007. But it is more than the previous years generation (9329.31 MUs.). This generation is record highest since inception of the plant.

2. OIL AND COAL CONSUMPTION

Consumption of coal has been 0.663 Kg/Kw. and consumption of oil has been 0.44 ML/K.W.H during 2006-2007, which is minimum ever.

3. D.M. WATER

D.M. water consumption is 1.76% against the target of 2.00%. This is the record lowest since inception of the plant.

4. **AUXILIARY CONSUMPTION**

The auxiliary consumption is 8.38% against the target of 9.00%.

5. **HEAT RATE**

The Heat Rate during the year is 2540.79 Kcal/Kwh against the target of 2538 Kcal/Kwh.

6. Highest ever Plant Availability factor of 90.24% has been achieved during financial year 2006-2007.

7. Running of all the 6 units without tripping for 19 days during 2006-2007.

8. Overhauling period of units has been reduced from 150 to 129 days during 2006-2007.

9. Achieved 9316.9 lacs units with PLF 99.39% during January, 2007 which is highest during any month since inception of plant.

10. **EFFICIENCY**

The efficiency of thePlant during the year is 33.85% against the target of 33.88%

DURING THE YEAR 2006-2007, THE DETAIL OF MAJOR WORKS DONE ARE AS UNDER:-

1. **PLANNING AND DEVELOPMENT WORKS**

i) Residual Life Assessment & Condition Assessment work which was taken up in respect of Unit-I during the year 2005-2006, was continued and carried out for Unit No.II in the year 2006-2007, with the continued consultancy from M/s NTPC. The project Report was also prepared and submitted to M/s Rural Electrification Corporation for obtaining loan for Consultancy Services and RLA/CA Studies.

ii) The following Renovation & Modernization activities were got executed and completed during the year 2006-2007, after obtaining loan from M/s REC.

Sr. No.	Name of Activity	Estimated cost (Rs. in Lacs)
1.	Installation of On-line opacity Meters/suspended particulate Matter (SPM) Analyzers on Unit-I to VI at GGSSTP, Ropar.	60.00
2.	Installation of Modernized Digital Semi Pulse ESP Controllers for unit No. I & II at GGSSTP, Ropar.	254.00

Completion of these works have helped in controlling the pollution more effectively.

iii) a) Project Report for the following Renovation & Modernization activities was prepared and submitted to M/s REC for obtaining loan for their execution.

Sr. No.	Name of Scheme	Cost (Rs. in Lacs)
1.	Providing 10 No.66 KV, 2000 AMP, Vacuum Circuit Breakers in place of existing MOCB's (Jyoti Make) for UATs and station Ties (Stage-II)	44.00
2.	Replacement of Static Excitation Equipment in Stage-I	455.00
3.	Replacement of Motor Differential Relays in Stage-I.	5.00
4.	Replacement of overload Alarm Relays for HT Auxiliaries in Stage-II & III	6.00

b) The following Renovation & Modernization activities are being executed after obtaining loan from M/s REC.

Sr. No.	Name of Activity	Estimated Cost (Rs. in Lacs)
1.	Replacement of Silicagel type driers with 4 No. Refrigeration type Hydrogen Driers of 210 MW Generatiors Unit-I, II, III& IV	16.70
2.	Capacitance and Tan Delta Measurement set	40.00
3.	Up gradation of Coal, Oil and Pollution Laboratory for GGSSTP, Ropar	15.50
4.	Motor Protection relays for Unit-I & II.	16.00
5.	Procurement of 210 MW Generator Satator as spare for eight No. units of PSEB.	1800.00
6.	Procurment and installation of 2 Nos. 220 KV, 30 KW DC motor for jacking oil pumps of turbine in stage-I (Unit - I & Unit-II)	20.00
7.	Installation of ON-LINE CO (Carbon Monoxide) analysers at GGSSTP, Ropar.	105.00

Execution of these activities will lead to improve plant availability.

3. MECHANICAL MTC. WORKS

A) CAPITAL OVERHAUL

i) Capital Overhaul of Unit-III (25.10.2006 to 4.12.2006) TG Bearing inspection, Generator Mechanical Works, HP module replacement works carried out.
Overhauling works of Main oil pump (MOP), HP & LP Bypass system etc. carried out.

ii) Capital Overhaul of Unit-II (15.2.2007 to 30.3.2007) HP, IP & LP Turbine Overhauls, General Mechanical works, General Rotor Thread out/Thread in, Replacement of LP

Turbine compensation and also associated with RLA Studies.

Overhauling works of Main oil pump (MOP), HP & LP Bypass system etc. carried out.

B) ANNUAL MAINTENANCE

i) Mini Shutdown of Unit-VI (16.4.2006 to 30.4.2006) Overhauling works of Main oil pump (MOP), HP, LP Bypass system etc. carried out.

ii) Annaul Overhaul of Unit-V (1.5.2006 to 29.5.2006) TG Bearing inspection, Generator Mechanical works & Partial Replacement of condenser tubes works carried out. Overhauling works of Main oil pump (MOP), HP, & LP Bypass system etc. carried out.

c. **GURU HARGOBIND THERMAL PLANT, LEHRA MOHABBAT**

Two units of 210 megawatte each have been installed at Guru Hargobind Thermal Plant at Lehra Mohabbat, Both these units have generated power at full capacity during the year 2006-2007.

PERFORMANCE OF THE PLANT FOR THE LAST FIVE YEARS AS GIVEN IN CHART BELOW:-

		2002-03	2003-04	2004-05	2005-06	2006-07
1.	Generation (in MUs)	2905.964	3380.473	3309.244	3145.925	3443.172
2.	Plant load Factor (P.U. F.) (%)	78.980	91.630	89.94	85.51	93.58
3. a)	Coal Procurement (M.T.)	1764799	1995278	2051414	1835839	1946260
b)	Coal Consumption (Kg./Kwh)	0.630	0.591	0.598	0.579	0.551
c)	Coal Consumption (M.T.)	1820383	1997570	1978357	1820387	1897070
4. a)	Oil Procurement (K.L.)	2010.700	516.700	2241.400	239.855	2036.850

b)	Oil Consumption (M.L./K.W.H)	0.630	0.320	0.246	0.373	0.327
c)	Oil Consumption (K.L.)	1830.700	1081.960	815.200	1174.830	1125.350
5.	Auxiliary Consumption (%)	8.950	8.910	9.420	8.970	8.800
6.	Make up Water (%)	1.890	1.250	0.830	0.760	0.690

1. GENERATION

A target of 3220 MUs of generation was fixed during the year 2006-2007. Against this target 3443.172 MUs (PLF 93.58%) were actually generated. This is the highest ever generation and plant load factor at GHTP-II there had been no backdown due to low system demand, the deemed generation during the year would have been 3506.641 MUs.

2. COAL AND OIL CONSUMPTION

The specific oil consumption during 2006-2007 is 0.327 ml/Kwh and the specific coal cosnsumption during the year remained as 0.551 Kg/Kwh respecively, which is lowest so far since the commissioning of Plant. Oil consumption during the calender year 2006 remained as 0.319 ML/Kwh.

3. AUXILIARY CONSUMPTION AND DM WATER MAKEUP

The Auxiliary Consumption during the year remained as 8.80%. This is the lowest ever auxiliary consumption during a financial year at GHTP. This includes exciter consumption and transformation losses. DM water make up during the year was 0.69% which is also the lowest so far since the date of commissioning of plant.

4. ANNUAL AND CAPITAL MAINTENANCE

During the year 2006-2007 the following maintenance were carried out as under:-

UNIT	TIME	TYPE OF MAINTENANCE
II.	22.4.2006 to 6.5.2006	Annual Maintenance
I.	7.12.2006 to 23.12.2006	Annual Maintenance.

5. AWARD RECEIVED

A national award for the year 2004-2005 for Meritorious Performance in Power Sector has been awarded to GHTP. Lehra Mohabbat by Hon'ble Prime Minister of India on 21st March, 2007.

3.4 PERFORMANCE OF EXISTING HYDRO POWER HOUSES

1. SHANAN POWER HOUSE, JOGINDER NAGAR (110 MW)

Shanan Power House is situated at Joginder Nagar in Himachal Pardesh which is first and oldest power house of North India. This is the 75th year of running of this Power House. The Installed capacity of this project is (4x15=60 MW + 1x50=50 MW)=110 MW.

Prior to 3/82 the installed capacity of this power house was 60 MW (4 No. machines of 15 MW each). In 3/82 with the commissioning of extension unit of 50 MW capacity, the total capacity of the plant has been increaed to 110 MW.

During the year 2006-2007, by utilizing full quantity of available discharge this power House generated 495.666 MUs against the target of 500 MUs. In addition to the annual maintenance of all the 5 Nos. machines, the following works were also undertaken during the year.

a) Replacement of old Temperature Recorders with new digital. Temperature recorders at 50 MW machine.
b) Retrofitting of 11 KV MOCB's 3150 Amp. with new SF-6 Breaker of ABB make.
c) Installation of new H.S.L. Lubrication system on 50 MW machine.
d) Installation of new Generator Air Coolers and Bearing Oil Coolers at 50 MW machines.
e) Replacement of Governor Oil Pumps and Motors of 15 MW & 50 MW machines.
f) Replacement of 8 Nos. new rebabitted Turbine Guide Bearing pads in 50 MW machine.
g) Replacement of Oil in single phase Power Transformer of 12 MVA, 11/132 KV Sr. No. 1297/3.
h) Replacement of Oil in single phase Power Transformer of 12 MVA, 11/132 KV Sr. No. 1297/7.
i) Dehydration of 1 No. 19 MVA Power Transformer of 11/132KV Sr. No. 23938 of 50 MW machine.
j) Replacement of existing damaged slip ring assembly with new slipping assembly at 50 MW machine.
k) Repair of expansion joints of new Reservoir at Head Works, Barot.

The above works have been carried out property and efficiently to avoid any generation loss.

2. U.B.D.C HYDRO POWER SCHEME STAGE I & II (91.35 MW)

a) i) U.B.D.C POWER HOUSE NO. I STAGE-I

The performance of the power house is satisfactory. During the year 2006-2007, 25957400 units have been generated whereas the machine remained under planned shut down since 8.9.2006 to date for capital maintenance.

ii) U.B.D.C. POWER HOUSE NO. 2 STAGE-I

The performance of the power house is satisfactory. During the year 2006-2007, 74248000 units have been generated, whereas the machine remained under planned and forced outage of 1350 hrs. 30 minutes and 1525 hrs. 29 minutes (31 hrs. 09 minutes due to machine fault and 1210 hrs. 20 minutes due to less water) respectively.

iii) U.B.D.C POWER HOUSE NO. 3 STAGE-I

The performance of the power house is satisfactory. During the year 2006-2007, 58504800 units have been generated, whereas the machine remained under planned and forced outage of 1152 hrs. 20 minutes and 2461 hrs. 03 minutes (15 hrs. 09 minutes due to machine fault and 2444 hrs. 54 minutes due to less water) respectively.

b. i) U.B.D.C. POWER HOUSE NO. 1 STAGE-II

The performance of the power house is satisfactory. During the year 2006-2007, 97103450 units have been generated, whereas the machine remained under planned and forced outage of 648 hrs. 35 minutes and 1154 hrs. and 54 minutes (50 hrs. 54 minutes due to machine fault and 1099 hrs. 00 minutes due to less water) respectively.

ii) U.B.D.C. POWER HOUSE NO. 2. STAGE-II

The performance of the power house is satistfactory. During the year 2006-2007, 55404700 units have been generated, whereas the machine remained under planned and forced outage for 20122 hrs. 20 minutes and 2497 hrs. 22 minutes (30 hrs. 40 minutes due to machine fault and 2466 hrs. 42 minutes due to less water) respectively.

iii) U.B.D.C. POWER HOUSE NO. 3 STAGE-III

The performance of the power house is satisfactory. During the year 2006-2007, 73389140 units have been generated, whereas the the machine remained under

planned and forced outage was 1667 hrs. 40 minutes and 1383 hrs. 04 minutes (71 hrs. 37 minutes due to machine fault and 1311 hrs. 27 minutes due to less water) respectively.

INCREASE IN GENERATION WITH THE CONSTRUCTION OF NEW ESCAPE CHANNEL

Prior to construction of new escape at RD-72720 generation of Power House was linked with irrigation demand down-stream of Power House and when irrigation requirement remained less or nil. Power house generation used to decline even if water was available at Madhopur head works. With the construction of new escape at RD-72750 which was completed during the month of 12/98 generation of Power House has improved. Now the Power House is running as per availability of water at Madhopur head works. Excess water ever and above the demand or Irrigation is diverted through the new escape. Additional 153630252 units have been produced during the year 2006-2007 due to escape channel. Total generation during this period has increased to 384607490 Unit.

c) ANANDPUR SAHIB HYDEL CHANNEL PROJECT (134 MW)

There are 2 Nos. Power Houses covered under Anandpur Sahib Hydel Project, one is at Ganguwal and other at Nakkian. Both Power Houses have 2 No. machines having capacity 33.5 MW on each machine (i.e total capacity of the projects 2 x 33.5 + 2 x 33.5 = 134 MW) Ganguwal Power House is located at RD 19417 Meters and Nakkian Power House at RD-29741 Meters from the Nangal Head Regulator. The Anandpur Sahib Hydel Channel is 34KM long and is running parallel to the Nangal Hydel Channel upto Lohand Khud. At Lohand Khud discharge of Anandpur Sahib Hydel Channel goes to Satluj River through the Lohand Escape. Anandpur Sahib Hydel project was commissioned in 1985.

The generation target of 728 MUs was fixed for the year 2006-2007 for these Power Houses by Centeral Electricity Authority. During the year 2006-2007, 666.089 MUs. were generated. The Generation of this Hydel Project depends upon the quantity of water discharge in the canal.

During the year 2006-2007 the performance of the machines of both these power houses under this project was satisficatory and these machines have full generation capacity but generation has been much less than the fixed target due less discharge/closure of the canal. Generation and planned and forced outage of machines installed in both the power houses as mentioned below:-

Unit /Machine No.	Generation in MWs.	Forced outage of Machines			
		Planned outage	Due to machine fault	Due to less water discharge	Total
		Hrs. Min	Hrs. Min	Hrs. Min	Hrs. Min
1.	173.970	430. 43	48 . 48	2087 . 36	2567 . 07
2.	173.188	619 . 15	5 .00	1674 . 46	2299 . 01
3.	193.082	608 . 15	13 . 47	869 . 53	1491 . 55
4.	151.781	449 . 24	6 . 42	2700 . 49	3156 . 55
Total	**692.021**	**2107 . 37**	**74 . 17**	**7333 . 04**	**9514 . 58**

d) MUKERIAN HYDEL PROJECT (207 MW)

Mukerian Hydel Project utilises the water for generation of Electricity received from Pong Dam through Mukerian Hydel Channel starting from Shah Nehar barrage having a capacity of 11500 Cusecs and length of 37 Kms. On this channel 4 Nos. Power Houses have been constructed having generation capacity of 3x15=45 MW, 3x15=45 MW, 3x19.5=58.5 MW and 3x19.5=58.5MW respectively, thus adding a total installed capacity of 207 MW to the Punjab's own generation. All the Power Houses were commissioned by the year 1988-89. The generation during 2006-2007 Is 1170.73 MUs. against the target of 900 MUs fixed by CEA.

e) MICRO HYDEL PROJECTS (3.9 M.W.)

Generation at Micro Hydel Projects depends on availibility of water in canal. The O & M 4 Nos. Micro Power Houses namely Daudhar Micro Power House, Nidampur Micro Power House, Thuhi Micro Power House and Rohti Micro Power House has recently been handed over to M/s DSL Powers (P) limited, Ludhiana on lease Basis w.e.f. 11.7.05

The Generation during 2006-2007 is 7.959 MUs against the target of 10 MUs fixed by CEA.

3. RANJIT SAGAR POWER PLANT, SHAHPURKANDI

Ranjit Sagar Dam Plant is situated about 24 Kilometers from Madhopur head works upstream Ravi in the lower ranges of Shivalik Hills. This is Multipurpose Project having numerous direct and indirect benefits such as irrigation, Power, Flood control also. It houses 4 Generating units of 150 MW each with a total installed capacity of

600 MW. It has a firm power of 162 MW at 100% load factor 4.6% of energy genrerated is being supplied free of cost to Himachal Pardesh and 20% of energy generated to the J&K at generated cost.

The energy generated during 2006-2007 was 1679.470 MUs. against the CEA target of 1150 MUs. During this year all the 4 units remain under generation

3.5 POWER PROJECT UNDER CONSTRUCTION

1. SHAHPURKANDI EPC (168 MW), MUKERIAN HYDEL PROJECT -II (18MW), U.B.D.C STAGE-III (75MW) SHAHPURKANDI EXTENSTION (55.5 MW), MICRO HYDEL PROJECT, ROPAR (2X850 K.W.) AND MICRO HYDEL POWER PLANT

I) SHAHPURKANDI HEP (168 MW)

The project comprises 2 No. PHs having capacity of 2x40 MW and 2x40+8 MW to be situated at the proposed RD-3500 metre and RD 6000 metre of the channel to be constructed from Shahpurkandi Barrage to Madhopur Head Work. As per the latest decision of GOP, this project is being developed departmentally. The civil works relating to barrage, channel etc. are being carried out by Irrigation Wing of Punjab Govt. while Electro-Mechanical works shall be carried out by Board on EPC mode. The total cost of the Project is Rs. 1945 Cr. at sept., 2005 price level and shall be about Rs. 2700 Cr. including IDC & escalation for five years. Applications for loan from financial institutions have already been sent. However, as per observation of PFC, the cost per MW of the project is very high which comes out to be Rs. 14.00 Cr. per MW. Apportionment of share between Irrigation and Board is 12.61 % and 87.39% respectively. It has also been intimated by PFC that apportionment of cost between Irrigation and Power Component may be reviewed. Irrigation Wingh has already started the work on the project. The electro machanical works shall be carried out EPC mode and consultants shall be engaged through limited tender enquiry. Case was submitted to WTMs for approval to short listed consultancy firms but the WTMsin their decision taken on 26.3.2007 decided that case be put up after the loan position was cleared. The per unit levelized tariff for 30 years is Rs. 3.80/ unit for annual generation of 1042 MUs as per mean year study. With the completion of this project 600 MW RSD Project shall become fully capable of generating peak power.

Main constraint is regarding arrangement of funds. Either govt. should review the apportionment of cost to be booked to Irrigation Wing so that loan is available form the financial institutions or the entrire cost of barrage may be booked to Irrigation wing to make the project viable.

ii) MUKERIAN HYDEL PROJECT -II (18 MW)

This project is being developed on the tail race of Mukerian Power Houe-IV. The Electro-Mechanical Work of the Power House are to be carried out by BHEL as EPC contract. The work of construction of Power House has been held up on account of creation of artesian wells at the Power House site, some material has already been supplied by BHEL but erection activity could not be started so far on account of non availability of civil fronts. The contractor has abandoned the work at site. As per the latest information price bids for carrying out the balance civil works have been opened and work shall be allotted in April, 2007. The project shall be completed within two years of allottment of work. The annual generation from the project shall be 121 MUs.

iii) U.B.D.C. STAGE-III (75MW)

This project is situated down stream of UBDC Stage-I & II. It has 2 No. PHs (3x15 MW+2x15 MW) at RD 8700 of UBDC Hydel Channel-III and RD 900 of UBDC Escape Hydel Channel. The discharge from UBDC Hydel Channel I&II and existing UBDC canal shall be released into UBDC Hydel Stage-III shall take from RD 65000 having capacity of 375 cumecs. The discharge from PH.No. I UBDC Stage-III after meeting the Irrigation requirement of Tibri shall feed the PH-II and then again discharge into river Beas. UBDC Hydel Channel Stage-III shall be 20.6 KM long while UBDC Carrieer Channel shall be 700 metre long UBDC escape channel shall be 7.8 KM long.

This project has been allocated to M/s Bhilwara Energy, Noida. Implementation Agreement has been signed. PPA is under preparation. Matter has been taken up with advisor/Finance vide this office letter dated 12.3.2007 for some clauses upon which comments of Finance Deptt. are required. After receiving the comments, the PPA shall be sent to M/S Crisil, the Consultants and Legal Expert for vetting. The same shall be put up to PSERC after getting it approved from Board. MOEF clearance for the project has been revoked by the MOEF clearance for the project has been revoked by the MOEF on 23.6.2003. The matter has been taken up with MOEF for clearanc and transferring the same in the name of the developer. The project is likely to be commissioned by 2010/2011. The total cost of the project is Rs. 640.00 Cr. excluding IDC. The per MW cost comes to be about Rs. 8.5 Cr. without IDC and Rs. 10.00 Cr. per MW with IDC. The design energy of the project is 468 MUs and it will be purchased by the Board @Rs. 2.49 unit for 30 years and the total payment of Rs.115.00 Cr. shall be made to the company annually.

iv) MICRO HYDEL POWER PROJECT, ROPAR (2X850 MW)

This project is being developed to utilize the water released after cooling from Ropar Thermal Plant which was going waste and the water shall be again discharged

into the river Satluj. The work involves construction of channel having length 4.4 KM. The electro-machanic works of the project are complete. However, the project is held up on account of breach in the canal. Repair of channel by Civil Deptt. so that water can be released for running of turbine generator units. The project is likely to be commissioned shortly. The annual generation from the project shall be about 13.4 MUs.

v) MICRO HYDEL POWER PLANTS

There are four No. running Micro Power Plants under the control of PSEB. Two Plants each of 800 KW rated capacity are situated near Nabha town at Rohti & Thuhi and the other two plants are situated at Nidampur and Doudhar having rated capacity as 800 KW and 1500 KW respectively.

Board has now given the work of operation & maintenance of these plants to M/s DSL Power Pvt. Ltd; Ludhiana. The O&M contract has been singed with this firm and these plants were handed over on 11.7.2005. The term of the contract is ten years.

vi) SHAHPURKANDI EXTENSION (55.5 MW)

This project is proposed to be developed by re-modeling the existing UBDC canal from Madhopur Head Works upto 65000 RD. It involves construction of 3 No. PHs having capacity 2x10.5 MW, 2x10.5 MW and 2x6.75 Mw. The capacity of the channel after remodeling shall be 13500 cuces and the total length of the channel shall be about 20 KMs.

It has been decided to implement the project on BOOT Basis. Tenders for the appointment of consultants for preparation of RFQ, REP and bid evaluation etc. are being floated for execution of the project on BOOT Basis. The cost of the project is approximately Rs. 500 Cr. at November, 2000 price level and the annual generation shall be about 192 MU and the per unit rate shall be about Rs. 6.00/unit. Case for engagment of consultants to formulate bidding documetns & finalize the bidding process has been put up to WTMs vide Memorandum No. 178 dated 26.3.2007. WTMs in their 10/2007 meeting held 11.4.2007 approved the case. Press tenders for calling the bids are being floated.

3.6 NEW PROJECTS

1. DEVELOPMENT OF 2X250 MW GOINDWAL SAHIB THERMAL POWER STATION BY INDEPENDENT POWER PRODUCER

M/s GVK Power (Goindwal Sahib) Limited was selected by Govt. of Punjab through competitive bidding to set up this Project on BOO. Basis and a PPA dated 17.4.2000 was signed with the company. The Project could not be executed due to

reasons beyond the control of the Company and PSEB. The firm was allocated Tokisud North Block coal mine in Jharkhand in 2002. As per the directive of Officers Committee of the Punjab Govt., the firm signed MOU with PSEB on 8.2.2006. The Amended and Restated PPA has been initialed as per "The Electricity ACT-2003", present guidelines of Ministry of Power and terms & conditions agreed to between PSEB and the firm in the MOU. The Amended and Restated PPA has been submitted to the PSERC for approval and shall be signed by PSEB and M/S GVK for purchase of power generated from the project after its approval by PSERC.

2. LEASE-CUM-POWER PURCHASE AGREEMENT OF JALKHERI POWER PLANT WITH M/S JPPL

Lease-Cum-Power purchase agreement was signed with M/s Jalkheri Power Private Limited for leasing Jalkheri Power Plant for 10 years in July, 2001. PSEB is purchasing power from them. All the technical improvements to be done by the lease holder in the plant for increasing its efficiency are got approved by this office from the Board.

3. PPAs FOR MINI HYDEL PROJECT BEING ALLOCATED AND DEVELOPED BY PEDA UNDER NRSE POLICY

PEDA has already identified 137 sites for allotment to private developers for Mini/Micro Hydel Projects. Out of these, 41 Nos. sites have already been allocated and the rest are in the process of allocation. PSEB shall be signing PPAs for purchase of power from all these developers.

4. SIGNING OF PPAs FOR BIOMASS BASED PROJECTS UNDER NRSE POLICY TO BE ALLOCATED BY PEDA

PEDA has also identified 37 Nos. sites for allocation for Biomass based projects. Out of this, 1 No. project at village Gulabewala, Distt. Muktsar has been commissioned by the firm M/S Malwa Power Pvt. Ltd. & 11 Nos. sites for Co-generation /Biomass Power Project have been allocated to other developers and are under execution. A tender enquiry has been floated by PEDA for allocation of rest of the sites. The MOU's and Implementation Agreement have been signed for some of the allocated projects or are in the process of being signed between the private developers and PEDA, the nodal agency of Punjab Govt. for development of these projects under NRSE policy. PSEB shall be signing PPA's with all the 36 developers subsequently.

5. GHTP STAGE II LEHRA MOHABBAT (2X250MW)

This is the extension project of GHTP stage-1 comprising of two units of 250 MW capacity each. The revised Project Report of this project is of Rs. 1789.66 Crores due to excalation in prices the project cost has increased upto 2123 Crores. The CEA has given the Techno-economic clearance to this project on 16.9.2000 all the statutory clearance has been obtained from various respective departments alongwith investment approval from planning commissioning GOI on 20.3.2001. Towards the financing of this Project M/s REC Ltd has sanctioned the loan of Rs. 1610.70 Crores. The loan agreement has been signed between PSEB & REC. Purchase Order has been placed in favour of M/s BHEL on 29.3.04. The project has been taken by M/s BHEL for execution on EPC basis.

The Zero date of project is 31.3.2004 TCE Banglore have been appointed as constultants for the Project. Latest Status of this Project is as under :-

UNIT - III

a) Design and Engineering is complete.
b) 95% of equipment supplies have been received at site.
c) Boiler light-up (Gun Trial) done on 31.3.2007.
d) Boiler light-up anticipated by 15.5.2007.
e) Synchronization anticipated by 30.6.2007.

UNIT - IV

a) Design and Engineering almost complete.
b) 70% of equipment supplies have been received at site.
c) Hydro test of Boiler completed in January, 2007.
d) Boiler light up expected by 30.6.2007.
e) Synchronization expected 30.9.2007.
f) Part payment for the work of Railway siding has been made to Northern Railways and the tenders have been floated by the Railways.

PROPOSED PROJECTS IN PUNJAB

Following 2 Nos. 1200 MW each Coal based Thermal Power Plants are proposed to be installed in Punajb on "B00" (Build Own & Operate) basis during 11th Plan.

6. 1200 MW Coal based Thermal Power Plant at Nabha, District, Patiala.
7. 1200 MW Coal based Thermal Power Plant at Talwandi Sabo (Banwala), Distt. Mansa.

i) For the above 2 Nos. plants matter has been taken with CEA/Ministry of Coal for Coal linkage.
ii) Land Acquisition for the above plants is under process.
iii) CMD, Directors and Subscribers of the SPV's required for the selection of Developers

have been finalized. M/s Nabha Power Limited, The Mall, PSEB Patiala and M/S Talwandi Sabo Power Limited, The Mall, PSEB, Patiala as Special Purposed Vehicles (SPVs) for these projects have been registered under company Act. 1956.

iv) Global invitation of EoI (Expression of Interest) for Selection of Developer for setting up of both the above plants have been published in the leading National and International News papers and also on PSEB and Punjab Govt. Web. site.

v) MOA and AOA of the proposed wholly owned subsidiary companies has been approved by the competent authority.

vi) M/s GAIL India has shown interest to supply the R-L NG for Doraha Gas based Thermal Plant Renewal/Signing of Heads of Agreement for Sale and Transmission of gas is under process.

8. TO ENGAGE CONSULTANTS FOR GIVING COMMENTS ON MOUs. / PPAs AND THEIR FORMULATION AND CONSULTANCY ON PURCHASE OF 1000 MW POWER

A work order has been placed on M/s Crisil Limited for formulation of MOU and PPA to be signed with M/s GVK (Goindwal Sahib) Private Limited, preparation of petition for getting approval from PSERC for purchase of 1000 MW power and for review and comments on PPA of UBDC-III project.

Another work order has been placed on M/s Crisil Limited for giving assistance in procurement process of 1000 MW power i.e. preparation of bid documents, their evaluaion and selection of successful suppliers for power.

9. FILING THE PETITION TO PSERC FOR APPROVAL OF PURCHASES OF 1000 MW POWER

A Petition was filed with PSERC to get the approval for floating a Tender Enquiry for purchase of 1000 MW power deficit in the state of Punjab & approval of RFQ/RFP documents. The petition for floating the tender enquiry for purchase of 1000 MW power and RFQ stands approved. The RFP documents are under the approval of PESRC.

10. FLOATING GLOBAL TENDERS FOR PURCHASES OF 1000 MW POWER

Global Tender Enquiry has been floated by this office for purchase of 1000 MW power from IPPs. The bids were opened on 20.7.2006. 11 Nos. bids were received. The RFP documents have been prepared by PSEB consultants and have been sent to PSERC for its approval. The RFP documents shall be issued to the short listed bidders after its approval by the Commission. The processing the Tenders and short listing of bidders is being finalized with the help of consultants M/s Crisil Limited New Delhi. Sucessful Biddders for supply of power ranging from 5 MW to 1000 MW in

suitable blocks shall sign Power Purchase agreemetns with PSEB after approval of tariff by PSERC.

11. 1000 MW GAS BASED THERMAL PROJECT AT DORAHA

Board and committee of officers of Pb. Govt. had already approved the proposal to set up 1000 MW Gas based Thermal Project near Doraha with provision to initiate negotiation with GAIL for equity participation & purchase of gas. Head of Agreemetn was already signed with GAIL which has expired of 8.3.07 and PSEB is in the process of signing another HOA with GAIL for purchase and transmission of Gas which is likely to be finalized shortly. Now two separate HOAs will be signed one for gas supply and the other for gas transmission. Steps to acquire land for the gas project were shelved due to non-availability of gas. It is now proposed to set up both coal based and gas houses power thermal project and to acquire 1200 acres of land for the aforesaid purpose. Coal based Thermal plant is being proposed due to uncertainty of gas supply. Both these Projects are likely to come in 12th plan and may be executed on EPC basis by taking loan from PFC & REC as they can finance upto 90% of the Project cost. No provision of funds have been made for these projects for the year 2007-08.

12. DEVELOPMENT OF PROJECTS UNDER NRSE POLICY

Development of 12. Nos. 10 MW each rice/wheat based power plants at various load centers in Punjab was allocated to PSEB by the Punjab Govt. The revised capacity of the Projects has now been proposed as 12 MW by the developers. PSEB shall be assisting the developer for installation of these projects. PSEB shall be signing Implementation. Agreements and Power Purchases Agreements for all the 12 No. projects as per process adopted by PEDA for development of Projects under NRSE policy. The tariff to be paid to the developer under NRSE policy has been decided by PSERC vide its order dated 4.10.2005 for nine No. projects to be developed by the consortium of M/s Bermaco Energy Systems limited and M/s JPPL Limited. The petition of other developer M/s ETA has also been decided by PSERC in December, 2005 and Tariff has been approved to be given as per NRSE Policy. PSEB has already signed two Nos. Implementation-cum Power Purchase Agreements on 10.8.2006 with M/s Punjab Biomass Ltd. (A Special Purpose Vehicle Company formed by M/s Bermaco Energy System Ltd.) for execution of nine No. projects allocated to them for development. PSEB Shall be signing Implementation-cum-power Purchase Agreemetns for execution of all the remaining projects with both the developers. Tariff & other terms & conditions of the IA-cum PPAs shall be as decided by the commission in its tariff orders which are as per Implementation agreements signed by PEDA and PPAs signed by PSEB with owner developers unders NRSE Policy.

CHAPTER - 4

1. TRANSMISSION/DISTRIBUTION AND RURAL ELECTRIFICATION

4.1 During the year 2006-2007, 417.509 circuit Kms. Transmission lines (33 K.V. and above) 7160 circuit Kms. 11 K.V. Distribution lines, 2787 circuit Kms. L.T. lines were erected to meet the increasing demand of power of vaious categories of consumers and to develop/distribute the power. 25 New Grid Sub-Stations were installed and 6 old Grid Sub-Stations were augmented/upgraded. During the year 2006-2007, 22613 (11 K.V.) Distribution Transformers total capacity of 1351.925 M.V.A. were added to Board's Distribution System.

4.2 The details of transmission lines, Grid Sub-Stations commissioned, transformers augmented and capacitor Banks completed/commissioned during the year 2006-2007 are as given below:-

TRANSMISSION LINES

Sr. No.	Capacity of lines/voltage	Lines commissioned during year 2006-07 (in circuit-Kms)		Total transmission lines upto 31.3.07 (in circuit-Kms)
1	2	3		4
		No.	Length	
1.	220 K.V.	5	58.396	4310.524
2.	132 K.V.	2	32.134	3053.305
3.	66 K.V.	69	398.029	5626.345
4.	33 K.V.	_	(-) 71.050	1503.316
5.	11 K.V.	_	7160.000	123332.000
6.	L.T.	_	2787.000	173853.000

Note : 33 K.V. Lines upgraded to 66 K.V. lines has been deleted from the system.

TRANSMISSION LINES (INCLUDING PVT. DEPOSIT WORKS)

4.2.1 **220 K.V. LINES** **LENGTH IN CIRCUIT KMS**

PLANNED WORKS

1. LILO of both Ckts of 220 KV Rajpura DC line of 400 K.V. Phagan Majra, (P.G.C.I.U.L) by out sourcing — 23.352 Circuit Kms.

2.	Stringing of 4th Ckt. for 220 KV. RSD Sarna DC line 0,5 Sq".	30.000 Circuit Kms.
3.	220 KV Verpal-400 K.V. Balachak-Amritsar (P.G.C.I.L.D.C.) line (Twin Mouse)	2.522 Circuit Kms.
4.	220 KV Verpal-400 K.V. Bala chowk Amritsar (PGCL) D.C. line (Twin Mouse) CKT. No. 1	2.522 Circuit Kms.
	Total	**58.396 Circuit Kms.**

4.2.2 **132 K.V. LINES**

PLANNED WORKS

		LENGTH IN CIRCUIT KMs
1.	LILO of 132 KV APII-II Nawan Shahar line at Jadla.	22.194 Circuit Kms.
2.	132 K.V. Verpal-Hakima Gate Amritsar. (Stringing of 2 nd CKT.)	9.940 Circuit Kms.
	Total	**32.134 Circuit Kms.**

4.2.3 **66 K.V. LINES**

		LENGTH IN CIRCUIT KMs
1.	T-off 132 K.V. Main Rampura Phul for 66 K.V. Jodhpur.	8.556 Circuit Kms.
2.	T-off from 66 K.V. Bagha Purana-Samadh Bhai for Nathu-Wala.	13.868 Circuit Kms.
3.	66 K.V. Nathana-Kalyan Sukha line.	7.240 Circuit Kms
4.	66 KV T-off Wadala Granthian-Udhanwal line for Ranger Nangal.	1.540 Circuit Kms
5.	66 KV T-off Rehana Jattan-Banga line for Panchhata.	6.110 Circuit Kms
6.	U/G of 33 K.V. Goraya to Dosanja Kalan line to 66 K.V.	10.000 Circuit Kms
7.	T-of 132 KV Mour-Jogga Ralla for 66 K.V. Chowke line.	8,970 Circuit Kms
8.	66 K.V. line from 220 K.V. Baja Khanna Jaito (SC on DC).	11.780 Circuit Kms

9.	Stringing of 3rd CKt. TL-1 and joining with existing 33 K.V. line for Amarpura (66 K.V. Mukatsar-Ganganagar line).	0.300 Circuit Kms
10.	66 KV. Mansa-Jhunir line SC on DC line.	23.685 Circuit Kms
11.	66 K.V. line from 220 K.V Sunam to 66 K.V. Lehra Gagga upto T-off point for Chhajli (SC on DC).	12.450 Circuit Kms
12.	66 KV Ghanour-Loh Simbli line SC on SC.	11.666 Circuit Kms
13.	T-off 66 K.V. Patiala-Bahadurgarh line for 66 K.V. Urban Estate Patiala.	0.640 Circuit Kms
14.	66 K.V. Phillaur-Ashahoor.	6.405 Circuit Kms
15.	66 KV line from GHTP-Ballianwali SC on SC.	6.100 Circuit Kms
16.	Breaking of 66 K.V. Mukatsar-Ganganagar line near 132 KV Abohar and joining the same with 33 K.V. Bus of 132 K.V. Abohar with 33/66 K.V. link.	0.965 Circuit Kms
17.	66 K.V. Milerganj-Old Jail Road, Ludhiana.	2.275 Circuit Kms
18.	66 K.V. line from GNDTP-Bathinda to C-Compound.	0.140 Circuit Kms
19.	66 K.V. line from 220 K.V. Gobindgarh-1 to Focal point Gobindgarh SC on SC.	1.162 Circuit Kms.
20.	U/G 33 K.V. line from Bhogpur to Bullowal.	15.000 Circuit Kms
21.	66 K.V. Boha-Chak Ali Sher SC on SC.	10.312 Circuit Kms
22.	66 K.V. Ladhuka-Fazilka line.	12.943 Circuit Kms
23.	66 K.V. Sukhanwala-Fidde Khurd line SC on SC.	10.318 Circuit Kms
24.	Upgradation of 33 K.V. HSP- Nasrala.	3.850 Circuit Kms
25.	U/G of 33 K.V. Bhogpur-Kandhala Jattan line to 66 K.V.	13.600 Circuit Kms

26.	Stringing GHTP-Rampura Phul line upto TL-25 Ballianwali.	5.580 Circuit Kms
27.	66 K.V. Bhattianwala-Behak Gujran SC on SC.	7.175 Circuit Kms
28.	66 K.V. line from 220 K.V. from Sunam to 66 K.V. Cheema SC on SC.	11.510 Circuit Kms
29.	66 K.V. 2nd Circuit from Bahadurgarh.	7.381 Circuit Kms
30.	LILO of 66 K.V. Humbran Amaltas line at Balokee line.	0.940 Circuit Kms
31.	66 KV Loharka-Harsha Chhina DC line.	26.000 Circuit Kms
32.	66 K.V. Mukerian to Bhattian Jattan line SC on DC.	7.359 Circuit Kms
33.	Providing 2nd Circuit on 66 K.V. Patran-Bangan line.	11.871 Circuit Kms
34.	U/G of 33 K.V. HSP-Sham Churasi.	14.500 Circuit Kms
35.	66 K.V. Machhiwara-Haidobet.	9.278 Circuit Kms
36.	220 K.V. Bottianwala-66K.V. Kassoana line.	8.215 Circuit Kms
37.	66 K.V. line Mallian Kalan to Khusropur SC on SC.	7.445 Circuit Kms
38.	66 K.V. T-off Butari Beas line for Lidder.	4.130 Circuit Kms
39.	66 K.V. line from 132 K.V. Kot Karor to Dhanna Sahib SC on SC.	7.130 Circuit Kms
40.	33/66 K.V. LILO of 33 K.V. Malout Road Bathind-Dabwali Road Bathinda at Paras Ram Nagar on DC towers.	0.100 Circuit Kms
41.	33 K.V. Sardulgarh-Sanga line U/G	14.100 Circuit Kms
42.	66 K.V. lines from 132 K.V. G.T. Road, Amristar Golden Temple, Amritsar	0.639 Circuit Kms
43.	LILO of 66 K.V. Sarna Bhai line at 66 KV. S/S Ranipur (PSIEC) F.P.	0.644 Circuit Kms

44.	LILO of 66 K.V. Lalru-Handesra line of Zoulakhurd DC	15.344 Circuit Kms.
45.	220 K.V. Barnala-66 KV Mehal Kalan line (NCCO) (SC on DC) TL-43 to Mehal Kalan	16.516 Circuit Kms
46.	33/66 line from Ferozepur Cantt. to Jhoke Hari-Har SC on DC.	9.350 Circuit Kms
47.	T-off 66 K.V. line Lehra Mohabbat Phul for Bhai Rupa SC on DC	12.947 Circuit Kms
	Total	**398.029 Circuit Kms.**

4.3 GRID SUB-STATION

Sr. No.	Capacity/ Voltage	New/Upgradation/ augmented/Deau-gmented during 2006-07 No.			Comissioned/ Addition during 2006-07		Position as on 31.3.2007	
					Total No.	capacity (in M.V.A)	Total No.	Capacity (in M.V.A.)
1	2	3				4	5	6
		New/ upgraded	Augme-natation/ Addition on	Disman-tlelement De- Augu-mentation (-)				
1.	220 K.V.	1	7	0	1	269.00	47	10069.50
2.	132 K.V.	1	15	0	1	321.00	76	4867.50
3.	66 K.V.	29	67	(-) 2	27	798-25	430	9640.75
4.	33 K.V.	-	10	(-) 4	(-) 4	(-)18.50	93	1117.50
	Total :-	**31**	**99**	**-(6)**	**25**	**1369.75**	**646**	**25695.25**

Note: 2 Nos. 66 KV S/Stn. & 4 Nos.33 KV S/Stn. have been deleted from the System due to U/G of 66 KV S/S Tibber to 220 KV, 66 KV, Jadla to 132 KV, 33 KV Hamira to 66 KV, 33 KV Sham Churasi to 66 KV, 33 KV Nadala to 66 KV & 33 KV Attowal to 66 KV.

4.3.1 220 KV GRID SUB-STATION (NEW/AUGMENTATION/UPGRADED)

1.	Tibber (U/G)	1x100 MVA, 220/66 KV
2.	Rajla (Aug.)	1x20 MVA, 66/11 K.V. 1x20 MVA, 66/11 KV to replace 1x12.5 MVA, 66/11 KV
3.	Kartarpur (Aug.)	Addl. 1x12.5 MVA, 66/11 KV
4.	Humbran (Aug.)	1x20 MVA, 66/11 KV to replace 1x10/ 12.5 MVA, 66/11 KV
5.	Barnala (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
6.	Mansa (Aug.)	Addl. 1X100 MVA, 220/66 KV
7.	Khasa (Aug.)	1x10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
8.	Baja-Khana (Aug.)	Addl. 1x12.5 MVA, 66/11 KV

4.3.2 132 K.V. GRID SUB-STATION (NEW/AUGMENTED/UPGRADED)

1.	Jadla (U/G)	U/G to 132 KV with 1x40/50 MVA, 132/66 KV 1x10/12.5 MVA, 66/11 K.V.
2.	Phillaur (Aug.)	Addl. 1x12.5/16 MVA, 132/66-33 KV 1x10/12.5 MVA, 132/11 KV T/F
3.	IGC Bathinda (Aug.)	1x20/25 MVA, 132/66-33 KV to replace 1x12.5 MVA, 132/66-33, KV
4.	Bhogpur (Aug.)	1x50 MVA, 132/66-33 KV to replace 1x20/25 MVA, 132/66-33 KV T/F
5.	Dharamkot (Aug.)	1x50 MVA, 132/66-33 KV replace 1x20/25 MVA, 132/66-33 KV
6.	Chohal (Aug.)	1x20/25 MVA, 132/66-33 KV to replace 1x12.5/16 MVA, 132/33 KV
7.	Hoshiarpur	1x50 MVA, 66-33/11 KV to replace 1x12.5/16 MVA, 132/33 KV
8.	Chamkaur Sahib (Aug.)	1x20 MVA, 132/11 KV to replace 1x20/10/10 MVA, 132/33/11 KV
9.	Ghulal (Aug.)	1x20 MVA, 132/11 KV to replace 1x12 MVA, 132/11 KV

10.	Ghulal (Aug.)	1x50 MVA, 132/66 KV to replace 1x24/40 MVA, 132/66 KV
11.	Tangra (Aug.)	1x12.5 MVA, 132/11 KV to replace 16/20 MVA, 132/11 KV
12.	Skatri Bagh (Amritsar) (Aug.)	Addl. 1x20 MVA, 132/11 KV
13.	Moga-1 (Aug.)	1x50 MVA, 132/66-33 KV to replace 1x20/25 MVA, 132/66-33 KV
14.	Allawalpur (Aug.)	1x20/25 MVA, 66-33 KV to replace 1x12.5/16 MVA, 132/66-33 KV
15.	Doraha (Aug.)	Addl. 1x20/25 MVA, 132/66 KV
16.	MHP-IV (Aug.)	1x 50MVA, 132/66 KV to replace 1x20/25 MVA, 132/66-33 KV

4.3.3 66K.V. SUB-STATION (NEW/AUGMENTED/UPGRADED)

1.	Matti (New)	1x12.5 MVA, 66/11 KV T/F
2.	Dakala (Aug.)	Addl. 12.5 MVA, 66/11 KV T/F
3.	Jarg (Aug.)	1x20 MVA, 66/11 KV to replace 1X10/12.5 MVA, 66/11 KV T/F
4.	Karni Khera	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
5.	Jodhpur (New)	1x6.3/8 MVA, 66/11 KV T/F
6.	Golden Temple Amritsar (New)	1x20 MVA, 66/11 KV
7.	Zira (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
8.	Badrukhan (Aug.)	1x20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV
9.	Patto-Hira Singh (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
10.	Central M. Gobindgarh (Aug.)	Addl. IIIrd 20 MVA, 66/11 KV T/F
11.	Jaula Khurd (New)	1x20 MVA, 66/11 KV (Through out-sourcing)
12.	Kalyan Sukha (New)	1x6.3/8 MVA, 66/11 KV T/F
13.	Panchhatta (New)	1x6.3/8 MVA, 66/11 KV T/F
14.	Dhandi Quadian (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F

15.	Bhari (Aug.)	1x20 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
16.	Dagru (Aug.)	1x10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
17.	Gharota Khurd (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
18.	Gajju Majra (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x8/10 MVA, 66/11 KV T/F
19.	Chola Sahib (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
20.	Tullewal (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
21.	Thatha Sahib (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
22.	Ghagga (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
23.	Lang (New)	1x20 MVA, 66/11 KV T/F (Through out-sourcing)
24.	Laduka (Aug.)	1x20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV
25.	Balianwali (New)	1x6.3/8 MVA, 66/11 KV T/F
26.	Boha (Aug.)	1x10/12.5 MVA, 66/11 KV to replace 1x7.5 MVA, 66/11 KV T/F
27.	Ahmedgarh (Aug.)	1x16/20 MVA, 66/11 KV T/F to replace 1x10/12.5 MVA, 66/11 KV
28.	Heran (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
29.	Dhanaula (Aug.)	1x10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
30.	Badinpur (Aug.)	1x20 MVA, 66/11 KV to replace 1x10 MVA, 66/11 KV
31.	Chhajali (Aug.)	Addl. 1x7.5 MVA, 66/11 KV
32.	Latala (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
33.	Chowke (New)	1x12.5 MVA, 66/11 KV
34.	Rangar Nangal (New)	1x6.3/8 MVA, 66/11 KV
35.	Gohalwar (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
36.	Scharik (Aug.)	Add;. 1x6.3/8 MVA, 66/11 KV

37.	Loh Simbli (New)	1.6.3/8 MVA, 66/11 KV T/F & Line bay at Chanaur
38.	Asha Hoor/ Raipur Arian (New)	1x6.3/8 MVA, 66/11 KV & 66 Line bay at 132 KV S/S Phillaur.
39.	Naudhrani (Aug.)	1x10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
40.	Lehragaga (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
41.	Mandvi (Aug,.)	Addl. 1x6.3/8 MVA, 66/11 KV
42.	U/E, Patiala (New)	1x20 MVA, 66/11 KV & T-off Line.
43.	Focal Point Mandi Gobindgarh (New)	1x20 MVA, 66/11 KV & 66 KV Line bay at 220 KV S/S GBR-I
44.	Fidde Khurd (New)	1x12.5/8 MVA, 66/11 KV & 66 KV Line bay at 66 KV S/S Shukhanwala
45.	Chack Ali Sher (New)	1x6.3/8 MVA, 66/11 KV & 66 KV Line bay at 66 KV S/S Boha.
46.	Khun Khun Kalana (Aug.)	1x12.5, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
47.	Naushera Pannuan	1x10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
48.	Rasulpur (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
49.	Sidhwan Bet (Aug.)	1x12.5 MVA,, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV
50.	Guru Har Sahai (Aug.)	1x20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV
51.	Amaltas (Aug.)	Addl. 20 MVA, 66/11 KV T/F
52.	Balokee (New)	1x20 MVA, 66/11 KV & LILO Bays
53.	Old Jail Road, Ludhiana (New)	1x20 MVA, 66/11 KV & 66 Line bay at 66 KV S/S Miler-Ganj
54.	Bhattian Jattan (New)	1x12.5 MVA, 66/11 KV to 66 KV Line bay at 66 KV S/S Mukerian
55.	Behak Gujran (New)	1x12.5 MVA, 66/11 KV & 66 Line bay at 220 KV S/S Bottianwala
56.	Patiala Road Sangrur (Mangwal)	Addl. 1x12.5 MVA, 66/11 KV T/F

57.	Hamira (U/G)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 33/11 KV & 1x5 MVA, 33/11 existing T/F
58.	Harchowal (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
59.	Shanker (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
60.	Jiwan Arian (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV T/F
61.	Jalal (Aug,)	Addl. 1x6.3/8 MVA, 66/11 KV T/F
62.	Raikot (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10 MVA, 66/11 KV T/F
63.	Ram Dass (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
64.	Malerkotla (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV
65.	Bhadaur (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
66.	Morinda (Aug.)	1x 12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
67.	Rashiana-Kalan (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
68.	Nagoke (Aug.)	1x 12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
69.	Gajewal (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
70.	Garhshankar (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
71.	Mehsumpur (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
72.	Parasram Nagar (New)	1x 12.5 MVA, 66/11 KV T/F
73.	Shahpur Jajan (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
74.	Fattanwala (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV
75.	Bareta (Aug.)	1x6.3/8 MVA, 66/11 KV to replace 1x12.5/6.25/6.25 MVA, 66/33/11 KV T/F
76.	Tapa (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV
77.	Kajauli (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F

78.	Dayalgarh (Aug.)	1x 6.3/8 MVA, 66/11 KV to replace 1x5 MVA, 66/11 KV
79.	Sham Churasi (U/G)	U/G to 66 KV Existing 10/12.5 MVA, 66-33 KV/11 KV
80.	Alamgir (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
81.	Roomi (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
82.	Sirhind (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
83.	Ghungrali (Aug.)	1x 10/12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
84.	Tarn-Taran (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
85.	Majitha (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F
86.	Focal Point Jalandhar (Aug.)	1x 20 MVA, 66/11 KV to replace 1x10 MVA, 66/11 KV T/F
87.	Nadala (U/G)	U/G from 33 KV to 66 KV
88.	Attowal (U/G)	U/G From 33 KV to 66 KV with 1x6.3/8 MVA, 66-33/11 KV & 1x5 MVA, 66-33/11 KV T/F
89.	Bhogo Budha (Aug.)	Addl. 1x6.3 /8 MVA, 66/11 KV T/F
90.	C-Compound GNDTP, Bathinda (New)	1x20 MVA, 66/11 KV (out-sourcing)
91.	Haidon Bet (New)	1x12.5 MVA, 66/11 KV T/F
92.	Dhanna Shahid (New)	1x12.5 MVA, 66/11 KV T/F
93.	Kassoana	1x6.3/8 MVA, 66/11 KV T/F
94.	Kulran (Aug.)	Addl. 1x6.3/8 MVA, 66/11 KV T/F
95.	Talwara (Aug.)	1x12.5 MVA, 66/11 KV to replace 1x6.3/8 MVA, 66/11 KV T/F
96.	Bhagta Bhai (Aug.)	1x16/20 MVA, 66/11 KV to replace 1x10/12.5 MVA, 66/11 KV T/F

4.3.4 33 K.V. GRID SUB-STATION (NEW/AUGMENTED/UPGRADED)

1.	Kandhala Jattan (Aug.)	Addl. 1x3 MVA, 33/11 KV
2.	Bundala (Aug.)	Addl. 1x3 MVA, 33/11 KV
3.	Tibbi Khurd (Aug.)	1x5 MVA, 33/11 KV to replace 1x4 MVA, 33/11 KV
4.	Saila Khurd (Aug.)	Addl. 1x4 MVA, 33/11 KV
5.	Bilga (Aug.)	Addl. 1x5 MVA, 33/11 KV
6.	Chak-Sher-Wala (Aug.)	Addl. 1x5 MVA, 66/11 KV
7.	Dosanj Kalan (Aug.)	1x6.3/8 MVA, 33/11 KV to replace 1x3 MVA, 33/11 KV
8.	Bham (Aug.)	1x5 MVA, 33/11 KV to replace 1x3 MVA, 33/11 KV
9.	Attowal (Aug.)	1x5 MVA, 66-33/11 KV to replace 1x4 MVA, 33/11 KV
10.	Arniwala (Aug.)	Addl. 1x4 MVA, 33/11 KV

4.4 CAPACITOR BANK (CAPACITY) COMMISSIONED DURING THE YEAR 2006-2007

4.4.1 220 K.V. SUB-STATION

Sr. No.	Name of Sub-Station	11KV Capacity (M.V.A.R)	33 KV Capacity (M.V.A.R)	66KV Capacity (M.V.A.R)	132 KV Capacity (M.V.A.R)
1.	2.	3.	4.	5.	6.
1.	Moga	-	-	-	10.860
2.	Jamsher	-	-	10.860	-
3.	Moga	-	-	-	21.720
4.	Kotly Surat Mali	-	-	10.860	-
	Total	**-**	**-**	**21.720**	**32.580**

4.4.2 132 K.V. SUB-STATION

1.	Memoon (Mes)	1.361	-	-	-
2.	Badni	-	-	10.860	-
	Total	**1.361**	**-**	**10.860**	**-**

1	2	3	4	5	6
4.4.3	**66 K.V. SUB-STATION**				
1.	Urban Estate, Dugri (Ludhiana) (2x1.361)	2.722	-	-	-
2.	S U S	1.361	-	-	-
3.	Sector-68, Mohali (3x1.361)	4.083	-	-	-
4.	Focal Point, Hoshiarpur	1.361	-	-	-
5.	Bahomajra (2x1.361)	2.722	-	-	-
6.	Golden Temple (2x1.361)	2.722	-	-	-
7.	Jodhpur	1.361	-	-	-
8.	Matti (2x1.361)	2.722	-	-	-
9.	Kalyan Sukha	1.361	-	-	-
10.	Tanda Road, Jalandhar (2x1.361)	2.722	-	-	-
11.	Chowke (2x1.361)	2.722	-	-	-
12.	Focal Point, Jalandhar (2x1.361)	2.722	-	-	-
13.	Panchhatta	1.361	-	-	-
14.	Ranger Nangal	1.361	-	-	-
15.	Gohalwar	1.361	-	-	-
16.	Nurewal (2x1.361)	2.722	-	-	-
17.	U/E Patiala (2x1.361)	2.722	-	-	-
18.	Gaggo Bua	1.361	-	-	-
19.	U/E Patiala (2x1.361)	2.722	-	-	-
20.	Bhagrana	1.361	-	-	-
21.	Mangwal (2x1.361)	2.722	-	-	-
22.	Loh Simbli	1.361	-	-	-
23.	Sangat Mandi	1.361	-	-	-
24.	Dakala (2x1.361)	2.722	-	-	-
25.	U/E Patiala (2x1.361)	2.722	-	-	-
	Total :	**54.440**	-	-	-

4.4.4 33 K.V. SUB-STATION

----------Nil----------

MAIN ABSTRACT

Sr. No	Sub-Station	11 K.V. (M.V.A.R)	33 K.V. (M.V.A.R)	66 K.V. (M.V.A.R)	132 K.V. (M.V.A.R)	Total (MVAR)
1.	220 K.V. Sub-Station	-	-	21.720	32.580	54.300
2.	132 K.V. Sub-Station	1.361	-	10.860	-	12.221
3.	66 K.V. Sub-Station	54.440	-	-	-	54.440
4.	33 K.V. Sub-Station		-	-	-	-
	Total :	**55.801**	**-**	**32.580**	**32.580**	**120.961**

4.4.5 Total capacity of Capacitor Banks = 120.961MVAR Commissioned during the year 2006-2007

4.5 NORMAL DEVELOPMENT PROGRAMME

a) CONNECTION ISSUED DURING 2006-2007

Punjab State Electricity Board is continuously making efforts to issue new connection to various categories of consumers. During the year 2006-2007, Punjab State Electricity Board has issued connections as mentioned below:-

Sr. No.	Category	No. of Connections released during the year 2006-2007
1.	General Service Connection	1,97,794
2.	Industrial Service Connection	4,194
3.	Agricultural Pump Sets.	39,523
4.	Others	204
		2,41,715

b) The Number of consumers, who are being served upto the end of 31.3.2007 is as mentioned below:-

Sr. No.	Category	No. of Consumers upto the ends of 31.3.2007
1.	General	51,49,356
2.	Industrial	1,08,981
3.	Agricultural Pump Sets	9,70,139
4.	Other	2,764
	Total :	**62,31,240**

4.6 PER CAPITA CONSUMPTION

Per capita consumption in Punjab, which was 941.58 K.W.H. (unit) during the year 2005-2006, has touched 975.02 K.W.H. during the year 2006-2007.

4.7 TRANSMISSION & DISTRIBUTION LOSSES

Punjab State Electricity Board is fully aware of necessity to cut-down transmission and distribution losses in the system. To make addition to new Transmission & Distribution lines and Sub-stations, various activities and System Improvement steps are being taken in hand from year to year. Tansmission and Distribution Losses During the year 2006-2007 was 23.92%.

4.8 SYSTEM IMPROVEMENT WORKS (A.P.D.R.P. SCHEMES)

a (i) The APDRP Schemes prepared by different APDRP Cells are got checked from NTPC and further got approved from MOP/GOI. 5 No. Schemes costing Rs. 33.71 Crore have been got principally approved during 2006-2007 from MOP/GOI.

(ii) Govt of India has granted Rs. 178.74 crores against the approved schemes out of which 50% is grant and Rs. 211.6 crore has been granted by REC as counter part fund. Further, during the year 2003-2004, there was reduction in cash loss of about Rs. 502 crores. Thus MOP/GOI approved an incentive claim of Rs 251.84 Crore out of which Rs. 109.42 Crores have been released to GOP and balance Rs. 142.52 Crore is pending Govt. of Punjab has transferred only Rs. 65.28 Crore out of Rs. 109.42 Crore to PSEB.

iii) The requirement of material against APDRP schemes has been consolidated as a whole and sent to concerned offices for procurement of material.

iv) The month-wise physical and financial progress is collected from field offices and after consolidating the progress report is sent to concerned agencies Rs. 54.87 crore expenditure has been incurred during 2006-2007 against the works of APDRP schemes.

v) As above, utilization certificate has been sent to NTPC for onward submission to MOP/GOI.

b) ACTIVITIES OF APDRP CELLS

i) Deras/Dhanies having a cluster of 5-15 houses have been got identified from field offices for providing 24 Hrs.Urban supply, Tender Specification No. 16 has been prepared, tenders obtained/processed for providing 24 Hrs. UPS through outsourcing to the clusters having 5-15 houses of villages of Punjab.

ii) Information for conversion of 3 phase 4 wire system to 3 phase 3 wire of 11 KV UPS feeders and connecting of water works connection in rural area on UPS feeder has been collected from the field offices.

iii) 6 No. APDRP Schemes relating to DS Circle City Amritsar, Suburban Amritsar. Tran Taran and Gurdaspur (City Batala, Gurdaspur City and Pathankot) have been compiled duty completed and submitted for bench marking/parameters.

iv) Inspection of works being done under the APDRP scheme relating to various towns of Punjab has been carried out. Monitoring of status report, expenditure incurred and physical progress of APDRP schemes has been done.

v) APDRP scheme of Kapurthala and Nawanshehar has been got approved form the competent authority.

vi) Assistance to firms/contractors from time to time has been provided in execution of 24 Hrs UPS outsourced works and quality of works and material has been checked. Various items of material as per the allocation has been drawn from the PSEB stores and provided to the firms/contractors for the completion of 24 Hrs. UPS outsourced works within the schaduled target. Physical measurements of HT/LT line and sub station have been done for making the payment against the work Order-cum Contract Agreements.

c) **ACCOUNTS OFFICER / APDRP, PATIALA**

This office receives funds from Pb. Govt. and makes the repayment of loans and payment of interest to Pb. Govt. under APDRP scheme. Funds Rs. 216.44 Crore (50% grant & 50% Loan) has been released by Pb. Govt. to PSEB upto 2006-2007. Grant of Rs. 138 crore has been released by Punjab Rural Development Board to PSEB for the Work of providing 24 hrs. supply to villages on Urban Pattern upto 2006-2007.In addition to this Rs. 10 crore as grant has been released by Punjab Govt. to PSEB for providing 24 hrs. Urban Pattern Supply to villages under Border Area Scheme up to 2006-2007.

This office is also entrusted with the work regarding payment to the Contractors for providing 24 Hrs. Urban Pattern Supply on turn key basis through outcourcing to 1478 No. villages of Punjab, 4500 No. (Approximately) Daras/Dhanies/ Basties forming & cluster 5-15 houses, the work of conversion of 11 KV 3 phase 4 wire system of 2607 No. villages into 3 phase 3 wire for providing UPS and the work for providing 11KV 3 Phase UPS link line to water supply connections (Approximately 1211 No.) in rural area. The Government of Punjab has released funds to the tune of Rs. 35 Crores for the above works.

d) **STANDARDISATION CELL, PATIALA**

i) Sl. No. 51 dated 25.8.06 has been issued after carrying out the studies for installation of 11KV/75 Amp. air break-off load Go Swich on 8/9m/200K GPCC single pole.

ii) As per directions of Member/D, 11 KV F.R.P cross arms and top hamper has been studied and performance of these items collected from the State Elecy. Board and letter to M/s Yamuna Gases and Chemicals Limited, Jagadhari for suitability of above items.

iii) Feeder Schemes for Urban Area have been discussed with Shehal Powertel, Hyderabad and report submitted to Member/D.

iv) Literature from M/s Andrew Yule has been collected to install 11 KV Auto Raclosures in Distribution System and is under study.

v) Arithmetic model of Zero LT HVDS prepared to get funds from REC and Memorandum No. 213 in this regard has been submitted.

vi) Drawing for 11 KV 75 AMPS G.O. Switch on Single Pole for deading T-off and for intermadiate T-off, 11 KV T-off spur line for providing UPS to Deras/Dhanies, schematic diagram of Single Phase DTR on 9 metre 200 KG. Single Pole Structure, installation of G.O. Switch and Fuse Unit on 8 metre or 9 metre 200 KG. PCC

Poles, tapping on 11 KV Spur line from UPS feeder and Drawing of Sub Station Structure along with Go Switch and HT Fuse Unit on 8/9 metre Single PCC Poles has been prepared.

4.9 RURAL ELECTRIFICATION ORGANIZATION

In Punjab, 100% Rural electrification has already been completed by May, 1976. Now by providing more tubewell connections, domestic non-residential and industrial connections, additional electrification is being accomplished so that green revolution could be brought in villages.

4.9.1 TO ENERGIZE THE TUBEWELLS

a) 39526 Tubewells were energized during the year 2006-2007 where as the target was to energize 40000 Tubewells. 3740 No Connections have been released under the REC sanctioned Schemes. The balance, 35786 No. connections have been booked to Normal Development of PSEB for the year 2006-2007.

1. RURAL ELECTRIFICATION SCHEMES

Below mentioned schemes were got approved by P.S.E.B. during the year 2006-2007 to make the maximum use of finacial assistance received from R.E.C. and banks and drawn an amount to the tune of Rs. 279.939 Crores:-

Sr. No.	Category	No. of Scheme sanctioned	Amount (Rs. in Crore)
1.	2.	3.	4.
1.	P.S.I-H.V.D.S	40 No.	2176.30
2.	P.S.I-Transmission	2 No.	222.60
3.	Power Transformers	1 No.	48.08
4.	S.I. Capacitors	2 No.	7.69
5.	P.S.I (APDRP)	1 No.	4.64
6.	S.I (Transformers)	4 No.	266.20
	Total :	**50 No.**	**2725.51**

2. **THE POSITION OF SCHEME WISE LOAN DRAWN IS AS UNDER:-**

Sr. No.	Category	Loan Drawn (Rs. in Lac)
1.	P.S.I./APDRP	143691300
2.	P.I.E.	264868400
3.	P.S.I.	89910900
4.	S.I, Transformers	1114818000
5.	S.I. Meters	59142200
6.	S.I. Lines	60092980
7.	PCC Poles	72900
8.	SPA/P.E.	379080500
9.	Tower Material	3407600
10.	S.I. Capacitor Bank	29444200
11.	P.S.I. Transmission	492846700
12.	S.I. Power Transformers	153299000
13.	C & R Panels	8711600
	Total :	**2799386280**
	Say Rs.:	**279.939 Crores**

4.9.2 FINANCIAL ACHIEVEMENTS DURING THE YEAR 2006-2007

		(Rs. in Crores)
a)	Target fixed by the R.E.C. during the year 2006-2007	228.00

b) LOAN RECEIVED DURING THE YEAR 2006-2007

		(Rs. in Crores)
i)	Loan received from R.E.C.	279.939
ii)	Loan received from Director Co-Ordination (Kutir Jyoti)	--
	Grand Total	**279.939**

c) PHYSICAL ACHIEVEMENTS OF R.E.C. FINANCIAL SCHEMES DURING THE YEAR 2006-2007

Sr. No.	Item	Upto 3/2006	During 2006-07	Grand Total
1.	Tubewell Connections	467503Nos.	3740	471243
2.	Industrial Connections	18330 Nos.	-	18330
3.	General Connections	958801 Nos.	137567	1096368
4.	H.T. Lines	35748 K.M.	229	35977
5.	L.T. Lines	94595 K.M.	569	95164
6.	11/0.4 KV P/Mtg. No.	104033	37194	1 41227

(T/F added Capacity-wise=6.3 KVA=5655, 10KVA=5315, 16 KVA=2299, 25KVA=8295, 63 KVA=8766 & 100 KVA=6864 Nos.)

4.9.3 REPAYMENT OF LOAN/INTEREST

Repayment of Loan/interest made during the year 2006-2007:-

Sr. No.	Organisation	Principal amount repaid (Rs in Crore)	Interest Amount repaid (Rs in Crore)
1.	Rural Electrification Corporation, New Delhi.	138.408	91,339
2.	Commercial Banks	-	-
	Total:	**138.408**	**91,339**

4.9.4 LINK LINES

Erection of 11 KV/L.T. Lines by R.E.Organisation

During the year 2006-2007, 229.000 Kms new 11 K.V. Lines and 569.000 Kms New L.T. Lines were erected.

4.9.5 REGARDING UN-INTERRUPTED SUPPLY OF 24 HOURS POWER TO ALL THE VILLAGERS OF PUNJAB ON THE PATTERN OF CITIES

The scheme of supplying power to all the villages of Punjab on the pattern of cities was implemented in accordance with the decision taken in the meeting of the Board on 21.9.92 which was approved by the Punjab Govt's letter No. P.R.D.S.-42/707 dated 14.12.92. The Progress under this scheme is as follows:-

Sr. No.	Total No. of Villages/ Basties/Deras Clusters/ Dhanies	No. of Villages given 24 hrs. UPS ending 3/2006	No. Of Villages given 24 hrs. UPS During 2006-07	Total No. Villages given 24 hrs. UPS ending 31.3.2007
1.	13123	12424	695	13119*

i) * Only 4 No. Villages are pending due to Court Cases.

ii) PSEB has planned to provide 24 Hrs. UPS to Deras/Dhanies of Punjab (About 4500 Nos. identified so far) having a cluster of 5 or more houses subject to availability of material and funds from Punjab Govt.

Monitoring of works for providing 24 Hrs. UPS to villages by PSEB, Punjab Mandi Board & through outsourcing has been done. Reply of Assembly questions, queries raised by the Punjab Govt./Govt. of India, Panchayats & Consumers has been given. Utilization Certificate of Funds received from Punjab Mandi Board supplied to the Punjab Mandi Board.

4.9.6 OTEHR ACTIVITIES

COST DATA

i) Nil

ii) In principle approval of 16 No. DPR's of RGGVY pertaining to the 16 Districts of Punjab amounting to Rs. 121.96 Crores approximately was obtained from REC.Ministry of Power, Govt. of India.

iii) Specification No. Q-1012/SE/REP/2005-06 for outsourcing of works covered under Rajiv Gandhi Grameen Vidyutikaran Yojna (RGGVY) was framed. NIT for inviting tenders floated and case was processed. The case was put-up to the Board, but the same was not approved due to higher rates quoted by the firms. The Board has decided to re-invite the tenders. The revision of Specification is under process.

iv) Specification No. Q-1013/SE/REP/2005-2006 Development of Franchise for Revenue Collection of all the Rural Feeders exclusively AP feeders in the projects financed under Rajiv Gandhi Grameen Vidutikaran Yojna (RGGVY) framed and NIT was floated for inviting tenders. But due to poor response from the bidders, the tender enquiry was dropped. The information/data required for modification/ revision of Specification for Franchises Development have been collected from neighboring Power Utilities and revision of Specification is under process.

v) Specification for outsourcing of works covered under 6 No. HVDS projects and Samana & Patran Divisions under Patiala Circle, Mukatsar Circle, Dhuri under Sangrur Circle, City Tarn-Taran & Bhikhiwind Division under Tarn Taran Circle, Suburban Nakodar Division under Kapurthala Circle and Amloh & Sirhind Division under Khanna Circle have been framed.

vi) Detailed scheme for 220 KV works amounting to Rs. 150 Crores approximately framed and got sanctioned from REC.

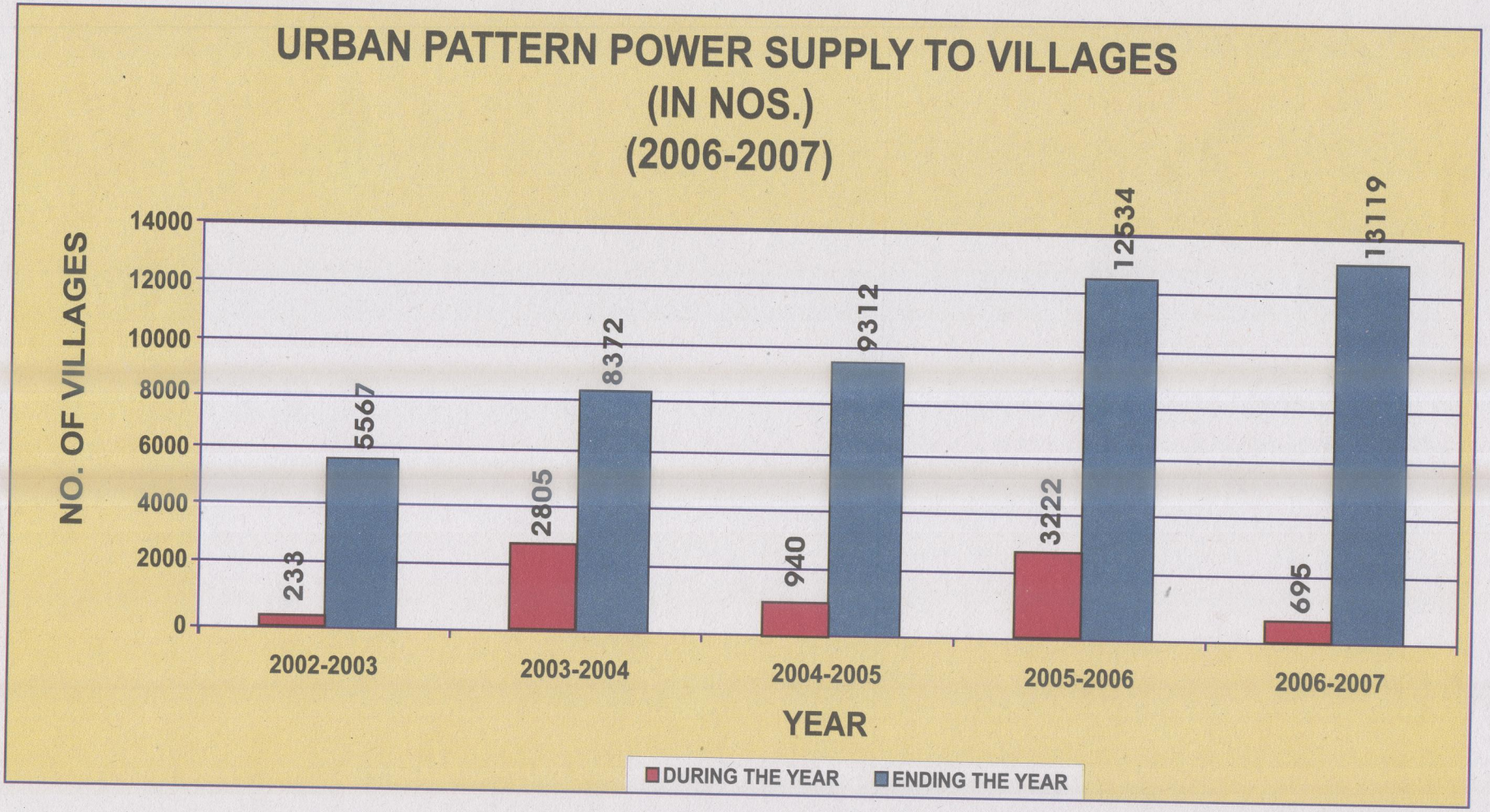
vii) 1032 No. 450 KVAR and 145 No. 600 KVAR 11 KV Manual Operated Switched Capacitor Banks procured against PO No. 45&46 both Dated 21.11.2005. The field offices have been requested to install these capacitors on the 11 KV feeders at the earlisest.

viii) Requirement of 11 KV. Mannual Operative Switched Capacitors gathered from the field offices. Specification for procurement of 430 No. 450 KVAR and 100 No. 600 KVAR has been framed and limited tenders invited. The case is under process. The tentative cost of these capacitors is Rs. 2.15 Crore.

ix) Moniatoring of L.T. Capacitors Banks (3 KVAR. 9KVAR & 18 KVAR rating) and 11 KV HT Capacitor Banks (450 KVAR & 600 KVAR rating) installed in Punjab State has been done.

24 HOURS POWER SUPPLY TO VILLAGES

YEAR	During the Year	Total No. of Villages
2002-2003	233	5567
2003-2004	2805	8372
2004-2005	940	9312
2005-2006	3222	12534
2006-2007	695	13119



CHAPTER - 5

5. PLANNING RESEARCH TRANING TECHNICAL AUDIT ENERGY CONSERVATION AND COMPUTERISATION ACTIVITIES.

5.1 ACTIVITIES OF PLANNING ORGANIZATION

The main activities performed by Planning organisation during the year 2006-2007 are listed as under:-

1. Annual Transmission works list for the year 2006-2007 was finalised and various amendments there to were issued.
2. Draft Annual Plan of Transmission works for the year 2007-08 formulated and furnished to the planning commitee.
3. Year-wise physical & financial plan for the 11th plan period formulated and furnished to CEA, GOI, New Delhi.
4. Dealt feasibility clearance cases of existing & prospective Industrial/Bulk Supply consumers of 1 MW load and above.
5. Monitored transmission works progress for onward submission to Punjab Govt. on monthly basis.
6. Prepared loading profile of all Grid Sub-Stations/ Transmission Lines based on Paddy-2006 loadings.
7. Collected data from various field offices and computed T & D Losses on quarterly monthly basis.
8. Supply of Various data/statements to CE/Commerical for filing of tariff revision petition for 2006-07 & 2007-08 & replies to the querries of PSREC.
9. Carried out load flow study in respect of :-

i) Amended evacuation system of 400 KV Ludhiana.

ii) To utilize additional bays available at PGCIL 400 KV Moga.

10. Attended to VIP references and answers to Parliamentary/Assembly questions.
11. Projected PSEB view point in the standing committee meetings of Northern Region Transmission System Planning and attended to references of Northern Council, BBMB, NREB, CEA, PGCIL, NTPC, NHPC, NPC, Planning Board MOP & other states.
12. Requirement of HT Shunt Capacitors for year 2006-2008 is under process/review.

13. Requisite Data Sent to NREB for shunt capacitor plan for the year 2007-08.
14. Fault Level Study Carried out for 3 phase & single line to ground faults for March, 2007 system conditions according to Maximum & minimum generation as per demand of Hydel Design Office, Chandigarh & Sub-Station organization.
15. Load Flow Study carried out for 220 KV transmission lines planned during 2006-07 on the request of EIC/RE & APDRP for computing cost benefit analysis.
16. Load Flow Study in respect of evacuation of GHK Goindwal Thermal, Nabha Thermal and Talwandi Sabo Thermal is under process.
17. Preparation of presentation on Punjab Power System for Excellence Awards Forum, CM Punjab/Punjab Govt. Periodically, India International Trade Fair and International Business Summit, New Delhi.
18. Submission of quarterly progress on energy conservation activities undertaken by the PSEB to CEA, Planning commission, GOI, New Delhi.
19. Follow up action taken on MOU signed between GOI & GOP on 30.3.2001 on Power Sector Reforms & ROFAP & put up to Punjab/Union Govt. from time to time for monitoring.
20. Furnished Comments to State/Union Govt. on Draft National Electricity Policy, Draft National Electricity Plan-transmission and draft national plan for reduction in T & D losses.
21. Maintained technical data of various Grid Sub-Stations/ feeders with regard to Maximum Demand, Maximum/Minimum Voltage, Installed capacity.
22. Contributed in various site selection committee for setting up of New Grid-Sub-Station/ Thermal Projects.
23. Updating of Transmission System Maps such as for voltage 220 KV & Above, 132 KV & Above, 33 KV & Above & their submission to various quarters.
24. Examined proposals for dismantlement of idle transmission lines, furnished by fields offices.
25. Attended to various Audit Paras raised by internal & external Audit Parties.
26. Attended various conferences, workshops, seminars, presentations, summits, meetings on behalf of PSEB.
27. Following figures regarding Electricity Board were collected from field offices and

reviews were issued after compilation :-

i) Regarding connection & connected load and pending applications and load.

ii) Regarding power generation and sale.

iii) Regarding L.T.H.T. lines and Grid Sub-Stations and Distribution Transformers etc.

iv) Regarding L.T. Shunt Capacitors.

v) Regarding Urban and Rural connections & connected load and consumption.

vi) Regarding per capita consumption.

vii) Regarding Captive Power Plants.

viii) Regarding Fatal Non-Fatal Accidents.

ix) Regarding H.T. Consumers.

x) Regarding details of losses occurring in Transmission & Distribution.

28. The annual statistics of PSEB were compiled and sent to CEA, New Delhi Economics Advisor to Govt. of Punjab.

29. Annual Plan (Generation, Transmission and Distribution) for the year 2007-08 was prepared and submitted to Government of Punjab and Planning Board. Govt. of Punjab was informed about the plan expenditure from time to time.

30. Reply to CPU/CAG Audit Paras was sent after collecting from concerned offices.

31. Following are the Projects likely to be commissioned during 11th Five Year Plan:-

i) **GHTP STAGE-II, LEHRA MOHABBAT**

The 2x250 MW GHTP Stage-II Lehra Mohabbat Project is under execution by M/s BHEL in erection, procurement and commissioning (EPC) mode. Total estimated cost of the project as per detailed project report (DPR) is Rs. 1789 Crore and a load of Rs. 1610 Crore has been tied up with RE C Ltd. Due to price variation clause the cost of project is likely to increase and revised estimated cost including IDC is likely to be Rs. 2100 Crore. The construction works at site is going on at war footing. One unit of 250 MW is expected to be commissioned by Sept, 2007 and 2nd Unit of 250 MW in December, 2007. Expenditure incurred upto 2/2007 is Rs. 1478.40 Crore. Provision of Rs. 450 Crore has been made for the year 2007-08 for making balance payments and to cover IDC.

ii) **MUKERIAN HYDEL PROJECT STAGE-II (18 MW)**

Execution of this project is already in hand and project is likely to be commissioned during the year 2008-09.

iii) **MICRO HYDEL PROJECT AT GGSSTP ROPAR**

This project stands commissioned on 27.5.2007.

iv) **SHAHPUR KANDI HEP (168 MW)**

Govt. of Punjab cleared the implementaion of the 68 MW Shahpurkandi Project and approved the original DPR with cost updated at September, 2006 price level as Rs. 1945 Crore without IDC. It is being undertaken departmentally with PSEB share as 88.39% and that of Punjab Govt. share as 12.61% Funds are being arranged for the project as loan from RECPFC.

v) **NABHA & TALWANDI SABO (BANWALA) THERMAL PLANTS (1200 MW EACH)**

Punjab Govt. has approved for setting up of 2 No. 1200 MW (2x600 MW) each coal based a Thermal Plants at Nabha District Patiala and Talwandi Sabo (Banwala) District Mansa. The projects are to be developed on Build Own & Operate (BOO) basis during 11th five year plan. Provision of Rs. 300 Crore has been made during the year 2007-08 for initial purchase of land for both the projects and will be recovered from the developers to whom projects are alloted lator on.

32. **SHAHPURKANDI EXTENTION (55MW)** has also been identified which are either under survey & investigation of their DPRs are yet to be prepared/finalized.

5.2 ACTIVITIES OF RESEARCH ORGANISATION

5.2.1(i) The office of Director/Research is mainly responsible for conducting the following functions:-

1. Conducting soil Resistivity Test on newly proposed Sub-Stations anywhere in Punjab (PSEB as well as Pvt.).
2. To apprise & suggest concerned departments of PSEB of various issues concerning Power Generation, Transmission & Distribution on new techniques of technology available in the Power Sector.
3. To carry out research work on going RSOPs already assigned by CBI & P New Delhi/CPRI, Banglore and to further get new Research schemes on various topics concerning power from CPRI, Banglore.
4. Liaison with PEC Chandigarh to co-related theory and practical.
5. Consolidation of Arbitration cases.

(ii) PROPOSED NEW RESEARCH SCHEMES ON POWER (RSOP)

The following Two Nos. RSOPs. (Reseach Scheme of Power) have been allotted by Central Power Research Institute Bangalore under Grant-in-aid scheme has been sanctioned, the first instalment of this Grant-in-aid has been received in the last week of Dec. 2006.

a) TO DETERMINE THE EFFECTIVE LIFE OF GROUND MAT BY USING 'ANTIDOTE' TECHNIQUIE/INHIBITORS ETC.

The after effect of indiscriminate use of herbicides, pesticides and synthetic fertilisers in the fields, to raise and increase food crops, is the continuous source of erosion/contamination of soil. As the earthing mat is embedded in the ground and is of mild steel, there fore, contaminated soils accelerates the corrosion of the ground mat and as a result its effective life span is getting shorteneded. Accordingly, there is a dire need to find out a solution to this problem and the objective of this study is to search suitable 'Antidote' techniques/Inhibitors or other effective methods, the applications of which will enhance the life of ground mat and ground electrodes.

2. For carrying out the studies four number sub-stations in PSEB covering the whols Punjab have been identified where the soild is more corresive to mild steel around mats & rods.

3. Samples of the soild of above four numbers sub-stations are being collected from the site for chemical analysis and testing them at Punjab Agriculture University Ludhiana/PEC/Punjab University for identifying the corresive factor like chloride, Sulphate & Ph Value causing corresien to mild steel in that paritcular area.

b) TO DETERMINE THE FEASIBILITY AND PERFORMANCE OF PROTOTYPE ELECTRONIC DEVICE TO BE INSTALLED IN PARALLEL WITH CONVENTIONAL BUCHHOLZ RELAY SO AS TO MAKE THE PROTECTION SYSTEM OF TRANSFORMERS MORE EFFECTIVE AND RELIABLE

1. The objective of the proposal is to study the feasibility & performance of an electronic device/system based upon sansors suitable for operation in the Power Transformers that can be used in parallel with conventional Buchholz relay, which evertually leads to development of a reliable prototype and more effective protection system.

2. Preliminary studies are being conducted in the form of surveying literature on power transformer oil regarding the %age of different type of gasses evelved during degeneration of oil at the time of internal fault of power transformer. Also the literature is being studied on aspect of other physical changes that occur in side the transformer during the internal fault.

3. Some data was downloaded from internet regarding the availability of different type of electronic sensors available in the market like hydrogen sensors vibration detector sensor, smoke sensor, accustic sensors etc.

(iii) RESEARCH PAPERS

During the year 2006-07 to keep abreast with the latest developments in the technology, papers were prepared and submitted at seminars/conference/journals.

1. 'Role of IT in fostering Growth-Power Sector' International Conference on Management conducted by IBS Ahmedabad January 5.7.2007.
2. Article on 'Polymers' published in Electrical india, November, 2006.
3. Article on 'Polymer Insulator's' published in Electrical India December, 2006.

(iv) CONSOLIDATION OF ARBITRATION CASES

Research Directorate is also acting as Nodal Office for the reconciliation of pending Arbitration cases. Liaisen is kept with office of Secretary, PSEB, Patiala for keeping track of cases pending with various Arbitrators, which have been already assigned to them by the Board.

(v) CONDUCTING SOIL RESISTIVITY TEST FOR UP COMING SUB STATION IN PSEB OR FOR PRIVATE FIRMS

As per requisitions received by this office from time to time, measuremetn of soil resistivity of upcoming sub stations in PSEB as well as those of private firms was recorded in 2006-2007 and the reports forwarded to Sub Station Design Directorate for design of earthmat. The year particularly witnessed growth in number of deposit works of conducting soil resistively tests on the proposed sites for setting up of 66 KV Sub-Stations by private parties in all 9 No. private sites were checked and revenue of about 1.95 lacs was collected as testing charges. Also 21 Nos. sub-station sites of PSEB were checked for recording soil resistivity.

LIST OF PLANNED 66/132/220 KV SUB/STN. OF PSEB & PRIVATE FIRMS WHERE SOIL RESISTIVITY TEST WERE CARRIED OUT FROM APRIL 2006 TO 31 MARCH 2007.

SUB-STATIONS OF PUNJAB STATE ELECTRICITY BOARD

SR. NO	NAME OF PROPOSED SUB-STATIONS (PSEB)
1.	220 KV S/S, Mohali.
2.	220 KV S/S, Ferozepur Road, Ludhiana.
3.	220 KV S/S, Amloh Road, Gobindgarh.
4.	132 KV S/S, Seh. Near Khanna.
5.	66 KV S/S, Kachri Chowk, Amritsar.
6.	66 KV S/S, Manwal, Phathankot.
7.	66 KV S/S, C-Compound, Bhathinda.
8.	66 KV S/S, Parasram, Nagar, Bhatinda.
9.	66 KV S/S, Hargana.
10.	66 KV S/S, Dhanna Sheed.
11.	66 KV S/S, Kassoana.
12.	66 KV S/S, Patel Chowk, Jal.
13.	66 KV S/S, Lidder.
14.	66 KV S/S, Banarsi.
15.	66 KV S/S, Dadarian.
16.	66 KV S/S, Chottian.
17.	66 KV S/S, Ghommorghat.
18.	66 KV S/S, Mallke.
19.	66 KV S/S, Jaitton.
20.	66 KV S/S, Sukhpura Near Phool.
21.	66 KV S/S, Basour Near Malerkotla

SR.NO	NAME OF PROPOSED SUB-STATIONS (Pvt.)
1.	66 KV S/S, Rana Polycot, Lalru.
2.	66 KV S/S, Vaneyak Textile, Ludhiana.
3.	66 KV S/S, Indian Acrylics, Sangrur.
4.	66 KV S/S, Luxami Energy & Food, Khamanoan.
5.	66 KV S/S, Saluja Cotox, Ludhiana.

6. 66 KV S/S, K.C. Soni & Sons, Gobindgarh.
7. 66 KV S/S, MES, Amritsar.
8. 66 KV S/S, Chandigarh Distilleries, Banur.
9. Shahpur Kandi Power House.

ABSTRACT

Sr. No.	Voltage of Capacity of Sub Stations.	No of places of sub station. which are tested		
		PSEB	PRIVATE	TOTAL
1.	220 KV Sub-Station	3	-	3
2.	132 KV Sub-Station	1	-	1
3.	66 KV Sub-Station	17	9	26
4.	33/66 KV Sub Station	-	-	-
	Total	21	9	30

5.2.2 ARBITRATION

Any dispute arising with contractors or Suppliers regarding various contracts or purchase orders of Punjab State Electricity Board, the same is referred to the Arbitrator appointed by competent authority for adjudication under Arbitration Act, 1940. This work is under the control of Director/Research, Chandigarh being Nodal Officer. Information regarding arbitration cases during the year 2006-2007 is mentioned below:-

a)	Total cases pending as on 1.4.2006	77
b)	New Cases received during the year	25
c)	Cases decided during the year	20
d)	Cases which the proceedings stayed by the court	7
e)	Cases which arbitration proceedings is under process	75
f)	Total cases pending as on 31.3.2007	82

5.2.3 SETTLEMENT OF CONSUMER DISPUTES

Dispute Settlement Authority was created vide Secretary, PSEB Office Order No. 8242/Cadre-1 CC No. 39/05 dated 7.6.2005 to dispose off the consumer disputes arising out of checking made by task force/Distribution organization/Enforcement Agency/Audit etc. However, Chief Engineer/Commercial vide his CC No. 27/06 issued vide Memo No. 33019/33819/SSM-118 dated 6.6.2006 and PSERC Notification No. 19 dated 17.8.2005 has decided to establish 'Forum' for Redressal of Grievances of

the Consumers. DSA ceaed to exist w.e.f. 1.8.2006.

1.	Chairman of the Forum	EIC/CE with experience in distribution
2.	Member of the 'Forum' with Experience in revenue matter	CAO with experience in revenue matter.
3.	Member of the 'Forum' with Experience in sales matters.	Dy. CE/SE having experience in Commercial matters.

The powers of the 'Forum' as per CC No. 40/06 in that a complainant aggrieved due to non redressal of his complaint under the "Consumer Complaint Handling Procedure" may approach the Forum established by the Board.

After the establishment of the 'Forum' w.e.f. 1.8.2006, the forum has already registered 282 cases. The latest position regarding the number of appeal and complaint cases received, decided and pending upto 31.3.2007 as given as under :-

Total cases received		Cases decided upto 31.3.07		Cases pending for settlement as on 31.3.07	
No.	Disputed Amt in (Rs. in Lacs)	No.	Amt. in Dispute (Rs. in Lacs)	No.	Amt (Rs. in Lacs)
282	1407.16	215	1306.58	67	100.58

5.3 TRAINING ACTIVITIES

Training is conducted for newly recruited technical/Enginners/subordinate employees and accounts personnel, already in the service of Board in Technical Training Institute, Patiala and for Lineman/Asstt. Line Man in Four Technical Training Centers (Kharar, Bathinda, Faridkot and Amritsar). Highlights Training Activities during the year 2006-2007 were as under:-

Sr. No.	Name of the Programme	Duration of Training	No. of Trainees trained During the year 2006-07
1.	2.	3.	4.
1.	Asstt Engineer (Direct Recruitment)	1 Year	-

1.	2.	3.	4.
2.	Asstt. Executive Engg./ Asstt. Engineer	2 weeks	5
3.	A.E. (Promoted)	6 weeks	-
4.	Junior Engineer (Elect.)	2 months	43
5.	JE/Sub-Stn. & S.S.O./S.S.A	2 months	62
6.	Linemen/Asstt. Linemen	55 Days	743
7.	Revenue Accountant/ Asstt. Revenue Accountant	2 weeks	04
8.	Internal Auditors	2 weeks	30
9.	Superintendent/ Divisional Accountant	2 weeks	45
10.	U.D.C./L.D.C	3 weeks	69
11.	Foreman/Elect.	2 months	92
		Grand Total :	**1093**

A. IN-HOUSE SPECIAL TRAININGS

TTI following special trainings/workshops were conducted during the year 2006-07 in which 225 officers/officials stand trained as detailed below :-

1.	Basic Computer Training	12 Officers/Officials
2.	Yoga Training	158 Officers/Officials
3.	Other Training/Workshop	55 Officers/Officials

B. ONE DAY SITE TRAINING CAMPS

No of Camps held for Short time (one day camp) 2006-07	No. of Trainees Trained (2006-07
77 Nos.	2801 Nos. Lineman/Asstt. Lineman

C. SPECIAL OUT-SOURCE TRAINING

Besides this, apart from Training officers/Employees in its own institute/Training Centres, H.R.D. has imparted them training in other/external institutes or got them trained

from other institutes whose details are as follow:-

Sr. No.	Name of Training/Seminar	Achievement during year 2006-2007
1.	Basic Computer Training	149 Nos.
2.	Training for Trade Union Leaders	82 Nos.
3.	Training for Trainers	150 Nos.
4.	Workshop for Customers satisfaction	69 Nos. (3 Nos. Workshop)
5.	Nomination of Officers/Officials for special trainings/Workshops/ Seminars.	585 Nos. 134 Nos. Programmes
6.	Stress Management/Yoga Training	61 Nos.
7.	Advance Professional Training in Germany	10 Nos.
8.	Hot Line Training	01 Nos.
9.	Distribution Loss Reduction and other Training Programme Under DRUM Project	184. Nos.
10.	Traininee programme of Safety aid Conducted by National Safety Concil of USA.	90 Nos. (3 Nos. Programme)
11.	Interactive Workshop for Top & Senior Managers and officer/officials at ESCI Campus at Hyderabad.	57 Nos. (2 Nos. Workshops)
12.	Workshop on building of High Performance Team	160 Nos. (4 Nos. Workshops)
13.	Training on Advanced Engineering and Management of Power Distribution System at REMI, Mumbai.	197 Nos.
	Total:	**1795 Nos.**

NOTE : The above training depends upon allotment of funds.

The following Apprentices were engaged during 2006-2007 under the Apprenticeship Act, 1961, Degree/Diploma Engineers and ITI trades.

Sr. No.	Apprenticeship Training	Training Period	No. of Apprentices
1.	Degree Engineers	1 Years	6 Nos.
2.	Diplona Engineers	1 Years	41 Nos.
3.	I.T.I. (Apprentice Lineman)	2 Years	590 Nos.
4.	I.T.I. (Apprentice Draftsmen)	1 to 2 Years	07 Nos.
		Total :	**644 Nos.**

Besides above, during 2006-2007, 18 officers have been sent to Foreign Country to received training by personnel department.

Presently, 33 Nos. officers/employees of the Board are on deputation with various organisations of Govt. of Punjab/India.

5.4 PURCHASE OF MATERIAL

Under other capital and maintainance works and to release the following number of connection, 252 purchase orders + 43 Amendments in P.O.'s + 4 Nos. cancelled P.O.'s + Nil Nos. amended P.O.'s cancelled of Rs. 422.24 crores were issued during the year 2006-2007 and material was provided to field officers:-

1.	General Service Connection	1,97,794
2.	Industrial Serivce Connection.	4,194
3.	Agricultural Pump set.	39,523
4.	Other	204
	Total :	**2,41,715**

The amount of rate contracts has not been included in the above amount. Disposal Committee has disposed of the material machinery within fixed limit during the year 2006-2007 as under:-

		Amount (In Lac)
1.	Price of useless items/surplus machinery for which the tender have been accepted and letter of intent issued.	6522.80

2.	Value of surplus/Material machinery in stores/projects/works.	--
3.	Cost of material which was actually lifted by the bidders during the year	6110.31

5.5 TECHNICAL AUDIT

Technical Audit of PSEB comprises of Inspection or Material Services Wing and two separate Technical Audit Wings for electrical and civil works. The Inspection Wing is responsible for quality control of the material being purchased by PSEB for erection and maintenance of electrical power distribution system by conducting regular inspection of material at the manufacturers/'suppliers' premises to ensure that material received in PSEB Stores is strictly as per IS/P.O. specifications. Besides, the works appraisals are conducted in respect of new manufacturing units participating in Board's tenders for the first time to assess their technical and financial capacity to supply the material to the Board. The inspections are carried out by the various officers of the rank of Addl. SEs/ Sr. Xens. Material Services Wing also conducts inspections of the repaired transformer through 4 No. Addl. SEs/Sr. Xens (TRT) with head quarter at Patiala, Ludhiana, Jalandhar and Amritsar in various TRWs/ of PSEB. During 2006-2007, a total of 2770 No. inspections for various items of material were conducted and also 162 No. works appraisals were done by this wing.

The second level of quality check is exercised through Technical Audit Wing by making random checks and physical verification of material received in various Central Stores of PSEB, Any discrepancies, if observed are brought to the notice of concerned purchasing organization for taking suitable action against the suppliers. The technical Audit Wings also ensures proper use of the material drawn from the stores of PSEB by means of regular checks on the works executed by the field offices. The works of giving 24 hours urban pattern supply has been outsourced by the Board and Technical Audit Wing ensures use of good quality material on these works by the contractors. Apart from above, Technical Audit Wing investigates complaints recived directly form Public or forwarded by the office of Chairman or Members, PSEB, identifies lapses and recommends action against officials/officers for violation of Board's regulations in execution of distribution works. During Financial year 2006-2007 total number of

559 cases were got finalized. While finalizing the above cases, disciplinary action against 159 delinquent officers/officials were initiated who were held responsible for various lapses.

In addition to the above, this directorate has carried out the works appraisals of 84 Nos. firms on call from Engineer-in-Chief MM and CE/Workshops, Ludhiana relating to the procurements of various types of equipment/material.

The Civil Wing under this Organization has carried out investigations of 24 No. Civil works and 19 No. disciplinary actions against deliquent officers/officials were intiated. The Physical verification of Coal/Oil at all the three Thermal Plants of PSEB is also carried out by the Civil Wing on quarterly basis.

As a result of efforts of TA & I Organization the tendency to cheat the Board by supplying inferior material and the misuse/misappropriation of material drawn for execution of works has been curtailed substantially.

5.6 ENERGY CONSERVATION WING

The Board is trying its best to popularise the methods of conservation of energy in all the sectors i.e. in Domestic, Commercial, Agricultural and Industrial and the following methods are adopted:-

1. To educate the children for adopting the habit of energy conservation, paper reading contests were conducted in various schools of Punjab on the subject of energy conservation 'why & how'. For every contest, invitations were sent to 10-12 schools. Two Students from every school took part in these contests. In this way 12-16 student of various school participated in each contest. To encourage the meritorious students, prizes were given to those students obtaining first, second and third positions along with a merit certificate. Every participating student was also given a participation certificate. During the year 2006-2007, 20 Nos. such paper reading contests were organized as per list enclosed. Print and electronic media covered all these contests and new items were published in many Newspapers besides telecast on various television channels/local cable which propagated the cause of energy conservation.
2. State level energy conservation day was celebrated under North Zone , at Jalandhar 14.12.2006, which was presided over by the Member (Generation).

PSEB. Er. H.M.Jain and Er. J.S. Sekhon, Member/Distribution, PSEB , was the guest of honour. Chief Engineer/North, Jalandhar, Director/Energy Conservation, PSEB, Patiala all SE's/ Sr. Xens/ SDOs North Zone, Jalandhar, Officers /Officials, industrialists, farmers and other consumers took part in this function. Punjab Energy Development Authority (P.E.D.A.) also arranged exhibition. Other stalls of energy conservation devices are also installed by local bussinessman to encourage people to save energy. Stall was also installed by Directorate of Energy Conservation to give information regarding Energy Conservasion. A special paper reading contest on the subject of Energy Conservation on 'why & how' was conducted at Jalandhar on 12.12.2006 in which students of different schools in Punjab were participated. The students qualified in this contest as first, second and third positions, read their papers in the state level energy conservation day function on 14.12.2006 at Jalandhar. Many new suggestions were made and all the participants were very much appreciated. The whole function was organized under the direct supervision of Director/Public Relation, PSEB, Patiala, who conveyed the message of energy conservation through various skits and songs Print and electronic media also covered the whole function. New items were published with photographs in many news papers besides telecast on variuos T.V. Channels/local cable.

3. Stalls were arranged by Energy Conservation Directorate in 10 No. Kisan Mela's throughout the year organized by Punjab Agricultural University, Ludhiana, throughout the State at different places Pamphlets were distributed to farmers and concept of energy Conservation was displayed, through banners and posters. Deputy Director/SLSC, Ludhiana visited the stalls in the Mela's at P.A.U., Ludhiana Campus and gave the information to the farmers regarding need of Energy Conservation.

4. As per instructions of PSERC & higher authorities , 53,514 Nos. sample meters are installed (which are 5.59% of the total flat-rate tube-wells. 956651 Nos.) in Punjab.The reading of these 5% sample meters are supplied by respective Op. Divisions every month to DD/SLSC for calculation of AP factor. After calculationg monthly AP Factor, the same is submitted to Secretary/Power Punjab and other higher authorities of PSEB in time.

5. Readings/data are supplied by DS Organization for the correctness of readings/ data some meter readings are cross checked by AD/SLSC in different circles so that more accurate AP Factor (KWH/KW) can be calculated wherever the readings found wrong then letters are sent to these Sub/Divn/Circle for necessary Action.

6. As per instructions of PSERC & higher authorities 5 No. 11 KV rural AP feeders are selected in different geographical Zones for calculating HT & LT losses. Meters are installed on the premises of each consumers and on the LT side of each consumer and on the LT side of each distribution transformers reading of these meters are started from month 9/05 and HT/LT losses are calculated from 10/05. These losses are sent to concerned operation offices & higher authorities for further action. Defected meters are on these feeders are replaced by Concerned Sub-Division & Division.

7. In year 2006-2007 M/s Energy audit Services, Faridabad was engaged to check pumping efficiency of 300 Nos. Tubewells in five Operation Zones in PSEB. The report submitted by the Engery Auditior was incompleted and did not fulfill the conditions of the work order. The matter has been referred back in the Energy Auditor to submit the complete report as per the work order.

8. For promotion of efficient use of Energy and its conservation in the State of Punjab, a comprehensive & time bound plan for mandatory use of CFL's in Commercial, Residential, SP & MS and Agricultural sector at the cost of Rs. 270 Crore has been preparted and in under consideration and approval of Management. This project is likely to reduce about 640 MW System Peak requirement and save energy equivalent to about 1500 MU's per Annum.

9. In the 2nd phase of the plan detailed in para 8 above, time bound plan for replacement of conventional Flourscent Tubes with 36 W. Slim. Tubes Domestic, Commercial and SP & MS consumers has been chalked out at the cost of Rs. 80 Crore. This project is likely to reduce system peak requirement by about 30 MW and save an energy equivalent to about 68 MU's per annum.

10. Comprehensive and time bound plan in parallel to the above has been worked out to replace incandescent Lamp and conventional tubes with CFL and energy

efficient fittings in all the buildings of the offices, Sub Stations and Power Projects along with yard and gate lighting etc. in PSEB which will also provided relief to the system peak and saving in energy.

11. A Project Idea Note has also been prepared for replacing inefficient Agricultural pumps by more Energy Efficient pumps in Punjab rural areas, aiming to implement DSM programme in PSEB. As per analysis made by World Bank expert, this project will cost Rs. 1500 Crore on and average cost of Rs. 15000 per pump set is likely to be incurred for replacement of each AP set. This project will save energy equivalent to 3000 MUs. This project is to be completed in phased manner after arranging funds from other Agencies. Negotiations are going on with World Bank about this project.

12. To Build Energy Awareness on Conservation, other major plan has been drawn for Energy Conservation activities at a cost Rs. 80 Crore which include installation of capacitors of 11 KV lines etc. to replace incandescent Lamps & conventional tubes in all Board's Buildings, to arrange Seminars and D.S.M. traning programmes. Distribution literature and wide publicity in Kissan Mela's regarding energy conservation measures, wide publicity through print & electronic. media regarding energy conservation measures, mandatory use of Solar. Water Heater system in all PSEB Buildings & commercial institutions and incentive to the individual farmer who will use/install energy efficient pumps at time of new A.P. connections.

13. Monitored the recording of readings & sample meters by M/s K.L.G. and field officers for calculations of AP Buildings.

14. Matter was taken with the concerned Chief Engineers of PSEB, Patiala for mandatory use of CFL's, Energy efficient tubes and Solar Water Heater System in all the PSEB Buildings.

15. Matter was also taken up with C.E./ Commercial, PSEB, Patiala and E.I.C./Civil & Design, PSEB, Patiala to expedite implementation of Punjab Govt. Orders dated 20 th January 6th February for mandatory use of CFL's, Solar Water Heater, B.I.S. Pumps and energy efficient buildings design.

16. The proposal has also been prepared for replacement of all Sodium & Mercury Vapour Lamps with LPSV and HPSV in all the major cities maintained by Municipal Corporation, Ludhiana, Jalandhar, Patiala and Amritsar.

LISTS OF SCHOOLS WHERE PAPER READING CONTESTS HELD DURING THE YEAR 2006-2007.

Sr. No.	Date	Name of school
1.	2.	3.
1.	27.9.2006	Fountain Ganj Sr. Sec. School, Jalandhar.
2.	5.10.2006	Baba Banda Sing Bahadur, Sr. Sec. School, Dhariwal.
3.	6.10.2006	Her Public High School, Verka, Amritsar.
4.	10.10.2006	S.G.G.Sr. Sec. School, Godwal (Raikot)
5.	16.10.2006	Ashoka Model Sr. Sec. School, Kotkapura.
6.	26.10.2006	Kaim Bridge International School.
7.	27.10.2006	Laurence International School, Jalandhar.
8.	3.11.2006	Essential Convent School, Goraya, Jalandhar.
9.	17.11.2006	Shree Arvindo International School, Patiala.
10.	22.11.2006	Prince Public High School, Goniana Mandi (Bathinda)
11.	24.11.2006	Sardar Teja Singh Kandari Public School, Patiala.
12.	29.11.2006	Wood Stock High School, Jujhar Nagar, Patiala.
13.	30.11.2006	Rishi Sr. Sec. School, Kotkapura, Bathinda.
14.	1.12.2006	S.S.High School, Majida Road, Amritsar.
15.	5.12.2006	Kamal Joti Public School, Sultan Wind Road, Amritsar.
16.	12.12.2006	Innocent Mart School Green Model Town, Jalandhar.
17.	24.1.2007	Babu Isher Singh Nanak-Sar Public School, Bhai Randhir Singh Nagar, Ludhiana.
18.	29.1.2007	Guru Nanak Public School, Kamla Nehru Colony, Bathinda.

19.	30.1.2007	K.J. Model High School, Guru Nanak Nagar, Patiala.
20.	28.3.2007	S.D. Kenyan Vidalia, Ropar.

5.7 DIRECTOR COMMUNICATION, PATIALA

The work of design of Communication Equipment for providing Communication facility between Sub-Stations is done by this office 220 KV, 132 KV & 66 KV Sub-Stations are provided with Power Line Carrier Communication facility. During the year 2006-2007, for providing Power Line Carrier Communication facility for new Transmission Works of 132KV/220 KV Sub-Stations and to maintain PLCC equipment already installed at existing Sub-Stations, the purchase process for the required material such as PLCC Terminals, Coupling Devices, Coupling Capacitors, Wave Traps, Battery, Battery Chargers, Telephone / HF Cables was initiated.

5.8 DIRECTOR/S.L.D.C., PATIALA

This Directorate came into existence in 12/99. This directorate is entrusted with the job of interim scada and unified scada scheme. The detail of works done under this scheme is as mentioned below:-

a) SCADA SCHEME

i) Upkeep and maintenance of SCADA/EMS system with 49 No. RTU's installed at various grid sub-stations, to provide on line display of energy data at SLDC Ablowal (Patiala) and 2 No. Area sub SLDC at Laltonkalan (Ludhiana) and Jamsher (Jalandhar).

ii) Proposal for additions of 25 No. RTUs in the existing SCADA/EMS system got approved and tendering process initiated.

iii) Action for finalization of AMCs for SCADA system, RTUs UPS system DG system etc. taken.

b) NATIONAL LOAD DESPATCH CENTRE (NLDC)

The agreement for setting up of NLDC at New Delhi signed with Power grid on 29.6.2006.

c) DISTRIDUTION SCADA

Action for implemetation of Distribution SCADA in Punjab with Ludhiana as a pilot project initiated as per Board's directive.

d) INTERSTATE BOUNDARY METERING

Purchase proposal for implementation of Interstate Boundary Metering Scheme

in PSEB submitted to the Board. As per Board's decision taken in 1/2007 meeting held on 6.2.2007 action for re-working our specification requirments is under process.

e) IMPLEMENTATION OF STATE GRID CODE

Action for implementation of State Grid Code as per requirements of PSERC initiated under the present bundled scenario in PSEB initiated and a STU body along with various committees have been formulated.

5.9 SUPERINTENDING ENGINEER/COMMUNICATION CIRCLE, JALANDHAR

Under this circle, following new P.L.C channels were started during the year 2006-2007 :-

Sr. No.	Name of Sub-Stations	No. of Terminals
a)	**400 KV SUB-STATION**	
1.	400 KV Balachak-220 KV Verpal.	2 Nos.
2.	400 KV Fagan Majra-220 KV Bahadurgarh	2 Nos.
b)	**220 KV SUB-STATION**	
1.	220 KV Verpal-400 KV Balachak.	2 Nos.
2.	220 KV Sarna-220 KV Vadala Granthian.	2 Nos.
3.	220 KV Rajpura-220 KV Mohali.	2 Nos.
4.	220 KV Tibber-220 KV Sarna.	2 Nos.
5.	220 KV Civil Lines - 220 KV F.G. Churian.	2 Nos.
6.	220 KV Kartarpur-66 KV Surgical Complex.	2 Nos.
7.	220 KV Jalandhar-220 KV Jamsher.	2 Nos.
8.	220 KV Jalandhar 132 KV Medical College.	2 Nos.
9.	220 KV Lalten Kalan-220 KV Jagraon.	2 Nos.
10.	220 KV Patti-220 KV Verpal.	2 Nos.
11.	220 KV Verpal-220 KV Butari.	2 Nos.
12.	220 KV Bajakhana - 66 KV Zida.	2 Nos.
13.	220 KV Sadiq-66 KV Sukhna Wala	2 Nos.
14.	220 KV Mansa- 66 KV Bhikhi.	2 Nos.
15.	220 KV Mansa-66 KV Dhalewan.	2 Nos.

16.	220 KV Bathinda -132 KV Baluans.	2 Nos.
17.	220 KV Ablowal - 400 KV Fagan Majra.	2 Nos.

Sr. No.	Name of Sub-Stations

c) **66 KV SUB-STATION**

1. 66 KV Dakala - 66 KV Balberha.
2. 66 KV Sukhnawala - 220 KV Bajakhana.
3. 66 KV Bargari - 220 KV Bajakhana.

d) **PROVIDED NEW LEVEL METER / OSCILATOR**

1.	220 KV Sarna	Level Meter =	1 No.
2.	220 KV Dasuya	-do-	
3.	220 KV Jamsher	-do-	
4.	220 KV Lalton Kalan	-do-	2 No.
5.	220 KV RTP	-do-	1 No.
6.	220 KV Malerkotle	-do-	1 No.
7.	220 KV Mandi Gobindgarh	-do-	1 No.
8.	220 KV Lehra Mohabbat	-do-	1 No.
9.	220 KV Barnala.	-do-	1 No.
10.	220 KV Moga.	-do-	1 No.
11.	220 KV Mukatsar.	-do-	1 No.
12.	T&C Lab Jalandhar	-do-	1 No.
13.	220 KV Lalton Kalan	Level Oacilator=-do-	1 No.
14.	220 KV RTP	-do-	1 No.
15.	T&C Lab Jalandhar.	-do-	1 No.
16.	Sarna S/D	-do-	1 No.

e) **TERMINALS INSTALLED AGAINST REPLACMENT DURING THE YEAR**

1	220 KV Verpal -220 KV Patti & Vice Versa.	2 Nos.
2.	220 KV Wadala Granthian-Panj Goraian & Vice versa.	2 Nos.
3.	220 KV Verpal-220 KV Patti & Vice Versa.	2 Nos.

4.	220 KV Butari-Verpal & Vice Vers.	2 Nos.
5.	MPH-I-MPH-II & Vice Versa	2 Nos.

Sr. No.	Name of Sub-Stations	
f)	**PROTECTION COUPLERS INSTALLED DURING THE YEAR**	
1.	400 KV Fagan Majra-220 KV Ablowal.	F-6
2.	400 KV Balachak - 220 KV Verpal	DIP-5000
3.	220 KV Ablowal - 400 KV Fagan Majra	F-6
4.	220 KV Bahadurgarh-Rajpura.	F-6
g)	**EXCHANGES INSTALLED**	
1.	400 KV Fagan Majra	8/8 Lines
2.	220 KV Hambran	8/16 Lines
3.	220 KV Kohara.	8/16 Lines
4.	Mini Secretariate Ludhiana.	200 Lines

h) **EQUIPMENT INSTALLED AGAINST SURVEYED OFF (L.M.U.)**

Sr. No.	Direction	Qty.
1.	220 KV Patti- 132 KV Tarn Taran & Sultanpur	2 Nos.
2.	220 KV Kotti Surat Malhi-66 KV Bhagowal, Kala Afgana & Dera Baba Nanak.	3 Nos.
3.	220 KV Verpal-132 KV Naraingarh & 132 KV Mallmandi	2 Nos.
4.	220 KV Butari-132 KV Tarn Taran, 132 KV Tangra & 132 KV Jandiala Guru.	3 Nos.
5.	132 KV Shri Hargobindpur-66 KV Harchowal.	1 No.
6.	132 KV Gurdaspur-Dhariwal CKT-I	1 No.
7.	132 KV Tarn Taran-220 KV Butari and Patti.	2 Nos.
8.	132 KV and Hargobindpur-66 KV Ghuman	1 No.
9.	132 KV Kangra Bhanan Power House Circuit-I&II	2 Nos.
10.	Power House - 132 KV Kangra I&II	2 Nos.
11.	132 KV Hoshiarpur- 220 KV Mahalpur	1 No.

12.	132 KV Batala-66KV Aliwal	1 No.
13.	132 KV Dhilwan -220 KV Jalandhar.	1 No.
14.	UBDC Power House-II & III Ckt. No. I & II	2 Nos.

i)

	BATTERY / BATTERY CHARGERS	BATTERY BATTERY CHARGER
1.	220 KV Fatehgarh Churian	Battery Charger
2.	220 KV Wadala Granthian	"
3.	220 KV Kotli Surat Malhi.	"
4.	220 KV Wadala Granthian-Kala Afgana.	"
5.	220 KV Laltan Kalan	Battery
6.	132 KV Shri Hargobindpur	Battery Charger
7.	132 KV Asron.	Battery
8.	66 KV Jaura Chittran	Battery Charger
9.	66 KV Tanda Road Jalandhar	Battery
10.	Nakkian Power House	Battery & B.C.

In addition to the above, R.T.U. mtc,. Lab, Cabin provided in the T&C Hall PSEB Jalandar. 8 Nos. Participants of Varous constituents batch No. 306 of ULDC Scheme regarding data Communication over power Lines (given in 6/2006).

5.10 DIRECTOR/ESTATE

Estate office with SE/Civil as Estate Officer was created in year 1992. Keeping in view the importance of this Directorate, 3 Estate Cells each headed by Sr. Xen./ Civil with headquarters at Patiala, Ludhiana and Jalandhar were created in the year 1992. Lateron in the year 2004 the post of Estate Cell Jalandhar was diverted to the newly created post of Sr. Xen/Civil, Pilot workshop at Sarna. Main job of this office is to re-survey the land to find cut encroachment and to monitor the cases for aviation of illegal possession with the custodian of the sub-stations, to collect revenus record of lands etc. This office is also pursuing the matter with Secretary/Power for tranfer of ownership of Sub-Stations in the name of Board which exists in the name of Provincial Govt. Board in its 3/2003 meeting approved in principle that PSEB should have a good Staff Training Institute for training of its officers. Vide Jt. Secretery/Cadre-II Office

MAIN HIGHLIGHTS

Sr. No.	Item	As on 31.3.2006	As on 31.3.2007
1.	2.	3.	4.
1.	**INSTALLED GENERATING CAPACITY (in MW)**		
a)	Hydro	2,255.650	2,255.650
b)	Thermal	2,130.000	2,130.000
	Total (a+b)	4,385.650	4,385.650
2.	**MAXIMUM DEMAND (MW)**	6,092.000	6,558.000
3.	**CONNECTED LOAD (MW)**	19,688.000	21,079.000
4.	**CONSUMERS CONNECTED (In Nos.)**		
a)	Domestic	42,46,008	43,79,601
b)	Commericial	7,46,484	7,69,755
	Total (a+b)	49,92,492	51,49,356
c)	Industrial		
	Small Supply	78,194	77,974
	Medium Supply	18,606	19,524
	Large Supply	4,142	4,483
	Public Water Works	6,455	7,000
	Total (c)	1,07,397	1,08,981
d)	Agricultural	9,31,209	9,70,139
e)	Public Lighting	2,068	2,272
f)	Bulk Supply	487	492
	Total (a to f)	60,33,653	62,31,240

Sr. No. 1.	Item 2.	As on 31.3.2006 3.	As on 31.3.2007 4.
9.	**ENERGY SOLD (MUs)**		
9.1	Tctal Energy sold within State of Punjab Transmission & LT Ratio Error	24,470.429	26,617.040
9.2	Energy sold as share of Common Pool Consumers i.e. M/s National Fertilizers Limited (N.F.L)	26.910	302.060
9.3	Total Energy sold (Total 9.1 to 9.2)	24,497.339	26,919.100
10.	**BALANCE UNACCOUNTED ENERGY (MUs.) (8.3-9.3)**	8,187.483	8,367.090
11.	**PERCENTAGE LOSSES**		
	a) Excluding share of Common Pool Consumers	25.07%	23.92%
	b) Including share of Common Pool Consumers.	25.07%	23.92%
12.	**Per Capita Consumption (KWh)**	942	975
13.	**Average number of units sold to each consumers (KWh)**	4,010	4,222
14.	**Sanctioned Strength of Board's employees.**	83,798	83,648
15.	**Total Revenue Receipt (Rs. in lacs)**	8,33,624	8,70,880
16.	**Total Revenue Expenditure (Rs. in Lacs)**	8,35,748	10,35,420