

**Petition for Aggregate Revenue Requirement
And
Determination of Tariff**

for
FY 2009-10

Volume -II

Evidential Documents

Submitted to

Punjab State Electricity Regulatory Commission
Chandigarh

By

PUNJAB STATE ELECTRICITY BOARD

The Mall, Patiala – 147001

December 2008

TABLE OF CONTENTS

Sr. No.	Description	Pg
1	Notification to authorize PSEB to continue to function as the State Transmission Utility and Licensee for a further period upto 30-11-2008.	1
2	Roadmap for next 5 years for Reduction of AT&C Losses in Punjab	3
3	PSEB Training Policy & HR Expenditure Plan	10
4	Planned Fund Allocation FY 09-10	27
	Details of voluntary disclosure Schemes	32
5	Metering Status as on FY ending March 2008	33
6	Extra Levy of Private Hospitals	34
7	HERC Order on Generation Tariff for HPGCL for FY 07-08	39
8	Annexure for enhancement of Peak Load Exemption Charges	45
9	Evidential Documents in favor of Wholesale Price Index	62
10	Data on detection of Theft of energy /Leakage of Revenue by Enforcement upto Sep'08	63
11	Power cuts on consumers – SLDC data	65
12	Agricultural consumption	67
13	Transit Loss Information (%)	68
14	Shunt Capacitor Addition / Repair Program.	72
15	Zonewise Information on Electrical Accidents	73
16	Failure of Power Transformers	78
17	Zonewise information on Overloaded Distribution Transformers	84
18	Major System Occurrences	92
19	Zonewise Abstract of Outages due to feeder tripping	93
20	Number of Service Connection Applications Pending	100
21	Zonewise information on Overloaded Feeders	107
22	Zonewise List of Defaulting Amount	113
24	Backing Down and No Demand Data for Thermal Plants	118
25	CERC Order on Approval of Tariff for Badarpur Thermal Power Station	121

OTR-I (V)

DD/AR-I

DD/AR-II

AR-I

ਵਿਸ਼ਾ :

ਪੰਜਾਬ ਰਾਜ ਬਿਜਲੀ ਬੋਰਡ
ਦਫਤਰ ਸਕੱਤਰ (ਬੋਰਡ ਭਾਗ)

OTR-I

ਪੰਜਾਬ ਰਾਜ ਬਿਜਲੀ ਬੋਰਡ ਨੂੰ ਜਾਣੇ ਵਾਲੇ ਟਰਾਂਜਿਸ਼ਨ ਯੂਟਿਲਟੀ ਅਤੇ
ਨਾਇਕੀ ਦੇ ਤੌਰ ਤੇ ਕੰਮ ਕਰਨ ਦੀ ਨੋਟੀਫਿਕੇਸ਼ਨ

ਮੁਖ ਇੰਜੀਨੀਅਰ

ਡਾਇਰੀ ਨੰ: 2658

ਮਿਤੀ 16/10/07

ਕੀ ਗੁਪਤ ਇੰਜੀਨੀਅਰ/ਕਮਰਸ਼ੀਅਲ

ਪੰ:ਰਾ:ਬਿ:ਬੋ: ਪਟਿਆਲਾ ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਵੱਲ ਧਿਆਨ ਦੇਣ ਦੀ ਕ੍ਰਿਪਾਲਤਾ
ਕਰਨਗੇ।

ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਦੇ ਸਬੰਧ ਵਿਚ
ਪੰਜਾਬ ਰਾਜ ਬਿਜਲੀ ਬੋਰਡ (ਉਰਜਾ ਨਿਯੰਤਰਣ) ਦੀ ਸ਼ਾਖਾ ਤੋਂ
ਪ੍ਰਾਪਤ ਪੱਤਰ ਨੰਬਰ 136/21.53 (P.R.) 10.50 ਮਿਤੀ
11.10.2007 ਉਨ੍ਹਾਂ ਨੂੰ ਸੂਚਨਾ ਅਤੇ ਲੋੜੀਂਦੀ ਕਾਰਵਾਈ ਕਰਨ ਹਿੱਤ
ਭੇਜਿਆ ਜਾਂਦਾ ਹੈ।

ਸੁਪਰਡੈਂਟ ਬੋਰਡ

ਪੰ:ਰਾ:ਬਿ:ਬ ਪਟਿਆਲਾ

ਨੱਥੀ/ਉਪਰੋਕਤ ਅਨੁਸਾਰ

ਵੱਲ

ਗੁਪਤ ਇੰਜੀਨੀਅਰ/ਕਮਰਸ਼ੀਅਲ
ਪੰ:ਰਾ:ਬਿ:ਬੋ:ਪਟਿਆਲਾ

ਗੈ.ਸ.ਪੰ.ਨੰ: 3383 ਬੀਡੀ ਜੀ - 2612:V0E-4
ਮਿਤੀ 15/10/07

ਜੀ.ਐੱਸ.: ਚੀਫ ਆਈ.ਐੱਸ. ਅਤੇ ਵੈਲਫੇਅਰ, ਪੰ:ਰਾ. ਬਿ. ਬੋ., ਪਟਿਆਲਾ ਅਤੇ
ਕਾਪੀ ਨੋਟੀਫਿਕੇਸ਼ਨ।

GOVERNMENT OF PUNJAB
DEPARTMENT OF POWER
(Energy Branch)

NOTIFICATION

The 7 October, 2008

1367
10/10/08

No. 1367/07-EB (PR) / 1048 -In exercise of the powers conferred by clause (a) of Section 12 of the Electricity Act, 2003 (Central Act 36 of 2003) and all other powers enabling him in that behalf, the Governor of Punjab is pleased to authorize the Punjab State Electricity Board to continue to function as the State Transmission Utility and a Licensee for a further period up to 30.11.2008. This issues with the concurrence of Government of India. Issued vide their letter No. 25/13/2004-R&R, dated 6th October, 2008

SURESH KUMAR
Principal Secretary to Govt. of Punjab,
Department of Power.

Post No. No. 1367/07-EB (PR) / 1050 Dated: October 2008

A copy is forwarded to the following for information and necessary action

- Chairman Punjab State Electricity Regulatory Commission, Chandigarh
- Chairman Punjab State Electricity Board, Patiala

[Signature]
Special Secretary Power

Post No. No. 1367/07-EB (PR) / Dated: October 2008

A copy is forwarded to the Controller, Printing and Stationary Punjab, Chandigarh with the request that the Notification may kindly be published in the Punjab Government ordinary Gazette and to send 50 spare copies thereof for official use

[Signature]
Special Secretary Power

Post No. No. 1367/07-EB (PR) / Dated: October 2008

A copy is forwarded to the Under Secretary to Government of India, Ministry of Power, Shram Shakti Bhavan, Rafi Marg, New Delhi with reference to his office letter No. 13/2004 R&R dated 6th October, 2008 for information.

[Signature]
Special Secretary Power

Chaturvedi

[Signature]
Sd/-

[Signature]
Sd/-

Road Map for next 5 years for reduction of AT&C Losses in PSEB

Sr. No	Activity to be undertaken	Scope of work	Total cost Rs. In Crores	Annual Plan Rs. In Crores				
				2007-08	08-09	09-10	10-11	11-12
1	Addition of new electrical network with HVDS	New electrical network shall be conforming to such design which would ensure practical zero theft and less LT losses which is possible with HVDS only. To achieve this following action plan will be implemented.	525 (Detailed calculation on Annx.'A' attached)	105	105	105	105	105
		a) All new AP connections w.e.f 1.10.06 shall be released under HVDS only by providing individual small rating DTs for each connection.	250(Detailed calculation on Annx.'B' attached)	50	50	50	50	50
		b) For MS connection above load of 50 KW shall be released with LT metering at 11 KV only by providing independent 63/100/200KVA DTs.	75(Detailed calculation on Annx.'C' attached)	15	15	15	15	15
		c) For industrial load below 50 KW, connections shall be released with LT metering by installing	540(Detailed calculation on Annx.'D' attached)	108	108	108	108	108

		independent 25 KVA or 63 KVA transformer with Zero LT & meter installed on MCB or pillar box on the pole. d) All DS /NRS /SP new connections with load more than 10 KW shall be released on LT by providing independent transformer of 6.3/10/16/25KVA or higher capacity for each connection with zero LT by providing metering in pillar boxes or in MCB /CT chamber on poles. e) All DS & NRS connections for load less than 10 KW, single phase connection shall be released on LT by providing meters in pillar boxes or MCB on pole or MCB on outer wall as per location. f) All SIS & deposit works shall be prepared /sanctioned/execute d with the objective of Zero LT & meter in pillar boxes/ MCB on pole /MCBs on outer wall of consumers	60(Detailed calculation on Annx.'E' attached)	12	12	12	12	12
			50	10	10	10	10	10
2.	HVDS for 11KV	All 9.30 lac AP consumers in PSEB	2387(Detailed calculation	700	700	700	287	-

	feeders exclusively feeding T/Well load	shall be converted on HVDS in next 3 to 4 years through outsourcing on turn key basis. This will be conversion of LT system to HT with Zero LT and installing small capacity DTs of 6.3/10/16/25KV matching with the load of pump set.	on Annx. F attached)					
3.	Capacitors on AP consumers	All 9.30 lac AP consumers in PSEB shall be provided with LT capacitors of adequate capacity through outsourcing on Turn Key and BOO basis.	125	25	25	25	25	25
4.	HVDS in GSC /ISC	Transformers to be spared from AP with HVDS shall be installed in residential colonies, shopping centres, Malls, Industrial Estates, Focal Points with cluster of 4/5 to 8/10 houses depending on load and meters shall be installed in pillar boxes to ensure Zero LT and no commercial loss/theft. This activity will be outsourced on labour basis as material would be available with the Board.	25	5	5	5	5	5
5.	Replacement of Single	Board has 5 lac Single Phase and	150(Detailed calculation	75	75	-	-	-

- 7

25

5

	Phase & Poly Phase Electro-Mechanical Meters with Static Meters.	20000 Poly Phase Electro-Mechanical Meters which are still left to be replaced with Electronic Meters. Board has planned 100% replacement of these meters within 2 years. All the new Electronic meters shall be installed in pillar boxes/MCB on pole/outer wall of the consumer through outsourcing. Board has also planned to install display units in the consumer's premises for all 48 lac DS & 2.6 lac NRS connections.	on Annx. G' attached)					
6.	Earthing	Earthing of all Grid Sub Stations and Distribution Transformers will be strengthened to bring the earth resistance to the lowest level by using Bentonite Powder.	85(Detailed calculation on Annx. 'H' attached)	35	50	-	-	-
7.	DT metering	For effective energy accounting & auditing DT meters shall be provided on Urban DTs in the First Phase and DTs catering GSC /ISC load in rural area in the 2nd phase.	Urban:80 Rural:20 (Detailed calculation on Annx. 'I' attached)	20	30	30	-	-
8.	Creation of Switching	PSEB has planned to create switching	.50	10	10	10	10	10

	Station, Ring Main Units & installation of 12 KV Auto Reclosers and Line Sectionalisers	stations fed from two independent sources of supply to establish ring main units and to install 12KV Auto Reclosers and line sectionalisers to improve system reliability for Urban Consumers pertaining to big cities of Punjab viz Amritsar, Jalandhar, Ludhiana Patiala & Bhatinda in the first phase and other Towns in the second phase.						
9.	IT in Distribution	Following activities by way of introduction of IT in Distribution shall be covered in the first order of priority ensuring their seamless integration with the main project at a later date : i) Spot Billing through hand held computers. ii) Creation of centralized 24 Hrs. call centres for the entire State to handle supply failure complaints. iii) Consumer indexing & creation of consumer data bank without GIS /GPS in the first instance. iv) Creation of	425	100	20 0	12 5	-	-

		customer care centres at each Sub Divisional Level office to handle following activities: a) New connections & enhancement of load. b) Wrong billing complaints. c) Faulty meter complaints d) Faulty transformers complaints e) Change of category/ownership etc.,etc. v) Remote metering of LS & BS consumers vi) Remote metering of all Agricultural Supply Feeders.						
10	Installation of capacitors	a) All 11 KV feeders in Urban & Rural areas shall be provided with 600/450Kvar 11 KV Line Capacitors to compensate the reactive load for the improvement of Power factor. b) Adequate addition of capacitors at all Grid Sub Stations for improving Power Factor & Load Control Measures.	25(Detailed calculation on Annx.'I' attached)	5	5	5	5	5
11	De-loading of overloaded	All the over loaded and over regulated 11 KV feeders are	50	10	10	10	10	10

	/over regulated feeders.	planned to be de-loaded by way of bifurcation or by augmenting of existing conductor with higher size.						
12	Rectification of defective Sub Station equipment	All obsolete equipments installed at Grid Sub Stations such as Breakers, Batteries, CTs/PTs etc., etc. are to be replaced so that sluggish equipment is changed in order to reduce the outages.	50	10	10	10	10	10
13	Protection of distribution transformers	All the distribution transformers installed in the Urban area are planned to be provided with proper LT protection by use of MCBs/Switches.	25(Detailed calculation on Annx.'K' attached)	5	5	5	5	5
		Total	4997					

* The Expenditure not incurred in any of the year shall be carry forward to the ensuing year



Office of Chief Engineer/ HRD

Punjab State Electricity Board, Patiala

Email: ce-hrd@psebindia.org, principal-hrd@psebindia.org

To

Chief Engineer/Commercial,
PSEB, Patiala.

Memo No. 15346

Dated 5.12.08

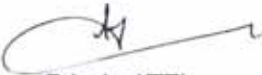
Subject:- ARR. 5

Please refer discussions in the meeting held today i.e. 5.12.2008 which was attended by Director/Energy Conservation, PSEB, Patiala on behalf of HRD Organization.

The information in respect of HRD Organization is as under:-

- 1) **PSEB Training Policy:**
Copy of the PSEB approved Training Policy is attached herewith.
- 2) **Expenditure on trainings during the year 2008-09**
Total expenditure on training during the year 2008-09 incurred/to be incurred is Rs.2.00 Crore approximately.
- 3) **Expenditure planned to be incurred during the year 2009-10.**
Expenditure for training planned during the year 2009-10 is Rs.10.00 Crore approximately.
- 4) **Man Power Study by M/s PWC:**
The status report is attached herewith.
- 5) **Man power Study by M/s CRISIL:**
The status report is attached herewith.

DA/As above.


Principal/TTI,
PSEB, Patiala.

**PUNJAB STATE ELECTRICITY BOARD
(HRD ORGANIZATION)**

Office order No 309 / DT-134

Dated... 16.8.2007

In compliance to "National Training policy for the Power Sector", correspondence held by Ministry of Power, Govt. of India, New Delhi in this regard from time to time and **with an aim to turn around PSEB a pro-public, modern, progressive and profit making organization**, it has been decided to lay a "Training Policy and Implementation Plan" for all officers and employees of Punjab State Electricity Board on following lines :-

Secy

1. PSEB's COMMITMENT FOR IMPLEMENTING "NATIONAL TRAINING POLICY FOR THE POWER SECTOR"

The objectives of the PSEB's Training Policy are to:

- Make learning one of the core values of the organization
- Optimum utilisation of the existing resource pool of knowledge with in the establishment for the growth of organisation
- Ensure value addition through training to the overall business process
- Institutionalize learning opportunities that supplement work experience
- Integrate organizational and individual developmental needs
- Enable employees to keep abreast with the latest knowledge and skills and enable them to undertake current and future responsibilities in a more effective manner.
- Provide linkages between the different functionaries of training activity
- Provide linkages of training activity with overall Human Resource function
- To develop Software Enabled Training Management Implementation System (TMIS).

PSEB's commitment for implementing 'National Training Policy' for the Power Sector is as under:-

- i) Like every **successful organisation** in private and public sector **PSEB should have a very strict training policy** and establish a Staff Training College to train its managers.
- ii) PSEB having about 2107 executives and 64510 deployed employees **need to follow the National Training Policy** made by the Ministry of Power to achieve higher efficiency in its working.
- iii) The Staff Training College may be called "PSEB Management Development Institute" and located at Shakti Vihar on PSEB's vacant land. **This Institute shall be developed and run on the lines of Power Management Institute of NTPC at Noida.**
- iv) This Institute shall use the latest state of art technology and aim to **become a prestigious management Institute through excellent working and tie ups with national and International training/ management Institutes.** This training Institute shall be able to serve the power sector training needs of North West India. Through the proposed tie ups with management Institutes, the PSEB MDI shall be able to run MBA and IT courses for outsiders as well.

LE/HRD

4541
Sd/-
[Signature]

2. MANDATORY TRAINING

Secy /
Services-
I&II
Director /
Personnel

To ensure that in-service training becomes a part of career plan in PSEB, training shall be mandatory and the grant of promotional scales (9/16/23 years step ups) of all officers and employees shall be linked to completion of minimum 5 days of training per year in each band (e.g 45 days training as eligibility for grant of first step up, 35 days training as eligibility for grant of each of the second & third step ups).

3. NOMINATION FOR TRAINING & EDUCATION PROGRAMMES

All HODs
&
CE/HRD

- HRD head quarter in Patiala under CE-HRD shall be the central authority for all training related functions of HRD. At other levels the responsibility for planning, co-ordination, execution, monitoring and evaluation of training activities shall have shared responsibilities of following officers –
 - Nodal Officers
 - *Distribution*
 - Zone Level – SE/Dy CE (HQ)
 - Circle Level – Sr. XEN (Technical)
 - Division Level – AEE/AE (Stationed at Div HQ)
 - *Other Organisations*
 - SE/Dy CE (HQ) or equivalent at Zonal Level
 - *Thermal Plants*
 - SE Training in Thermal Plants
 - All nodal officers shall functionally report to CE/HRD and administratively shall report to their CE Incharge.
 - The relevant column relating to training of subordinates in the ACR of all above Nodal Officer to evaluate their contributions for Training Related activities which shall be assessed by CE/HRD and communicated separately to Secretary / Secret for overall evaluation based on maximum marks.
 - HRD Co-ordinators (For Contact At Zonal Level):
 - Dy Directors at TTCs Amritsar (Border), Jalandhar / Lalton Kalan (North & Central), Bathinda (West) & Principal / TTI (South). Principal / TTI shall also act as DDO (as at present) and 'Distribution Training Manager'
 - PSEB HRD would send to Zonal Nodal Officer (For Training) – SE/Dy CE attached with CE/EIC of respective zone and existing Deputy Directors TTCs (HRD Co-ordinators) schedules for the next programmes planned for employees. Selection of employees for the scheduled training program shall be the joint responsibility of the HRD and CE/EIC of respective zone. Such decisions shall be binding on all employees.
 - PSEB HRD along with nodal officers will ensure that employees are normally nominated to programmes related to training needs identified.
 - An employee deputed for attending any of the training programmes included in the training calendar shall forward his/her request for nomination, through the reporting officer, at least three weeks before the commencement of the programme.
 - Decision on imparting training to employees who are due for retirement (HODs – 3 Months, Officers – 6 Months and Officials – 1 Year) shall be taken only after taking in account the nature of training, opportunity for the trainee to extend the benefits of the training to the job at hand. Such deliberation and decision will come in the purview of HRD organisation and decided with the approval of Members-In-Charge.
 - Employees may generally be considered for nomination to training

programmes only in the areas identified in the Training Needs Analysis and for training programmes being conducted during the year. The training need identification shall be done by their Reporting Officers in case of 'Non-Executives'. In case of 'Executives' Training need identification shall be done by executive themselves concerned in consultation with their Reporting Officers.

- As per rules already prevalent, the authorities competent to approve nominations for external training programmes shall be concerned Member-in-charge of the organization. Immediate reporting officer will send names for the training to Chief Engineer/HOD of the respective department, which further will be sent to CE-HRD for obtaining final approval of concerned Member. If training is common for more than one wing then the Chairman shall be the competent authority for final approval. In case of abroad programs Chairman shall be the competent authority.
- With a view to achieve the Training Target of average of 5 days of training in a training year for each employee, HRD, along with the nodal officers /TTCs shall periodically prepare a list of employees who have not attended any training programme or have not yet completed an average of 5 days of training. Nominations shall be generally based on this list. The list shall be made available to concerned employees and the regional coordinators.
- Officers with outstanding academic and professional history shall be nominated for various higher education courses.
- The induction level training of 2 months duration currently being conducted at TTI & TTCs shall continue as earlier for new induction / promotes only. All other in service staff shall undertake 5 days field training programme.

4. TRAINING PLAN

The Training Plan for rolling out the field level trainings at Circle levels shall be as under :

A The Training Plan for distribution organization shall be as follows:-

All HODs
&
CE-HRD

- There are around 500 subdivisions, 105 divisions and 20 circles in the distribution organisation of PSEB.
- The training will be conducted at *Circle level* in separate batches of 55-60 each for technical and 13 to 15 for non-technical staff. The training shall be imparted by 4 technical and 1 non-technical trainers per circle on regular basis. Thus whole of DS organisation shall require 80 technical and 20 non-technical full time trainers. *These trainers shall out of retired Officers/Officials selected for imparting training*
- The trainers shall be imparting training during 35 weeks in a year (*No training during paddy season*). Administratively trainers will report to Sr. XEN Tech of his Circle and functionally to Principal TTI designated as Distribution Training Manager / Dy. Director TTC of the concerned zone during these 35 weeks of the year.
- Considering weekly program per batch 35 batches comprising 55 to 60 trainees each will be trained per circle. Therefore approximately $35 \times 20 \times 55/60 = 38500/42,000$ technical officials (including supervisors) shall be trained annually. Similarly $35 \times 20 \times 14 = 9,800$ non-technical officials (including supervisors) shall be trained annually. This shall cover approximately 90% of the sanctioned staff strength of DS organisation.
- Training shall be conducted 5 days per week.
- *Although the training shall be conducted for 35 weeks in a year (no training*

during paddy season) yet it is workable as only 2.4 technical and 0.6 non-technical people per subdivision shall have to be spared for training per batch.

- **Officers / officials selected as trainers shall be dedicated for the training work** for 35 weeks in a year. The trainers shall be retired Officers/Officials (JE to Sr. Xen and higher level of PSEB). 80 Technical (JE/AEE and higher level) and 20 Non Technical (DA/RA and higher level) trainers out of retired Officers / Officials applicants shall be identified.
- **Infrastructure Provisions** – Present infrastructure at circle level is not adequate for giving training. Sr XEN (Tech) is here by empowered to hire the classroom, furniture, refreshments, meals, stationary, training material to the trainee, trainers & organisers for the training sessions. For this purpose Rs. 60/- per head per day (for one lunch and two teas) shall be allowed as food expenses and training facilities shall be paid as per actuals.
- **Training Stipend** – The retired Officers/Officials selected as Trainers shall be paid an honorarium on monthly basis for which Chairman shall be authorised to approve being the Member-in-Charge of HRD. Such trainers can be selected through an entrance test after receiving their nominations from EIC/CE concerned following an advertisement to this effect in the newspapers.
- **Responsibility Center** - The successful conduct of in-service training shall be responsibility of SE/HQ in his zone and Sr. XEN/Tech in his circle. For interest shown by SE Distribution & Sr. XEN/Tech concerned in training activities a column related to training in the ACR and shall be assessed by CE/HRD & conveyed to Secretary / Secret separately.
- Proposed training can commence simultaneously in all Zones (target 50% during 2007-08 and 100% onwards).
- **Training of Trainers** – For Distribution wing, in total 80 technical and 20 Non-technical trainers shall be trained in batches. These trainers shall be trained in 5 batches (20 trainees per batch) under a dedicated training programme customised as per the needs of PSEB, from the Institutes such as Engineering Staff College of India, Reliance Energy Management Institute, Mumbai or any other appropriate institute of similar or greater competence. Training of trainers shall be for a minimum of 5 to 10 days.
- **Time Lines – (Day Zero Date of Acceptance of the Training Plan)**

S. No.	Activity	Time Line
1	Identification of Nodal Officers	2 weeks from Day Zero
2	Identification of Trainers	5 weeks from Day Zero
3	Training of Trainers	11 weeks from Day Zero
4	Nomination For Trainees & Formation of Batches	11 weeks from Day Zero
5	Schedule of Field Level Training For Various Batches	12 weeks from Day Zero
6	Commencement of Field Level Training	In 13th week from Day Zero
7	Evaluation of Field Level Training	Monthly after the commencement of field level training

B Similar training plan for Transmission, Generation & other organisations shall be implemented

5. HONORARIUM FOR FACULTY & FOOD CHARGES

Honorarium for faculty, both internal and external, for training programmes would be regulated as per the rules on Honorarium rates and other training

related expenses given as under:-

HONORARIUM RATE FOR FACULTY

SECRETARY
Secretary
Personnel
&
CAO

Sr. No.	Level	Rate	Travel & Incidentals	Board & Lodge
1)	External Faculty			
a)	Level-I Professors/S R Academics / Sr Consultants / Present & Former Directors, Members on the Board/EDs, GMs of PSUs / Ir-in-Chief /CEs in Board, Govt /Joint Secretary & above in Govt. and Equivalent	-Rs. 1500/- per session of 1.5 hrs or - Upto Rs. 7500/- per faculty per day	As per actuals (Air Economy class; Train: IInd AC/Executive Chair Car; Road: Taxi) OR Rs. 6.00 per km for other modes of transport including travel by own car OR Arranged by PSEB	As per actuals (upto 4 Star facility) OR Arranged by PSEB
b)	Level-II Associate Professors, Readers/ DGMs or above (below GM) of PSUs / Dy CEs, SEs of Board & Govt. and equivalent	- Rs. 900/- per session of 1.5 hrs or - Upto Rs. 4500/- per faculty per day	-do-	-do-
c)	Level-III Faculty below Level- II (Executives)	- Rs. 600/- per session of 1.5 hrs or -Upto Rs. 3000/- per faculty per day	As per actuals (Air: Economy class; Train: IInd AC/AC Chair Car; Road: Taxi) OR Rs. 6.00 per km for other modes of transport including travel by own car OR arranged by PSEB	As per actuals (upto 3 Star facility) OR arranged by PSEB
d)	Level-IV Faculty below Level- II (Non- Executives)	- Rs. 400/- per session of 1.5 hrs or - Upto Rs. 2000/- per faculty per day	As per PSEB rules	As per actuals (Economy Hotel) OR arranged by PSEB
2)	Internal Faculty			
a)	Board Members / Ir-in-Chief /	Rs. 600/- per session of 1.5 hrs	As per PSEB rules	As per PSEB rules

	CE's & equivalent			
b)	Dy. CE /SE /ASE /Sr.Xen /CAO / Dy CAO & equivalent	Rs. 500/- per session of 1.5 hrs	-do-	-do-
c)	AE/AEE & equivalent	Rs. 300/- per session of 1.5 hrs	-do-	-do-
d)	Non-Executives	Rs. 200/- per session of 1.5 hrs	-do-	-do-
3)	Package Programs	- Upto Rs. 15000/- per day	As per actuals (Air: Economy class, Train: 1Ind AC/ Executive Chair Car Road: Taxi) OR Rs. 6.00 per km for other modes of transport including travel by own car	As per actuals (upto 4 Star facility) OR arranged by PSEB
4)	Residential Program	- Upto Rs. 20,000/- per participant for a domestic program of 5 days - As per actuals for Abroad	As per actuals/As per PSEB rules	-NA-

1) The above mentioned rates are based on survey done at PMI, Noida, PGCIL, Gurgaon, NPTI Faridabad, HRD foundation, New Delhi and discussions with various freelancers. It is observed that these will be competitive rates to attract quality trainers for PSEB.

2) Package programs are one, which will cater to the specific needs of PSEB and help in implementing the concepts during the program through on-site training interventions at PSEB campus.

3) Wherever, it is not possible to arrange the program within the range of above mentioned rates, Competent Authority shall sanction such programs considering core competence of the training partner, needs of PSEB etc.

4) For implementing of program, meet the travel requirements of visiting faculty, outsourcing of vehicles as per the applicable rates of PSEB, Principal/TTI shall raise the requisition & make payments directly from allocated funds in his capacity as DDO for HRD Organisation.

5) The above mentioned rates will be reviewed periodically on Bi-annual basis.

6. SHARING OF LEARNINGS & FORMATION OF CORE & IMPLEMENTATION GROUPS

Employees who have attended training programmes shall normally share their learning with other employees in forums called 'Core Group' created for these sharings. PSEB HRD Organization would work towards creating these forums of knowledge sharing. Various Core Groups in recent past have been constituted in PSEB to follow up their learnings during training programs attended, with specific Action Plans. This practice has been widely appreciated and it shall be a continued practice. These Core Groups shall be supported by Implementation Groups to be framed in field on zonal level for

All HODs
and
CLERKS

on ground implementation of such Action Plans. The Quality Circle Model being implemented in NTPC & BHEL at shop floor level will be emulated in PSEB in due course of time.

All HODs

7. REGULATION OF ENTITLEMENTS

& CE/HRD

Secy /
General

Entitlement of employees on Training relating to TA/DA and outdoor activity expenditure regarding transportation/accommodation shall be as per PSEB Rules. The food expenditure will be at the following rates which are at par with the leading Training Institutes like PMI Noida, PGCIL Gurgaon and ESCI Hyderabad.

CAO

1) Food Expenditure (For Internal Programs)

Sr. No.	Type of Program	Rate
1)	Non-Residential	Upto Rs. 110/- per day per participant (includes during Conference morning tea with light snacks, lunch evening tea with cookies)
2)	Residential	Upto Rs. 200/- per day per participant (includes bed tea, newspaper, during conference morning tea with light snacks, lunch, evening tea with cookies and dinner)

2) Outdoor Activities (For Groups during Internal Programs)

Sr. No.	Type of Activity	Mode	Rate
1)	Transportation Outdoor Activity/Plant Visit/Site visit for upto two days per trip per program	- AC 2x2 Coach/ Bus for Group - AC Car for Faculty	As per PSEB Rules and at PSEB Contract Rates
2)	Accommodation Stay during Outdoor activity/Plant visit/Site visit at locations other than the original Program location	- Hotel	As per PSEB Rules

8. INCENTIVE SCHEME

All HODs/

CE/HRD

&

CAO

DDOs

To attract persons of high caliber in training function, training allowance @ 15% of basic salary on the pattern of Govt. of India training establishments shall be allowed to PSEB Officers/officials engaged in HRD Organisation (reference Deptt. of Personnel & Training, Govt. of India Memo No.11012/3/97-TRG dated 18.3.1998-Annexure-I and Ministry of Finance No.105/1/2004-1C dated 1.3.2004 -Annexure-II) while special pay being paid to the Officers/officials in the HRD Organisation of PSEB shall be withdrawn.

9. INCORPORATING SYSTEM DRIVEN PRACTICES:

Secretary/

CE/HRD

Training Policy of PSEB has been formulated keeping in perspective the goal of **establishing the training organization of PSEB as a system driven organization rather than a people driven organization**. While it is important to have such a structure and practices that enables PSEB to become a learning organization **but at the same time it is equally important that such structure must be in place for the effective organization of PSEB**, since training function of PSEB's HRD organization can not act in isolation but is interlinked with the rest of the organization. Thus the need to have an

efficient system driven practices is equally necessary for the whole organization and can not be restricted for the training function only.

10. TRAINING CALENDAR

CE/HRD

The training Calendar along with Programme Content & Empanelment List of faculty will be dynamic and be changed every year. Thus PSEB HRD shall draw the training Calendar along with Programme Content & Empanelment List of faculty every year in January and also update it from time to time during the year as per requirement for the approval of the Member- In-charge.

11. BUDGET

Advisor/
Finance

0.75% of the PSEB salary budget shall be allocated during 2007-08 for all activities of HRD (including construction of PSEB Management Development Institute at Shakti Vihar which stands already approved) and depending upon the performance of Training Plan Implementation by PSEB HRD, the budget shall be enhanced in the coming financial years.

The money spent on training shall be treated as investment and the human resource shall be considered as a corporate asset.

12. WAY FORWARD

Besides trainings, HRD Organization shall be strengthened in some other areas on the pattern of NTPC/SAIL as indicated below:-

(i) Strengthening Training Function

CE/HRD

- Creation of Training Infrastructure at TTI & TTCs and development of Infrastructure Management Process.
- Communication plan to circulate/communicate the Training Policy for PSEB.
- Development of TMIS.
- Development of Performance Measurement & Incentive System for Trainers & Training Institution.
- Development of Internal Trainers from Base Level Program to Advanced Programs as well as Project Teams.

(ii) Strengthening HRD Function

New positions under HRD Organization Structure for Director/Industrial Engineering (IE), Director/Management Development (MD), Organizational Development (OD) and Director/Personnel & Reforms (PPR).

Secretary
&

CE/HRD

- In the stage wise process of strengthening HRD function two more positions need to be created under CE/HRD i.e. Director/IE, Director/MD, OD and Director/PPR. As the new recruitment for senior positions is totally stopped by PSEB therefore, these positions can be filled on deputation/contract basis for an initial period of 3-5 years from organizations like NTPC, SAIL or any other private organization. The other option could be to have a full time consultant/advisor & then various tasks can be performed as a team combination of consultant & HRD Organization.

Secretary

iii) Small Group Activities (SGA) - a step towards Organization Development

CEs/
Thermal
Plants

All HODs

To establish participative approach, team work, pro-active initiatives, the SGA is very useful approach used at all work places in any type of organization. The 'Quality Circle' is a very widely used & appreciated tool

CE/HRD

as a part of SGA. The same will be initiated in PSEB and the starting point may be Generation Units followed by other areas.

13. NEXT LEVEL COMPETENCY TRAINING

CE/HRD

&

All HODs

For Sr.Xens, S.Es. and C.Es PSEB HRD shall evolve 'Next Level Competency Training Programme' in collaboration with a leading Management Institute of national repute on the pattern of the Indian Administrative Services (they have to undergo eight weeks training in an IIM including a capsule of training abroad between 7th to 9th and 14th to 16th year of service and four weeks training in 26th to 28th year) which shall be mandatory to be undergone by the PSEB officers in a band of 2 years of promotion (one year before and one year after) as Sr.Xen, S.E. and C.E.

14. UNIFIED TRAINING FUNCTION

Secretary

&

CE/HRD

Post PSEB un-bundling, the training function shall be vested in the Holding Company to ensure smooth implementation of PSEB Training Policy/Plan.

Implementation of this office order shall be the responsibility of respective officers indicated in the margin.

This issues with the approval of the Full Board.

Director / HRD-II,
PSEB, Patiala.

Endst. No...6911/7610./ HRD-515 Vol-IV

Dated: 16.08.2007

Copy of the above is forwarded to the following officers for further necessary action please:-

1. Secretary, Ministry of Power, Govt. of India, Shram Shakti Bhawan, New Delhi-110001.
2. Chairman, Central Electricity Authority, HRD wing, Sewa Bhawan, R.K.Puram, New Delhi -110066.
3. DGP V&S, PSEB, Patiala
4. All General Managers/Engineer-In-Chief/Chief Engineers in PSEB
5. Advisor/Finance, PSEB, Patiala
6. Chief /IR & W, PSEB, Patiala
7. CCC&R, PSEB, Patiala
8. Chief Accounts Officers in PSEB
9. Chief Auditor, PSEB, Patiala.
10. RAO, PSEB, Patiala
11. All Director/SEs in PSEB
12. All Sr. Executive Engineers in PSEB
13. All Dy. CAO's/ Dy CAs in PSEB
14. All Jt.Secys. in PSEB.
15. Dy. Secretary to Chairman, PSEB, Patiala
16. Sr. Private Secy. to Member/Administration.
17. Sr. Private Secy. to Member/F&A, PSEB, Patiala
18. Sr. Private Secy. to Member/Generation, PSEB, Patiala
19. Sr. Private Secy to Member/Distribution, PSEB, Patiala
20. Sr. Private Secy to Member/Transmission, PSEB, Patiala
21. Sr. Private Secy. to Secretary, PSEB, Patiala

Director / HRD-II,
PSEB, Patiala.

1/10/97-1

No. 11012/J/97-TRG.
MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
DEPARTMENT OF PERSONNEL AND TRAINING
(Training Division)

Block No. IV, 2nd Floor,
Old J.N.U. Campus,
New Mehrauli Road,
NEW DELHI - 110 067.

Dated : MARCH 18, 1998.

OFFICE MEMORANDUM

Subject: Improvement in service conditions of faculty members / training institutions - Revision of rate of Training Allowance - Recommendation of the FIFTH CENTRAL PAY COMMISSION -

The undersigned is directed to say that in terms of this Department Office Memorandum No. 12017/2/86-TRG., dated the 9th July, 1992, the training Allowance at the rate of 15% of the basic pay is granted to employees of the Government who join training institutions meant for training Government officials, as faculty members, other than, as permanent faculty members. Consequent upon the decision taken by the Government on the recommendation contained in para 106.21 of the Fifth Central Pay Commission, the President is pleased to decide that training allowance, wherever it is admissible, shall be allowed at the rate of 15% of the basic pay in the revised scales of pay. This allowance shall not be granted to the permanent faculty members of the training institutes. The trainers who are granted training allowance shall not be entitled to special pay/deputation (duty) allowance or CDTA.

2. These orders shall take effect from the 1st August, 1997.

3. In so far as the application of these orders to the Indian Audit and Accounts Department is concerned, these orders issue in consultation with the Comptroller and Auditor General of India.

C. Prasad
(KALPANA AMAR)
DEPUTY SECRETARY TO THE GOVERNMENT OF INDIA.

To

All Ministries/Departments of Government of India
as per STANDARD LIST;

Contd.....p.2/-

NEW DELHI-110067, MARCH 18, 1990.

Copy also forwarded to :-

- 1) The Comptroller and Auditor General of India and all States under his control (with 400 spare copies)
- 2) The Comptroller General of Accounts / Controller of Accounts, Ministry of Finance.
- 3) Secretariat to Union Public Service Commission/Supreme Court of India/Election Commission/Lok Sabha Secretariat/Rajya Sabha Secretariat/Cabinet Secretariat/Central Vigilance Commission/President's Secretariat/Vice-President's Secretariat/Prime Minister's Office/Planning Commission.
- 4) Department of Personnel and Training (AIS Division)/JCA/Administration Section.
- 5) Additional Secretary (Union Territories), Ministry of Home Affairs.
- 6) All State Governments and Union Territories.
- 7) Secretary, National Council (Staff Side), 13-C, Feroz Shah Road, New Delhi-110 002.
- 8) All Members of the Staff Side of the National Council of JCH / Departmental Council.
- 9) All officers / sections of the Department of Personnel and Training / Department of Administrative Reforms and Public Grievances / Department of Pension and Pensioners' Welfare.
- 10) Ministry of Finance, Department of Expenditure.
- 11) All the Central/State Training Institutes.

- G. Arun
(KALPANA AMAR)
DEPUTY SECRETARY TO THE GOVERNMENT OF INDIA.

F.No.105/1/2004-1C
Government of India
Ministry of Finance
Department of Expenditure

New Delhi, dated the 1st March, 2004

OFFICE MEMORANDUM

Subject: Merger of 50% of Dearness Allowance/Dearness Relief with basis pay/pension to Central Government employees/pensioners w.e.f. 1.4.2004.

The Fifth CPC in para 105.11 of their Report had recommended that 'DA should be converted into Dearness Pay each time the CPI increases by 50% over the base index used by the last Pay Commission.'

2. The recommendation of Fifth CPC has been considered and the President is pleased to decide that, with effect from 1.4.2004, DA equal to 50% of the existing basic pay shall be merged with the basic pay and shown distinctly as Dearness Pay (DP) which would be counted for purposes like payment of allowances, transfer grant, retirement benefits, contribution of GPF, Licence Fee, monthly contribution for CGHS, various advances, etc. The entitlements for LTC, TA/DA while on tour and transfer and government accommodation shall, however, continue to be governed on the basis of the basic pay alone without taking into account Dearness Pay. In case of existing pensioners, Dearness Relief equal to 50% of the present pension will w.e.f. 1.4.2004, be merged with pension and shown distinctly as Dearness Pension. Dearness Allowance/Dearness Relief converted into Dearness Pay/Dearness Pension respectively would be deducted from the existing rate of Dearness Allowance/Dearness Relief.
3. To ensure that pensioners retiring between 1.4.2004 to 31.12.2005 do not face any loss in fixation of pension, as a special dispensation in their case, DA equal to 50% of the basic pay would be treated as basic pay for purposes of computation of pension in respect of received by them prior to 1.4.2004. Consequently, element of dearness pension will exist only for pensioners retired/retiring from Government or India upto 31.3.2004.
4. Insofar as the persons serving in the Indian Audit & Accounts Department are concerned, these orders issue after consultation with the Comptroller & Auditor General of India.

Sd/-

(SUSHAMA NATH)

Joint Secretary to the Government of India

To

All Ministries/Departments of the Government of India as per standard distribution list.
Copy (with usual number of spare copies) to C&AG, UPSC, etc. as per standard endorsement list.

*Our
recommendations*

106.18

We recommend

rates of Project Allowance

Basic Pay Range (revised)	Rates of Project Allowance per month in (Rs)
--------------------------------	--

Below Rs 3000	150
Rs 3000 - Rs 4499	300
Rs 4500 - Rs 5999	450
Rs 6000 - Rs 8999	600
Rs 9000 and above	750

TRAINING ALLOWANCE

Definition

106.19 To give an impetus to quality of training imparted to its employees, the Government of India instituted a Training Allowance in 1986. Training Allowance was given to all non-permanent faculty members, joining training institutions on deputation at the rate of 30% of their total emoluments. Guidelines were issued simultaneously for extending other facilities like preference in promotion and posting, LTC twice a year to children, housing etc. Initially the scheme was introduced in the training institutions meant for Group 'A' officers and later extended to other training institutes for Central Government employees as well.

Present Position

106.20 Consequent upon the revision of the pay scales on the recommendations of the Fourth CPC, the scheme was reviewed and this allowance was reduced from 30% of the total emoluments to 30% of the basic pay. In the context of resource crunch in 1991-92, the training allowance was again reviewed and its utility in attracting the talented people was discussed. While it was agreed that incentive in the form of Training Allowance was necessary, the rate was reduced from 30% to 15% of basic pay w.e.f. 9.7.92.

*Our
recommendations*

106.21 We observe that the arguments for improving training are as relevant today as they were earlier. Training institutions should be manned by capable persons drawn from, both government as well as educational institutions. To encourage such a trend and to ensure that the probationers are imparted the best possible training, we recommend the following:-

- i) Training Allowance should continue to be paid @ 15% of the basic pay. This allowance should henceforth be made admissible to all faculty members in all the training institutes including trainers on deputation from Universities and other academic institutions as well as trainers permanently employed in the training institutes. This allowance should be paid in addition to all the other allowances like the deputation duty allowance etc, which will continue to be drawn by the trainers when on deputation.
- ii) As far as possible, training institutions for Central Government

employees should be manned by people drawn from the relevant disciplines within government and educational institutions on deputation. Most of the posts in the various training institutes which have been encadred in a particular service should therefore be de-caded and selection made from a wider pool of eligible incumbents.

- (iii) The concept of a visiting faculty should be encouraged to tap the services of those eminent people who are otherwise unable to stay for long periods in the institutes.

RISK ALLOWANCE

Definition.

106.22 Risk allowance is granted at different rates to certain categories of Central government employees whose normal duties involve special risks.

Views expressed by the previous Commissions

106.23 The Second CPC recommended that certain unskilled staff employed in the Ministry of Defence and Railways, whose work was exceptionally heavy or whose normal duties involved special risk such as those of chemical process workers or those who handled explosives should be given a special pay of Rs.3 p.m. This allowance was also extended to sweepers working in underground sewers and in infectious hospitals. The Third CPC recommended grant of special pay at the rate of Rs. 10 p.m. to all categories of staff in receipt of Risk Allowance. A special pay of Rs. 10 was given to certain semi-skilled operatives working in the boiler house or in cold storage plants under the Delhi Milk Scheme. It was also felt that except in the case of unskilled categories, for whom special pay had already been recommended, it was not necessary to grant hazardous allowance to most of the other categories of staff. These categories were recruited primarily for the jobs which they manned and in such cases the proper course would be to take into account the element of hazard while fixing their scales of pay. The Third CPC recommended the appointment of a Committee to examine the feasibility of rationalising grant of such an allowance to various categories engaged in the work of a hazardous nature. In pursuance of the recommendation of the Third CPC, Government appointed a Committee to examine this issue. The Committee recommended the classification of the beneficiaries of Risk Allowance into four categories, namely, Semi-skilled workers, Skilled workers, Supervisors and certain Gazetted and non-gazetted officers in the Ordnance factories. The rates ranged from Rs. 15 to Rs. 100 per month. The Fourth CPC recommended that the need and adequacy for the grant of risk allowance to different categories of employees should be examined by a Committee appointed by the Government. In the meantime, the Commission recommended a 100% increase in the existing rates.

The present position

106.24 At present risk allowance is paid to all those engaged in duties involving greater hazards or whose health is liable to be adversely affected progressively over a long period of time because of the particular avocation. Sweepers/Safaiwalas engaged in cleaning of underground drains, sewer lines, those working in trenching grounds and infectious diseases hospitals are also paid risk

PUNJAB STATE ELECTRICITY BOARD
(HRD ORGANISATION)

Subject : Status Report of study by M/S CRISIL on Implementation of National Training Policy in PSEB .

CE/HRD Memorandum No.30 HRD- 515 dt. 11.12.2006 on the subject noted above on considered by Full Board in its 9/2006 meeting held on 26.12.2006 and a committee comprising Member/D, Member/F&A and Secretary was set up to examine the proposal and give recommendations to the Board.

1. As recommended by CRISIL minimum 5 days training per annum for officers is made mandatory in PSEB.
2. Honorarium for Faculty : Honorarium for faculty ,both internal and external would be regulated as per rules on honorarium rates and other Training related expenses .
3. Sharing of Learnings and formation of core and implementation groups:

Employees who have attended Training Programmes shall normally share their learning with other employees in forums called core group created for this sharing.

4. Incorporating System driven practices keeping in perspective the goal of establishing the Training organization of PSEB.


*Director / HRD-II
PSEB Patiala.

5/12/08

PUNJAB STATE ELECTRICITY BOARD
(HRD ORGANISATION)

Subject : Status Report of Staffing study by M/S PwC.

M/s Pwc has submitted the following reports :

1. Report on Generation Wing and its addendum: The report is under scrutiny and the recommendations are yet to be evolved.
2. Report on Transmission wing : The report has been circulated among all the wings of Transmission and their feedback has been communicated to M/s PwC.
3. Report on Distribution Wing : The report has been discussed by Member/D with all the Chief Engineers of Distribution wing and feedback given to M/s PwC.
4. Report on Secretariat wing : Feedback from all the wings of the Secretariat has been sent to Secretary office from HRD.

Remaining parts of the work order given to M/s PwC are yet not furnished by the firm.


Director / HRD-II
PSEB Patiala.



PUNJAB STATE ELECTRICITY BOARD
ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10

ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10

(Rs. In lacs)

Sr. No.	Name of Scheme / Project	2009-10 Proposed by PSEB	Status of Scheme				Sanctioned	Unsanctioned	Loan already tiedup	to be drawn during 2009-10	Loan yet to be tied up	To be arranged by PSEB	Grant, if any	Remarks
A GENERATION														
1	Shahpurkandi HEP (163 MW) (For EIS only) CE/Civil (IB)	1000.00				Yes			-	-	1000.00	-	-	Expenditure to be incurred after tie up of the loan
2	Mukerian HEP-II (16 MW) (90%) CE/Hydel CE/Civil Designs & Construction	2500.00 2800.00			11271.60	12569.00	-			4770.00	-	530.00	-	Likely date of completion 31.10.2010
3	GHTP Stage-II Lehra Mohabbat (2x250 MW) (90%) CE/Construction, GHTP CE/Thermal Design	1250.00 2595.00			201070.00	Yes	-			3460.00	-	325.00	-	Against Balance Works & spares
4	GHTP Stage-I Lehra Mohabbat for making pending payments of additional Air Compressor, Fire Fighting Detection & Alarm System & Design & Consultancy of Raising of Ash Dykes	200.00			-	-	-			-	-	200.00	-	Raising of Ash Dykes Balance Portion
5	Lehra Mohabbat Thermal Plant - Extension Stage-III (2x250 MW) (EPC basis) (90%)	5000.00			-	-	-			-	4500.00	500.00	-	Expenditure to be incurred after sanction of the scheme & tie up of the loan
6	For Survey, investigation and appointment of consultants for Goderohi Thermal Plant, Lehra Mohabbat Extension (Stage-III) and 2x250 MW Bathinda Extension on Stage-II	1100.00			-	-	-			-	-	1100.00	-	
7	GHTP Ebn CE/ Thermal Design	2000.00			-	-	-			-	1800.00	200.00	-	Expenditure to be incurred after sanction of the scheme & tie up of the loan
Total (New Projects)		18415.00								8260.00	7300.00	2055.00	-	
B R & M OF PSEB THERMAL PROJECTS														
i	GNDTP, Phase-II, Bathinda	36.00				Yes	-			-	-	36.00	-	Likely date of completion 31.3.2010
ii	GNDTP Unit-I & II based on RLA study report (86.17%)	607.00			18304.00	Yes	-			500	-	107.00	-	Project report approved by CEA for Rs 21241 lac. 85.17% loan tied up with PFC.
iii	GNDTP Unit-III & IV based on RLA Study Report (80%)	21146.00			47156.00	Yes	-			20000.00	-	1145.00	-	Project report approved by PSEB for Rs 55945 lac. & 80% loan tied up with REC.

PUNJAB STATE ELECTRICITY BOARD
ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10

(Rs. In lacs)

Sr. No.	Name of Scheme / Project	2009-10 Proposed by PSEB	Status of Scheme				Grant, if any	Remarks
			Sanctioned	Unsanctioned	Loan already tied up	to be drawn during 2009-10	Loan yet to be tied up	To be arranged by PSEB
IV	Augmentation of Fire Protection System of GNDTP	11.00	Yes	-	-	-	-	11.00
V	GNDTP a) Dry Fly Ash Handling System of GNDTP b) Raining of Ash Dyke GNDTP Bathinda	10.00 36.00	Yes	-	-	-	-	10.00 36.00
VI	GGSSSTP Ropar Scheme-I (90%) b) GGSSSTP Ropar Scheme-II (90%) c) GGSSSTP Ropar Scheme-III (90%)	155.00 432.06 9333.10	1005.00 469.00	- 56006.38	139.50	368.85 8369.79	-	15.50 43.21 933.31
	d) T & P Items for GGSSSTP Ropar e) Strengthening of Micro Hydel Channel	134.00 450.00	- -	134.00 450.00	- -	- -	-	134.00 450.00
VII	GGSSSTP Ropar CE (GGSSSTP Ropar) b) GHTP, Stage-I, Lehna Mohabbat (CE/O&W, GHTP-I)	641.00	-	-	-	-	-	641.00
	Total (PSEB Thermal Projects)	32263.16	-	-	26639.50	8768.64	-	3565.02
9	RAM OF EMB HYDEL PROJECTS i) Dehar Power House, Distt. ii) Bhakra Left Bank, PH (50%)	148.00 4225.50	Yes	-	133.00	133.00	-	15.00 424.50
	Total (BMB) [Special Svcy. RBVIB]	4372.50	-	-	133.00	133.00	-	439.50
10	RAM OF PSEB HYDEL PROJECTS SHANAI (110 MW) UBDC I & II	3695.00 397.00	716.00	-	562.00	270.00	-	3695.00 127.00
III	MHP-I	500.00	-	Unsanctioned	-	-	-	500.00
IV	ASHIP	2915.00	-	-	-	-	-	2915.00
V	RSD	91.00 151.90	-	-	-	-	-	91.00 151.90
	Total PSEB Hydel Projects Total Generation	7749.90 63531.56	-	-	270.00 29302.50	19689.64	-	7479.90 14339.42

PUNJAB STATE ELECTRICITY BOARD
ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10

Sheet III of V

Sr. No.	Name of Scheme / Project	2009-10 Proposed by PSEB	Sanctioned	Unsanctioned	Loan already tied up	To be drawn during 2009-10	Loan yet to be tied up	To be arranged by PSEB	Grant, if any	Remarks
TRANSMISSION										
i)	Transmission Lines Works									
a)	Normal Works	25200.00	-	-	-	-	17640.00	7560.00	-	
b)	APDRP Works	1100.00	-	-	-	-	770.00	330.00	-	
c)	System Improvement work for Patiala & Bathinda City	400.00	-	-	-	-	390.00	40.00	-	
	CE/TL									
ii)	Sub-Station Works									
a)	Normal Works	54500.00	-	-	-	-	36150.00	16350.00	-	
b)	APDRP Works	1600.00	-	-	-	-	1120.00	480.00	-	
c)	System Improvement works for Patiala & Bathinda City	2600.00	-	-	-	-	2340.00	260.00	-	
	CE/S.S.									
iii)	Station									
	Renovation & Refurbishment works of old sub-station equipment & other works	5000.00	-	-	-	-	1500.00	3500.00	-	
	M.P.C. Works	241.00	66.00	172.00	-	-	-	241.00	-	Expenditure to be incurred after approval of unsanctioned works
	(C)									
	TOTAL TRANSMISSION	90841.00					61880.00	28761.00		
DISTRIBUTION										
i)	(i) Normal Development works including SI Schemes (50%)	35000	-	-	-	-	31500	3500	-	
ii)	APDRP Works (75%)	5000	-	-	-	-	3750	1250	-	
iii)	System Improvement Works for Bathinda & Patiala City (90%)	4000	-	-	-	-	3600	400	-	
iv)	Comprehensive T&D issues reduction Plan +HVDS Project for Conversion of LT lines of AP feeders to 11KV HT for 40 No. Schemes	200000.00	179500.00 (34 Nos. Schemes)	35000.00 (6 No. Schemes)	161550.00	180000.00	-	20000.00	-	likely date of completion 31.3.2010
v)	Rural Electrification									
a)	RGGVY Scheme	18361.00	18361.00	-	18361.00	15368.00	-	60.00	16552.00	likely date of completion 31.3.2010
b)	Providing 11 KV Manual Operative Switched Capacitors on 11 KV Lines (90%)	600.00	-	-	-	-	-	-	-	
Release of Tubewell Connections										
a)	For General connections (to be released by Op. Organisation)	10000.00	-	-	-	-	-	10000.00	-	Rs. 20 Cr. for each Op. Zone
b)	For General Connections (to be released by CE/RE & APDRP)	14100.00	-	-	-	-	-	14100.00	-	Subject to approval of Board
c)	For Sem affected area connections	37700.00	-	-	-	-	30200.00	7500.00	-	

PUNJAB STATE ELECTRICITY BOARD
ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10 Sheet IV of V
(Rs. in lacs)

Sr. No.	Name of Scheme / Project	2009-10 Proposed by PSEB	Status of Scheme					Grant, if any	Remarks	
			Sanctioned	Unsanctioned	Loan already fled up	to be drawn during 2009-10	Loan yet to be fled up			To be arranged by PSEB
v	Urban Pattern Supply to Villages/Conversion of 3 Phase 4 Wire System to 3 Phase 3 Wire System and to connect to rural water works with UPS feeder	6500.00	-	-	-	-	-	-	6500.00	Grant by Pb. Mandi Board.
vi	For Workshop Organization (CE/Workshop)	319.00	-	-	-	-	-	319.00	-	likely date of completion 31.3.2010
vii	For ME Lab (CE/Metering)	360.00	360.00	-	-	-	-	360.00	-	This amount will be recovered against the Carbon Credits as per the Carbon emissions allotted by the UrfCCC, but initially the expenditure will be incurred by the Board for submission of Project Design Document.
viii	Energy Conservation a) Replacement of incandescent lamps of Domestic Consumers under E.L.Y. launched by BEE, Ministry of Power, Govt. of India (300 lsc Lamps)	3600.00	-	-	-	-	-	3600.00	-	
	b) For providing CFL for Board's work	400.00	-	-	-	-	-	400.00	-	Out of Rs. 10 Cr. demanded during 2008-09, 6 Cr. will be utilized during 2008-09 and balance 4 Cr. will be utilized during 2009-10
	TOTAL DISTRIBUTION	336200.00				181839.00	69590.00	61719.00	23052.00	
D. MISCELLANEOUS										
	i) Implementation of I.T. Plan (Director/IT)	5000.00	615.00 (inclusive of Rs. 69 lac for communication equipment (10/10/06))	-	-	-	-	5000.00	-	
	b) i) Procurement of additional 25 No. RTU under SCADA Scheme	546.00	-	-	-	-	-	546.00	-	
	j) ASB compliant Intermediate Boundary Metering	3000.00	Yes (16-11-04)	-	-	-	-	300.00	-	Linked with unbundling of the Board

**PUNJAB STATE ELECTRICITY BOARD
ANNUAL PLAN PROPOSAL AND FUNDS REQUIREMENT / RESOURCES FOR 2009-10**

Sheet V of V

(Rs. in lacs)

Sr. No.	Name of Scheme / Project	2009-10		Status of Scheme			Loan yet to be tied up	To be arranged by PSEB	Grant, if any	Remarks
		Proposed by PSEB	Sanctioned	Unsanctioned	Loan already tied up	to be drawn during 2009-10				
	ii) Providing Distribution SCADA for all 66/33KV S/S in Punjab including setting up of control centre communication system existing electrical system upgradation etc	1500.00	Yes Rs. 2000 (For Ludhiana Pilot Project) (25-05-07)	-	-	-	-	-	1500.00	100% funds for Ludhiana Pilot Project under DMS/SCADA shall be provided under APDRP by the Govt. of India, Ministry of Finance as per notification No. 14/04/09-APDRP
	c) i) Billing Software	25.00	-	-	-	-	-	25.00	-	likely date of completion is August, 2010.
	ii) Civil Works for Renovation of Rooms for Data Capturing	10.00	-	-	-	-	-	10.00	-	likely date of completion is March, 2010.
	iii) Soft Billing in additional 20 Divisions.	66.00	-	-	-	-	77.50	8.50	-	likely date of completion is March, 2010.
	iv) Remote metering of L.S. Consumers.	100.00	-	-	-	-	90.00	10.00	-	likely date of completion is March, 2010.
								1000.00	-	
	i) Setting up of Staff College (CE/HRD)	11270.00	-	-	-	-	2867.50	8902.50	1500.00	
	TOTAL MISCELLANEOUS					211141.5	154227.14	111721.92	24552.00	
	GRAND TOTAL	501642.56								

FORMAT 64

DETAILS OF VOLUNTARY DISCLOSURE SCHEME

Sr. No.	Period	No. of Applicants	Total Unauthorized Load Regularized (MW)	Total Amount Received (Rs. Cr)
A	FY 04-05	314925	715	115
B	FY 06-07	171691	548	66
C	FY 07-08	152561	386	72
D	FY 08-09	70913	183	24
	TOTAL	710,090	1,831	277

STATUS OF METERING

Ending March, 2008

Sr No.	Consumer Category	No. of Consumers	No. of Metered Consumers				Percentage Metering	Remarks
			No. of Electro mechanical Meters	No. of Electronics Meters	No. of TOD Meters	Total		
1	DS	4361304	2048800	2312504	-	4361304	100	
2	NRS	756601	328118	428483	-	756601	100	
3	SP	82333	4532	77801	-	82333	100	
4	MS	21916	6	21910	-	21916	100	
5	LS	4988	-	4988	-	4988	100	
6	BS	371	-	371	-	371	100	
7	RT	7	-	7	-	7	100	
8	PL	1208	186	3001	-	3187	100	Information relates to 18 circles computerized till date. Normally more than one meter is installed against one connection. 3187 meters are installed against 1208 connections.
9	AP	973074	-	-	-	-	Nil	Billing of only Flat rate consumers is being done by this office.
	TOTAL	6201802	2381642	2849065		5230707	84.34	

PUNJAB STATE ELECTRICITY BOARD

From

The Chief Engineer/Commercial,
PSEB, Patiala.

To

The Director/Tariff,
PSERC, SCO-220-221 Sector-34-A,
CHANDIGARH.

Memo No. 2657 CC/DTR-116/Vol. VII
Dated. 4-12-08

Subject: Extra levy for Private Hospitals.

Please refer to your office memo No. 1981/PSERC/Tariff/T-70 dated 28.7.2008. The para wise reply is submitted as under please:-

CP-83/1

(i) **Commercial Circular (PR) No.3/2000 and all other circular(s) issued in this connection:**

CP-57

Only one PR Circular No.3/2000 dated 9.6.2000 was issued on the subject and no other circular has been issued after this circular. A copy of the said circular is enclosed as Annexure-A.

(ii) **Category of consumers covered:**

As is evident from the circular itself, it covers privately managed Commercial Heart Care, MRI & CT Scan Units for attending accidents/emergency cases.

(iii) **Whether optional or obligatory to adopt the circular.**

It is optional for the consumers. The consumers who are interested in availing the facility of exemption from power cuts and to get supply on the pattern of essential services can opt for taking power under the said circular.

(iv) **Whether ED is charged on enhanced tariff or tariff approved by the Commission:**

Presently the ED is chargeable on percentage basis on the tariff applicable and 25% extra being charged from these consumers is recovered from the consumer as tariff. As such ED is being charged on the additional amount payable by the consumer.

(v) Total number of consumers opted for such a scheme.

CP-57

Following consumers have opted for the scheme:-

- a) M/s BBC Heart Care Hospital Jalandhar.
- b) M/s Guru Nanak Mission Hospital, Jalandhar.
- c) M/s Apolo Hospital, Ludhiana.
- d) M/s S.G.L.Charitable Hospital, Jalandhar.
- e) M/s Civil Hospital Rampura Phul.
- f) M/s Sacred Heart Hospital, Maksudpur, Jalandhar.

(vi) Total extra revenue per annum earned by the Board.

CP-88

Sr.No.	Name of Consumer	25% extra tariff charged to private managed commercial heart care , MRI and City scan units during 2007-08.
1.	M/s BBC Heart Care Hospital, Jalandhar	Rs.537345
2.	M/s Guru Nanak Mission Hospital, Jalandhar	Rs.468091
3.	M/s Apolo Hospital Ludhiana	Rs.3897618
	Total	Rs.4903054

(vii) If it is optional then what treatment is given to such consumers on (i) mixed feeders(ii) independent feeders:

CP-57

As per the circular, only those consumers can opt for the scheme who have a load of 100 kW or more or who are ready to get the power supply at 11 KV voltage level through feeder erected at their cost. It is apparent that such feeders will be serving the consumer only and power cuts which are normally imposed by switching off the breaker from the grid will not be applicable in their case. Thus a consumer being served through a mixed feeder is not eligible for opting under the scheme.

(viii) Is it feasible/viable to create a 11 KV bay for just 100 kW load.

The facility of uninterrupted supply has been given to privately managed commercial Heart Care, MRI & CT Scan units since they deal with emergency/accidental cases and are being treated at par with essential services. The facility has been extended to save precious lives of victims by providing immediate and quick diagnostic help. Keeping in view the services involved and

keeping in view the fact that the cost of the total 11 KV facility is to be borne by the consumer, it is feasible/viable for PSEB to create 11 KV bay for 100 kW load.

- (ix) If supply is given by tapping an existing 11 KV feeder then during power cut do that feeder is also kept on:

As provided in the circular supply is given only through 11 KV feeder erected independently for the consumer or by tapping/existing 11KV independent feeder the question of imposition of power cuts does not arise as consumers connected on independent feeders observe only regulatory measures and their supply remains on from the grid.

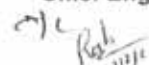
- (x) How those hospitals which are already getting uninterrupted power supply under essential services, shall be treated if they do not opt for such a scheme.

As provided in the para (4) of the circular, the existing privately managed commercial, Heart Care & CT Scan consumers on the date of issue of circular were to opt for the scheme or else get supply with power cuts. As on date these consumers are either getting supply under PR Circular 3/2000 without power cut or if they have not opted for the scheme, they are getting power with power cuts.

- (xi) Rationale for charging 25% extra Tariff:

Although, as per record available no specific rationale for charging extra tariff is there, but it can be safely presumed that extra tariff is necessary as the consumer will get 24 hours un-interrupted power supply without any weekly off days / power cuts even though during short supply PSEB purchases power at much higher rates as compared to the normal tariff. This will not only help the institution to provide better services to the patients, but will help the institution commercially also. Further to avoid misuse of the facility, the extra tariff will act as a deterrent.


Chief Engineer/Commercial,
PSEB, Patiala.


3/12

3/12


2/12/08

ਪੰਜਾਬ ਰਾਜ ਬਿਜਲੀ ਏਗੰਡਾ
ਪੀ.ਆਰ.ਸਕਰੂਨਰ ਨੰ: 3 /2000
ਮਿਤੀ: 9/6/2000

ਯੋਗ ਇੰਜੀਨੀਅਰ/ਐਮ.ਏ. ਤੇ ਸੀ.
ਪਾਵਰ ਡਿਵੀਜ਼ਨ ਆਫ਼ ਕੰਟਰੋਲ ਡਾਇਰੈਕਟੋਰੇਟ,
ਪੀ.ਓ.ਬਿ:ਬ: 220 ਕੇ.ਵੀ. ਸ/ਸ: ਆਲੋਚਨਾ,
ਪਟਿਆਲਾ।

ਦੱਖ

- 1) ਸਾਰੇ ਇੰਜ: - ਇਨ-ਚਾਰਜ/ਯੋਗ ਇੰਜ: (ਸੰਚਾਲਣ) ਪੀ.ਓ.ਬਿ:ਬ:
- 2) ਯੋਗ ਇੰਜੀਨੀਅਰ/ਇਨਡਰਸਮੇਟ, ਪੀ.ਓ.ਬਿ:ਬ: ਪਟਿਆਲਾ।
- 3) ਯੋਗ ਇੰਜੀਨੀਅਰ/ਪੀ. ਤੇ ਐਮ. ਪੀ.ਓ.ਬਿ:ਬ: ਠਧਿਆਣਾ।
- 4) ਸਾਰੇ ਯੋਗ ਇੰਜ: /ਨਿਗ: ਇੰਜ: /ਸੰਚਾਲਣ ਪੀ.ਓ.ਬਿ:ਬ:
- 5) ਸਾਰੇ ਯੋਗ ਇੰਜ: /ਨਿਗ: ਇੰਜ: /ਪੀ. ਤੇ ਐਮ.।
- 6) ਸਾਰੇ ਯੋਗ ਇੰਜ: /ਕੁਇਕਲ/ਇਨਡਰਸਮੇਟ ਆਫ਼ ਐਮਐਲੀਐਸ।
- 7) ਸਾਰੇ ਵਪਾਰਿਕ ਨਿਗ: ਇੰਜ: /ਸੀ.ਕਾ.ਕਾ: ਇੰਜ: /ਸੰਚਾਲਣ ਸਮੇਤ
5 ਡਾਨਤ ਕਾਪੀਆਂ ਕਾ:ਕਾ: ਇੰਜ: /ਸਹਾਇਕ ਕਾ:ਕਾ: ਇੰਜ: /
ਸਹਾਇਕ ਇੰਜ: /ਸੰਚਾਲਣ ਦੇ ਦਫ਼ਤਰਾਂ ਵਿੱਚ ਭੇਜਣ ਦਿੱਤਾ।
- 8) ਸਾਰੇ ਵਪਾਰਿਕ ਨਿਗ: ਇੰਜ: /ਸੀ.ਕਾ.ਕਾ: ਇੰਜ: /ਪੀ. ਤੇ ਐਮ. ਆਫ਼
ਕੰਟਰੋਲ ਡਿਵੀਜ਼ਨ ਸਮੇਤ 5 ਡਾਨਤ ਕਾਪੀਆਂ।
- 9) ਸਾਰੇ ਵਪਾਰਿਕ ਨਿਗ: ਇੰਜ: /ਸੀ.ਕਾ.ਕਾ: ਇੰਜ: /ਇਨਡਰਸਮੇਟ ਸਮੇਤ
5 ਡਾਨਤ ਕਾਪੀਆਂ।

ਮੀਮੋ ਨੰ: 2520/2845 /ਯੋਗ/ਪੀ.ਆਰ.ਸਕਰੂਨਰ/ਐਲਡੀ/
ਪੀ.ਓ.ਬਿ:ਬ: ਮਿਤੀ: 9/6/2000

SUBJECT: LEVY OF POWER CUT EXEMPTION CHARGES.

A Large number of privately managed Commercial Heart Care, M.R.I. & CT Scan Units have been set up in the State for attending to accident/emergency cases. It has been decided to give supply on the pattern of Essential Services to such Units on the following terms and conditions:-

- 1) The Minimum load of such Units should be equal or more than 100 KW.
- 2) The supply to these Units will be given by erecting new 11 KV Independent Feeders or by tapping the existing 11 KV Independent Feeders. The connection to such new consumers should be released on 11 KV or shall be converted to 11 KV in case of existing LT Supply consumers at their own cost as per standing Commercial instructions on the subject.
- 3(a) These consumers shall be charged 25% extra tariff.
- (b) Minimum Consumption Charges in respect of these consumers shall be increased by 25%.
- 4) The existing Privately managed Commercial Heart Care, M.R.I. & CT Scan consumers fed from Independent Feeders, who are interested in continuing the facility of exemption from Power cut shall be charged 25% extra tariff.

Minimum Consumption Charges shall be increased by 25%. Seperate Notices are being served to them in this regard.

- 5) This levy shall not be imposed on Government Hospitals including Hospitals run by Charitable Institutions which have been duly registered and notified by Government as per existing instructions.

The cases for such Privately managed Units who want power cut exemption on the pattern of 'Essential Services' may be sent to this office through Chief Engineer/Operation concerned alongwith their recommendation for taking necessary action.

Singh
Deputy Director/F.R.,
for Chief Engineer/S.O.&C.,
PSEB, Patiala.

HARYANA ELECTRICITY REGULATORY COMMISSION

BAY No.33-36, SECTOR - 4, PANCHKULA – 134 109

HERC ORDER

ON

GENERATION TARIFF FOR

HARYANA POWER GENERATION CORPORATION LTD.

FOR FY 2007- 08

CASE No: HERC / PRO-5 OF 2006

May 8, 2007

PANCHKULA

(Unit I-III) considering the vintage factor and recent performance i.e. 8.78 ml/kWh upto January 2007. In all other cases including DCR TPP (I&II) the Commission has considered the national norm (stabilisation norm in respect of DCR TPP).

The recent performance and the national norms have been taken into consideration while approving the specific fuel oil consumption for FY 2007-08. The table 2.6 presents the lowest level of specific fuel oil consumption in the last seven years in the case of PTPS unit I to V and FTSP unit I to III, while in all other cases viz. PTPS (unit VI, VII & VIII) the reference point is their respective year of Commissioning. HPGCL's proposals for specific fuel oil consumption and Commission's approvals thereto are presented in the table below.

Table 2.6 Specific Oil Consumption (ml / kWh)

Stations	Lowest Achieved in past 7 years	HPGCL's Proposal for FY 2007-08	HERC's Approval for FY 2007-08
PTPS (Units I to IV)	3.05	4.25	3.0
PTPS (Unit V)	1.02	2.0	2.0
PTPS (Unit VI)	0.53	2.0	2.0
PTPS (Unit VII)	0.84	2.0	2.0
PTPS (Unit VIII)	1.08	2.0	2.0
FTSP (Units I-III)	3.12	4.0	4.0
DCR TPP (I & II)	NA	4.5	4.5

HPGCL needs to take all possible corrective measures including those recommended by CEA in its Energy Audit Report to rein in SFC at PTPS (Unit I to IV) and FTSP (Unit I to III) to 2ml/kWh or lower.

2.9 Station Heat Rate (SHR)

The Station Heat Rate (SHR) of the existing generating units of HPGCL excluding the recently commissioned PTPS unit VII & VIII are much higher than the norms adopted for the central generating thermal stations. The average SHR in respect of PTPS (I to IV) showed some improvement from 3411 Kcal/kWh in FY 2005-06 to 3334 Kcal/kWh in FY 2006-07 (upto January 2007). The Commission recognises the fact that SHR despite regular O&M deteriorates with time. However, the deviation of the heat rate established by the Energy Audit from the

respective design values, even after allowing reasonable margin to account for normal operation vis-à-vis test conditions including some aberrations in the PLF are far in excess.

The CEA in its communiqué dated 10/01/2006 to the Commission with reference to the energy audit carried out by them at PTPS and FTPS has observed that "Station must take efforts to bring down the unit heat rate to at least in the range of 10% deviation from the design value gradually and their efforts to operate at design heat rate would be highly appreciated as this will result in saving coal & environmental benign".

The design value in the case of PTPS (unit I-IV) ranges between 2460 – 2526 Kcal / kWh considering a 10% deviation the desirable heat value as per CEA should have ranged between 2706 – 2778 Kcal / kWh. The actual performances of these stations have been way below the desired heat value. In FY 2007-08 (upto January 2007) the average Station Heat Rate (SHR) reported for PTPS unit I-IV was 3334 Kcal / kWh (the values ranged from 3325 to 3347 Kcal / kWh). Keeping in view that PTPS Unit I will be refurbished during FY 2007-08 with performance guarantee of 2018 Kcal/kWh of turbine heat rate & 86% boiler efficiency as per work order dated 1/8/2006 placed by HPGCL on BHEL and some more improvement in SHR of PTPS unit II – IV, the Commission has considered SHR of 3200 Kcal/kWh in respect of PTPS unit I-IV.

The Commission, in its Generation tariff order of FY 2006-07, considered SHR of 2700 & 2500 Kcal/kWh in respect of PTPS V & VI respectively. HPGCL vide its memo no. HPGC/FIN/Reg-226/163 dated 20/02/2007 submitted that SHR of 2500 Kcal/kWh for Unit VI, PTPS, determined by the Commission for FY 2006-07 could not be achieved and remained at 2756 Kcal/kWh upto January 2007 and 2851 Kcal/kWh in FY 2005-06, thus the Commission may revise target SHR from 2500 to 2700 Kcal/kWh i.e. equal to SHR of PTPS Unit V.

The SHR is largely influenced by efficiency of the boilers and turbines; make – up requirements and O&M practices. Lack of R&M and overall good O&M practices over a prolonged period has hastened the deterioration in SHR of PTPS (Unit I to IV), PTPS (Unit V & VI) and FTPS. It is a matter of great concern to us that PTPS Unit V & VI failed to achieve the SHR targets set by the Commission in FY 2005-06 and FY 2006-07. HPGCL seems to have eschewed its responsibility by stating "Unit VI SHR as allowed by HERC could not be achieved". The CEA vide memo no. CEA/TETD-TT/2003/N-6 dated 25th April 2005, after conducting energy audit tests of these units, recommended, "a gross unit heat rate of 2460 Kcal/kWh (80% PLF) for 210 MW kwh type units installed at Panipat. The only possible correction in heat rate shall be applied for part load operation @2.5 Kcal/kWh for every 1% variation in PLF upto the target PLF for these units". It is pertinent to note that in FY 2006-07 (upto January 2007) both PTPS units V & VI have been operating at over 90% PLF and hence the cushion for 'part load operation' is also not applicable. **Thus, HPGCL is directed to undertake a detailed analysis including energy audit of these units and submit a report to the Commission within three months from the date of this order along with time-bound remedial measures to improve upon the SHR of these units.** However, considering the performance of these units and the fact that PTPS (unit V & VI) machines are more or less of similar vintage and performance the Commission has considered SHR of 2600 Kcal/kWh for estimating fuel cost in respect of PTPS Unit V & VI in FY 2007-08. **The Commission would like to monitor the performance of these machines during the later part of the year and accordingly set improved norms during the next rate case.**

In the case of FTPS (unit I-III) the average design value of SHR is 2787 Kcal/kWh (values ranges between 2727 – 2847 Kcal / kWh). Thus these Stations are capable of achieving an average heat value of 3185 Kcal / kWh at 45% PLF. As against this the reported actual during FY

2006-07 (upto 28/02/2006) in the case of FTPS (unit I-III) was 4200 Kcal / kWh (values ranging from 4167 Kcal / kWh to 4250 Kcal / kWh).

The Commission has been allowing SHR of 3970 Kcal/kWh in respect of FTPS (unit I-III) i.e. the lowest value reported in FY 1999-2000. The station has shown some improvement over the years as SHR improved from 4354 Kcal/kWh in FY 2001-02 to 4186 Kcal/kWh in FY 2004-05 and is currently (FY 2006-07 upto January 2007) at 4281 Kcal/kWh level. The improvement reported over the years is marginal and erratic. In the light of the recent performance of these units, its failure to meet the target of 3970 Kcal/kWh set by HERC since its first Generation tariff order of FY 2004-05 and the fact the FTPS powerhouses have completed their normal useful life, and as submitted by HPGCL in its reply filed vide memo no. HPGC/FIN/Reg-205/415 dated 21/03/2006, are likely to be phased out by 2011-12, the Commission has pegged the SHR of FTPS (Unit I-III) at 4000 Kcal/kWh.

In case of PTPS units VII-VIII and DCR TPP unit I-II, the Commission has considered SHR of 2500 & 2600 Kcal/kWh respectively in accordance with the national norms.

As the Commission has been allowing all the justifiably incurred capital & operating costs, it expects sustained improvement in the operating parameters including the SHR. The table 2.7 presents the lowest value of SHR in the last 7 years in case of PTPS units I to IV & FTPS units I to III, while in all other cases viz. PTPS units VI to VIII the reference point is their respective year of commissioning, HPGCL's proposal for FY 2007-08 and HERC approval thereto are presented in table 2.7 below.

Table 2.7 Station Heat Rate (K.cal / kWh)

Station	Lowest Achieved in past 7 years	HPGCL Proposal for FY 2007-08	HERC Approval for FY 2007-08
PTPS (Units I-IV)	3334	3450	3200
PTPS (Unit V)	2764	2700	2600
PTPS (Unit VI)	2756	2700 (revised)	2600
PTPS (Unit VII)	2501	2500	2500
PTPS (Unit VIII)	2499	2500	2500
FTPS (Units 1-III)	4186	3970	4000
DCR TPP (I&II)	NA	2600	2600

Note: In the case of DCR TPP (Unit I&II) the Commission has considered the stabilisation norm of 2600 Kcal/kWh.

2.10 Energy / Variable Charge

The Energy / variable charge has been calculated based on the Commission's approved parameters for FY 2007-08.

Table 2.8 PTPS Energy / Variable Charges for FY 2007-08

Parameters	Derivation	PTPS							
		I	II	III	IV	V	VI	VII	VIII
Generation (Million Units)	A	675	675	675	675	1472	1472	1752	1752
Auxiliary Cons (%)		11	11	11	11	9	9	9	9
Generation (Ex-bus Million Units)	A1	601	601	601	601	1339	1339	1594	1594
Station Heat Rate (Kcal/kWh)	B	3200	3200	3200	3200	2600	2600	2500	2500
Specific Oil Consumption (Mk/Wh)	C	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Calorific Value of Fuel Oil (Kcal/Ltr)	D	9991	9991	9991	9991	9991	9991	9991	9991
Calorific Value of Coal (Kcal/Kg)	E	3888	3888	3888	3888	3888	3888	3888	3888
Overall Heat (Gcal)	F= (A*B)	2160000	2160000	2160000	2160000	3826368	3826368	4380000	4380000
Heat From Oil (Gcal)	G= (A*C*D)/1000	20232	20232	20232	20232	29407	29407	35008	35008
Heat From Coal (Gcal)	H= (F-G)	2139768	2139768	2139768	2139768	3796961	3796961	4344992	4344992
Oil Consumption	I=G*1000/D=A*C	2025	2025	2025	2025	2943	2943	3504	3504
Coal Consumption (MT) 2% loss	J=(H*1000/E)/0.98	561584	561584	561584	561584	996515	996515	1140346	1140346
Cost of Oil per KL (Rs)	K	18127	18127	18127	18127	18127	18127	18127	18127
Cost of Coal per MT (inc LADT) Rs	L	2252	2252	2252	2252	2252	2252	2252	2252
Total Cost of Oil (Rs. Million)	M=K*I/10 ⁶	37	37	37	37	53.35	53.35	63.52	63.52
Total Cost of Coal (Rs. Million)	N=J*L/10 ⁶	1265	1265	1265	1265	2244	2244	2568	2568
Total Fuel Cost (Rs/Million)	O=M+N	1301	1301	1301	1301	2298	2298	2632	2632
Fuel Cost (Rs/kWh)	P=O/A1	2.17	2.17	2.17	2.17	1.72	1.72	1.65	1.65

Table 2.9 FTPS & DCR I&II Energy / Variable Charges for FY 2007 - 08

Parameters	Derivation	FTPS			DCR TPP		WYC & Kakrol
		I	II	III	I	II	
Generation (Million Units)	A	217	217	217	772	242	302
Auxiliary Cons (%)		12.5	12.5	12.5	9.5	9.5	0.50
Generation (Ex-bus Million Units)	A1	189.88	189.88	189.88	698.66	219.01	300
Station Heat Rate (Kcal/kWh)	B	4000	4000	4000	2600	2600	
Specific Oil Consumption (Mk/Wh)	C	4.0	4.0	4.0	4.5	4.5	
Calorific Value of Fuel Oil (Kcal/ltr)	D	10000	10000	10000	9991	9991	

ANNX TO PLEC REVISION

FROM: THE CHIEF ENGINEER, PSEB
 TO: THE CHIEF ENGINEER, PSEB
 DATED: 20.4.1990

From

The Chief Engineer, P.O.E.,
 Power Regulation & Control Dto.,
 PSEB, Shakti Sedan,
 Patiala.

To

1. The P-1-47/311, PSEB, Patiala.
2. The Chief Engineer/EA & Enforcement, PSEB, Patiala.
3. All Chief Engineers/Op. in PSEB.
4. All Dy. Ch. Engrs./Op. in PSEB.
5. All Dy. Ch. Engrs./Op. in PSEB.
6. All Directors/Enforcement in PSEB.
7. All Addl. S. Engrs./Op. in PSEB alongwith 5 spare copies for further distribution amongst XEs/AEs/AES, Operations.
8. All Addl. S. Engrs./Op. in PSEB & Grid Mto. alongwith 5 spare copies.
9. All Addl. S. Engrs./Op. in PSEB alongwith 5 spare copies.

Mem No. 1082/1216 /19/100/13-71 Dated: 20.4.90
 Subject: Greater Peak Load Hours Restrictions on the Industrial - Provision for non compliance - Industrial.

In pursuance of P.R. Circular No. 16/71 dated 10.10.97 and P.R. Circular No. 16/97 dated 22.12.97, P.T.E.N. is pleased to rationalise instructions on use of power during Peak Load Hours by Industrial Units, as follows:-

1). All Industrial Units having connected load of 50 KW or above shall be required to observe Peak Load Hours Restrictions on use of power. (Earlier Restrictions were applicable only to the consumers having Sanctioned Connected Load of 100 KW & above). The Consumers having Sanctioned Connected Load upto 49 KW shall be exempted from the observance of Peak Load Hours Restrictions.

2(i). H.B. Connections having Connected Load of 40 KW or above shall be allowed to use power during Peak Load Hours to the extent of 10% of the Sanctioned Load for lighting, water supply purposes, Office Air-Conditioners, Pollution Control equipment and Res. Load etc. without payment of any additional charges i.e. if consumer is having a Connected Load of 60 KW, it can use 6 KW power during Peak Load Hours, without payment of additional charges.

Encl. 1, 2

4). All L.S. Consumers who install or have installed Electronic Energy Meters of quality approved by MES, irrespective of the fact whether they are Continuous Process/Essential Industry or not can be allowed to use power & above the limit indicated in para-3 during Peak Load Hours on the following conditions:-

- A) Exemption of 100 KW shall be available if they pay Rs. 100/- per KW per month extra for a load of 100 - eligible exemption limit as per para-3 KW over and above their normal energy bill. The minimum period for which exemption is allowed at a time will be 6 months i.e. even if a consumer wants to surrender its exemption prior to completion of 6 months, he has to pay the additional charges for 6 months.
- B) Exemption above 100 KW can also be granted to the extent required by the industrial Units if they agree to pay an extra load, additional energy charges of Rs.1.5 per KW per hour if their exemption does not exceed ~~the~~ (amended to Rs. 1.5) of the Sanctioned Contract Demand and Rs.2.25 per KW per hour if exemption above ~~the~~ (amended to Rs. 2.25) of the Sanctioned Contract Demand is required.
- C)
 - i) The Peak Load Exemption to L.S. Consumers under (A) shall be granted by Dy. CE/S.E./ Operation under intimation to C.E./S.E., P.R.&C Directorate, PSID, Patiala, Director, Enforcement Director/SEIE and concerned billing section.
 - ii) The Peak Load Exemption to L.S. Consumers under (B) shall be granted by C.P.&C.C., P.R.&C Directorate, PSID, Patiala.

5) The categories of consumers mentioned at Sr.No.2 to 4 above are not entitled to facilities available to Continuous Process/Essential Industries/Essential Services fed through Independent Feeders (or) or exemption from power cut/emergency load shedding etc.).

6). For those L.S. Consumers where electronic energy meters are not installed, the existing instructions issued vide LD Circulars No.6/US, 9/70 & 20/91 will continue to be applicable, in case of consumers who are

Contd...

-5-

All cases of penalties either pending or decided as per P.R. Circular No. 14/97 dated 8.10.97 or 40/96 dated 18.11.96, in respect of the consumers having installed Electronic Meters shall be decided as per rationalised instructions covered under this Circular.

12(a) The instructions contained in this Circular will be applicable with immediate effect in respect of the consumers who violate Peak Load Restrictions and having installed Electronic Meters.

(b) The other instructions contained in this Circular will be applicable from 1.6.1998.

13(a) It is also reiterated that checking by MTS or Enforcement Wings does not absolve the AEs/AEEs/XBMs/Sr.XBMs from the responsibility of checking connections to detect Peak Load Hours Restrictions violations.

(b) MTS/Enforcement Organisation may please also ensure that Print Outs of the Electronic Meters/ TOD Meters are taken at regular intervals of every month.

14). Peak Load Restrictions Hours timings shall be observed as per timings specified in P.R. Circular No. 17/97 dated 31.12.97, which are being reproduced again here:-

S.No.	Name of month	Timings of Peak Load Restriction Hours
1.	January, November, and December.	18.00 hrs. to 21.00 hrs.
2.	February, March, September & October.	18.30 hrs. to 21.30 hrs.
3.	April to August	19.00 hrs. to 22.00 hrs.

The above may please be got noted from all the concerned consumers well before the date of implementation of these instructions.

26/1/98
Director/P.R. & C.,
for Chief Engineer P.G.C.,
PSES, Patiala.

Contd....6

ANN-1A

PUNJAB STATE ELECTRICITY BOARD

P.R. Circular No. 9/2007

Dated: 7.11.2007

From

The Chief Engineer/S.O.&C,
Power Regulation & Control Dte.,
PSEB, 220KV S/Strn., Ablowal, Patiala.

To

1. All EIC/CEs/Distribution in PSEB.
2. Chief Engineer/P&M, PSEB, Ludhiana.
3. Chief Engineer/Enforcement, PSEB, Patiala.
4. All Dy.CEs/SEs/Distribution in PSEB.
5. All Dy.CEs/SEs/P&M in PSEB.
6. All Dy.CEs/Directors/Enforcement & EA&MMTS.
7. All Addl.SEs/Sr.XENs/Distribution along with 5 spare copies for further distribution amongst XEIs/AEEs/AEs.
8. All Addl.SEs/Sr.XENs/P&M, Grid Mto. & Distribution along with 5 spare copies.
9. All Addl. SEs/Sr.XENs/Enforcement & EA&MMTS along with 5 spare copies.

Memo No. 10405/10619 ISO/PRCALD-38
Dated: 7.11.07

Subject: Levy of Peak Load Exemption Charges and Imposition of weekly off day restrictions.

All Large Supply Consumers except Essential Services (such as Hospitals, Railway Stations, Railway Installations, Defence & Military Installations, All India Radio/T.V., Water Supply & Sewerage Installations, P&T Installations and News Service Installations etc.) are required to observe Evening Peak Load Hours restrictions. As per P.R. Circular No. 2/98, exemptions from observing Peak Load Restrictions are being allowed, as per their request, to Large Supply consumers against payment of Peak Load Exemption Charges as fixed by the Board in addition to normal tariff as detailed below:-

- 1.1 Peak Load Exemption Charges for sanction of PLE of 100KW load are @ Rs. 120/- per KW per month minus eligible exemption i.e. Rs. 120/-(100 - Eligible exemption). The minimum period at a time will be six months i.e. even if a consumer wants to surrender its exemption prior to six months, he has to pay the additional charges for full six months.
- 1.2 Peak Load Exemption Charges for sanction of PLE above 100KW load are @ Rs. 1.80 per KW per hour for the exemption up to 65% of sanctioned contract demand at 90% PF & @ Rs. 2.70 per KW per hour for the exemption beyond 65% of sanctioned contract demand at 90% PF.

7/11/07

.....p2

2. While implementing PR Circular No. 2/98, some difficulties were being reported by the field / consumers and these are discussed as under:-

2.1 Peak Load Exemptions for the load of 100KW are allowed by Dy.CE's/SE's (DS), whereas, Peak Load Exemptions for load more than 100KW are granted by CE/SO&C. As per clause No. 4(a) of applicable PR Circular No. 2/98 and Sales Regulation Clause No.168.1.2.1, it has been provided that Peak Load Exemptions of 100KW shall be applicable minimum for a period of six months, whereas for the Peak Load Exemption of load above 100KW, applicable period will be as per request of the consumer which can be less than six months also.

It has been seen that Dy.CE's/SE's(DS) while granting PLE of 100KW, invariably allow this exemption only for 6 months. After expiry of six months, consumer again has to approach Dy. CE/SE(DS) office for getting the period extended. Sometimes if due to some lapse on the part of the consumer or some delay in DS office, if validity period is not extended in time, heavy penalty is levied on the consumer, resulting in harassment to the consumer & increase in Dispute Settlement cases.

2.2 Applicable rates of Peak Load Exemption Charges as per sanctioned Contract Demand as per Para (1.2) above are worked out and detailed out in the permission letter issued by the office of CE/SO&C to the consumer with a copy to concerned CBC Cell & others for levy of Peak Load Exemption Charges. It is seen that in case sanctioned contract demand of the consumer is enhanced and the applicable slab of charges changes, the consumer approaches this office for revision of applicable rates/charges, as chargeable amount to the consumer will be on lower side. Time taken in this process causes loss to consumer as the change in revised applicable rate of Peak Load Exemption is made applicable from the date of issue of letter from the office of CE/SO&C. But in case sanctioned contract demand is reduced, consumer may not bring it to the notice of the office of CE/SO&C as the revised PLE rate may be higher. As such, there are chances that higher PLE rates may not be levied to the consumer.

3) The matter was under consideration of the Board for sometime and after considering the above issues, the Board has decided as under:-

3.1 To have uniformity, Peak Load Exemptions to be granted by Dy.CE/SE(DS) or by the office of Chief Engineer/SO&C will be granted for the period as per the request of the consumer (minimum for a period of six months). If no specific period for grant of Peak Load Exemption has been mentioned by the consumer in his

.....3/p

12/11/07

request, then the same may be granted for the unlimited period i.e. on regular basis. Withdrawal /reduction /enhancement of Peak Load Exemptions will not be permissible within first six months of sanction of P.L.E.

Thereafter, if a consumer wants to withdraw / reduce / enhance Peak Load Exemption, he may make a direct request to the office which originally sanctioned Peak Load Exemption, along with a copy of last sanction letter & latest energy bill at advance notice of one month. Concerned office will ensure that requisite permission as per consumer request is issued at the earliest, maximum within one month from the date of receipt of letter, however revised P.L.E so granted shall be applicable further for minimum period of three months without any change during these three months. Every further change in P.L.E will also be applicable for minimum three months.

This stipulation of initial sanction of P.L.E. for minimum period of six months and further sanction for every three months will not be applicable on such consumers who are running their TG/D.G. sets in synchronization with PSEB system. Such consumers, in case of breakdown of their TG/D.G. sets or any other emergency will be allowed P.L.E. as per their request on day to day basis subject to availability of power on real time basis.

If a consumer already availing Peak Load Exemption (P.L.E) of 100 KW, applies for enhancement of P.L.E, case will be routed through concerned Dy.CE/SE (DS) who will forward the case duly recommended to Chief Engineer/SO&C giving complete loading details of the feeder/sub station feeding the consumer, on the already notified performa alongwith a copy of the last letter of sanction of P.L.E issued by his office, so that stipulation of minimum six months/every additional three months is ensured / complied with.

3.2 Chief Engineer/SO&C office will grant quantum of Peak Load Exemptions indicating effective period only and will not give calculations of rate of Peak Load Exemption Charges. On account of Computerized Billing, already available software shall work out applicable Peak Load Exemption Charges as per the latest sanctioned contract demand available with concerned CBC Cell & Energy Bill may be prepared accordingly. In case of revision of contract demand, revised rates of P.L.E. charges shall be computed by CBC Cell (through computer software) and made applicable from the effective date of enhancement/reduction of contract demand.

4) It is once again reiterated that the Peak Load Exemption allowed to any consumer will not entitle him to claim it as matter of right since Peak Load

contd.....4/p

7/11/02

- 4 -

Exemption can be withdrawn by the Board completely/partially keeping in view the system constraints/power availability during peak load exemption period.

The above said instructions shall become effective after 15 days from the date of issue of these instructions. All other instructions on this subject issued earlier shall remain applicable as heretofore.

The above instructions may please be got noted from all the LS industrial consumers well before the date of implementation of the instructions.

These instructions can also be down loaded from PSEB's Website www.psebindia.org.

Encl: As above

15/11/07
Director/PR&C,
for Chief Engineer/S.O & C,
PSEB, Patiala.

- CC: 1) Chairman, PSEB & All Members/PSEB.
2) O.S.D. to Chairman, PSEB, Patiala.
3) Chief Engineer/Commercial, PSEB, Patiala.
4) Chief Engineer/Q.I. & T.A., PSEB, Patiala.
5) Director/I.R., PSEB, Patiala.
6) Director/I.T., PSEB, Patiala for putting the above Circular on PSEB Web-site.

ANNEXURE - I W.R.T. PR CIRCULAR NO. 10/2007

Ludhiana (City East & West) (Area to remain off)		Mandi Gobindgarh (Area to remain off)
MONDAY	66KV Dhandari Kalan-II 66KV Focal Point, Phase-VIII 66KV Focal Point-I 66KV Ludhiana Steel 66KV Mahavir Spg. 66KV Halbowal 66KV Billet Factory 66KV Sambhav Spg. Mills	66KV S/Stn. Talwara (T/F T-1, T-2, T-3 & T-4) 66KV Oesla Enterprises feeder (E/F 66KV S/S Talwara)
TUESDAY	66KV Indra Park 66KV D.C. Complex 66KV Model Town 66KV Vardhman Spg. Mills 66KV Punjab Concast 220KV Dhandari Kalan-B	66KV S/Stn. Amloh Road, Mandi Gobindgarh
WEDNESDAY	66KV Giaspura 66KV Upper India 220KV Jamalpur 66KV Nurewal 66KV Vishav Karma 66KV Jail Road 66KV Urban Estate Dugri	i) 220KV S/S G-II M. Gobindgarh (Transformer T-2, T-4 & T-6) ii) 66KV Punjab Forging Feeder (E/F 220KV S/Stn. G-II)
THURSDAY	66KV Sahnewal 66KV Transport Nagar 66KV Avery 66KV Aarti Steel 220KV Sahnewal 66KV Balloke 66KV Oswal Woolen Mills 66KV Kangarwal 66KV Hero 66KV Ralson 66KV Vardhman Spl. Steel 66KV Railway Traction 66KV GT Road 66KV Gill Road	i) 66KV S/Stn. Grain Market (T/F T-1, T-2 & T-3) ii) 66KV Nabha Feeder (E/F 220KV S/Stn. G-I)
FRIDAY	220KV Dhandari Kalan-A 66KV Ferozepur Road 66KV Amaltas 66KV South City 66KV Sharu Steel 66KV Chandigarh Road 66KV Sharu Industries	i) 220KV S/S G-I M. Gobindgarh (T/F T-1 & T-4) ii) 66KV Central S/Stn. (T/F T-1, T-2 & T-3) iii) 66KV S/Stn. Focal Point
SATURDAY	66KV Dhandari Kalan-A 66KV Ferozepur Road 66KV Amaltas 66KV South City 66KV Sharu Steel 66KV Chandigarh Road 66KV Sharu Industries	i) 66KV Dutt Feeder (E/F 220 KV S/S G-I) ii) 66KV Bassi Feeder (E/F 220 KV S/S G-I) iii) 66KV Bhatia Feeder (E/F 66KV S/S Amloh Road) iv) 66KV Bhiwani Indl. Feeder (E/F 220 KV S/S G-I) v) 66KV KC Soni feeder (E/F 66KV S/S Amloh Rd. Turan)
SUNDAY	66KV Dholewal 66KV Aarti International 66KV Gaungarh 66KV Millergarh 66KV Rockman 66KV Dholewal Park	i) 66KV Modern Feeder (E/F 220 KV S/S G-I) ii) 66KV Jyoti Bansal Feeder (E/F 220 KV S/S G-I)



3. For the month of September 2008 i.e. 1st September 2008 to 30th September 2008.

Month	Type of Power	Duration	#Minimum Reserve Price in Rs./kWh	Quantum in Mty	Price Quoted by the Buyer in Rs./kWh	*PTC Margin in paisa/kWh	Selling Price of PTC in Rs./kWh
September 08	Night Power	00:00 Hrs to 08:00 Hrs and 23:00 Hrs to 24:00 Hrs	5.00		(a)	(b) 4	(c) = (a) + (b)
	Off Peak Power	08:00 Hrs to 17:00 Hrs	6.00			4	
	Evening Peak Power	17:00 Hrs to 23:00 Hrs	7.00			4	

Bidders shall not quote below the Minimum Reserve Price as mentioned in the above table.
* As per current CERC regulations.

PTC India Limited

(Formerly known as Power Trading Corporation of India Limited)
2nd Floor, NBCC Tower, 15 Bhaugama Place New Delhi - 110 066 Tel: 011-41659503 Fax: 011-41659504
E-mail: info@ptcindia.com Website: www.ptcindia.com

2. For the month of August i.e. 1st August 2008 to 31st August 2008.

Month	Type of Power	Duration	#Minimum Reserve Price in Rs./kWh	Quantum in MW	Price Quoted by the Buyer in Rs./kWh	PTC Margin in paisa/kWh	Selling Price of PTC in Rs./kWh (c) = (a) + (b)
August 08	Night Power	00:00 Hrs to 08:00 Hrs and 23:00 Hrs to 24:00 Hrs	5.00		(a)	(b)	(c)
	Off Peak Power	08:00 Hrs to 17:00 Hrs	6.00			4	
	Evening Peak Power	17:00 Hrs to 23:00 Hrs	7.00			4	

#: Bidders shall not quote below the Minimum Reserve Price as mentioned in the above table.
 -: As per current CERC regulations.

PTC India Limited

(Formerly known as Power Trading Corporation of India Limited)
 2nd Floor, NBCC Tower, 15 Bhikaiji Cama Place New Delhi - 110 066 Tel: 011-41659503, Fax: 011-41659504
 E-mail: info@ptcindia.com Website: www.ptcindia.com

PRICE BID

1. For the month of July 2008 i.e. 15th July 2008 to 31st July 2008.

Month	Type of Power	Duration	#Minimum Reserve Price in Rs./kWh	Quantum in MW	Price Quoted by the Buyer in Rs./kWh	*PTC Margin in paisa/kWh	Selling Price of PTC in Rs./kWh
July 08	Night Power	00:00 Hrs to 08:00 Hrs and 23:00 Hrs to 24:00 Hrs	5.00		(a)	(b)	(c) = (a) + (b)
	Off Peak Power	08:00 Hrs to 17:00 Hrs	6.00				
	Evening Peak Power	17:00 Hrs to 23:00 Hrs	7.00				

Bidders shall not quote below the Minimum Reserve Price as mentioned in the above table.
As per current CERC regulations.

PTC India Limited

(Formerly known as Power Trading Corporation of India Limited)
2nd Floor, NSCC Tower, 15 Bhaiji Cama Place New Delhi - 110 046 Tel: 011-41639503 Fax: 011-41637504
E-mail: info@ptcindia.com Website: www.ptcindia.com



Price Report

1(1)

Delivery Date: Aug 24, 2008

Currency: INR

Time of calculation: Sat Aug 23 12:29:59 IST 2008

00-01	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54	6.874.54
01-02	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75	6.870.75
02-03	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80
03-04	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80	6.870.80
04-05	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85
05-06	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85
06-07	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84	7.314.84
07-08	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45	7.308.45
08-09	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11	7.307.11
09-10	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01	7.307.01
10-11	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84	7.308.84
11-12	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38
12-13	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38
13-14	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38	7.306.38
14-15	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34	7.299.34
15-16	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40	7.299.40
16-17	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40	7.189.40
17-18	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83	7.313.83
18-19	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85	8.022.85
19-20	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72	8.000.72
20-21	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82
21-22	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82	8.000.82
22-23	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73	7.340.73
23-00	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85	8.580.85
Min	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85	6.870.85
Max	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82	9.800.82
Avg	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37	7.406.37

All prices in INR/MWh

Revised
Revised
Revised



Price Report

Delivery Date: Sep 23, 2008

Currency: INR

Currency: INR
Time of calculation: Mon Sep 22 12:28:54 IST 2008

[illegible]

All prices in INTUMVIM

Kind Attention : Mr. Singla.

kuglerAkt1
 kuglerAkt2
 kuglerAkt3

SL.	ITEMS	OFFER
10	Payment Security Mechanism	Standby LC or any other suitable PSM can be mutually discussed and agreed to depending upon the period of Order from PSEB.
11	Rebate for Prompt Payment	PSEB shall allow a rebate of 2.0 % on the billed amount to NVVN for payments made as per agreed payment schedule. The rebate shall be adjusted at the time of weekly payment by NVVN.
12	Surcharge	Delay payment surcharge of 1.25% per month shall be leviable on all dues remaining unpaid for more than 30 (Thirty) days from the date of issuance of the bill.

All other terms and conditions shall be as per the Agreement between NVVN and PSEB to be signed on placement of LOI by PSEB.

We request you to confirm the terms and provide consent for the above power by return fax so as to enable us to take further necessary action for tying up with the buyer and for applying for Open Access for booking of transmission corridor.

We assure you of our best services at all times.

Thanking You,

Yours faithfully,


(P.K Jena)

Senior Manager (BD)

Revision Bill

NTPC Ltd.
NCR-Headquarters
R&D Building, Sector-24
Noida, UP -201301

Annexure-D'
Sheet 1 of 3

me-D
2 of 3

Energy Bill	From : 01.07.2008 To : 31.07.2008	Tariff Reference : CERC order dtd. 9.5.2006 in Pet. No. 160
Ref. Doc. No.	: 600055524	REA Reference :
Date	: 07.09.2008	REA Date :
Beneficiary	: Punjab State Electricity Board .	Last Energy Bill Date : 05.08.2008
Station	: Anta Gas Power Station	Last Energy Bill No. : 600051512

In Pet.

Regular Energy

S.N.	Description	Unit	Rate	Current Amount	Already Claimed	Net Now Claimed
1	Base Energy Charges-Gas	P/KWH	92.540	19,007,651	19,033,122	25,471
2	Base Energy Charges-Liq	P/KWH	373.650	29,901,472	29,901,472	0
3	Base Energy Charges-LNG	P/KWH	423.820	2,078,413	2,078,413	0
4	Fuel Price Adj.-Gas	P/KWH	7.520	1,544,603	1,544,603	2,070
5	Fuel Price Adj.-Liq	P/KWH	943.470	75,501,517	75,501,517	0
6	Fuel Price Adj.-LNG	P/KWH	431.840	2,117,743	2,117,743	0
	Total	Rs.		130,151,399	130,178,940	27,541

Claimed
38,802
0
0
11,494
0
0
50,296

Rupees: (In Words) MINUS Twenty-Seven Thousand Five Hundred Forty-One Only

Variable charge for liquid generation:-

Paise/unit
373.650
943.470
1317.120

Revision Bill

NTPC Ltd.
NCR-Headquarters
R&D Building, Sector-24
Noida, UP -201301

Annexure-D
Sheet 3 of 3

Energy Bill	From : 01.07.2008 To : 31.07.2008	Tariff Reference	: CERC order dtd. 9.5.2006 in Pet. No. 156
Ref. Doc. No.	: 600055526	REA Reference	:
Date	: 07.09.2008	REA Date	:
Beneficiary	: Punjab State Electricity Board	Last Energy Bill Date	: 05.08.2008
Station	: Dadri Gas Power Station	Last Energy Bill No.	: 600051514

Regular Energy

S.N.	Description	Unit	Rate	Current Amount	Already Claimed	Net Now Claimed
1	Base Energy Charges-Gas	P/KWH	93.340	43,200,017	43,265,524	65,507
2	Base Energy Charges-Liq	P/KWH	481.450	236,007,522	235,991,080	16,442
3	Fuel Price Adj.-Gas	P/KWH	27.800	12,866,515	12,886,025	19,510
4	Fuel Price Adj.-Liq	P/KWH	290.500	142,403,542	142,393,621	9,921
	Total	Rs.		434,477,596	434,536,250	58,654

Rupees: (In Words) MINUS Fifty-Eight Thousand Six Hundred Fifty-Four Only

Variable charge for liquid generation

Paise/Unit

481.450

290.500

771.950

0 nepawa B 'C'

PURCHASE OF POWER DURING 4-07 TO 7-07

6.10.08

	ENERGY AT DELIVERY PT.	AMOUNT Rs.Crs.	Avg. Rate Ps./KWH Paisa/kwh	ENERGY AT PUNJAB PERIPHERY MUs	Avg. Rate Ps./KWH Paisa/kwh
1	Central Public Sector MUs	4097.80	761.35	185.79	3958.88
2	UI central sector	600.73	175.25	291.73	600.73
3	Traders & Bilaterals	1260.70	782.40	620.61	1155.81
4	PEDA & Others	82.06	30.79	375.21	82.06
5	UI within state	0.00	0.00	0.00	0.00
6	Total	6041.29	1749.79	289.64	5707.48
7	Banking	766.30	397.07	618.17	722.85
8	Grand Total	6807.59	2146.86	315.36	6520.34

PURCHASE OF POWER DURING 4-08 TO 7-08

	ENERGY AT DELIVERY PT.	AMOUNT Rs.Crs.	Avg. Rate Ps./KWH Paisa/kwh	ENERGY AT PUNJAB PERIPHERY MUs	Avg. Rate Ps./KWH Paisa/kwh
1	Central Public Sector MUs	4253.39	947.83	222.84	4097.29
2	UI central sector	495.04	287.65	581.06	495.04
3	Traders & Bilaterals	1125.24	735.53	653.66	1022.08
4	PEDA & Others	63.52	23.68	372.80	63.52
5	UI within state	-3.72	-2.35	631.72	-3.72
6	Total	5933.47	1992.34	335.78	5677.91
7	Banking	745.10	392.67	527.00	697.71
8	Grand Total	6678.57	2385.01	357.11	6375.62

Monthly Wholesale Price Index

Base Year 1993-94 = 100

Name of Commodity : ALL COMMODITIES

Type : Group Item

Month /Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2008	218.1	219.9	225.5	228.5	231.1	237.4	240	241.2	241.5			
2007	208.8	208.9	209.8	211.5	212.3	212.3	213.6	213.8	215.1	215.2	215.9	216.4
2006	196.3	196.4	196.8	199	201.3	203.1	204	205.3	207.8	208.7	209.1	208.4
2005	188.6	188.8	189.4	191.6	192.1	193.2	194.6	195.3	197.2	197.8	198.2	197.2

I. Figure 9999.9 may be treated as index for particular item not-available

MRO-6A
DETECTION OF THEFT OF ENERGY/LEAKAGE OF REVENUE BY ENFORCEMENT

Sr. No.	Zone/Circle	UP TO SEPTEMBER 2007-08										UP TO SEPTEMBER 2008-09												
		Cases Detd in respect of					Rev. Leakage Detd. due to					Equiv. units in respect of theft of power & wrong metering (in LU.s)	No. of conn. checked	Cases Detd in respect of					Rev. Leakage Detd. due to					Equiv. units in respect of theft of power & wrong metering (in LU.s)
		No. of conn. checked & wrong Metering	Theft of Power & wrong Metering	Un-auth. extn. of Load & other Charges	Total	Thft of Power & wrong Metering	Un-auth. extn. of Load & other Charges	Total	Thft of Power & wrong Metering	Un-auth. extn. of Load & other Charges	Total			Thft of Power & wrong Metering	Un-auth. extn. of Load & other Charges	Total								
																	No.	No.	(Rs.Lac)	(Rs.Lac)	No.	No.	(Rs.Lac)	
A	BORDER	Gurdaspur	3406	354	424	778	35.90	46.43	82.33	10.60	5301	417	317	734	89.95	31.88	121.83	26.54						
		Amritsar (C)	5061	2325	150	2475	67.25	15.91	83.16	19.85	2545	653	64	717	42.66	7.55	50.21	12.58						
		Amritsar (S)	8166	3330	863	4193	119.01	43.27	162.28	35.10	11567	4638	738	5376	426.05	68.22	494.27	125.68						
		Tarn Taran	3574	638	750	1388	51.61	28.44	80.05	15.22	4278	575	180	755	108.44	25.98	134.42	31.99						
			20207	6647	2187	8834	273.77	134.05	407.82	80.77	23691	6283	1299	7582	667.10	133.63	800.73	196.79						
B	NORTH	Kapurthala	4216	411	1252	1663	41.99	61.21	103.20	12.40	5674	389	948	1337	72.98	83.85	156.83	21.53						
		Jalandhar	12037	1654	2487	4141	101.96	239.62	341.58	29.78	12111	1575	1711	3286	188.43	169.21	357.64	55.59						
		Hoshiarpur	2424	183	447	630	58.82	57.04	115.86	17.34	2945	241	311	552	23.82	54.63	78.45	7.03						
		Nawanshehar	2051	126	408	534	11.09	26.90	37.99	3.26	3117	273	508	781	31.75	33.18	64.93	9.38						
			20728	2374	4594	6963	213.86	384.77	598.63	62.78	23847	2478	3478	5956	316.98	340.87	657.85	93.53						
C	CENTRAL	Ldh.(W-C)	6086	795	1025	1820	83.76	204.55	288.31	24.71	8363	639	1257	1896	226.95	159.22	386.17	66.95						
		Ldh.(E-C)	5729	658	1021	1679	68.15	193.22	261.37	20.11	5667	535	1057	1592	127.43	200.36	327.79	37.58						
		Ldh.(S)	3332	206	956	1162	13.38	77.90	91.28	3.95	5244	291	777	1068	58.13	65.94	124.07	17.15						
		Khanna	4794	236	1295	1531	20.46	120.63	141.09	6.03	6544	121	1159	1280	51.87	436.13	488.00	15.30						
			19941	1895	4297	6192	185.75	596.30	782.05	54.80	25818	1586	4250	5836	464.38	861.65	1326.03	136.98						
D	SOUTH	Patiala	7305	446	1781	2227	58.83	153.85	212.68	17.35	8044	385	1040	1425	110.54	100.51	211.05	32.61						
		Sangrur	5129	199	1240	1439	34.15	152.29	186.44	10.06	4392	136	822	958	62.10	153.52	215.62	18.31						
		Ropar	2411	26	232	258	15.24	30.06	45.30	4.51	2593	56	305	361	27.84	65.69	93.53	8.20						
		Mohali	2812	113	454	567	11.09	115.97	127.06	3.27	3665	60	586	646	124.16	312.21	436.37	36.58						
			17657	784	3707	4491	119.31	452.17	571.48	35.19	18694	637	2753	3390	324.64	631.93	956.57	95.70						
E	WEST	Bhatinda	5447	419	561	980	53.04	50.06	103.10	15.65	7968	569	553	1122	195.55	82.76	278.31	57.68						
		Ferozepur	2617	443	496	939	57.31	30.13	87.44	16.91	4483	416	357	773	139.65	52.65	192.30	41.19						
		Faridkot	3683	209	887	1096	21.59	63.87	85.46	6.36	6141	279	710	989	150.58	57.16	207.74	44.42						
		Mukatsar	3372	432	343	775	41.87	24.64	66.51	12.33	3581	262	227	489	95.88	28.97	124.85	28.28						
			15119	1503	2287	3790	173.81	168.70	342.51	51.25	22173	1526	1847	3373	581.66	221.54	803.20	171.57						
	G. Total	93652	13203	17072	30275	966.50	1735.99	2702.49	284.79	114223	12510	13627	26137	2354.76	2189.62	4544.38	694.57							

DETECTION OF THEFT OF ENERGY/LEAKAGE OF REVENUE BY OPERATION ORGANISATION

Sr. O.	Zone/Circle	UP TO SEPTEMBER 2007-08										UP TO SEPTEMBER 2008-09									
		Cases Deld.in respect of					Rev Leakage Deld. due to					Cases Deld.in respect of					Rev Leakage Deld. due to				
		No. of conn. checked	No.	Theft of Power & wrong Metering	Un-auth. extn.of Load & other Charges	Total	Theft of Power & wrong Metering	(Rs.Lac)	(Rs.Lac)	Total	Equiv. units in respect of theft of power & wrong metering	No. of conn. checked	No.	Theft of Power & wrong Metering	Un-auth. extn.of Load & other Charges	Total	Theft of Power & wrong Metering	(Rs.Lac)	(Rs.Lac)	Total	Equiv. units in respect of theft of power & wrong metering
A	BORDER	88307	9142	421		9563	251.85	15.21	267.06	83.72	107527	6531	93	6624	491.65	3.11	494.76	164.92			
		58375	1412	585		1997	88.76	37.70	126.46	23.50	32108	1095	294	1389	165.92	26.80	192.72	27.60			
		85037	9473	6495		15968	345.11	204.80	549.91	115.03	52921	5716	1492	7208	1213.84	52.58	1266.42	404.62			
		86763	7691	4951		12642	277.08	109.86	386.94	115.64	49116	5158	1632	6790	404.25	54.60	458.85	155.48			
		313482	27718	12452		40170	962.80	367.57	1330.37	337.89	241672	18500	3511	22011	2275.66	137.09	2412.75	752.62			
B	NORTH	27391	662	2193		2855	27.73	72.30	100.03	17.26	50168	1439	4490	5929	153.62	190.47	344.09	39.44			
		35197	730	1987		2717	34.62	76.55	111.17	12.54	59528	804	2526	3330	123.05	139.13	262.18	34.13			
		42370	604	1394		1998	16.93	36.03	52.96	5.65	64707	1256	1691	2947	88.98	45.97	134.95	29.66			
		33380	483	3297		3780	22.81	97.50	120.31	25.83	45217	786	4082	4868	130.43	138.53	268.96	86.02			
		138338	2479	8871		11350	102.09	282.38	384.47	61.28	219620	4285	12789	17074	498.08	514.10	1010.18	189.25			
C	CENTRAL	41259	3221	2548		5769	205.36	70.75	276.11	74.70	29908	1858	1429	3287	370.46	62.98	433.44	134.70			
		39659	2595	1417		4012	133.53	53.47	187.00	48.57	26477	1961	1496	3457	349.93	66.56	416.49	127.26			
		90676	2074	10787		12861	99.67	393.28	492.95	36.24	62973	1839	6669	8508	270.57	241.78	512.35	98.39			
		56022	1394	11112		12506	65.29	480.23	546.52	23.36	51552	1722	3990	5712	366.56	218.26	584.82	133.28			
		227616	9284	25864		35148	504.85	997.73	1502.58	182.87	170910	7380	13584	20984	1357.52	589.58	1947.10	493.63			
D	SOUTH	50323	7101	5030		12131	335.91	216.36	552.27	136.59	28485	3169	2457	5626	364.04	118.87	482.91	133.92			
		82863	5016	9037		14053	177.07	350.95	528.02	154.50	45260	2675	5044	7719	219.89	257.90	477.79	130.72			
		46643	1196	3200		4396	54.95	90.45	145.40	21.05	44423	2972	1525	4497	214.56	61.72	276.28	57.40			
		34282	761	1260		2021	46.18	92.85	139.03	12.91	27405	969	796	1765	274.43	85.75	360.18	78.11			
		214111	14074	18527		32601	614.11	750.61	1364.72	325.05	145573	9785	9822	19607	1072.92	524.24	1597.16	400.15			
E	WEST	40176	2447	592		3039	105.56	30.72	136.28	31.69	47521	5602	616	6218	884.45	34.10	918.55	292.39			
		37711	3261	3206		6467	113.54	114.02	227.56	42.17	37502	6047	3274	9321	1118.46	142.02	1260.48	171.53			
		76734	2164	2400		4564	98.88	87.64	186.52	52.59	80115	4733	6982	11715	365.93	774.17	1140.10	262.22			
		23507	1881	291		2172	86.70	12.88	99.58	25.78	56228	13295	311	13606	1188.85	7.49	1196.34	365.05			
		178128	9753	6489		16242	404.68	245.26	649.94	152.23	221366	29677	11183	40860	3557.69	957.78	4515.47	1091.19			
G. Total		1076675	63308	72203		135511	2588.53	2643.55	5232.08	1059.32	999141	69627	50889	120516	8759.87	2722.79	11482.66	2926.84			

Format -36

Power cuts on consumers - SLDC data

(April 07 - Mar. 08)

Month	MU per month
Apr-07	76
May-07	60
Jun-07	191
Jul-07	234
Aug-07	306
Sep-07	332
Oct-07	344
Nov-07	370
Dec-07	379
Jan-08	537
Feb-08	624
Mar-08	524
Total	3977

Abstract of Load Shedding

Month	Urban	Urban Pattern	Rural	Industrial	Rural Agri.	Total
	Domestic					
Apr-07	0	20	All rural feeders have been covered under Urban Pattern supply	54	2	76
May-07	0	3		56	1	60
Jun-07	1	20		157	13	191
Jul-07	0	18		208	8	234
Aug-07	1	37		208	60	306
Sep-07	0	26		201	105	332
Oct-07	24	85		206	28	344
Nov-07	67	101		190	12	370
Dec-07	93	101		175	10	379
Jan-08	96	116		189	137	537
Feb-08	123	116		253	132	624
Mar-08	107	107		298	12	524
Total	512	749			2195	520

Format -36(A)**Power cuts on consumers - SLDC data****(April 08 - Sept. 08)**

Month	MU per month
Apr-08	344
May-08	211
Jun-08	161
Jul-08	737
Aug-08	301
Sep-08	546
Total	2300

Abstract of Load Shedding

Month	Urban	Urban Pattern	Rural	Industrial	Rural Agri.	Total
	Domestic					
Apr-08	89	74	All rural feeders have been covered under Urban Pattern supply	177	4	344
May-08	35	11		164	1	211
Jun-08	6	20		128	7	161
Jul-08	251	173		249	64	737
Aug-08	19	30		218	34	301
Sep-08	101	64		247	134	546
Total	501	372		1183	244	2300

Format 46

Agricultural consumption

Month	2007-08			2008-09			2009-10(Projected)		
	Total Cons. (MU's)	Total Connected Load (MW)	KWh/KW	Total Cons. (MU's)	Total Connected Load (MW)	KWh/KW	Total Cons. MU's	Total Connected Load (MW)	KWh/KW
April	406	5099	80	486	5623	86	474	6127	77
May	634	5113	124	561	5667	99	739	6142	120
June	1059	5302	200	779	5868	133	1235	6334	195
July	1396	5420	258	1312	5969	220	1628	6472	252
Aug	1466	5450	269	1339	6042	222	1710	6507	263
Sept	1327	5481	242	1248	6044	206	1548	6545	237
Oct	906	5388	168	979	5851	167	1057	6441	164
Nov	608	5401	113	656	5863	112	709	6453	110
Dec	533	5409	98	575	5872	98	621	6464	96
Jan	505	5417	93	546	5883	93	589	64677	9
Feb	525	5446	96	567	5919	96	612	6521	94
Mar	665	5606	119	718	6064	118	776	6671	116
Apr-Sept	6288	5481	1147	5726	6044	947	7335	6545	1121
Oct-Mar	3741	5606	667	4041	6064	666	4364	6671	654
Total	10030	5606	1789	9766	6064	1611	11699	6671	1754

FORMAT -49

TRANSIT LOSS INFORMATION (%)

Month	GNDTP	Month	GNDTP
Apr-07	3.17	Apr-08	1.58
May-07	0.97	May-08	-0.07
Jun-07	0.81	Jun-08	-1.168
Jul-07	1.88	Jul-08	0
Aug-07	0.82	Aug-08	0
Sep-07	1.20	Sep-08	0.52
Oct-07	3.12		
Nov-07	2.80		
Dec-07	2.39		
Jan-08	1.84		
Feb-08	1.19		
Mar-08	2.94		
Overall for Fy 2007-08	2.04	Overall for Fy 2008- 09	0.13

FORMAT -49

TRANSIT LOSS INFORMATION (%)

Month	GGSSSTP, Roop nagar	Month	GGSSSTP, Roop nagar
Apr-07	1.85%	Apr-08	1.68%
May-07	1.68%	May-08	1.66%
Jun-07	1.02%	Jun-08	1.82%
Jul-07	1.36%	Jul-08	2.53%
Aug-07	0.67%	Aug-08	1.36%
Sep-07	1.63%	Sep-08	1.21%
Oct-07	4.06%		
Nov-07	4.42%		
Dec-07	4.22%		
Jan-08	3.13%		
Feb-08	2.24%		
Mar-08	3.14%		
Overall for FY 2007-08	2.50%	Overall for FY 2008-09	1.70%

PUNJAB STATE ELECTRICITY BOARD
ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2009-10

FORMAT 49

Transit Loss Information (%)

Name of the Plant: GHTP, Lehra Mohabat (Stage I)

Month	2007-08	Month	2008-09
Apr-07	1.73	Apr-08	0.88
May-07	2.50	May-08	-0.21
Jun-07	2.08	Jun-08	-0.32
Jul-07	1.63	Jul-08	0.25
Aug-07	1.46	Aug-08	-0.15
Sep-07	0.83	Sep-08	0.04
Oct-07	2.11		
Nov-07	2.68	Average for FY 2008-09 (H1)	0.06
Dec-07	1.48		
Jan-08	0.84		
Feb-08	0.49		
Mar-08	0.81		
Average for FY 2007-08	<u>1.49</u>		

ANNUAL REVENUE REQUIREMENT FOR THE YEAR 2009-10

FORMAT 49

Transit Loss Information (%)

Name of the Plant: GHTP, Lehra Mohabat (Stage II)

Month	2007-08	Month	2008-09
Apr-07		Apr-08	
May-07		May-08	
Jun-07		Jun-08	
Jul-07		Jul-08	
Aug-07		Aug-08	
Sep-07	Nil	Sep-08	Nil
Oct-07			
Nov-07		Average for FY 2008-09 (H1)	Nil
Dec-07			
Jan-08			
Feb-08			
Mar-08			
Average for FY 2007-08	Nil		

Note:-

1. Unit # 3: Commercial Operation Declared on 16.10.2008.
2. Unit # 4: Assumed to be on commercial run w.e.f. 01.01.2009

Format-52

Shunt Capacitor Addition / Repair Program.

Format Applicable to: Transmission System.

S. No.	Particulars	Capacity (MVAR)
Capacitor Additions		
1	Total Capacitors requirement at the end of previous year (2007-08)	2969.628
2	Actual installed Capacitors at the end of previous year (2007-08)	2346.869
3	Backlog / short fall at the end of previous year (1 – 2)	622.759
4	Additional requirement for the current year	-
5	Total Capacity required to be added during the current year (3 + 4)	622.759
6	Actual installed during first half of current year	5.031
7	Target for the 2 nd half of current year	617.728
8	Total Capacitors likely to be added during current year (6+7)	622.759
9	Total capacity likely to be available by the end of current year (2+8)	2969.628
10	Short fall if any (1+4) (-9)	-
Repair of Defective Shunt Capacitor		
11	At the end of the end of previous year (2007-08) (Defective)	79.104
12	Net capacity available by the end of previous year (2-11)	2267.765
13	Capacitors damaged during 1st half of the current year	119.776
14	Capacitors repaired / replaced during 1st half of the current year	84.135
15	Net capacity available by the end of 1st half of the year (12+13+14)	2232.124
16	Target level of damaged capacitors by the end of current year	-
17	Net capacity likely to be available by the end of current year (9-16)	2969.628
18	Net short fall by the end of the year (9-17)	-

Format-53**Electrical Accidents****Central Zone**

Format Applicable to: Transmission/ Distribution System

Transmission Zone	2007-08		2008-09	
	Fatal	Non fatal	Fatal	Non Fatal
East Circle, Ludhiana				
Board Employees	2	2	1	2
Private persons	2	0	0	0
Animals	0	0	0	0
West Circle, Ludhiana				
Board Employees	1	0	2	0
Private persons	0	2	1	0
Animals	0	0	0	0
Sub.Circle, Ludhiana.				
Board Employees	4	4	2	0
Private persons	9	0	6	4
Animals	2	0	9	0
Khanna Circle.				
Board employees	4	6	1	4
Private persons	2	1	0	0
Animals	4	0	0	0
Central Zone Ludhiana.				
Board employes	11	12	6	6
Private persons	13	3	7	4
Animals	6	0	9	0

Format-53

West Zone

Electric Accidents Under West Zone, Bathinda.

Format Applicable to: Distribution System

West Zone	FY 2007-08		FY-08-09	
	Fatal	Non fatal	Fatal	Non fatal
Board Employees	9	22	9	12
Private persons	9	8	8	4
Animals	18	0	12	0
Total	36	30	29	16

FORMAT 53

North Zone

ELECTRICAL ACCIDENTS

Name of Circle	FY 2007-08		FY 2008-09 (30.9.08)	
	Fatal	Non-Fatal	Fatal	Non-Fatal
KAPURTHALA				
Board Employee	1	9	1	2
Private Employee	5	0	0	1
Animals	0	0	0	0
JALANDHAR				
Board Employee	1	5	0	2
Private Employee	0	0	2	0
Animals	0	0	0	0
HOSHIARPUR				
Board Employee	1	6	2	4
Private Employee	4	1	5	0
Animals	2	0	1	0
NAWANSHAHR				
Board Employee	0	5	1	6
Private Employee	2	0	2	2
Animals	1	0	0	0
NORTH ZONE				
Board Employee	3	25	4	14
Private Employee	11	1	9	3
Animals	3	0	1	0

Format 53

CE Border

Electrical Accidents

Format Applicable to: Transmission/ Distribution System

Transmission Zone	FY 2007-08		FY 2008-09(30.9.08)	
	Fatal	Non fatal	Fatal	Non Fatal
Gurdaspur Circle.				
Board Employees	0	6	2	2
Private persons	6	2	5	0
Animals	3	0	5	0
Suburban Circle.				
Board Employees	2	3	1	5
Private persons	4	2	7	1
Animals	7	0	4	0
Taran Taran Circle.				
Board Employees	0	1	1	2
Private persons	5	1	4	0
Animals	0	0	3	0
City Circle.				
Board employees	0	0	0	4
Private persons	0	0	0	0
Animals.	0	0	0	0
Border Zone.				
Board employes	2	10	4	13
Private persons	15	5	16	1
Animals	10	0	12	0

Format-53

South Zone

ELECTRICAL ACCIDENTS

FORMAT APPLICABLE TO: TRANSMISSION/DISTRIBUTION SYSTEM

TRANSMISSION ZONE	FY 2007-08		FY 2008-09(30/09/08)	
	FATAL	NON-FATAL	FATAL	NON-FATAL
PATIALA CIRCLE				
Board Employees	12	10	0	5
Private Persons	13	2	1	1
Animals	3	0	4	0
SANGRUR CIRCLE				
Board Employees	5	11	2	6
Private Persons	4	2	5	1
Animals	2	0	1	0
Ropar Circle				
Board Employees	7	3	1	0
Private person	3	0	0	0
Animals	0	0	0	0
MOHALI CIRCLE				
Board Employees	2	5	3	4
Private persons	1	0	3	0
Animals	0	0	0	0
SOUTH ZONE				
Board Employees	26	29	6	15
Private persons	21	4	9	2
Animals	5	0	5	0

Format-54

Failure of Power Transformers
Format Applicable to: Transmission System

Sl. No.	Item	FY Ending 31.3.08			1.4.08 to 30.9.08			1.10.08 to 31.3.09(Projections)			2009-10 (Projections)		
		No. of Transformers	No. of failures	Total Duration of failure (Hrs.)	No. of Transformers	No. of failures	Total Duration of failure (Hrs.)	No. of Transformers	No. of failures	Total Duration of failure (Hrs.)	No. of Transformers	No. of failures	Total Duration of failure (Hrs.)
	Transformation ratio												
1	Transformation ratio 1	0	0	0	0	0	0	0	0	0	0	0	0
2	Transformation ratio 2	0	0	0	0	0	0	0	0	0	0	0	0
3	Transformation ratio 3 66KV	142	108	307.25	144	158	751.27	150	52	212.35	156	44	197.11
4	Transformation ratio 4 33KV	1	0	0	1	0	0	1	0	0	1	0	0
	Average duration of interruption												
5	Average duration of interruption per transformer for Transformation ratio 1	0	0		0	0		0	0		0	0	
6	Average duration of interruption per transformer for Transformation ratio 2	0	0		0	0		0	0		0	0	
7	Average duration of interruption per transformer for Transformation ratio 3	0.020			0.033			0.027			0.029		
8	Average duration of interruption per transformer for Transformation ratio 4	0			0			0			0		

Format 54

West Zone
FAILURE OF POWER TRANSFORMERS
Format Applicable to : Transmission System

Sr.N o	Item	FY 2007-08			FY 2008-09 (upto 30-09-08)			FY 2008-09 (Tentative)		
		No. of Transformers	No. of failures	Total Duration of failure (Hrs.)	No. of Transformers	No. of failures	Total Duration of failure (Hrs.)	No. of Transformers	No. of failures	Total Duration of failure of failure (Hrs.)
Transmission ratio										
1	Transmission ratio 1(66/11KV)	159	2	24.00	183	1	12.00	183	1	12.00
2	Transmission ratio 2(33/11KV)	66	-	-	61	1	-	61	1	-
3	Transmission ratio 3(11/0.4KV)	68439	9913	311720	74397	6190	182716	77642	8200	242047
4	Transmission ratio 4	-	-	-	-	-	-	-	-	-
Average duration of interruption										
5	Average duration of interruption per transformer for transformer ratio 1	0.0755			0.0656			0.0656		
6	Average duration of interruption per transformer for transformer ratio 2	-			-			-		
7	Average duration of interruption per transformer for transformer ratio 3	0.0005			0.0004			0.0004		
8	Average duration of interruption per transformer for transformer ratio 4	-			-			-		

FORMAT-54

Zone: North

Failure of Transformers

Sr.	Item	Proceeding Year 2007-08		Current Year (Actual) 9/08		
		No. of T/F	No. of failures	Total Duration of failure (Hrs.)	No. of T/F	No. of failures
	Transformation ratio					
1	66/11KV T/F	87	4	80.5	91	-
2	33/11 Kv.	64	1	26.05	61	1
3	11/04 KV T/F	47739	5081	62694.23	54249	3278
	Average duration of Interruption					
4	Average duration of Interruption per Transformer for Ratio 1			0.23		0.00
5	Average duration of Interruption per Transformer for Ratio 2			0.41		0.40
6	Average duration of Interruption per Transformer for Ratio 3			0.0003		0.0003
7	Average duration of Interruption per Transformer for Ratio 4					

Format 54

CE-Border

Failure of Power Transformers

Format Applicable to: Transmission System

Sl. No.	Item	FY 2007-08			FY 2008-09(up to 9/2008)		
		No. of Transformers	No. of failures	No. of duration of failures(hrs)	No. of transformers	No. of failures.	No. of duration of failures (hrs)
	Transformation ratio						
1	Transformation ratio 1(66/11KV)	147	5	19	153	1	6
2	Transformation ratio 2(33/11KV)	5	0	0	5	0	0
3	Transformation ratio 3 (11/.04KV)	49886	13289	243075	51375	7662	140580
4	Transformation ratio 4						
	Average duration of Interruption						
5	Average duration of Interruption per transformer for Transformation ratio 1			0.025			0.039
6	Average duration of Interruption per transformer for Transformation ratio 2			0			0
7	Average duration of Interruption per transformer for Transformation ratio 3			0.0003			0.0003
8	Average duration of Interruption per transformer for Transformation ratio 4						

Format 54 B

CE-Border

Expected Failure of Power Transformers

Format Applicable to: Transmission System

Sl. No.	Item	FY 2008-09 (3/2008)				FY 2009-10			
		No. of Transformers	No. of failures	No. of duration of failures(hrs)	No. of transformers.	No. of failures.	No. of duration of failures (hrs)		
	Transformation ratio								
1	Transformation ratio 1(66/11KV)	156	1	6	160	0	0		
2	Transformation ratio 2(33/11KV)	5	0	0	0	0	0		
3	Transformation ratio 3 (11/.04KV)	52400	9665	173970	55200	9000	135000		
4	Transformation ratio 4								
	Average duration of interruption								
5	Average duration of interruption per transformer for Transformation ratio 1			0.03			0		
6	Average duration of interruption per transformer for			0			0		
7	Average duration of interruption per transformer for			0.00034			0.0002		
8	Average duration of interruption per transformer for								

Failure of Power Transmission

Format 54

Format Applicable to :- Transmission System

Sr. No	Item	FY 2007-08		FY 2008-09(30/09/08)	
		No. of T/Fs	Total duration of failure(Hrs)	No. of T/Fs	Total duration of failure(Hrs)
South Zone					
	Transformation Ratio				
1	Transformation Ratio 1(66/11 KV)	193	2	199	0
2	Transformation Ratio 2(33/11 KV)	7	0	7	0
3	Transformation Ratio 3(11/.04 KV)	76836	11650	80976	138917
4	Transformation Ratio 4	0	0	0	0
	Average duration of Interruption				
5	Aver duration of interruption per T/F for Transformer ratio 1		0.0530		0
6	Aver duration of interruption per T/F for Transformer ratio 2		0		0
7	Aver duration of interruption per T/F for Transformer ratio 3		2.390		1.710
8	Aver duration of interruption per T/F for Transformer ratio 4		0		0
South Zone					
	Transformation Ratio				
1	Transformation Ratio 1(66/11 KV)	193	2	199	0
2	Transformation Ratio 2(33/11 KV)	7	0	7	0
3	Transformation Ratio 3(11/.04 KV)	76836	11650	80976	138917
4	Transformation Ratio 4	0	0		
	Average duration of Interruption				
5	Average duration of interruptionper transformer for Transformation ratio 1		0.0266		0
6	Average duration of interruptionper transformer for Transformation ratio 2		0		
7	Average duration of interruptionper transformer for Transformation ratio 3		0.00021		0.0002
8	Average duration of interruptionper transformer for Transformation ratio 4				

Format 55

Central Zone

Overloaded Distribution Transformers (DTRs)

Format Applicable to Distribution System

Year: 31.3.08 (for the year 2007-08)

S.No	Area	No. of DTRs in Area	No. of overloaded DTRs In area	% number of overloaded DTRs
A	66KV			
	City East Circle, Ludhiana	59	4	6.78
	City West Circle, Ludhiana	0	0	0.00
	Sub.Circle, Ludhiana.	33	6	18.18
	Khanna Circle	50	6	12.00
	Sub-Total 66 kV	142	16	11.27
B	33KV			
	City East Circle, Ludhiana	0	0	0.00
	City West Circle, Ludhiana	0	0	0.00
	Sub.Circle, Ludhiana.	1	0	0.00
	Khanna Circle	0	0	0.00
	Sub-Total 33 kV	1	0	0.00
C	11KV			
	City East Circle, Ludhiana	3600	177	4.92
	City West Circle, Ludhiana	4756	194	4.08
	Sub.Circle, Ludhiana.	11736	1323	11.27
	Khanna Circle	11635	3122	26.83
	Sub-Total 11 kV	31727	4816	15.18
Total for State at 66 kV		142	16	11.27
Total for State at 33 kV		1	0	0.00
Total for State at 11 kV		31727	4816	15.18

Format 55 A

Central Zone

Overloaded Distribution Transformers (DTRs)

Format Applicable to Distribution System

Year: 2008-09 (upto 30.09.08)

S.No	Area	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs
A	66kV			
	City East Circle, Ludhiana	59	4	6.78
	City West Circle, Ludhiana	0	0	0.00
	Sub.Circle, Ludhiana.	33	6	18.18
	Khanna Circle	52	6	11.54
	Sub-Total 66 kV	144	16	11.11
B	33kV			
	City East Circle, Ludhiana	0	0	0
	City West Circle, Ludhiana	0	0	0
	Sub.Circle, Ludhiana.	1	0	0
	Khanna Circle	0	0	0
	Sub-Total 33 kV	1	0	0
C	11kV			
	City East Circle, Ludhiana	3657	172	4.70
	City West Circle, Ludhiana	4873	185	3.80
	Sub.Circle, Ludhiana.	13464	1768	13.13
	Khanna Circle	12494	2717	21.75
	Sub-Total 11 kV	34488	4842	14.04
	Total for State at 66 kV	144	16	11.11
	Total for State at 33 kV	1	0	0.00
	Total for State at 11 kV	34488	4842	14.04

Format 55 B

Central Zone

Overloaded Distribution Transformers (DTRs)

Format Applicable to Distribution System

Year: 2008-09 (1.10.08 to 31.3.09)

S.No	Area	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs
A	66kV			
	City East Circle, Ludhiana	60	3	5.00
	City West Circle, Ludhiana	0	0	0.00
	Sub.Circle, Ludhiana.	32	6	18.75
	Khanna Circle	58	4	6.90
	Sub-Total 66 kV	150	13	8.67
B	33kV			
	City East Circle, Ludhiana	0	0	0
	City West Circle, Ludhiana	0	0	0
	Sub.Circle, Ludhiana.	1	0	0
	Khanna Circle	0	0	0
	Sub-Total 33 kV	1	0	0
C	11kV			
	City East Circle, Ludhiana	3710	192	5.18
	City West Circle, Ludhiana	4925	215	4.37
	Sub.Circle, Ludhiana.	13565	1798	13.25
	Khanna Circle	12700	2747	21.63
	Sub-Total 11 kV	34900	4952	14.19
Total for State at 66 kV		150	13	8.67
Total for State at 33 kV		1	0	0.00
Total for State at 11 kV		34900	4952	14.19

Format 55

West Zone
OVERLOADED DISTRIBUTION TRANSFORMERS (DTRs)

Format Applicable to : Distribution System

Sr.No	Area	Year 2007-08		
		No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs
A	66 KV	165	22	13.33
B	33 KV	66	12	18.18
C	11 KV	68439	4789	7.00
Total for State at 66 KV		-	-	-
Total for State at 33 KV		-	-	-
Total for State at 11 KV		-	-	-

Format 55 A

West Zone

OVERLOADED DISTRIBUTION TRANSFORMERS (DTRs)

Format Applicable to : Distribution System

Sr.No	Area	Year 2008-09 (Upto 30-09-08)			Year 2008-09 (Tentative)		
		No. of DTRs in Area	No. of overloaded	% number of overloaded DTRs	No. of DTRs in Area	No. of overloaded	% number of overloaded DTRs
A	66 KV	183	23	12.57	183	20	10.93
B	33 KV	61	13	21.31	61	10	16.39
C	11 KV	74397	5892	7.92	77642	4520	5.82
Total for State at 66 KV		-	-	-	-	-	-
Total for State at 33 KV		-	-	-	-	-	-
Total for State at 11 KV		-	-	-	-	-	-

FORMAT-55

North Zone

Overloaded Distribution Transformers (DTRs)

S.N	Area	2007-2008			2008-2009(9/08)		
		No. of DTRs in area	No. of over loaded DTRs in area	% number of overloaded DTRs	No. of DTRs in area	No. of over loaded DTRs in area	% number of overloaded DTRs
I Kapurthala							
A	66 KV	26	3	11.54	26	3	11.54
B	33 KV	24	2	8.33	24	2	8.33
C	11 KV	16161	1727	10.69	21612	2039	9.43
II Jalandhar							
A	66 KV	27	1	3.70	27	7	25.93
B	33 KV	8	2	25.00	8	3	37.50
C	11 KV	9300	782	8.41	9493	916	9.65
III Hoshiarpur							
A	66 KV	18	2	11.11	22	0	0.00
B	33 KV	22	2	9.09	19	0	0.00
C	11 KV	13364	999	7.48	14016	1126	8.03
IV N/Shahat							
A	66 KV	16	7	43.75	16	7	43.75
B	33 KV	10	2	20.00	10	2	20.00
C	11 KV	8914	1235	13.85	9128	1639	17.96
V North Zone							
A	66 KV	87	13	14.94	91	17	18.68
B	33 KV	64	8	12.50	61	7	11.48
C	11 KV	47739	4743	9.94	54249	5720	10.54

Overloaded Distribution Transformers (DTRs)

Overloaded Distribution Transformers (DTRs)
Former Applicable to Distribution System

Annual Appraisal to Distribution System																			
S.No	Area	No. of DTRs in Area	Year 2007-08			Year 2008-DTRs 30-09-08			Year 2008-09(10-08 to 09-09-08)			Year 2008-09(10-08 to 09-09-08)			2008-10 Expected				
			No. of overloaded DTRs in area	% number of overloaded DTRs	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs	No. of DTRs in Area	No. of overloaded DTRs in area	% number of overloaded DTRs			
A																			
66kV																			
	Zone 1(South)																		
	Zone 2 (Border)	147	51	34.69	147	52	35.37	156	52	33.33	160	45	28.12						
	Zone 3 (Central)																		
	Zone 4 (North)																		
	Zone 5 (West)																		
	Sub-Total 66 kV	147	51	34.69	147	52	35.37	156	52	33.33	160	45	28.12						
B																			
11kV																			
	Zone 1(South)																		
	Zone 2 (Border)	5	0	0	5	0	0	5	0	0	5	0	0						
	Zone 3 (Central)																		
	Zone 4 (North)																		
	Zone 5 (West)																		
	Sub-Total 11 kV	5	0	0	5	0	0	5	0	0	5	0	0						
C																			
11kV																			
	Zone 1(South)																		
	Zone 2 (Border)	40848	3097	6.21	51375	3297	6.41	52400	3500	6.68	55200	3300	5.98						
	Zone 3 (Central)																		
	Zone 4 (North)																		
	Zone 5 (West)																		
	Sub-Total 11 kV	40848	3097	6.21	51375	3297	6.41	52400	3500	6.68	55200	3300	5.98						

Overloaded Distribution Transformers (DTRs)

Format 55 A

Format applicable to Distribution System

Year 2007-08

Sr.No.	Area	No. of DTRs in Area	No. of Overloaded DTRs Area	%age number of Overloaded DTRs
	Zone			
A	66KV	193	20	10.36
B	33KV	7	3	42.86
C	11KV	76836	11853	15.43

Overloaded Distribution Transformers (DTRs)

Format 55 B

Format applicable to Distribution System

Year 2008-09

Sr.No.	Area	No. of DTRs in Area	No. of Overloaded DTRs	%age number of Overloaded DTRs
1	Patiala Circle			
A	66KV	71	21	29.58
B	33KV			
C	11KV	28771	5029	16.09
2	Sangrur Circle			
A	66KV	82	12	14.63
B	33KV			
C	11KV	33997	7639	22.28
3	Ropar Circle			
A	66KV	21	5	23.81
B	33KV	7	3	42.85
C	11KV	12134	240	1.98
4	Mohali Circle			
A	66KV	25	5	20
B	33KV			
C	11KV	6074	226	3.72
	Zone			
A	66KV	199	43	88.02
B	33KV	7	3	42.85
C	11KV	80976	13134	44.07

Format-56

Major System Occurrences

Format Applicable to: Transmission System.

Sr. No.	Disturbances	FY 2007-08		FY 2008-09 Up to September-2008	
		Number	Total Duration (Hrs.)	Number	Total Duration (Hrs.)
A	Occurrences where distribution system supply has been effected for more than 1 Hr.				
1	Due to 132 kV transformer failures	29	279.34	17	125.11
2	Due to 132 kV transmission line outage	39	121.54	26	115
3	Due to 132 kV substation equipment (CT, CVT etc.) failure.	9	46.11	9	84.15
4	Due to 220kV transformer failure	10	36.11	12	61.18
5	Due to 220kV transmission line failure	18	41.22	44	307.14
6	Due to 220 kV substation equipment (CT, CVT etc.) failure.	4	13.15	2	6.07
B	Estimated un-served energy due to such interruptions	244.69 LUs		60.90 LUs	
C	Other occurrences where distribution system supply has not been effected.				
1	Due to 132 kV transformer failures	105	263.2	69	53.28
2	Due to 132 kV transmission line outage	297	598.08	138	581.46
3	Due to 132 kV substation equipment (CT, CVT etc.) failure.	2	71.16	7	59.18
4	Due to 220kV transformer failure	23	149.13	19	109.42
5	Due to 220kV transmission line failure	221	3407.52	117	3642.58
6	Due to 220 kV substation equipment (CT, CVT etc.) failure.	15	177.26	13	283.21

Format-57

Abstract of Outages due to feeder tripping

Format Applicable to: Transmission / Distribution System.

Sr. No.	Item	FY 2007-08 (Ending 31.03.08)			FY 2008-09 (ending September-08)		
		No. of Feeders	No. of trippings)	Total Duration of Trippings (Hrs)	No. of Feeders	No. of trippings)	Total Duration of Trippings (Hrs)
1	Feeder Voltage Level 1 (400 kV)	-	-	-	-	-	-
2	Feeder Voltage Level 2 (220 kV)	111	352	2543.13	111	216	1304
13	Feeder Voltage Level 3(132 kV)	141	522	1196.21	141	327	703
4	Average duration of interruption per feeder for Voltage Level 1 (400 kV)	-			-		
5	Average duration of interruption per feeder for Voltage Level 2 (200 kV)	0.065			0.054		
6	Average duration of interruption per feeder for Voltage Level 3 (132 kV)	0.016			0.015		

Format-57

Central Zone

Abstract of Outages due to feeder tripping

Format Applicable to: Transmission/ Distribution System

S.No	Item	upto 31.3.08			1.4.08 to 30.9.08			1.10.08 to 31.3.09		
		No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)	No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)	No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)
1	Feeder voltage Level 66KV	129	226	303.08	132	192	226.82	138	150	118.13
2	Feeder voltage level 33KV	1	0	0	1	0	0.00	1	0	0.00
3	Feeder voltage Level 11KV	914	41506	1383.5	927	30865	1029	944	45500	1517
4	Average duration of interruption per feeder for voltage level 66KV	0.01040			0.00895			0.00571		
5	Average duration of interruption per feeder for voltage level 33KV	0.00000			0.00			0.00		
6	Average duration of interruption per feeder for voltage level 11KV	0.00004			0.00004			0.00004		

Format 57
West Zone
ABSTRACT OF OUTAGES DUE TO FEEDER TRIPPINGS
Format Applicable to : Transmission/Distribution System

Sr.N	Item	FY 2007-08				FY 2008-09(30-09-08)				FY 2008-09 (Tentative)			
		No. of Feeders	No. of Trippings	Total Duration of trippings (Hrs.)	No. of Feeders	No. of Trippings	Total Duration of trippings (Hrs.)	No. of Feeders	No. of Trippings	Total Duration of trippings (Hrs.)	No. of Feeders	No. of Trippings	Total Duration of trippings (Hrs.)
1	Feeder voltage Level 66 KV	36	622	12	39	287	19.45	45	310	16.72			
2	Feeder voltage Level 33 KV	26	106	17.38	25	109	24.05	25	120	26.49			
3	Feeder voltage Level 11 KV	1282	82578	16072.08	1338	58627	8363	1352	65270	9310			
5	Average duration of interruption per Feeder for voltage level 66 KV		0.0005			0.0017			0.0012				
6	Average duration of interruption per Feeder for voltage level 33 KV		0.0063			0.0088			0.0088				
7	Average duration of interruption per Feeder for voltage level 11 KV		0.0002			0.0001			0.0001				

FORMAT -57

North Zone

Abstract of Outages due to feeder tripping

S.No.	Item	Previous Year(2007-2008)			2008-2009(9/08)		
		No.of feeders	No.of Trippings	Total Duration of Trippings (Hrs)	No.of feeders	No.of Trippings	Total Duration of Trippings (Hrs)
1	66 KV	68	146	286.31	73	171	161.77
2	33 KV	31	193	230.2	35	152	72.74
3	11 KV	1027	91994	18990.78	1060	70197	16266.15
4	Average duration of interruption per feeder for 66 KV			4.21			2.22
5	Average duration of interruption per feeder for 33 KV			7.43			2.08
6	Average duration of interruption per feeder for 11 KV			18.49			15.35

Format 57

Border Zone

ABSTRACT OF OUTAGES DUE TO FEEDER TRIPPINGS

Format Applicable to : Transmission/Distribution System

S.No	Item	FY 2007-08			FY 2008-09(Up to 9/2008)			FY 2008-09(3/2009) Expected			FY 2009-10 Expected		
		No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)	No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)	No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)	No. of feeders	No. of Trippings	Total Duration of Trippings (Hrs)
1	Feeder voltage Level 66KV	91	306	126.78	93	215	97.98	93	312	148.92	94	310	145.23
2	Feeder voltage level 33KV	2	104	25.3	2	39	8.97	2	51	32.64	2	45	30.35
3	Feeder voltage Level 11KV	1129	127757	96917	1161	72753	47471	1175	111653	87829	1210	110303	76310
4	Average duration of interruption per feeder for voltage level 1.		0.0004			0.0049			0.0005			0.0049	
5	Average duration of interruption per feeder for voltage level 2		0.12			0.12			0.32			0.33	
6	Average duration of interruption per feeder for voltage level 3		0.00067			0.00056			0.0006			0.0005	

Abstract of Outage due to feeder tripping Under South Zone

Format 57

Abstract of Outages due to feeder tripping FORMAT APPLICABLE TO: TRANSMISSION/DISTRIBUTION SYSTEM

Sr. No	Item	FY 2007-08				FY 2008-09(30/09/08)			
		Transformation Ratio		Total duration of Trippings (Hrs)	No. of Feeders	No. of Trippings	Total duration of Trippings (Hrs)		
		No. of Feeders	No. of Trippings						
SOUTH ZONE									
1	Feeder voltage level-1 66KV/grid	144	211	201.59	155	157	206.58		
2	Feeder voltage level2- 33 KV	5	23	17	5	33	19		
3	Feeder voltage level-3 11KV	1357	63966	22083.53	1450	87941	23203.28		
4	Average duration of interruption per feeder for voltage level-1.		1.400			1.440			
5	Average duration of interruption per feeder for voltage level-2.		3.400			3.800			
6	Average duration of interruption per feeder for voltage level-3.		16.270			16.000			

Format 58

Form: Number of Service Connection Applications Pending

Central Zone

Format Applicable to Distribution System

Year 2008-09(1.10.08 to 31.03.09)

Category	Pending at the beginning of the period	Associated Load (MW)	No. of Applications Received during period	Associate d Load (MW)	No. of Connections released during period	Associate d Load (MW)	Pending at the end of the period No. of Applications Received during period	Associated Load (MW)
	Total	Total	Total	Total	Total	Total	Total	Total
DS	4369	7.168	14690	25.690	17356	29.446	1703	3.412
NRS	551	31.645	2014	35.393	2225	59.298	340	7.74
SP	283	3.842	227	3.203	285	3.965	225	3.08
MS	253	12.682	147	10.022	245	12.507	155	10.197
LS	94	92.118	69	30.660	102	50.676	61	72.102
PWW	43	0.689	20	0.447	41	0.846	22	0.29
AP	36998	130.790	3055	18.283	4244	28.295	35809	120.778
Others	77	0.692	19	0.196	62	0.706	34	0.182
	0	0.000	0	0.000	0	0.000	0	0
Total	42668	279.626	20241	123.894	24560	185.739	38349	217.781

Format 58

Central Zone

Number of Service Connection Applications Pending

Format Applicable to Distribution System

1.4.07 to 31.3.08

Category	Pending at the beginning	Associated Load (MW)	No. of Applications Received	Associated Load (MW)	No. of Connections released	Associated Load (MW)	Pending at the end of the period	Associated Load (MW)
		Total	Total	Total	Total	Total	Total	Total
DS	1	0.011	32311	51.093	28562	42.324	3750	8.78
NRS	2	0.002	4306	70.010	3918	34.785	390	35.227
SP	193	2.907	525	7.492	535	7.575	183	2.824
MS	141	8.097	510	27.785	528	29.496	123	6.386
LS	47	66.146	223	117.878	200	114.699	70	69.325
PWW	75	0.876	58	1.149	83	1.240	50	0.785
AP	29190	93.976	9841	45.240	1103	4.719	37928	134.497
Others	80	0.533	123	1.129	103	0.895	100	0.767
	0	0.000	0	0.000	0	0.000	0	0
Total	29729	172.548	47897	321.776	35032	235.733	42594	258.591

Format 58A

Central Zone

Form: Number of Service Connection Applications Pending

Format Applicable to Distribution System

Year 2008-09(1-04-09 to 30-09-08)

Category	Pending at the beginning of the period	Associated Load (MW)	No. of Applications Received during period	Associated Load (MW)	No. of Connections released during period	Associated Load (MW)	Pending at the end of the period No. of Applications Received during period	Associated Load (MW)
	Total	Total	Total	Total	Total	Total	Total	Total
DS	3750	8.780	14699	24.213	14080	25.825	4369	7.168
NRS	390	35.227	1918	65.350	1757	68.932	551	31.645
SP	183	2.824	236	3.088	136	2.070	283	3.842
MS	123	6.386	205	10.781	75	4.485	253	12.682
LS	70	69.323	70	46.928	46	24.133	94	92.118
PWW	50	0.785	15	0.189	22	0.285	43	0.689
AP	37928	134.497	2406	15.666	3336	19.373	36998	130.79
Others	100	0.767	36	0.493	59	0.568	77	0.692
	0	0.000	0	0.000	0	0.000	0	0
Total	42594	258.589	19585	166.708	19511	145.671	42668	279.626

Format 58
WEST Zone

NUMBER OF SERVICES CONNECTION APPLICATIONS PENDING

Format Applicable to : Distribution System

Year 2008-09 (30.09.08)

Sr.N o	Category	Pending at the beginning of the period	Associated Load (M.W)	No. of Applications received during period	Associated load (M.W)	No. of Connections released during period	Associated load (M.W)	Pending at the end of the period	Associated load (M.W)
1	Domestic	13331	21.41	33142	38.14	23708	30.31	22765	29.244
2	Non-residential	1442	6.206	4464	19.80	3503	15.90	2403	10.102
3	Small Power	226	2.468	384	4.33	339	3.50	271	3.306
4	Medium Supply	49	3.085	104	7.97	89	6.20	64	4.858
5	Large Supply	19	9.299	67	32.94	42	22.75	44	19.491
6	Public Water Works	38	0.493	81	1.00	38	0.68	81	0.819
7	Agriculture	173813	676.561	43762	261.28	17813	156.43	199762	781.406
8	Others	9	0.11	4	0.03	5	0.02	8	0.12
	Total	188927	719.632	82008	365.490	45537	235.776	225398	849.346

Year 2007-08

Sr.N o	Category	Pending at the beginning of the period	Associated Load (M.W)	No. of Applications received during period	Associated load (M.W)	No. of Connections released during period	Associated load (M.W)	Pending at the end of the period	Associated load (M.W)
1	Domestic	14894	21.766	32515	38.209	21319	23.01	6945	14.823
2	Non-residential	1713	6.841	3448	13.913	2447	11.044	868	3.692
3	Small Power	260	2.791	264	2.855	256	2.853	303	3.194
4	Medium Supply	61	3.09	115	8.545	84	6.393	51	2.852
5	Large Supply	35	14.393	71	25.053	47	19.973	19	6.185
6	Public Water Works	64	0.748	44	0.715	19	0.512		0.603
7	Agriculture	177936	678.561	34893	191.012	11116	57.137	145783	543.347
8	Others	8	0.084	22	0.507	20	0.465	7	0.128
	Total	194971	728.274	71372	280.809	35308	121.387	153976	574.824

FORMAT-58

North Zone

NUMBER OF SERVICE CONNECTION APPLICATIONS PENDING

FORMAT APPLICABLE TO DISTRIBUTION SYSTEM

						YEAR 2007-08 (3/08)		
Category	Pending at the beginning of the period 3/07	Associated load (MW)	No. of Applications Received during period	Associated Load (MW)	No. of Connections released during period	Associated Load (MW)	Pending at the end of the period 3/08	Associated Load (MW)
NORTH ZONE								
Domestic	1867	3.181	42036	61.534	34059	55.376	6784	9.198
Non-residential	452	4.751	7676	33.87	5927	30.633	1174	7.577
Small Power	109	1.254	400	4.363	269	4.016	107	1.364
Medium Supply	79	3.851	279	10.721	103	9.119	86	1.127
Large Supply	29	14.17	100	21.446	25	20.466	40	10.473
Public Water Works	90	1.596	185	3.195	155	1.947	116	1.571
Agriculture	42337	141.793	22028	102.645	1478	23.113	61163	222.036
Others	32	6.452	52	4.119	24	1.548	30	8.521
Total	44995	177.048	72756	241.893	42040	146.218	69500	261.867

FORMAT 58A

NORTH ZONE

NUMBER OF SERVICE CONNECTION APPLICATIONS PENDING

FORMAT APPLICABLE TO DISTRIBUTION SYSTEM

YEAR 2008-09 (Till 9/08)

Category	Pending at the beginning of the period 1/08	Associated load (MW)	No. of Applications Received during period	Associated Load (MW)	No. of Connections released during period	Associated Load (MW)	Pending at the end of period 9/08	Associated Load (MW)
NORTH ZONE								
Domestic	6784	9.198	18430	31.278	10927	23.426	11051	16.985
Non-residential	1174	7.577	3203	17.934	2034	15.454	1967	9.669
Small Power	107	1.364	143	1.68	87	1.327	122	1.435
Medium Supply	86	4.78	119	4.803	78	5.229	95	4.471
Large Supply	40	10.473	71	37.268	11	8.763	53	23.877
Public Water Works	116	1.571	48	0.82	80	0.903	68	1.198
Agriculture	61163	222.036	3774	13.232	2671	15.064	60348	220.91
Others	30	8.521	37	3.007	2	0.171	36	11.288
Total	69500	265.52	25825	110.022	15890	70.337	73741	289.833

Format 58

Border Zone

NUMBER OF SERVICES CONNECTION APPLICATIONS PENDING

Format Applicable to : Distribution System

Category	Pending at the beginning of the period	Associated Load (MW)	No. of Applications Received during period	Associated Load (MW)	No. of Connections released during period	Associated Load (MW)	Pending at the end of the period	Associated Load (MW)
Year 2007-08								
Domestic	8820	8.641	32317	36.903	22342	26.916	14151	15.054
Non-residential	1088	12.269	5082	40.354	4144	19.681	1550	24.522
Small Power	193	1.73	513	4.874	501	4.699	154	1.475
Medium Supply	31	1.64	79	4.457	73	3.705	37	1.995
Large Supply	18	4.206	34	8.688	52	11.484	17	3.82
Public Water Works	128	1.349	140	2.379	126	1.151	112	1.099
Agriculture	78258	268.184	23910	110.096	1426	5.414	79120	274.872
Others	13	0.389	24	0.397	4	0.153	28	0.438
Total	88549	298.408	62099	208.148	28668	73.203	95169	323.275
Year 2008-09(30.9.08)								
Domestic	14151	15.054	15122	17.12	10302	12.753	19365	20.504
Non-residential	1550	24.522	2188	10.369	1751	6.505	2020	28.537
Small Power	154	1.475	145	1.509	114	1.151	177	1.761
Medium Supply	37	1.995	30	1.461	36	2.031	37	1.953
Large Supply	17	3.82	7	2.288	8	1.61	15	4.046
Public Water Works	112	1.099	45	0.764	47	0.609	107	1.36
Agriculture	79120	274.872	1914	6.123	1472	6.944	78415	268.702
Others	28	0.438	13	0.15	19	0.306	42	0.427
Total	95169	323.275	19464	39.784	13749	31.909	100178	
Year 2008-09 (31.3.2009)								
Domestic	14151	15.054	15122	17.12	10302	12.753	19365	20.504
Non-residential	1550	24.522	2188	10.369	1751	6.505	2020	28.537
Small Power	154	1.475	145	1.509	114	1.151	177	1.761
Medium Supply	37	1.995	30	1.461	36	2.031	37	1.953
Large Supply	17	3.82	7	2.288	8	1.61	15	4.046
Public Water Works	112	1.099	45	0.764	47	0.609	107	1.36
Agriculture	79120	274.872	1914	6.123	1472	6.944	78415	268.702
Others	28	0.438	13	0.15	19	0.306	42	0.427
Total	95169	323.275	19464	39.784	13749	31.909	100178	327.29

Format 58

Number of Service Connection Applications Pending

Format Applicable to Distribution System

SOUTH ZONE

Year 2008-09(upto 30.09.08)

Category	Pending at the beginning of the period	Associated Load (MW)	No.of Applications Received during period	Assoc. Load (MW)	No.of Connections released during period	Associated Load (MW)	Pending at the end of the period	Associated Load (MW)
Domestic	8297	13385	22456	38077	19388	35232	11351	15085
Non-residencial	1045	12173	2998	12122	2693	14655	1350	9413
Small Power	191	2238	184	2467	145	1901	224	2675
Medium Supply	107	5180	176	10981	83	3683	198	12076
Large Supply	45	21484	93	31434	29	12680	108	40971
Public Water Works	33	1348	58	1766	35	638	50	2250
Agriculture	97333	397220	15932	88835	24097	125777	87467	355471
Others	18	4014	35	543	27	281	26	4282
Total	107069	457042	41932	186225	46497	194847	100774	442223
Year 2007-08								
Domestic	2920	7164	45820	65823	39717	57193	8297	13385
Non-residencial	636	3579	6071	32397	5310	22120	1045	12173
Small Power	178	2157	617	6129	577	5988	191	1683
Medium Supply	94	5205	424	24842	393	24658	107	5180
Large Supply	71	21856	139	78406	166	87704	45	21484
Public Water Works	54	771	65	1911	71	1218	33	1348
Agriculture	78408	290272	54222	221365	37065	126928	97333	397220
Others	14	3755	33	781	26	354	18	4014
Total	82375	334759	107391	431654	83325	326163	107069	456487

Format 59 A
Overloaded Feeders

Central Zone

Format Applicable to: Transmission/ Distribution System

S.N	Voltage Level	No. of Feeders	Line length (ckt. km)	No. of feeders overloaded	Line length overloaded feeders (ckt. km)	% number of Overloaded Feeders	% length of overloaded feeders
	Ending 31.3.08						
1	Voltage Level 66KV	129	642.55	6	52.5	4.65	8.17
2	Voltage Level 33KV	1	6	0	0	0	0
3	Voltage Level 11KV	914	12782	155	1395	16.95	10.91
	Total	1044	13430.55	161			
	1.4.08 to 30.9.08						
1	Voltage Level 66KV	132	651	5	51.5	3.78	7.91
2	Voltage Level 33KV	1	6	0	0	0	0
3	Voltage Level 11KV	927	13756	142	1278	15.31	9.29
	Total	1060	14413	147			
	1.10.08 to 31.3.09						
1	Voltage Level 66KV	138	663	5	50.5	3.62	7.61
2	Voltage Level 33KV	1	6	0	0	0	0
3	Voltage Level 11KV	935	13805	148	1332	15.83	9.65
	Total	1074	14474	153			

Format 59

West Zone

Overloaded Feeders (Distribution System)

Sr.N o	Voltage Level	No. of Feeders	Line Length (ckt.km)	No. of Feeders overloaded	Line Length overloaded Feeders (ckt. km)	%age number of Overloaded Feeders	%age Length of overloaded Feeders
Year 2007-08							
1	Voltage Level 66 KV	36	648.10	2	46	5.56	7.10
2	Voltage Level 33 KV	26	506.48	-	-	-	-
3	Voltage Level 11 KV	1282	38568.38	198	5541	15.44	14.37
Total		1344	39722.96				
Year 2008-09 FY							
5	Voltage Level 66 KV	39	660.10	2	24	5.13	3.64
6	Voltage Level 33 KV	25	506.48	-	-	-	-
7	Voltage Level 11 KV	1338	43733	206	3341	15.40	7.64
Total		1402	44899.58				

South Zone Overloaded Feeders (Distribution System)						Year 2007-08	
Sr. No.	Circle/Area	No.of Feeders	Line length (ckt. Km)	No.of feeders overloaded	Line length overloaded feeders (ckt. Km)	% number of Overloaded Feeders in Area	% length of overloaded feeders in Area
I	<u>Kapurthala</u>						
A	66 KV	19	70	0	0	0.00	0.00
B	33 KV	13	265	0	0	0.00	0.00
C	11 KV	354	7045	44	660	12.43	9.37
II	<u>Jalandhar</u>						
A	66 KV	23	152.377	0	0	0.00	0.00
B	33 KV	4	17.7	0	0	0.00	0.00
C	11 KV	257	2957	29	67	11.28	2.27
III	<u>Hoshiarpur</u>						
A	66 KV	16	146	0	0	0.00	0.00
B	33 KV	9	154	0	0	0.00	0.00
C	11 KV	246	6547	10	419	4.07	6.40
IV	<u>N/Shahat</u>						
A	66 KV	10	107	0	0	0.00	0.00
B	33 KV	5	45	0	0	0.00	0.00
C	11 KV	170	4240	36	1199	21.18	28.28
V	<u>North Zone</u>						
A	66 KV	68	475.377	0	0	0.00	0.00
B	33 KV	31	481.7	0	0	0.00	0.00
C	11 KV	1027	20789	119	2345	11.59	11.28

Format 59 A

South Zone

Overloaded Feeders (Distribution System)

Sr. No.	Circle/Area	No. of Feeders	Line length (ckt. Km)	No. of feeders overloaded	Line length overloaded feeders (ckt. Km)	Year 2008-09			(ending 9/08)
							% number of Overloaded Feeders in Area	% length of overloaded feeders in Area	
I	Kapurthala								
A	66 KV	19	70	0	0		0.00	0.00	
B	33 KV	13	265	0	0		0.00	0.00	
C	11 KV	366	8195	37	455		10.11	5.55	
II	Jalandhar								
A	66 KV	23	152.377	0	0		0.00	0.00	
B	33 KV	4	17.7	0	0		0.00	0.00	
C	11 KV	261	2997	16	23		6.13	0.77	
III	Hoshiarpur								
A	66 KV	21	171	0	0		0.00	0.00	
B	33 KV	13	122	0	0		0.00	0.00	
C	11 KV	259	6531	7	307		2.70	4.70	
IV	N/Shahat								
A	66 KV	10	107	0	0		0.00	0.00	
B	33 KV	5	45	0	0		0.00	0.00	
C	11 KV	173	4346	44	1272		25.43	29.27	
V	North Zone								
A	66 KV	73	500.377	0	0		0.00	0.00	
B	33 KV	35	449.7	0	0		0.00	0.00	
C	11 KV	1059	22069	104	2057		9.82	9.32	

Format 59

Border Zone

Overloaded Feeders (Distribution System)

Sl. No.	Voltage Level	No. of Feeders	Line length (ckt. km)	No. of feeders overloaded	Line length overloaded feeders (ckt. km)	% number of Overloaded Feeders	% length of overloaded feeders
FY 2007-08							
1	Voltage Level 66 KV	91	940.49	5	77	5.49	8.19
2	Voltage Level 33 KV	2	65.61	0	0	0	0
3	Voltage Level 11 KV	1129	22123	175	3115.05	15.5	14.08
Total		1222	23129.1				
FY 2008-09(9/2008)							
1	Voltage Level 66 KV	93	949.39	3	52	3.23	5.48
2	Voltage Level 33 KV	2	65.61	0	0	0	0
3	Voltage Level 11 KV	1161	22659	167	2480.31	14.38	10.94
Total		1256	23674				
FY 2008-09							
1	Voltage Level 66 KV	93	949.39	2	38	2.15	4
2	Voltage Level 33 KV	2	65.61	0	0	0	0
3	Voltage Level 11 KV	1175	22690	165	2250.373	14.04	9.92
Total		1270	23705				
FY 2009-10(Expected)							
1	Voltage Level 66 KV	94	959.35	0	0	0	0
2	Voltage Level 33 KV	2	65.61	0	0	0	0
3	Voltage Level 11 KV	1210	23092	150	1984.5	12.4	8.59
Total		1306	24116.96				

Format 59 C

South Zone

Overloaded Feeders (Distribution System)

Year 2007-08

Sr. No.	Voltage Level	No.of feeders	Line Length (Ckt.K.M.)	No.of feeder Overloaded	Line length Overloaded feeders (Ckt K.M.)	%age No.of Overloaded feeders in Area	%age length of Overloaded feeders in Area
South Zone							
a	66KV	146	1753.41	11.00	323.29	20.62	46.70
b	33KV	5	62.72				
c	11KV	1364	33628.14	277.00	5547.00	61.37	45.83

Year 2008-09

Sr. No.	Voltage Level	No.of feeders	Line Length (Ckt.K.M.)	No.of feeder Overloaded	Line length Overloaded feeders (Ckt K.M.)	%age No.of Overloaded feeders in Area	%age length of Overloaded feeders in Area
South Zone							
a	66KV	151	1853	16	348	11.5	30.6
b	33KV	5	63	1	15	20.0	23.9
c	11KV	1443	34204	335	6195	69.3	46.7

FORMAT 61**Central Zone****DEFAULTING AMOUNT ENDING MARCH/SEPTEMBER 2008****IN RESPECT OF CENTRAL ZONE LUDHIANA**

Month/Year	Litigation Cases	Govt. Deptts	PDCO Cases	Others	Total
Ending 3/2002	8913.99	3124.67	7168.88	1680.02	20888
Ending 9/2002	10599.60	3516.83	7054.07	1900.79	23071
Ending 3/2003	11263.95	4907.60	7937.93	3072.66	27182
Ending 9/2003	11322.68	6911.86	8100.38	4107.97	30443
Ending 3/2004	6651.32	241.21	1452.55	797.10	9142
Ending 9/2004	6582.22	338.26	1328.19	727.25	8976
Ending 3/2005	6542.26	242.71	1432.62	818.83	9036
Ending 9/2005	7094.78	279.47	1510.21	1013.74	9898
Ending 3/2006	7452.41	143.91	1348.08	746.86	9691
Ending 9/2006	7601.15	184.58	1283.73	637.40	9707
Ending 3/2007	7327.24	140.45	1107.59	746.11	9321
Ending 9/2007	7603.46	161.00	1068.82	687.23	9521
Ending 3/2008	7821.37	140.58	1090.72	685.31	9738
Ending 9/2008	8208.17	162.93	964.03	685.70	10021

Format 61**West Zone**

DEFAULTING AMOUNT ENDING MARCH/SEPTEMBER - WEST ZONE, BATHINDA upto 9/08

Rs. in lacs

Month/Year	Litigation cases	Govt. Deptt.	PDCO Cases	Others	Total
Ending 03/2002	603.74	261.28	1288.60	305.82	2459.44
Ending 09/2002	725.30	307.54	1267.21	351.26	2651.31
Ending 03/2003	769.90	491.14	1457.91	721.01	3439.96
Ending 09/2003	809.00	742.97	1730.69	946.41	4229.07
Ending 03/2004	823.39	985.41	2028.25	1060.13	4897.18
Ending 09/2004	850.26	1296.24	2401.35	1501.14	6048.99
Ending 03/2005	938.00	1168.22	2869.06	1964.03	6939.31
Ending 09/2005	1012.38	1376.27	3433.17	2915.43	8737.25
Ending 03/2006	1113.29	1069.43	2503.50	4563.60	9249.82
Ending 09/2006	1139.30	1317.53	2849.21	4445.91	9751.95
Ending 03/2007	1204.47	1547.18	3059.87	4710.23	10521.75
Ending 09/2007	1143.94	1917.73	3039.12	4796.32	10897.11
Ending 03/2008 (Audited)	1247.46	1959.25	3281.25	4817.62	11305.58
Ending 03/2008 (Un-Audited)	1266.09	2000.13	3077.11	4491.95	10835.28
Ending 09/2008 (Un-Audited)	1310.88	2220.29	3373.61	5055.64	11960.42

Format 61

North Zone

DEFAULTING AMOUNT ENDING MARCH/SEPT. IN RESPECT OF NORTH ZONE

Month/Year	Litigation Cases	Govt. Deptt.	PDCO	Others	Total Recoverable	Grand Total
3/2002	785.58	435.60	61.76	36.14	97.90	1319.08
9/2002	678.26	383.56	86.90	54.68	141.58	1203.40
3/2003	740.99	792.29	153.32	61.08	214.40	1747.68
9/2003	905.25	1517.1	215.98	81.84	297.82	2720.17
3/2004	1012.86	1971.34	247.38	110.14	357.52	3341.72
9/2004	1115.48	2615.06	283.24	68.48	351.72	4082.26
3/2005	1219.98	3164.8	296.46	85.91	382.37	4767.15
9/2005	1436.85	3480.81	381.37	126.66	508.03	5425.69
3/2006	1565.75	999.10	398.53	112.75	511.28	3076.13
9/2006	1660.19	1184.27	389.55	221.93	611.48	3455.94
3/2007	1747.62	1336.04	436.25	351.83	788.08	3871.74
9/2007	1705.16	1500.12	419.01	347.75	766.76	3972.04
3/2008	1630.42	1146.29	496.39	398.80	895.19	3671.90
9/2008	1728.00	1183.01	460.47	401.37	861.84	3772.85

Format 61

Border Zone

DEFAULTING AMOUNT ENDING MARCH/SEPTEMBER

MONTH/YEAR	LITIGATION N CASES	GOVT. DEPTT.	PDCO CASES	OTHERS	TOTAL
ENDG 03/2001	750.8	69.55	2684.53	568.51	4073.39
ENDG 09/2001	750.87	1027.64	2855.82	711.16	5345.49
ENDG 03/2002	775.73	1775.09	2941.22	571.05	6063.09
ENDG 09/2002	832.53	2180.2	3029.67	551.84	6594.24
ENDG 03/2003	823.82	2824.7	3145.65	1033.71	7829.88
ENDG 09/2003	847	3411.94	3184.91	1649.53	9093.38
ENDG 03/2004	1007.12	3969.02	3316.89	2493.51	10786.54
ENDG 09/2004	1123.03	4639.32	3344.43	3757.91	12864.69
ENDG 03/2005	1304.62	4298.43	3428.3	5664.5	14695.85
ENDING 9/2005	1416.02	4519.31	3391.61	7519.36	16846.3
ENDING 3/2006	1504.28	916.51	3803.14	7858.88	14482.81
ENDING 9/2006	1514.97	1475.81	3991.8	7894.84	14877.42
ENDING 3/2007	1545.92	1227.77	4311.36	7979.59	15064.64
ENDING 9/2007	1623.88	1671.93	4448.26	8148.86	15892.93
ENDING 3/2008	1762.36	1546.99	4698.07	7903.93	15911.35
ENDING 9/2008	1846.33	1767.22	4757.47	8134.81	16505.83

Format - 61

South Zone

DEFAULTING AMOUNT ENDING MARCH/SEPTEMBER

MONTH/YEAR	LITIGATION CASES COURT/DSC	GOVT. DEPTT.	PDCO CASES	OTHERS	TOTAL
SOUTH ZONE					
ENDG 03/2002	1982.68	445.29	1175.84	147.58	3751.39
ENDG 09/2002	2431.38	472.02	1329.71	174.72	4407.83
ENDG 03/2003	2370.15	621.5	1196.64	438.88	4627.17
ENDG 09/2003	2465.99	977.75	1125.84	450.07	3715.85
ENDG 03/2004	3005.82	841.02	1165.09	722.06	5733.99
ENDG 09/2004	3382.72	1248.86	1074.84	861.18	6567.6
ENDG 03/2005	3480.14	1360.45	1087.72	898.32	6826.63
ENDG 09/2005	3331.27	1527.4	933.96	1030.43	6823.06
ENDG 03/2006	3208.36	651.92	1057.9	779.39	5697.57
ENDG 09/2006	3320.5	774.8	930.26	848.84	5874.4
ENDG 03/2007	3084.72	1070.03	1065.13	776.96	5996.84
ENDG 09/2007	3044.08	1200.87	963.12	936.94	6145.01
ENDG 03/2008	3305.55	840.75	1062.42	1065.73	6274.45
ENDG 09/2008	3756.41	944.84	1119.25	976.71	6797.19

Format-62

Backing Down and No Demand Data for GNDTP,BATHINDA

2007-08	FULL BACKDOWN		PARTIAL BACKDOWN		TOTAL	
MONTH	HRs	MUs	HRs	MUs	HRs	MUs
Apr-07	0.00	0.00	24.55	0.46	24.55	0.46
May-07	33.17	3.65	13.67	0.27	46.83	3.92
Jun-07	61.92	6.81	35.43	0.71	97.35	7.52
Jul-07	66.42	7.30	8.90	0.18	75.32	7.48
Aug-07	0.00	0.00	5.33	0.11	5.33	0.11
Sep-07	42.33	4.66	24.92	0.50	67.25	5.16
Oct-07	0.00	0.00	0.00	0.00	0.00	0.00
Nov-07	0.00	0.00	0.00	0.00	0.00	0.00
Dec-07	0.00	0.00	0.00	0.00	0.00	0.00
Jan-08	0.00	0.00	0.00	0.00	0.00	0.00
Feb-08	0.00	0.00	0.00	0.00	0.00	0.00
Mar-08	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	203.84	22.42	112.80	2.23	316.63	24.65
2008-09						
Apr-08	0.00	0.00	7.06	0.14	7.06	0.14
May-08	0.00	0.00	118.58	2.37	118.58	2.37
Jun-08	86.50	8.88	72.50	1.69	159.00	10.57
Jul-08	0.00	0.00	0.75	0.02	0.75	0.02
Aug-08	288.50	28.85	24.25	0.71	312.75	29.56
Sep-08	0.00	0.00	11.67	0.24	11.67	0.24
TOTAL	375.00	37.73	234.81	5.17	609.81	42.90

BACKING DOWN AND NO DEMAND DATA FOR GGSSTP

2007-08	Full Back Down		No Demand		Total Back Down	
	Hrs.	MUs	Hrs.	MUs	Hrs.	MUs
April	105.43	3.95	75.71	15.90	181.14	19.85
May	106.84	3.59	27.65	5.81	134.49	9.40
June	343.17	14.15	20.25	4.25	363.42	18.40
July	253.08	9.63	0.00	0.00	253.08	9.63
August	124.40	6.17	55.70	11.71	180.10	17.88
Sept.	191.63	8.07	24.75	5.20	216.38	13.27
Oct.	2.50	0.25	0.00	0.00	2.50	0.25
Nov.	55.80	1.14	0.00	0.00	55.80	1.14
Dec.	6.80	0.18	0.00	0.00	6.80	0.18
Jan.	0.00	0.00	0.00	0.00	0.00	0.00
Feb.	0.00	0.00	0.00	0.00	0.00	0.00
March	16.25	0.25	0.00	0.00	16.25	0.25
Total	1205.90	47.38	204.06	42.87	1409.96	90.25
2008-09						
April	143.21	5.29	76.71	16.11	219.92	21.40
May	373.79	15.68	88.16	18.52	461.95	34.20
June	201.47	11.27	216.47	45.45	417.94	56.72
July	12.25	0.49	0.00	0.00	12.25	0.49
August	283.08	10.06	164.33	34.51	447.41	44.57
September	271.50	10.08	0.00	0.00	271.50	10.08
October	-	-	-	-	-	-
November	-	-	-	-	-	-
December	-	-	-	-	-	-
January	-	-	-	-	-	-
February	-	-	-	-	-	-
March	-	-	-	-	-	-
Total	1285.30	52.87	545.67	114.59	1830.97	167.46

FORMAT 62

Backing Down Schedule and No Demand data for GHTP, Lehra Mohabbat

YEAR 2006-07

Month	Full Backdown		No Demand		Total Backdown	
	Hrs.	MUS	Hrs.	MUS	Hrs.	MUS
Apr-07	43.33	9.10	27.95	1.118	71.28	10.218
May-07	10.58	2.22	28.44	1.138	39.02	3.360
Jun-07	0.00	0.00	67.28	2.691	67.28	2.691
Jul-07	0.00	0.00	37.28	1.491	37.28	1.491
Aug-07	0.00	0.00	18.90	0.756	18.90	0.756
Sep-07	0.00	0.00	37.55	1.502	37.55	1.502
Oct-07	0.00	0.00	0.28	0.01	0.28	0.011
Nov-07	0.00	0.00	2.15	0.09	2.15	0.086
Dec-07	0.00	0.00	0.14	0.01	0.14	0.006
Jan-08	0.00	0.00	0.00	0.00	0.00	0.000
Feb-08	0.00	0.00	0.00	0.00	0.00	0.000
Mar-08	0.00	0.00	0.00	0.00	0.00	0.000
Total	53.92	11.32	219.97	8.80	273.89	20.121

YEAR 2007-08

Month	Full Backdown		No Demand		Total Backdown	
	Hrs.	MUS	Hrs.	MUS	Hrs.	MUS
Apr-08	0.00	0.00	20.28	0.811	20.28	0.811
May-08	0.00	0.00	152.80	6.112	152.80	6.112
Jun-08	0.00	0.00	81.93	3.277	81.93	3.277
Jul-08	0.00	0.00	2.03	0.081	2.03	0.081
Aug-08	66.00	13.86	103.44	4.138	169.44	17.998
Sep-08	0.00	0.00	72.50	2.900	72.50	2.900
Total	66.00	13.86	432.98	17.32	498.98	31.179

**CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI**

Coram

1. Shri Ashok Basu, Chairperson
2. Shri K.N.Sinha, Member
3. Shri Bhanu Bhushan, Member

Petition No 40/2004

In the matter of

Approval of tariff in respect of Badarpur Thermal Power Station, New Delhi for the period from 1.4.2004 to 31.3.2009.

And in the matter of

National Thermal Power Corporation Ltd.

.....Petitioner

Vs

Delhi Transco Ltd, New Delhi

..Respondent

The following were present

1. Shri V.B.K. Jain, NTPC
2. Shri S.D. Jha, NTPC
3. Shri Manoj Saxena, NTPC
4. Shri Shankar Saran, NTPC
5. Ms Pranav Kapoor, NTPC
6. Shri R. Chhabra, NTPC
7. Shri A. Basu Roy, NTPC
8. Shri V.K. Gupta, Consultant, DTL
9. Shri M.P. Aggarwal, DTL
10. Shri V.K. Garg, DTL
11. Shri S.R. Sethi, DTL
12. Shri V.K. Malhotra, DTL

ORDER

(DATE OF HEARING: 14.9.2005)

This petition has been filed by the petitioner, a generating company owned or controlled by the Central Government on behalf of that Government for approval of tariff in respect of Badarpur Thermal Power Station, New Delhi (hereinafter referred to as "the generating station") for the period from 1.4.2004 to 31.3.2009 based on the

(Rs. in lakh)					
Particulars	2004-05	2005-06	2006-07	2007-08	2008-09
Interest on Loan	265	101	10	0	0
Depreciation	1559	1559	1559	1559	1559
Advance Against Depreciation	0	0	0	0	0
Return on Equity	3276	3276	3180	2975	2757
O & M Expenses	14275	14275	14275	14275	14275
Interest on Working Capital	2879	2879	2879	2885	2878
TOTAL	22255	22091	21903	21694	21469

OPERATIONAL NORMS OTHER THAN TARGET AVAILABILITY/PLF

59. The norms of operation of the generating stations have been specified in the 2004 regulations for consideration for determination of tariff for the period 1.4.2004 to 31.3.2009; except the generating station the subject matter of the present petition.

60. The petitioner has claimed tariff by considering the operational norms as follows:

	As claimed
Gross Station Heat Rate (Kcal/kWh)	2885.00
Auxiliary Energy Consumption (%)	12.00
Specific fuel oil consumption (ml/kWh)	3.50

61. The question of determination of appropriate operational norms was included in the terms of reference to the one-Member Bench who has recommended the following norms, namely:

	As Recommended
Gross Station Heat Rate (Kcal/kWh)	2885
Auxiliary Energy Consumption (%)	11%
Specific fuel oil consumption (ml/kWh)	2.60

Gross Station Heat Rate

62. The respondent has submitted that station heat rate norm should be specified based on norm for 210 MW sets decided by the Commission for other generating stations of 2500 kCal/kWh and norms for Tanda TPS for 110 MW sets of 3000 kCal/kWh. Accordingly, it has sought station heat rate norm of 2720 kCal/kWh. The contentions of the respondent may hold good for the units which have not completed their rated life. However, in the present case, the units of 95 MW have already outlived their rated life and the units of 210 MW are nearing completion of their rated life. As such it would not be reasonable to apply station heat rate norms applicable to the rated life of the generating station. The recommendation of the one-Member Bench on the station heat rate norm of 2885 kCal/kWh based on actuals is considered to be reasonable and has been accepted.

Auxiliary Energy Consumption

63. The petitioner has reiterated that norm of auxiliary energy consumption be fixed as 12%. The respondent on the other hand has submitted that the norms as notified by the Commission in the 2004 regulations should only be considered without any deviation. The respondent has not worked out the detailed basis for its claim. Based on AEC of 9% for 210 MW sets and 11% for 95 MW sets (Based for norm of Tanda TPS), AEC for the generating station is worked out as 9.81%. Here also the contention of the respondent holds good for the units which have not completed their rated life. However, in this particular case the units of 95 MW has outlived their rated life and units of 210 MW are nearing completion of their rated life. As such, the one-Member Bench recommendation on the auxiliary energy consumption norms of 11% based on actuals has been accepted.