

REPORT OF THE

METER TESTING DRIVE FOR ELECTRONIC METERS

INITIATED BY THE

DELHI ELECTRICITY REGULATORY COMMISSION

IN ASSOCIATION WITH

THE BUREAU OF INDIAN STANDARDS

AND

THE CENTRAL POWER RESEARCH INSTITUTE

Need for the Meter Testing Drive

1. Keeping in view the large number of complaints that were being received regarding the electronic meters which have been installed in the NCT of Delhi, the Delhi Electricity Regulatory Commission (DERC) decided to undertake a limited meter testing drive in order to allay the fears in the minds of the public regarding electronic meters. This meter testing drive was initiated by this Commission from the 1st of October, 2005 and it concluded on the 10th of January, 2006.

2. Earlier to this, there have been several other meter testing drives which include testing of meters by this Commission in 2003 wherein random samples were picked up from the godowns of Distribution Companies. Subsequently, the Distribution Companies also conducted their own meter testing drives in July/ August 2004 wherein the services of the Central Power Research Institute, an autonomous body of the Ministry of Power, Government of India, was taken as an independent third party. Separately, the Government of NCT of Delhi had also conducted a meter testing drive in October/ November 2005 under the supervision of the Sub-Divisional Magistrates.

DERC's meter testing team

3. In the latest initiative by this Commission which took place during the period 1st of October 2005 to 10th January 2006, the Central Power Research Institute (CPRI), an accredited laboratory of NABL and the Bureau of Indian Standards (BIS) were also associated. The meter testing team thus comprised of officials of the DERC and the officials of the BIS and the CPRI. Officials of the Distribution Companies concerned were also a part of the team since without the presence of the Distribution Companies, the testing drive could not have been conducted. The list of the officials from the DERC, the BIS and the CPRI who took part in this meter testing drive is given at **Annexe – I**.

4. It would be pertinent to add that the BIS was associated with this drive since BIS is the government agency which has the mandate for laying down standards for electronic meters. Both domestic and foreign manufacturers have to get a BIS certificate before they can release their electronic meters in Indian markets. The choice of CPRI was arrived at after the DERC floated a limited tender, seeking the services of a NABL accredited laboratory in the public sector having the requisite experience for on-site meter testing. The testing of meters was conducted using CPRI's own test equipment.

Public Notice for meter testing

5. The Delhi Electricity Regulatory Commission issued a public notice on 5.9.2005 in seven leading newspapers comprising of English, Hindi, Urdu and Punjabi newspapers, inviting requests from the public for testing of meters. A copy of the public notice is given at **Annexe – II**. The drive was restricted to single phase domestic electronic meters only and the Residents Welfare Associations (RWAs) were requested to forward the names of two consumers whose electronic meters were suspected to be faulty. Though the public notice had indicated that the complaints should be routed through the RWAs, individual complaints which were received in the Commission were also entertained. A total number of 626 applications were received from the consumers in the NCT of Delhi.

Procedure of testing of meters

6. The procedure adopted by the team for carrying out of testing of meters is as follows:
- I. Each meter was tested for a minimum consumption of 1 kWh.
 - II. Only optical scanners were used for counting the pulses.
 - III. Standard reference load of 4-6 KW was used.
 - IV. Meter testing report was generated on site itself and signed by all members of the team as well as the consumer. A copy of the report was handed over to the consumer at the site. A sample copy is enclosed at **Annexe – III**.
7. For testing of meters, a standard reference meter of 0.2 Class accuracy was used. The reference meter was Zera make, imported from Germany and owned by the Central Power Research Institute (CPRI), Bangalore. The reference meter was calibrated by the CPRI in the month of June, 2005.

Results of meter testing drive

8. A total of 536 meters were tested during the drive. The results of the drive are as tabulated below:

Table –1

Company	Total Applications received	Total meters tested	Slow	Meters found with errors between +/- 3%	Fast	Common Neutral problems
BRPL	330	266	0	263	3	24
BYPL	172	157	0	157	0	50

NDPL	124	113	0	112	1	22
Total	626	536	0	532	4	96

Note: Out of 532 meters found within +/- 3%, 479 meters were found to be within +/- 1%

9. The break-up of the meters not tested and reasons thereof are given below:

Table -2

S. No.	Reason	Total	BRPL	BYPL	NDPL
1.	Meter defective	11	7	1	3
2.	Mechanical meter	6	4	-	2
3.	Consumer not interested	29	20	6	3
4.	Meter replaced before testing	8	7	-	1
5.	Letter returned	12	9	3	-
6.	Premises locked	9	6	3	-
7.	Other	15	11	2	2
	Total	90	64	15	11

Analyses of test results

10. While the statistics of the meters tested are already indicated in Table-1, it is clear from the results that the electronic meters which have been installed by the Distribution Companies are functioning well within the stipulated limits under the Indian Electricity Rules, 1956. In fact, most of the meters are functioning between +/- 1% whereas the limits setup by the Indian Electricity Rules 1956 is between +/- 3%. Similar results were also arrived at by the earlier test-drives conducted by the DERC/ the GNCTD/ the Discoms. What has been observed, however, is that there is a problem of bunching of neutral wires in many cases which may lead to aberrations in recording of electricity consumption? This problem was especially noticed in the case of multi-storied houses, DDA flats, Consumer Group Housing Societies etc. Though the problem of neutral wiring has been observed in as many as 18% of the meters tested, it would not be appropriate to extend this ratio to the entire city of Delhi since the meters tested were not a representative sample. It has to be borne in mind that it is only those consumers who felt that their meters were faulty had approached this Commission for testing and, therefore, this ratio would naturally be relatively high.

11. The problem of neutral wires arises because of faulty wiring in the consumer's premises and this has to be rectified by the consumers themselves. Whether a consumer is having a faulty wiring or not can very easily be determined by observing the Earth Leakage indicator in the electronic meter. In case of any fault, the LED for Earth Leakage starts glowing. This issue was highlighted by the Commission in its advertisement "Do's and Don't's for change of meter/ meter testing", published in eight newspapers on the 1st of August 2005. A copy of the advertisement is given in

Annexe IV. There is no doubt, however, that the Distribution Company should have advised the consumers of this potential problem while moving from mechanical to electronic meters. The DERC has given certain directions to the Distribution Companies in this regard which is highlighted below.

Follow-up action taken by DERC

12. The problem of neutral wires, however, is an issue which clearly needs to be addressed and the Commission had held discussions with the Distribution Companies in the month of November 2005 and directions were issued to them on 28th of November 2005 which included the following:

- i) The Discom will immediately give a public advertisement, drawing the attention of consumers of the potential earth-leakage/ neutral wire problem which could be determined by observing the meter itself. Such of those consumers who observe Earth Leakage/Neutral Wire problem shall be advised to report the matter to the concerned Discom for further advice in the matter.
- ii) The meter readers of the Discoms will advise the consumers wherever there are indications in the meter that there could be an earth leakage/neutral problem. The meter reader will simultaneously inform the Discom also and the Discom will send their staff to ascertain if it is a problem of earth-leakage or neutral wire. The consumer would be suitably apprised of the remedial measures. This exercise would be completed within the next two months.
- iii) The Discom will simultaneously conduct an analysis of their billing module to segregate those meters where increase in consumption has been recorded to the extent of 50% or more after installation of electronic meters. Such meters would immediately be checked for internal wiring problem so that the consumers can be suitably apprised. This exercise shall be further extended to consumption in excess of 30% also in due course.
- iv) For rectification of the problem of neutral wire/earth-leakage, the consumers may take the services of electricians identified by the Discoms or employ their own electricians for this purpose.

Action taken by the Distribution Companies

13. The Commission had reviewed the matter in a meeting with the Distribution Companies, held on 13.1.2006, wherein the following feedback was given by the Distribution Companies:

- i) Public advertisements/ pamphlets have been issued by the Distribution Companies, cautioning consumers of the problem of neutral wires and requesting them to check the LED lights of their electronic meters. Copies of such advertisements/ pamphlets are at **Annexe V** and **VI** respectively.
- ii) In the case of BSES companies, the issue of neutral wires has been highlighted in the electricity bills of consumers (copy at **Annexe VII**). The NDPL has addressed individual letters to all consumers whose meters were changed to electronic meters requesting them to check their meters for any indication of earth leakage (copy at **Annexe VIII**).
- iii) Meter readers of all the three Distribution Companies are checking each individual meter for potential neutral problem and it would take about two months to identify all such consumers. This exercise would thus be completed by about mid-March 2006.
- iv) Electricians have been trained by the Distribution Companies who can advise the consumers on the presence of neutral wire problem and its rectification.

COMPOSITION OF TEAM

A team of representatives of Commission, CPRI and BIS was constituted to test the meters. Each testing team included one representative from each of the organisations. Representative of the respective licensee was also associated for witnessing the test.

DERC: Shri Ajay K. Kaundal, Dy. Director (T &D)
Shri Anish Garg, Dy. Director (T &D)
Shri S. K. Sinha, Dy. Director (Tariff-Engg.)

BIS: Shri Ghanshyam Jha, Director
Shri S. K. Kanogia, Joint Director
Smt. Manju Gupta, Joint Director
Shri Rajiv Sharma, Joint Director
Shri K. R. Ahir, Dy. Director
Shri Jitender Kumar, Asstt. Director
Shri Ram Singh, Asstt. Director
Shri A. Kannappar, Asstt. Director

CPRI: Shri M. Kudloor, Engg. Officer
Shri P. Kalippan, Engg. Officer
Shri V. Suresh, Engg. Officer
Shri S. G. Dugad, Engg. Officer
Shri R. Hari, Engg. Officer
Shri V. Shiva Kumar, Engg. Officer
Shri B. L. Jayadev, Engg. Asstt.
Shri Shankara Murthy, Engg. Asstt.
Shri K. Lesly, Engineer



DELHI ELECTRICITY REGULATORY COMMISSION
(A statutory body of Govt. of NCT of Delhi)
Viniyamak Bhawan, Shivalik, Malviya Nagar, New Delhi – 110 017
Telefax: 26673608, Website : www.dercind.org

PUBLIC NOTICE Dated 5th September, 2005

METER TESTING DRIVE FOR DOMESTIC ELECTRONIC METERS

The Delhi Electricity Regulatory Commission (DERC), a statutory body set-up by the Government of NCT of Delhi, announces a Meter Testing Drive for **Domestic Electronic Meters** with the association of the Bureau of Indian Standards (BIS) and the Central Power Research Institute (CPRI), an autonomous body under the Ministry of Power, Government of India. This drive would be for a period of three months, i.e. from 1st October, 2005 to 31st December, 2005.

2. This is a one-time drive by the Commission and the salient features are as follows:
 - I. This drive is limited to domestic electronic meters only.
 - II. All Resident Welfare Associations (RWAs) in the NCT of Delhi who are being served either by NDPL or BSES may forward names of two domestic consumers whose electronic meters are suspected to be faulty. The names of the consumers may be forwarded either by post or via e-mail (secyderc@nic.in) to Shri V.J. Talwar, Director (Engg.), DERC along with the following details:
 - a. Address of the consumer
 - b. Telephone no. of the consumer
 - c. New K.No.
 - d. Whether Single-phase or Three-phase meter
 - e. Name of the Licensee: whether NDPL/BSES Yamuna Power Ltd./BSES Rajdhani Power Ltd.
 - III. During the three months period, i.e. 1st October, 2005 – 31st December, 2005, the Commission would be able to test approximately 500 electronic meters. In case the number of consumers who wish to get their meters tested exceeds 500, a computer generated sample of 500 meters would be drawn up by the Commission.
 - IV. The meter testing team will include officials from the DERC, the BIS and CPRI. The team will inform the consumers of the date of their visit at least three days in advance. Representatives of the RWAs are requested to be present when the test is conducted.
 - V. All the RWAs are requested to forward the names of the two domestic consumers selected to the Commission, latest by 19th September, 2005.
 - VI. The test report would be given to the consumer immediately after the completion of the test at site.
 - VII. The entire expenditure for this drive shall be met by the Commission.
3. For any further clarification, Shri V.J. Talwar, Director (Engg.), DERC may be contacted at telephone No.26673613.

Secretary, DERC

Delhi Electricity Regulatory Commission

Viniyamak Bhawan, C-Block, Shivalik, Malviya Nagar, New Delhi-110017

Meter Testing Report

Date : 19.12.2005

Consumer Particulars	Test Parameters	Revolution/Pulses Test
K. No.: 35300550002Q	Phase Current (A): 19.55	Meter Constant: 3200
Meter No. : 0103278872	Neutral Current (A):	Reading Before Test: 11800
District: Shakti Nagar	Phase – Neutral Voltage (V): 195	Reading After Test: 11801
Sanctioned Load (KW): 0.25		No. of pulses taken: 3200
Consumer's Name: Smt Anar Devi		Energy recorded by meter: 1000 Wh
Address: H No. – A-58, Shastri Nagar, Delhi-52	Load (kW): 3.86	Energy recorded by Reference meter: 999.0 Wh
Phone No.: 23645981	Power Factor : 1	
	Frequency (Hz): 48.7	
Meter Particulars	Instant Parameters	Error : + 0.10 %
Size/Rating: 10 – 60 A, Class – I	Phase Current(A): 12.87	
Meter Type: Single Phase	Neutral Current (A): 14.29	Status of LED
Meter Make: L & T	Phase – Neutral Voltage(V): 198	Phase : OK
Status of Seals	Neutral--Earth Voltage (V) : 23	REV : Off
Meter Seals: OK	Phase-Earth Voltage (V) : 202	EL : Intermittently On
Terminal Box Seals: OK		Pulse : OK
	Power factor: 0.74	Time taken: 15 min 51 sec
	Temperature (°C): 20	

Result : Consumer Meter recorded 0.10 % more consumption.

It is to certify that the testing has been carried out as per the procedure prescribed by the Commission. An external load of 3.86 kW was used for testing for 1 kWh. The testing was carried out by using optical scanner for counting the pulses. Earthing from pole to meter is not proper. NDPL has been advised to rectify the same.

Difference between phase current and neutral current has been observed. There could be neutral mixing with the other meter in the premises. Further, earthing is also not available in consumer premises. The consumer has been advised to get both of these faults rectified. Before entering the premises Identity card was shown and visiting card handed over to the consumer.

Sharma
19/12/05

Tuhin
19.12.05

Anish Garg
19.12.05

Signature of the
Consumer
Sh J P Sharma

Signature Of the
CPRI Official
Sh Shankar Murthy
Engg. Asstt.

Signature of
BIS Official
Mr Jitender Kr
Asstt. Director

Signature of NDPL
Official
Sh Tuhin Roy
Officer

Signature of Commission
Official
Anish Garg
Dy. Director (Engg)



DELHI ELECTRICITY REGULATORY COMMISSION
(A statutory body of Govt. of NCT of Delhi)
Viniyamak Bhawan, Shivalik, Malviya Nagar, New Delhi – 110 017
Telefax: 26673608, Website : www.dercind.org

PUBLIC NOTICE Dated 1st August 2005

DOs AND DON'Ts FOR CHANGE OF METER / METER TESTING

Meter Testing/ Changing is to be carried out by Licensee's officials only. Consumers are advised to insist for production of Identity Card and Visiting Card of the Licensee's official heading the team before allowing them to enter the premises. Entry to premises may be refused if team is not accompanied by Licensee's official or if such official fails to produce both the Identity Card and Visiting Card.

APPROVED PROCEDURE FOR CHANGE OF METER

- Meter change shall be carried out in the presence of Registered Consumer or current occupant of the premises.
- The meter changing team shall bring all the required material, including wires, insulation tape, nuts and bolts, etc. and consumer shall not be asked to supply any material.
- Meter changing team shall ensure that all connections to meter are properly done and there are no loose/bare wires.
- Team shall also ensure that meter and terminal box are properly sealed after installation.
- The consumer should ensure that a copy of the meter change report is handed over to him after change of meter.
- Consumer should cross check his old and new meter numbers, final reading of the old meter and the initial reading of the new meter before signing the report
- After installation of new meter, if it is observed that 'E/L' (Earth Leakage) LED is emitting light (indicating some leakage in the internal wiring of the consumer), the consumer shall be advised by the Licensee to get his wiring checked to remove such leakage.

APPROVED PROCEDURE FOR METER TESTING

- The meter shall be tested for at least 1 kWh
- Optical scanner shall be used for counting of pulses/revolutions
- The testing team should carry external load of appropriate rating of 1 kW to 3 kW.
- Approximate time required for meter testing for 1 kWh is as under

External load in kW*	Approx. time required
Less than 1 kW	More than 1 hour
Between 1 – 2 kW	30 min. to 1 hour
Between 2 – 3 kW	20 min. to 30 min.

Licensee's testing kit would indicate the load used during the test.

The consumer may record the time consumed during testing while signing Meter Testing Report. The consumer may also verify all the entries made in the report before signing it.

In case of all meter related complaints, the Licensees may be contacted at the following telephone numbers

• BSES Rajdhani Power Limited	- 39999733
• BSES Yamuna Power Limited	- 39999733
• North Delhi Power Limited	- 55111912

Consumers are advised not to pay any money to the employees of Licensee or his contractor who come to test /change the meter. In case, any employee demands any money, this may be brought to the notice of the Vigilance Department of the Distribution Companies or at telephone no. 39999777 (for BSES) or no. 27468030 (for NDPL).

This notice has been issued in public interest for the knowledge of consumers in the NCT of Delhi.

Secretary, DERC

25th July - 2005
HINDUSTAN TIMES.

THE ADVANTAGES OF AN ELECTRONIC METER ARE MORE THAN YOU CAN IMAGINE.

The new generation electronic meter is packed with advantages. To start with, it displays actual load consumption. It also gives you 100% accurate billing as meter reading is through an optical reader. But this is just the beginning. Read on.

CONSUMER ADVANTAGES

ADVANTAGE NO. 1

Zero Billing Error
Electronic downloading.
Billing data in memory.
Tamperproof body.

ADVANTAGE NO. 2

For Your Safety
Indicates faulty wiring system.
Alerts you against electricity leakages to avoid mishaps.
Helps you to detect power theft from your meter.

ADVANTAGE NO. 3

Credibility
Approved by BIS for ISI mark.
Type tested and certified by ERTL/ERDA.
Meter consignment inspected by CPRI.
You can get your meters tested by CPRI.

ADVANTAGE NO. 4

Service Line Upgradation To Avoid Failure
Service line replacement at no cost.
Installation of Bus Bars.
Connections through junction boxes.

ADVANTAGE NO. 5

Measures 'Maximum Demand'
No hassle for using higher than sanctioned load.

ADVANTAGE NO. 6

Freedom To Choose
You have the choice to buy yourself a meter packed with the advantages mentioned above from approved vendors. Simply visit our website (www.bsesdelhi.com) for specifications and list of approved vendors or visit your nearest Divisional Office and contact, Manager - Commercial.

BSES YAMUNA
BSES Yamuna Power Limited
Regd. Ofc: 25/11 Kirti Bldg, Kirti Road, Delhi-110 002.

BSES RAJDHANI
BSES Rajdhani Power Limited
Regd. Ofc: BSES Bhawan, Naina Place, New Delhi-110 013.

A JOINT VENTURE OF BSES LIMITED WITH GOVT. OF NCT, DELHI.

M/HR/BSES/02/00

BSES HELPLINE NUMBERS:

FOR 'NO SUPPLY' & POWER CUT COMPLAINTS DIAL 52895555 & 52895556, FOR 'BILLING QUERIES' DIAL 39999707, FOR 'VIGILANCE'/ENFORCEMENT RELATED COMPLAINTS DIAL 39999777 FOR METER RELATED COMPLAINTS DIAL 39999733

CHOOSE YOUR OWN ELECTRONIC METER

Now the decision to replace your defective meter with the new BSES electronic meter or the one of your choice, rests with you. However for regular meter replacements, we have simplified the process for you.

REPLACEMENT PROCESS OF OLD METERS WITH ACCURATE ELECTRONIC METERS:

1. A team of Engineers well conversant with meter technology and replacement process will contact you/your representative to brief, about the process.
2. On a mutually agreed date a team will arrive to test your old meter and provide report about its usability. Also, work related to the bus-bar and service line will be noted.
3. After testing, if changing of the meter is required, it will be replaced by a BSES stock meter.

IN CASE YOU'RE NOT SATISFIED WITH THE NEW BSES METER:

1. You can get your meter tested by BSES.
2. You can get your meter tested by Central Power Research Institute (CPRI), Ministry of Power, Govt. of India.
3. If you still wish to install your own procured meter of approved make, it will be installed after submission for testing. Addresses of BSES approved manufacturers and specification labs are available on the website www.bsedelhi.com and BSES Division Offices.
4. For any enquiry related to choice of meter etc., you can visit BSES Division Offices.
5. The BSES team will change the meter on the scheduled date.
6. It will be replaced under the supervision of BSES employees.

FOR YOUR SAFETY:

1. Please ensure the person visiting your area has a proper I-Card.
2. BSES stock meter will be installed free of cost.
3. All replacement is free of cost.
4. Please ensure that after your meter replacement, you receive the Meter Change Report (MCR).
5. Sign the report after checking MCR data.
6. Kindly take appropriate action on any internal electrical wiring problem as may be intimated by the BSES team.
7. A list of electricians, competent to check your internal wiring, is available on our website www.bsedelhi.com

BSES HELPLINE NUMBERS

POWER SUPPLY : 52895555 & 52895556

METER : 39999733

BILLING : 39999707

ANTI-CORRUPTION : 39999777

BSES YAMUNA
BSES Yamuna Power Limited

Regd. Off: Shakti Kiran Building, Kalkaji, Delhi-110 032.

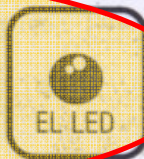
BSES RAJDHANI
BSES Rajdhani Power Limited

Regd. Off: BSES Bhawan, Netaji Place, New Delhi-110 013.

A JOINT VENTURE OF RELIANCE ENERGY LIMITED WITH GOVT. OF NCT, DELHI.

SAFETY HAZARDS. SHORT CIRCUIT. FIRE.

**TO FORGET THEM FOREVER
JUST ENSURE THIS INDICATOR NEVER GLOWS.**



The new state-of-the-art meters installed by BSES come with an inbuilt safety feature called the EL LED. When it glows it's a warning that there is a problem with the internal house wiring which could be due to the following-

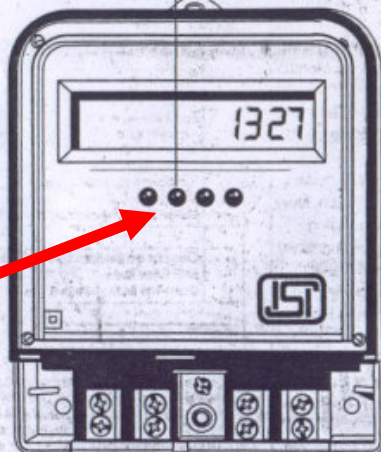
- Earth is being used as the neutral.
- Neutral is touching the earth.
- Phase/ Neutral wire is interconnected with another consumer's wiring.

These can result in fires, safety hazards and leakage of current. So if you see the EL LED glowing contact a qualified electrician.

Consumers are advised to:

- Install Earth Leakage Circuit Breaker (ELCB) to keep their family, property, and possessions safe from electric shocks, leakage and fire.
- Get electrical wiring of the premises checked for common neutral and earth leakage especially where electronic meters are installed.
- Get internal wiring including any addition/ alteration done by a qualified electrician only.

BSES Rajdhani Power Limited/ BSES Yamuna Power Limited have also conducted training programmes for electricians sponsored by electrical wiring contractors, RWAs etc. A list of these electricians is available at our Customer Care Centres and our website www.bsedelhi.com



JAN - 6, 2006

BSES YAMUNA
BSES Yamuna Power Limited
Regd. Off: Shakti Kees Building, Karkardooma, Delhi-110 032.

BSES RAJDHANI
BSES Rajdhani Power Limited
Regd. Off: BSES Showroom, Nehru Place, New Delhi-110 019.

A JOINT VENTURE OF RELIANCE ENERGY LIMITED WITH GOVT. OF NCT, DELHI.

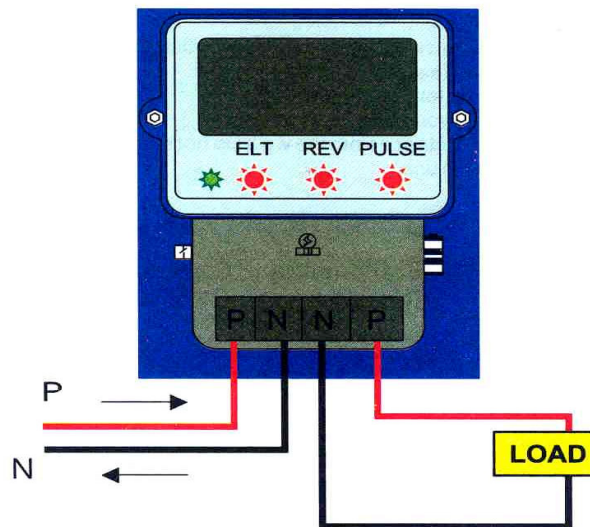
For further information, contact - BSES Yamuna: 39999808, BSES Rajdhani: 39999707



NDPL
North Delhi Power Limited
 (A Tata Power and Delhi Government joint venture)

TIPS ON ENERGY METER AND ENERGY CONSERVATION

Single-Phase Meter



IMPORTANT INDICATIONS ON METER

- ✓ Pulse indicates the consumption.
- ✓ **ELT indicates earth leakage in the wiring (as per rule 61A, Earth Leakage Circuit Breaker (ELCB) needs to be provided by the consumer for protection of Human life (for load equal to and above 5 KW) this will help you avoid accidents or consumption on this account.)**
- ✓ REV indicates wrong connection.
- ✓ POWER ON indicates supply on position.

DEFECTIVE WIRING (Unsafe & can cause electric shocks, possibility of fire)

- Common Neutral Mixed with floors / premises, while extending floors and having got meters for portions while wires are mixed.
- Earth Leakage - Unsafe for residents.
- Mix-up of Neutral & Earthing.
- If ELCB is provided by consumer (for any type of connection and any load) the same would hold ON position if wiring inside the house is ok, otherwise it will trip.

REMEDY

Internal wiring should be done / checked by qualified electrician NDPL is undertaking certification of neighborhood local electricians & shall issue certificates to them.

Use of ELCB (Earth Leakage Circuit Breaker) is recommended for all connections, as it will alarm you if any Earth leakage or mismatch exists due to neutral wiring mix-up within your house.


Annexe VII

YAMUNA BSES Yamuna Power Limited **YOUR ELECTRICITY BILL**
 Regd. Off: Shakti Kiran Building, Karkardooma, Delhi-110 032.

Circle	District	Cycle	New K No.	Old K No.	Consumer Name	
East	KN	9	1220 2090 0616	9 22 402 004962 M	SH GURCHARAN SINGH	
Bill No.	Bill Month	Bill Date	Due Date	Amount (Rs.)	Amount Due Within 50 days from Due Date	Please pay within Due Date to avoid disconnection
443423	JAN-06	13-JAN-06	28-JAN-06	640.00	650.00	

Cashed Cheque/DD should be drawn in favour of "BYPL (K No. 1220 2090 0616)" and payable at Delhi only.

Cashier's Seal and Signature
 Counter _____ Date _____ Amount _____



091220209006160000006477520080128000000965

YAMUNA BSES Yamuna Power Limited **YOUR ELECTRICITY BILL**
 Regd. Off: Shakti Kiran Building, Karkardooma, Delhi-110 032.

Circle	District	Cycle	New K No.	Old K No.	Consumer Name	
East	KN	9	1220 2090 0616	9 22 402 004962 M	SH GURCHARAN SINGH	

Please read the reverse of this bill for information on payment methods and tariffs. Please retain this portion of the bill for future reference and record.

Page No.	Cy CD	Book	CRN No.
3443	09	2090	122011319

OUR HELPLINES
 For Power Supply Complaints : 52895555
 For Commercial Complaints : 39999707

SH GURCHARAN SINGH
 C-6 KANCHAN APPARTMENT
 GEETA COLONY

Bill Number	Bill Month	Bill Date	Due Date	Amount (Rs.)	Amount Due Within 50 days from Due Date	Please pay within Due Date to avoid disconnection
443423	JAN-06	13-JAN-06	28-JAN-06	640.00	650.00	

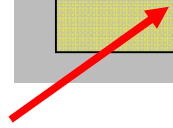
CONSUMPTION DETAILS

Meter No.	Unit	Status	Current		Previous		M.F.	Units Consumed	Billed Consumption
			Date	Reading	Date	Reading			
23096241	KWH		01-JAN-06	1280	30-NOV-05	1154	1/1	126	126 32 Days (EC) 1.00 MWh(s)FC

Bill Basis: ACTUAL

Bill Details		Connection Details		Remarks
a. Energy Charges	302.40	Category	DX	
b. Fixed Charges	60.00	Sanctioned Load (KW)	3.00	
c. Electricity Tax	15.12	Connected Load (KW)	3.00	
d. Other Charges	0	Arrears Details (g)		
e. Current Charges (a to d)	377.52	a. Electricity Charges	237.60	
f. Subsidy/Adjustments		b. Electricity Tax	12.96	
* GoNCTD Subsidy	-17.60	c. Other Charges	50.36	
* Discorn Adjustment	-17.60	d. LPSC	.00	
g. Arrears	300.92	e. Total Arrears (a to d)	300.92	
h. Refunds	.00	f. Deferred pending settlement	.00	
i. LPSC Levied	4.51	g. Instalment not yet due	.00	
j. Other Adjustment (Dr/Cr)	.00	Total (e+f-g)	300.92	
k. Amount Payable sum (e to j)	647.75	Payment Details		
1. Previous Monthly Consumption Pattern		Payment Received		
Bill Month	Average Units	Bill Status	Date	
DEC-05	108	Regular		
NOV-05	180	Regular		
OCT-05	171	Regular		
SEP-05	218	Regular		
AUG-05	202	Regular		
JUL-05	248	Regular		
		Payment Accounted upto	05-JAN-06	
		Cashier's Seal and Signature		
		Counter	Date	
		Amount		

If the EL(Earth Leakage) indicator on your electronic meter is glowing, get your internal house wiring checked from a licensed electrical wiring contractor.





NOTICE TO CONSUMERS

Metering

NDPL is committed to continuously improve its services associated with electricity distribution, while ensuring supply at competitive costs and recovery of dues from all concerned. This is possible by ensuring that all units of electricity bought by NDPL from the grid are properly accounted for and the units consumed at any premises are recovered from the consumer concerned. As such, NDPL has been migrating its metering system to state of the art electronic meters, which have significant tamper-proof features. Also, NDPL is now able to reconcile bulk energy transfers up to the point nearest to your premises, which is a Feeder / Distribution Transformer. We are now in a position to ascertain the gap between Energy provided by NDPL (into a Feeder / Distribution Transformer) and that accounted by aggregation of meter readings of consumers connected to such feeders / transformer. This gap reflects the un-accounted/un-metered consumption at the consumer-end.

The Hon'ble High Court of Delhi has vide its order dated 14-12-2005 in writ petition WP(C) No. 12328/2005 recently upheld that a Discom has the right to change, replace the existing meter with Electronic meter without the need to check the existing meters accuracy or status.

Wiring

It is vital from safety and accurate meter reading point of view that the internal wiring inside consumer premises is safe and correct. It is noteworthy that the Indian Electricity Rules, 1956 read with the National Electrical Code and the National Building Code issued by the Bureau of Indian Standards -

- Oblige the consumers to maintain the internal wiring in good and correct condition at all times.
- Require that no electrical installation work (including additions, alternations, repairs and adjustments to existing installation) be carried out upon the premises on behalf of any consumer/owner except by qualified personnel -other than replacements of lamps, fans, fuses, switches, low voltage domestic appliances and fitting that do not alter the capacity and the character of the installations.
- Mandate that Interconnection of phases or neutrals of consumer loads must be avoided between two or more metered connections (read with IS 13779, Amendment 3 of December 2004).

If you are in an independent house with one independent metered connection you are not likely to encounter intermixing of wires. However, if you are in cluster of premises, you need to check and ensure that your internal wiring is independent of wiring of other metered premises.

All consumers where new Electronic Meters have already been installed are hereby advised to get their wiring checked for Earth Leakage and Intermixing of wiring (phase, neutral) between two or more metered connections. NDPL has trained such of the neighborhood electricians who volunteered themselves and the list, contact details of such electricians is placed on NDPL web site or can be obtained from its consumer care centers.

For all future installation of new electronic meters, NDPL shall check the wiring status for any intermixing, earth leakage and connected load and inform consumers about any need to get a problem rectified as on the date of checking.

With a view to protecting the internal wiring within consumer premises as also for safety, NDPL recommends the use of Earth Leakage Circuit Breakers (ELCB) as main switch immediately after the Meter. This is designed to protect internal wiring as also secure against any Earth Leakage or Wiring errors, wrong

interconnections, leakages that may arise within consumer premises. Please note that the use of ELCB' s is also mandated by law for premises with loads equal to or above 5 KW.

For any further clarifications consumers are encouraged to contact our commercial call center at 55111912 between 9.00 am to 9.00 pm on all days or visit our consumer care centers.

NDPL -Hum Milkar Ek Ujwal Kal Banayeg