MINUTES OF THE TWENTY SECOND MEETING

<u>OF</u>

FORUM OF REGULATORS (FOR)

- **VENUE :** "GODAVARI CONFERENCE ROOM", WRLDC, ANDHERI (EAST), MUMBAI (MAHARASHTRA).
- **DATE** : 14^{th} February, 2011.

List of Participants : At Annexure-I (enclosed).

INAUGURAL SESSION :

The Twenty Second meeting of Forum of Regulators (FOR) was inaugurated by Shri Prithviraj Chavan, Hon'ble Chief Minister, Government of Maharashtra. Shri V.P. Raja, Chairperson, Maharashtra State Electricity Regulatory Commission (MERC) welcomed the Hon'ble Chief Minister. In his welcome address, he gave brief overview of the formation of independent Regulatory Commissions in the electricity sector. He also highlighted the problems facing the Regulators and specifically mentioned about the challenges around regulating the Government owned utilities. He underscored that implementation of open access and reduction of cross subsidy were the two major challenges before the Regulatory Commissions. He observed there was an urgent need for coordinated efforts between Regulatory Commissions, State Government and State owned distribution companies for furtherance of reforms in the electricity sector.

Dr. Pramod Deo, Chairperson, CERC/FOR in his address highlighted the national level issues relevant for reforms in the power sector. Financial viability of the distribution companies, he emphasized, was a major cause of concern for the sector. The growing financial losses of the distribution companies pose a challenge to development of the sector. He expressed apprehension that this might lead to new generation capacities getting stranded. He also referred to a directive given by the Appellate Tribunal for Electricity (APTEL) to all State Electricity Regulatory Commissions asking for status on revision of tariff and tariff adequacy. He informed that FOR had carried out a study of ten States highlighting the state of affairs in this regard. The Forum proposes to discuss this report and chart out an action plan for addressing this concern. Dr. Deo also specifically mentioned about Special Economic Zones (SEZs) which in his opinion have emerged as good model of second licensee in the same area of supply. If SEZs are set up in areas where the existing distribution licensees have not been able to build any network, their deemed licensee status will help build the desired network. There was a need for special dispensation of tariff for such SEZ areas. One of the options could be to allow the industrial tariff of the existing licensees as a ceiling tariff for such SEZ areas. This was earlier discussed in the FOR. However, he felt that such a dispensation might not hold in case there already existed distribution network in an SEZ area. The Forum proposes to discuss this issue today and find out a solution. Dr Deo also referred to dilemma of the regulators because of the conflicting policies being pursued in some states in procurement of generation and transmission services. The National Tariff Policy mandates that generation as well as transmission services should be procured through competitive bidding. However, some State Government policies still favour MOU/negotiated route as against competitive procurement of such services.

The address of Dr. Pramod Deo was followed by the inaugural address of Shri Prithviraj Chavan, Hon'ble Chief Minister of Maharashtra. Shri Chavan in his address presented an overview of the reforms initiatives of the Government at the national level as well as the issues at stake at the State level. Good governance, he informed was one of the important pillars of reforms being pursued by the Central Government. This includes inter alia good economic governance and strengthening the institution of Regulatory Commission is part of this initiative of the Government. The Chief Minister felt that reforms in the electricity sector with all its problems are a success story. There are other sectors like coal, transportation where a lot needs to be done. For the electricity sector reforms to take off, he felt there was a need for reforms in the downstream sector of coal, petroleum and natural gas and transportation. About the issues at the State level, he highlighted that there was huge pressure on natural resources like land, water, underground resources. In the process of development, concerns around these resources should not be lost sight of. Similarly, rehabilitation and resettlement should be given highest priority before setting up any generation project. This is required not only to enlist support of the local community for development of the project but also for the sake of social equity. He underscored the need for introduction of open access, development of transmission and distribution network, replication of the distribution franchisee model like in Bhiwandi. He also urged MERC to resolve the issues around tariff determination in areas where two distribution licensees are operating in Mumbai.

The address by Shri Prithviraj Chavan was followed by an interaction with the members of the Forum. The members expressed deep appreciation for the insight given by the Hon'ble Chief Minister on wide range of issues facing the economy in general and power sector in particular.

The interaction was followed by a vote of thanks extended by Shri Sushanta K. Chatterjee, Deputy Chief (Regulatory Affairs), CERC. On behalf of the Forum, he conveyed his sincere thanks to the Hon'ble Chief Minister, and all the dignitaries present in the meeting. He also thanked the staff of WRLDC, Mumbai and FOR Secretariat for their valuable support and assistance in organising the meeting.

BUSINESS SESSION:

Dr. Pramod Deo, Chairperson, CERC/FOR welcomed the participants in the Twenty Second meeting of the Forum of Regulators (FOR).

The FOR thereafter took agenda items for consideration.

Agenda Item No. 1:Confirmation of the Minutes of the 21st Meeting
of "FOR" held during 27th – 28th November, 2010
at Chennai (Tamil Nadu).

The Forum noted and endorsed the minutes of the 21^{st} Meeting of FOR held at Chennai (Tamil Nadu) during $27^{th} - 28^{th}$ November, 2010 as circulated.

In this context, in reference to the proposal of framing regulations under section 60 of the Act, MERC Chairperson informed that the State Commission in Maharashtra has made another reference to the Competition Commission in India (CCI) seeking its views on the instances of market domination. Chairperson, CERC/FOR reiterated that the Forum had already discussed these issues earlier and had concluded that in view of the constitutional bench judgment of the Hon'ble Supreme Court on PTC vs. CERC, the Electricity Act has already been recognized as a complete code in itself and the Electricity Regulators have full authority to decide any case within the ambit of its power under section 60 of the Act.

Another issue was raised in the context of competitive procurement of power after 06th January, 2011. On the question raised as to whether Regulators would be in a position to approve the tariff for projects for which PPAs have been signed in large number prior to the deadline of 06th January, 2011, Shri Sushanta K. Chatterjee, Deputy Chief (Regulatory Affairs), CERC clarified that a similar question came up after the Tariff Policy was notified in January, 2006. He informed that a clarification was issued by the Ministry of Power at that time explaining that (i) the projects for which PPAs had been signed before 06th January, 2006 (i.e., the date of notification of Tariff Policy), or (ii) the projects for which appraisal/financial appraisal had been initiated before 06th January, 2006 and petition for approval of PPA had been made before the Appropriate Commission before 30th September, 2006, would be treated as falling outside the scope of clause 5.1 of the Tariff Policy which requires procurement of power through competitive bidding. In other words, such projects would qualify for tariff determination under section 62 of the Act. A copy of the clarification dated 28th March, 2006 issued by the Ministry of power in this regard is enclosed as Annexure-II. He also said that similar dispensation may have to be given to the projects for which PPAs have been signed before 6th January, 2011.

On the issue as to whether the regulators are bound by the tariff policy requirement of competitive procurement in view of the APTEL's judgment that the discretion lies with the regulator – there was a general consensus that this discretion gets circumscribed by the current realities of tariffs discovered through competition in generation and transmission being more efficient than the cost plus tariffs. CERC's statutory advice to Ministry of Power in this regard, which is based on a detailed analysis of 14 projects also establishes that the distribution companies should be encouraged to procure power through competitive bidding route. It was felt that given the efficient price discovery through competition in generation and transmission it may be difficult for the regulators to exercise the discretion of cost plus approach in future.

Agenda Item No. 2:Discussion : Issues relating to CEA's Powers of
Technical Clearance under J&K Act, 2010.

Jammu & Kashmir Chairperson felt that there was a need for greater clarity in this regard in the Tariff Policy and that there should be clear provision in the Tariff Policy stating that CEA does not have powers of techno-economic clearance under section 8 of the Act. Chairperson, CERC/FOR stated that the provision in the law was amply clear and that the issue has to be understood in the context of the historical background and its corresponding provisions in the repealed laws of 1948. He said that a note to this effect explaining the historical background would be prepared by FOR Secretariat and circulated to all the members, which if need be could be discussed in the next meeting of Forum.

Agenda Item No. 3:Discussion : Common Guidelines for Licence
condition including Tariff for SEZ.

A presentation (copy **enclosed** - <u>Annexure-III</u>) was made by the representative of SEEPZ Association. They highlighted that SEEPZ as SEZ has been recognized as deemed distribution licensee. In the area of SEEPZ both the existing distribution licensees have their own networks but not necessarily parallel networks over all the area. In fact, in this area, there are three licensees including SEEPZ. The other two distribution licensees are R-Infra-D and Tata Power Limited. They felt that there was no need for duplication of network in this area. The State Commission is required to determine the network usage charges which the SEEPPZ will have to pay to the existing distribution licesee, for usage of such network for distributing power to its consumers in that area. SEEPZ as a distribution licensee can do the billing and collection, be responsible for customer related issues. It can also procure long term or short term power for supplying power to the consumers in that area. They felt that there was a need for clarity on these and other related issues.

After discussion, it was felt that there was a need for detailed discussion on various issues relating to SEZ area. There could be different scenarios – e.g. an SEZ would have come up in a virgin area, or in an area where multiple distribution licensees already exist. The licence conditions including tariff and related issues in each of such cases have to be evolved with due regard to the special conditions prevalent in such areas and the Supreme Court judgment in Mumbai licensees case in the suburban area mandating payment of cross-subsidy charge for using other licensee's wires

over and above wire charges. The Forum, therefore, decided to constitute a Working Group to examine all such issues in detail and come out with the recommendations for consideration of the Forum. The Chairpersons of OERC, GERC, RERC and UPERC volunteered to be Members of this Working Group. It was decided that the Working Group may be constituted by Chairperson, CERC/FOR.

Agenda Item No. 4: CONSIDERATION OF MODEL SUPPLY CODE.

A presentation (copy **enclosed** - <u>Annexure-IV</u>) was made by PWC, the consultant engaged to assist FOR for drafting the Model Supply Code. It was informed that based on the direction of the Appellate Tribunal for Electricity (APTEL), FOR Secretariat had done a study comparing the supply codes of ten select States. The study revealed that there was wide variation in the supply codes across States. Thus, a need was felt for evolving a Model Supply Code by incorporating the best practices and by drawing on other regulations like Performance Standards Regulations etc. After discussion, the Draft Model was endorsed in principle. However, it was desired that the comments received so far on the draft Model Supply Code along with FOR Secretariat comments be circulated to all SERCs. The SERCs may give their comments on this within a period of 15 days subsequent to which the Model Supply Code be finalized with the approval of the Chairperson, CERC/FOR.

AGENDA ITEM NO. 5 : ISSUES RELATING TO BACHAT LAMP YOJNA (BLY).

A presentation (copy **enclosed** - <u>Annexure-V</u>) was made by the representative of Bureau of Energy Efficiency (BEE). She explained the programme of Bachat Lamp Yojna (BLY) and highlighted the issues that have arisen around implementation of this programme. She highlighted that concerns arose around possible misuse by consumers and the resultant impact on the cash flow of promoters. She suggested various options to overcome this concern.

After discussion, it was felt that the project developers should factor in the risk to the extent possible while designing the project itself. The residual risk, if any, could be shared by both the consumers and distribution company but mostly by the latter as it would be benefitting from the use of CFL being distributed as part of this programme.

AGENDA ITEM NO. 6: DISCUSSION ON THE REPORT ON DISCOM VIABILITY / TARIFF ADEQUACY.

Shri Sushanta K. Chatterjee, Deputy Chief (Regulatory Affairs) informed that a study was carried out for ten States about the DISCOM Viability and Tariff Adequacy. The study has revealed various factors responsible for increasing losses of the distribution companies. Non-filing of

petition for tariff revision and resultant non-revision of tariff, disallowance of costs, creation of regulatory assets, delay in and absence of true up exercise in some cases, disallowance of carrying costs/interest costs are some of the reasons for gap between cost and revenue realization for the distribution companies. There was an urgent need for tariff revision at regular intervals commensurate with the legitimate costs incurred by the discoms. Chairperson, CERC/FOR informed that a reference has been made by the APTEL to all SERCs in this regard. Shri Chatterjee informed that the format in which APTEL has asked for information has already been circulated to all SERCs. He requested that necessary information be given to the FOR Secretariat to enable it to prepare a report and submit it to APTEL by the end of February, 2011.

After discussion, the Forum noted the study of ten States. Shri Chatterjee informed the Forum that the Ministry of Power has also discussed the report. The constraints faced by the Regulators because of unmetered agricultural supply, non-availability of base line data on sales, loss level etc are recognized. But it is felt that the Forum and the Electricity Regulators being expert bodies should take the lead and commission a detailed study for addressing all such constraints in each state separately. Studies could be commissioned for arriving at correct energy sales, estimation of unmetered supply, development of base line data, correct estimation of opening level of AT&C loss and reasonable and practicable loss reduction strategy, principles for approval of power procurement quantum and costs. Funding for such a study would not be a constraint. The Forum also emphasized that Planning Commission and Central Government should insist that States make full payment of subsidy upfront etc.

The meeting ended with a vote of thanks to the Chair.

<u>/ ANNEXURE – I /</u>

LIST OF PARTICIPANTS ATTENDED THE TWENTY SECOND MEETING OF

FORUM OF REGULATORS (FOR)

HELD ON 14TH FEBRUARY, 2011

AT WRLDC, ANDHERI (EAST), MUMBAI (MAHARASHTRA).

S.	NAME	ERC
No.		
01.	Dr. Pramod Deo	CERC – in Chair.
	Chairperson	
02.	Shri Jayanta Barkakati	AERC
	Chairperson	
03.	Shri S.M. Sahay	BERC
	Chairperson	
04.	Dr. P.K. Mishra	GERC
	Chairperson	
05.	Shri S. Maria Desalphine	J&KSERC
	Chairperson	
06.	Shri Mukhtiar Singh	JSERC
	Chairperson	
07.	Dr. V.K. Garg	Joint ERC for Goa & all
	Chairperson	UTs except Delhi
08.	Shri C. Hmingthanzuala	Joint ERC for Manipur &
00.	Chairperson	Mizoram
	-	
09.	Shri M.R. Sreenivasa Murthy	KERC
	Chairperson	
10.	Shri K.J. Mathew	KSERC
	Chairperson	
11.	Shri V.P. Raja	MERC
	Chairperson	
12.	Shri P.J. Bazeley	MSERC
12.	Chairperson	motive
12	-	
13.	Bijoy Kumar Das	OERC
	Chairperson	

14.	Shri D.C. Samant	RERC
	Chairperson	
15.	Shri Manoranjan Karmakar	TERC
	Chairperson	
16	Shri Rajesh Awasthi	UPERC
	Chairperson	
17.	Shri Prasad Ranjan Ray	WBERC
	Chairperson	
18.	Shri C.S. Sharma	MPERC
	Member	
19.	Shri Sushanta K. Chatterjee	CERC
	Deputy Chief (Regulatory Affairs)	
20.	Ms. Neerja Verma	FOR
	Assistant Secretary	

No.45/2/2006-R&R Government of India Ministry of Power

New Delhi, the 28th March 2006

То

Shri A.K. Sachan, Secretary, Central Electricity Regulatory Commission, SCOPE Complex, Lodhi Road, New Delhi

Subject : Tariff Policy under the Electricity Act 2003

Sir,

I am directed to refer to CERC's letter No. 1/20(6)2006-Tariff/Policy/CERC dated 2.2.06 requesting for clarification under the provisions of para 5.1 of the Tariff Policy (notified on 6.1.06) which reads as under:-

"......All future requirement of power should be procured competitively by distribution licensees except in cases of expansion of existing projects or where there is a State controlled/owned company as an identified developer and where regulators will need to resort to tariff determination based on norms provided that expansion of generating capacity by private developers for this purpose would be restricted to one time addition of not more than 50% of the existing capacity......"

2. This matter has been considered taking into account the suggestions of the CERC and all relevant aspects. Accordingly, it is hereby clarified that the power generation projects which satisfy any of the following conditions would be well within this provision of the Tariff Policy:

i) Where the Power Purchase Agreement (PPA) has been signed and approved by the Appropriate Commission prior to 6.1.06 or PPA has been signed and is pending before the Appropriate Commission on 6.1.06, such procurement would be treated as falling outside the scope

of clause 5.1 of Tariff Policy as contractual obligation for procurement of power has been firmly established in such cases.

- ii) Similarly, where the appraisal of any power project has started before 6.1.2006 by the relevant financial institutions for lending funds to the project on the basis of appropriate evidence of process of procurement of power by any utility, such procurement would be treated as falling outside the scope of clause 5.1 of the Tariff Policy provided that in all such cases final PPA is filed before the Appropriate Commission by 30th September, 2006.
- iii) In case of hydro projects where detailed project report (DPR) has been submitted to the CEA/CWC before 6.1.06 for concurrence (except for projects where concurrence of DPR is not mandatory) and appropriate evidence of process of procurement of power by any utility exists before 6.1.2006, such procurement would be treated as falling outside the scope of clause 5.1 of Tariff Policy, provided that in all such cases the final PPA is filed before the Appropriate Commission by 30th September, 2006.

Yours faithfully,

Sd/-

(Alok Kumar) Director (R&R) 2371 4000

TATA POWER





SEEPZ – Deemed Licensee

Meeting with Forum of Regulators Mumbai, 14th Feb 11

Amulya Charan Tata Power Trading Company Ltd

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Agenda



- Legal Provisions
- SEEPZ Deemed Licensee
- Activities of the Licensee



14th Feb'11, Mumbai



Legal Provisions



- Special Economic Zones Act, 2005 empowers the Central Government to constitute for SEZs established by it before the commencement of the SEZ Act, 2005, an Authority, to exercise powers and functions assigned to it under the SEZ Act, 2005
- Central Government by a Notification dated 27.02.2009 (SO 569 (E)) constituted the SEEPZ Special Economic Zone Authority. The Authority, SEEPZ obtains special features that are available to an SEZ under the SEZ Act, 2005
- Powers conferred SEZ Act, 2005, the Central Government notifies: In clause (b) of Section 14 of the Electricity Act, 2003 (36 of 2003), the following proviso shall be inserted, namely: "Provided that the Developer of a Special Economic Zone notified under sub-section (1) of Section 4 of Special Economic Zones Act, 2005, shall be deemed to be a licensee for the purpose of this clause, with effect from the date of notification of such Special Economic Zone."



SEEPZ - Deemed Licensee



- SEEPZ Special Economic Zone Authority (Authority) is a deemed licensee.
- There are two incumbent licensees in the same area R Infra and Tata Power
 - Each licensee has its own existing distribution network
- The authority acting through the DC, or co-developer or a nominee can source and distribute power
 - The existing network can be used as it will be cheaper to use existing network instead of putting new set of wires.
- The network usage charges within the demarcated area of SEEPZ-SEZ can be determined by MERC
- Deemed Licensee need to invest in only the consumer end equipment, SCADA, metering, working capital etc.
- Retail tariff to be determined by MERC on the basis of power procurement cost by the distribution licensee, wire usage charges and other charges

14th Feb'11, Mumbai



TATA POWER

Activities of the Licensee



• Licensee shall perform

- Long term and short term sourcing of power
- File Annual Revenue Requirement
- Maintain internal network and equipment
- Distribute Power
- Raise Bills
- Collect money
- Regulatory and legal compliance
- Future investments
- SEEPZ has multiple incoming and outgoing feeders
 - Meters to be installed at all interconnections
 - Formulation of mechanism for energy balance settlement



14th Feb'11, Mumbai





Thank you

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Draft Model Supply Code Forum of Regulators 14 February 2011



Agenda

Process – Drafting the Model Supply Code Salient Features of the draft Model Supply Code Metering Cost of Replacement of Meter Billing and Related Issues Timelines

Annexure Billing in case of Theft Billing in case of UUE

Appointment of PwC for the assignment

- Hon'ble ATE in Oct'09 directed all SERCs & JERCs to ensure effective implementation of Sections 42(5) to 42(7), 50, 57, 59 of the E Act;
- Also directed FOR to identify gaps/variations in state Supply Codes;
- Study commissioned by FOR for comparison of Supply Codes across 10 States in India, undertaken by M/s PricewaterhouseCoopers (P) Ltd;
- In view of the lacunae identified, FOR decided that a Model Supply Code be developed featuring the suggested mandatory provisions in accordance with the E Act along with other desirable features based on the best practices in customer service being followed in various states;
- M/s PricewaterhouseCoopers (P) Ltd. awarded the assignment to prepare the Model Supply Code in May 2010.

Inception Report – Inter-state comparison of parameters

- Inception Report submitted in June 2010;
- Comparison of more than 85 parameters across 19 states covering the state's Supply Code, Distribution Code, Metering Code, Conditions of Supply (where issued by the SERC);

Outcomes:

- Best practices identified;
- Process and timelines for all procedures (granting of connection, issuing demand note, etc.) standardized;
- Parameters circulated among utilities, SERCs and industry associations (CII, FICCI, Assocham) for comments – Inputs received from NDPL, MP Madhya Discom and AERC

Consultation with Stakeholders – Workshop on 23 Nov, 2010

- Draft Model Supply Code circulated to SERCs on 21 Oct, 2010
- Chairperson: Mr. Sushanta K. Chatterjee, DCRA, CERC/FOR
- Participants:
 - SERCs: DERC, OERC
 - Utilities: BRPL, BYPL, NDPL, Torrent
 - Consumer Forum: CUTS, Consumer representative from UP

Consultation with Stakeholders – Workshop on 23 Nov, 2010

- Main issues discussed:
 - "Definitions and interpretations" in the draft Code
 - Timelines
 - Temporary connection (duration, pre-paid meters for LT temporary)
 - Annual review of contract demand
 - Conditions for load reduction
 - Review of security deposit
 - Mode of payment of charges
 - Prior intimation to consumers regarding bill issue dates
 - Due date for payment

Consultation with Stakeholders – Workshop on 23 Nov, 2010

- Provisional billing
- Provisions relating to role and functions of Electrical Inspector
- Method of assessment in case of theft/UUE in view of Section 50 of the E Act
- Format of Application forms, consolidation into a single booklet
- Decision to seek legal opinion on:
 - Conditions of load reduction w.r.t. Open Access
 - Method of assessment in case of theft and unauthorised use of electricity w.r.t. Sections 50 , 126 and 135 of the E Act

Difference between "application form" and "application"	 Application form: Deemed to be received on the date of receipt of consumer's requisition of supply in the prescribed format of the application form, complete in all respects and attached with all relevant documents; Application: Deemed to be received on the date of receipt of all applicable charges including the security deposit, after receipt of the application form
Registration fees	 Registration-cum-processing fees of Rs. 10,000/- for HT connections and Rs. 50,000/- for EHT connections; Shall be adjusted by the licensee while issuing the demand note.
Convenience in scheduling site inspection	 Date of inspection / re-inspection / testing must be scheduled in mutual consultation with the applicant; Provision for getting site inspection scheduled on a non-working day (Sunday, gazetted holidays etc.) on payment of an inspection fee (Rs. 500).

Condition for grant of connection	 The Licensee shall prominently display on its website and offices: Status of applications for new connections in that area/circle; Detailed procedure for grant of new connection; and Complete list of documents required to be furnished along with such application forms.
Caveats for the timelines specified for Distribution Licensee	 Distribution Licensee shall not be held responsible for delay in extending supply if the same is on account of problems related to right of way, acquisition of land or delay in consumer's obligation, over which Licensee has no reasonable control; In case of defects being found in the consumer installation at applicant's premises, the same shall not be included in the timeline specified for the Licensee; and Wherever the Transmission Licensee's involvement is required in time and cost estimation, the time taken by the Transmission Licensee shall not be included in the Distribution Licensee in the Code.

Temporary Supply	 For a period of up to 3 months at a time; For LT connections, temporary connection may be granted through pre-paid meters.
Tatkal Yojana	• Licensee may give temporary supply at a notice of 24 hours, if it is technically feasible, on payment of an additional fee of Rs. 1000 for LT connections and Rs. 5000 for HT/EHT connections.
Annual Review of Contract Demand	 In case of HT and EHT connections, if the maximum demand was recorded to be in excess of contract demand at least 4 times during the last financial year, Licensee shall issue a 30-day notice to the consumer for submitting an application form for enhancement of load; If no response, Licensee shall begin procedure for enhancing the consumer's contract demand to the average of 4 recordings of maximum demand shown by consumer's MDI meter in the last FY; In case of LT connections, similar review shall be carried out for connections equipped with an MDI meter.

Review of Security Deposit	• At the beginning of the FY, Licensee shall review the consumer's consumption pattern for adequacy of security deposit (except for connections less than 1 year old);
	 Consumer required to maintain a sum equivalent to his average payment for the period of one billing cycle plus one month;
	 'Average payment' = average of actual bills paid in the last FY;
	• The security deposit with the Licensee for each consumer shall be shown in the consumer's bill;
	• Refund of security to the consumer shall be made through maximum of 3 bills without any other formalities.
Interest on Security Deposit	• The licensee shall pay interest to the consumer at the SBI base rate prevailing on 1 April, payable annually;
	• Interest accrued during the year shall be adjusted in the consumer's bill for the first billing cycle of the ensuing FY.

Mode of payment of charges	 Cash (up to Rs 10,000), Banker's Cheque, DD, Money Order; Cheques and demand drafts shall be payable at any branch of a scheduled commercial bank that is a member of the clearing house for the area where the concerned Sub Divisional Office is located.
Prior intimation to consumer	 The Licensee shall intimate the consumer, in the beginning of the financial year, of the following: Probable week in which bill shall be issued by the Licensee in every billing cycle; Probably due dates for payment of bill; and Rebates applicable to consumers, if any.
Due date for payment	 The due date for bill payment through cheques shall be 3 days in advance of the normal due date for bill payment; and Due date for payment through online bank transfer/credit card shall be 1 day in advance of the normal due date for bill payment.

Consumer-friendly billing process	 Licensee shall intimate the consumer of bill dispatch through SMS and/or email, if the consumer has furnished requisite details; Billing details of last six bills (including the latest bill) for all consumers shall be made available on the licensee's website along with payment receipt details.
Third Party Testing of Meters	 Meters may be tested for accuracy at a third party facility approved by the Commission, if so desired by the consumer; The list of third party agencies approved by the Commission for
	 testing of meters shall be available on the licensee's website; In case of testing on the consumer's request, the consumer shall have to pay the testing fee as per the cost guidelines of the Cost Book (or as determined by the Commission from time to time);
	• Provided further that if the meter is found to be defective/burnt due to technical reasons viz. voltage fluctuation, transients etc. attributable to the licensee, the licensee shall refund the test fee to the consumer by adjustment in the subsequent bill.

Metering

- Consumer can purchase the meter and associated equipment of a make and specification approved by the Licensee from time-to-time;
- If supply to an HT/EHT consumer is given on an independent feeder for his exclusive use, the metering arrangement shall be installed at the consumer's premises or, if mutually agreed, the metering arrangement at the Licensee's sub-station may be used for billing and no meter need be installed at the consumer's premises;
- The Licensee shall evolve a format of Meter Particulars Sheet for recording the particulars of the meter at the time of initial installation or replacement one copy to be retained by the Licensee and the other by the consumer;
- The meter shall be read by an authorized representative of the Licensee. The Licensee shall issue proper photo identity cards to all meter readers which meter readers must carry;

Metering

- Meter reader may use hand held instruments, meter reading instrument (MRI) or wireless equipment;
- In case the meter is not read during a billing cycle, the Licensee shall prepare a provisional bill based on the average consumption of last three billing cycles when readings were taken;
- If the meter is rendered inaccessible on two consecutive meter reading dates, a notice shall be issued to consumer to keep the meter accessible for reading on the date (at least 7 days after the date of notice) and time specified in the notice;

Metering

- If meter not accessible even on the specified date, a notice shall be served on the consumer to get the meter read within the next 7 days, after payment of a penalty charge equivalent to 5% of the average billing amount for the last 12 months. Failing this, supply shall be disconnected;
- In case of meter testing, the meter can be tested for accuracy at a third party facility approved by the Commission, if the consumer desires so. The list of third party agencies approved by the Commission for testing of meters shall be available on the website of the Licensee;

Provided that in case of testing on the consumer's request, the consumer shall have to pay the testing fee as per the Cost Book given with the Code;

Provided further that if the meter is found to be recording incorrectly, the test fee shall be refunded by adjustment in the subsequent bill;

• Rectification for a maximum period of three months only, on the basis of the test report, shall be adjusted in the subsequent bill;

Cost of Replacement of Defective/Burnt/Lost Meter

- As a result of testing, if it is established that:
 - The fault was technical reasons attributable to licensee viz. voltage fluctuation, transients → the meter's cost shall be borne by licensee;
 - The fault was attributable to the consumer such as defect in consumer installation, connection of unauthorized load etc. → the meter's cost shall be borne by the consumer as specified below:
 - If the meter was owned by the consumer, the licensee shall inform the consumer to replace the meter within 7 days, after which the licensee may be empowered to install a new meter;
 - If the meter was owned by the licensee, the licensee shall install a new meter at its own cost.
- Provided that the meter cost shall be recover from the consumer in proportion of the remaining useful life of the meter (as per the depreciation schedule of the Commission) that was defective/burnt.

- Billing when meter not accessible:
 - Provisional bill may be issued on the basis of average consumption of last 3 billing cycles;
 - Provisional billing shall not continue for more than 2 billing cycles at a stretch;
 - Licensee shall not generate more than 2 provisional bills for a consumer during one FY;
 - Amount paid as per provisional bills shall be adjusted against the bill raised on the basis of actual meter reading during subsequent billing.

- Billing in case of defective/stuck/stopped/burnt meter: Consumer shall be billed on the basis of average consumption of the past 3 billing cycles immediately preceding the date of the meter being found/reported defective
- Billing in case of lost meters: Electricity charges for the period for which the meter was not available shall be assessed as below:
 - As per the procedure detailed for UUE if it is established in the Licensee's enquiry that the loss of meter was due to a deliberate act of the consumer and/or with his connivance;
 - As per the procedure for dealing with defective/stuck/stopped meters, in other cases.

- Payment on self-assessment by consumer: In case of non-receipt of bill the consumer may deposit self-assessed bill in the prescribed format for the period, provided that it is not less than the average consumption during the billing cycle over the last 6 months.
- Advance payment by consumer: In case a consumer's premises remains vacant for some duration, he may opt for making advance lump sum payments from which the billed amount shall be deducted periodically.
 - The consumer shall deposit an amount that covers the fixed charges for the duration of the proposed absence.
 - Such provisional payment shall be adjusted when subsequent bill is issued on the basis of actual meter reading.

• Billing in case of Excess Load: In cases where MDI is installed, assessment shall be made as per provisions of the Tariff order. In cases where no MDI is installed, the excess load shall be billed as per the formula below, but at two times the rate applicable in the tariff order.

Units assessed = L x D x H x F

The 'L' in the formula shall be computed as per below:

- In domestic category: 50% of the difference between the actual connected load and two times the contracted load;
- In commercial category: 75% of the difference between the actual load and 1.33 times the contracted load; and
- In all other cases: difference between the connected load and the contracted load.

Timelines for release of new connection (1/3)

SNIe		Timeline		
5110	Activity	Class-I Cities	Urban Areas	Rural Areas
1	Acknowledgement of receipt of <i>application form</i>	On the spot	On the spot	On the spot
2	Stipulation of inspection date	On the spot	On the spot	On the spot
3	Date of inspection to be scheduled within:	3 working days of receipt of application form	3 working days of receipt of application form	5 working days of receipt of application form
4	If defects found upon inspection:			
(a)	Written intimation to applicant regarding defects	On the spot	On the spot	On the spot
(b)	Applicant to get all defects removed within;	10 working days from inspection (provision for extension)	10 working days from inspection (provision for extension)	10 working days from inspection (provision for extension)
(c)	Stipulating a date for re-inspection	On the spot (on receipt of written intimation about defects being removed)	On the spot (on receipt of written intimation about defects being removed)	On the spot (on receipt of written intimation about defects being removed)
(d)	Date of re-inspection to be scheduled within:	3 working days of receipt of intimation from consumer	3 working days of receipt of intimation from consumer	5 working days of receipt of intimation from consumer

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Timelines for release of new connection (2/3)

SNo	Activity		Timeline	
SINO	Activity	Class-I Cities	Urban Areas	Rural Areas
5	After inspection (or re-inspection), issue of demand note			
(a)	If extension of Distribution Mains not required, within:	7 working days	7 working days	10 working days
(b)	If extension of Distribution Mains/system required			
	• In case of LT connections, within:	7 working days	7 working days	10 working days
	• In case of HT connections, within:	15 working days	15 working days	20 working days
	• In case of EHT connections, within:	30 working days	30 working days	30 working days
6	Time for applicant to make payment after receipt of demand note within:	15 working days (provision for extension)	Within 15 working days (provision for extension)	Within 15 working days (provision for extension)
7	If applicant had chosen to do the extension work done himself, after receiving intimation from the applicant regarding completion of works:			
(a)	Acknowledgment of written intimation	On the spot	On the spot	On the spot
(b)	Stipulation of a date for inspection & testing	On the spot	On the spot	On the spot
(c)	Date of inspection to be scheduled within:	3 working days of receipt of intimation	3 working days of receipt of intimation	5 working days of receipt of intimation
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Timelines for release of new connection (3/3)

SNo	A -45-54	Timeline		
SINO	Activity	Class-I Cities	Urban Areas	Rural Areas
7	Timeline for releasing new connection from receipt of <i>application</i>			
(a)	New connection/ additional load where supply can be provided from existing network	30 days	30 days	30 days
	New connection/ additional load where supply	LT 30 days	LT 30 days	LT 30 days
	can be provided after extension/augmentation of	HT 90 days	HT 90 days	HT 90 days
	network	EHT 180 days	EHT 180 days	EHT 180 days
(c)	Erection of substation to extend supply	On case to case basis as per Commission's approval	On case to case basis as per Commission's approval	On case to case basis as per Commission's approval

Timelines for release of temporary connection (1/1)

CN	SNo Activity			
SNO	Activity	Class-I Cities	Urban Areas	Rural Areas
1	Same timeline as for release of new connec	ctions, till completion	of site inspection	
2	If connection not found technically feasible, Licensee to inform the applicant within:	LT: 7 working days HT/EHT: 15 working days	LT: 7 working days HT/EHT: 15 working days	LT: 7 working days HT/EHT: 15 working days
3	Same timeline as for release of new connections, for issue of demand note, payment of demand note by applicant and testing in case of works being undertaken by the applicant himself			
4	Temporary connection shall be released by the date of requirement or the timeline given below, whichever is later			ichever is later
(a)	Where supply can be provided from existing network	3 days	3 days	7 days
(b)	Where supply can be provided after extension/augmentation of network	LT: 30 days HT: 90 days EHT: 180 days	LT: 30 days HT: 90 days EHT: 180 days	LT: 30 days HT: 90 days EHT: 180 days
5	For extension of period of temporary supply, appli temporary supply period	cant may apply to the Lic	ensee at least 7 working d	lays before expiry of the
6	Applicant may get the date of availing temporary supply amended to a date not later than 90 days from the date of original sanction, by applying to the Licensee at least:	4 days before the originally sanctioned commencement date	4 days before the originally sanctioned commencement date	8 days before the originally sanctioned commencement date
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Timelines for modification in existing connection

SNo		Timeline				
SINO	Activity	Class-I Cities	Urban Areas	Rural Areas		
1	Change in consumer's name to be effected within:	Two billing cycles	Two billing cycles	Two billing cycles		
2	Conversion from LT single-phase to LT 3-phase or vice-versa to be effected within:	Two billing cycles from payment of necessary charges	Two billing cycles from payment of necessary charges	Two billing cycles from payment of necessary charges		
3	Conversion from LT to HT or vice-versa to be effected within:	Two billing cycles from payment of necessary charges	Two billing cycles from payment of necessary charges	Two billing cycles from payment of necessary charges		
4	Change in HT to EHT or vice versa to be effected within:	Four billing cycles from payment of necessary charges	Four billing cycles from payment of necessary charges	Four billing cycles from payment of necessary charges		
5	Shifting of meter/service line, within:	7 days	7 days	7 days		
6	Shifting of LT/HT lines, within:	20 days	20 days	20 days		
7	Shifting of transformer, within:	30 days	30 days	30 days		
8 (a)	Reclassification to be effected:	From the date of inspection	From the date of inspection	From the date of inspection		
8 (b)	If Licensee does not reclassification valid, it shall inform the applicant in writing within:	10 days from date of inspection	10 days from date of inspection	10 days from date of inspection		
9	Load enhancement	Same timelines as for release of new connection	Same timelines as for release of new connection	Same timelines as for release of new connection		
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Timelines for meter reading, testing, replacement

SNo			Timeline	
5110	Activity	Class-I Cities	Urban Areas	Rural Areas
1	If meter inaccessible on two consecutive meter reading dates, notice issued to consumer to keep the meter accessible for reading on the specified date and time;	At least 7 days in advance of the specified date	At least 7 days in advance of the specified date	At least 7 days in advance of the specified date
2	If meter not accessible even on the specified date, notice served to get the meter read by the Licensee after payment of a penalty charge which shall be 5% of the average billing amount for the last 12 months, within:	7 days of the notice being served	7 days of the notice being served	7 days of the notice being served
3	Before testing a consumer's meter, advance notice specifying date, time and place:	2 days' notice	4 days' notice	7 days' notice
4	On receiving a complaint reg. accuracy of meter, Licensee shall check the meter within:	4 working days of receipt of complaint	7 working days of receipt of complaint	12 working days of receipt of complaint
5	Licensee shall dispatch the test report to consumer within:	2 working days of date of testing	2 working days of date of testing	2 working days of date of testing
6	Meters found not recording shall be replaced within:	3 working days of date of inspection	5 working days of date of inspection	15 working days of date of inspection
7	Burnt meters to be replaced within:	3 working days of date of inspection	5 working days of date of inspection	15 working days of date of inspection

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Timelines for billing and related issues

SNo	Activity	Timeline			
3110	Activity	Class-I Cities	Urban Areas	Rural Areas	
1(a)	After energization of new connection, Licensee shall issue the first bill within:	Two billing cycles	Two billing cycles	Two billing cycles	
1(b)	If consumer does not receive the first bill within two billing cycles, he shall complain to the Licensee and the Licensee shall issue a bill within:	14 days of receipt of complaint	14 days of receipt of complaint	14 days of receipt of complaint	
2	Bill must be delivered to consumer at least:	15 days before the due date of payment	15 days before the due date of payment	15 days before the due date of payment	
3(a)	Duplicate bill may be obtained from Licensee's office if consumer does not receive the bill within:	7 days of the bill issue date	7 days of the bill issue date	7 days of the bill issue date	
3(b)	Whether extension of due date on account of non-receipt of bill?	No	No	No	
4(a)	In case of request for special reading on account of vacancy or change in occupancy of premises, Licensee shall take a special reading within:	5 days of receipt of written request	5 days of receipt of written request	5 days of receipt of written request	
4(b)	On the basis of the above, Licensee shall raise a final bill including all arrears at least:	5 days before vacancy / change of occupancy	5 days before vacancy / change of occupancy	5 days before vacancy / change of occupancy	
5(a)	In case of dispute over bill, the same to be resolved and intimated to consumer (after receipt of written complaint) within:	7 days if no additional information required, or 15 days if information required from consumer	7 days if no additional information required, or 15 days if information required from consumer	7 days if no additional information required, or 15 days if information required from consumer	
5(b)	If complaint found to be correct, revised bill to be issued within:	5 days of intimation to consumer	5 days of intimation to consumer	5 days of intimation to consumer	

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Timelines for disconnection and reconnection (1/2)

SNo Activity				
SINO	Activity	Class-I Cities	Urban Areas	Rural Areas
1	Temporary disconnection on non-payment of dues, after giving the consumer a notice period of:	15 working days	15 working days	15 working days
2	In case of other reasons such as conduct of unlawful activity within consumer premises, defective wiring/installation, leakage of electricity, using electricity for any other purpose etc., Licensee to give consumer a notice period of:	At least 7 days	At least 7 days	At least 7 days
3	After temporary disconnection, Licensee shall issue a notice to the consumer to remove the cause of disconnection, failing which supply shall be disconnected permanently, giving him a notice period of:	45 days	45 days	45 days
4	Time period of continuous disconnection (not a temporary disconnection upon consumer's request), after which the Agreement shall be deemed to be terminated on expiry of 15 days or after expiry of the initial period of agreement whichever is later	180 days	180 days	180 days

Timelines for disconnection and reconnection (2/2)

SNo	A attritt.	Timeline		
SINO	Activity	Class-I Cities	Urban Areas	Rural Areas
5	On receiving consumer's request for permanent disconnection, Licensee to carry out a special reading and prepare a final bill including all arrears within:	5 days from receipt of request	5 days from receipt of request	5 days from receipt of request
6	Lock-in period of Agreement, before which if consumer wishes to terminate the Agreement, he shall pay certain charges	LT: 1 year HT/EHT: 2 years	LT: 1 year HT/EHT: 2 years	LT: 1 year HT/EHT: 2 years
7	In case of agreement being terminated on consumer's notice, no. of days for Licensee to give a written intimation after termination, failing which such intimation shall be deemed to have been given to the consumer:	2 working days	2 working days	2 working days
8	Time period within which Licensee shall reconnect the consumer's installation after payment of past dues, reconnection charges and Service Line Charges, if applicable	2 days	2 days	2 days

Annexure

Procedure in case of Theft (1/4)

- Authorized Officer shall carry out inspection and prepare a report in the given format;
- In case sufficient evidence of theft found, Licensee shall disconnect the supply, seize all material evidence from the premises and lodge a complaint in writing to police within 24 hours from disconnection;
- Licensee shall, within 2 days from inspection, file a case against the consumer in designated Special Court as per Section 135 of the E Act;
- Where theft is established, Authorized Officer shall assess energy consumption as per the given <u>assessment formula</u> for the entire period of theft (if period of theft can not be ascertained, it shall be limited to 12 months immediately preceding the date of inspection) and prepare an assessment order on applicable tariff;
- Authorized Officer shall remove the old meter under a seizure memo and seal it in the presence of the consumer or his authorized representative. The Authorized Officer and consumer have to sign on the seal borne on the meter. The Licensee shall continue supply to the consumer with a new meter. The old meter shall be tested in the presence of the consumer and the Authorized Officer at a Commission-approved third party facility;

Procedure in case of Theft (2/4)

- In case of suspected theft, if the consumption pattern for last 1 year is reasonably uniform and not less than 75% of the assessed consumption, no further proceedings shall be taken. Decision shall be communicated to the consumer under proper receipt within 3 days and connection restored through original meter;
- After detailed examination, if the Licensee is convinced that a prima-facie case is made out for abstraction, consumption or use of electricity dishonestly against the consumer, the Licensee shall, within 7 days of inspection, serve a provisional assessment order along with a show-cause notice to the consumer;
- In case a show-cause notice is not served even after 30 days from inspection, the case of suspected theft shall be dropped and no further action can be initiated against the consumer;
- The person on whom an order has been served shall be entitled to file objections, if any, against the provisional assessment before the Authorized Officer, who shall, after giving a hearing to such person, pass a final order of assessment;
- The consumer shall submit reply within 15 days of receipt of show-cause. Where the consumer files objections against the provisional assessment order, the process of hearing shall be held.

Procedure in case of Theft (3/4)

- Within 5 days from submission of consumer's reply, the Licensee shall arrange a hearing with the consumer. The consumer may be given another opportunity in case he fails to appear for the hearing. In case, the consumer fails to appear for the second time, the Licensee may proceed against the consumer.
- During the hearing, Authorized Officer shall give due consideration to facts submitted by the consumer and pass, within 5 working days, a speaking order whether theft is established;
- In cases where theft of electricity has been detected, the Licensee shall file a case with Appropriate Court for decision in the matter unless the offence is compounded under Section 152 of the Act.
 Provided that if the consumer is aggrieved by the decision, he may take appeal as specified in Section 153 of the Electricity Act, 2003 with all subsequent amendments.
- If the case of theft is not established based on the consumer's reply/hearing, no further proceedings shall be required and electricity shall be restored through original meter.
- Where theft is established, Authorized Officer shall assess energy consumption as per the given <u>assessment formula</u> for the entire period of theft (if period of theft can not be ascertained, it shall be limited to 12 months immediately preceding the date of inspection) and prepare a final assessment order on applicable tariff.

Procedure in case of Theft (4/4)

• Assessment formula:

Where,

- L = Load (connected load found in the consumer's premises during the course of inspection) in kW;
- D = Period of assessment in days;
- H = Average no. of hours per day of power supply available in the distribution mains feeding the consumer;
- F = Load factor, which shall be taken for different categories of use as given:

S. No.	Particulars	Load factor
1.	HT (including load above 75 kW for non domestic and above107 HP or 100 kVA for industries on LT)	100%
2.	LT Industrial (107 HP or 100 kVA)	75%
3.	Non- domestic (up to 75kW)	50%
4.	Domestic (up to 75 kW)	40%
5.	Domestic HT (including load above 75kW on LT)	40%
6.	Agriculture	50%
7.	Water supply	50%
8.	Street light	50%
9.	Direct theft – All categories	100%

- The consumer shall be required to make the payment within 7 days of its proper receipt.
- The Licensee, on deposit of assessed amount, shall, without prejudice to the obligation to lodge the complaint as referred to in the second proviso to the clause 13(A) (1A) of the Electricity (Amendment) Act, 2007, restore the supply line of electricity within 48 hours of such deposit/payment.

Units assessed = $L \times D \times H \times F$

<u>Back</u>

Procedure in case of UUE (1/3)

- Assessing Officer shall carry out inspection and prepare a report in the given format. The report shall clearly indicate whether sufficient evidence substantiating UUE was found or not. Material utilised for the purpose shall be kept as proof;
- Within 3 working days of inspection, Assessing Officer shall analyze all evidence including the consumption pattern. If it is concluded that no UUE has taken place, no further action will be taken;
- If Assessing Officer suspects UUE, he shall serve a provisional assessment order assessed as below, along with show cause notice to the consumer:

= Average Monthly consumption for the period of assessment (units) x Period of assessment (in months or fraction thereof)

If a consumer is found indulging in more than one act of UUE, charges payable by the consumer in respect of each such unauthorized use shall be separately assessed and billed.

• The person on whom an order has been served shall be entitled to file objections, if any, against the provisional assessment before the Assessing Officer, who shall, after giving a hearing to such person, pass a final order of assessment. If the provisional assessment amount is deposited within 7 days of service, reply to the notice shall not be necessary;

Procedure in case of UUE (2/3)

- The consumer shall submit his reply within 15 days of receipt of show cause notice. Where the consumer files objections against the provisional assessment order, the process of hearing shall be held;
- Within 5 days from consumer's reply, Licensee shall arrange a hearing with the consumer;
- During the hearing, the Assessing Officer shall give due consideration to the facts submitted by the consumer and pass, within 5 working days, a speaking order as to whether the case of UUE is established or not;
- In cases where UUE is not established based on consumer's reply/hearing, further proceedings shall be discontinued and case of UUE dropped. Where UUE is established, the Assessing Officer shall assess the energy consumption as given earlier;
- The final assessment order shall be served on the consumer under proper receipt in such manner as prescribed by the State Government under section 126(2) of the E Act. The consumer shall be required to make the payment within 7 days of its proper receipt;
- In case of non-payment of bill amount within 7 days of serving the final assessment order, connection will be disconnected after serving a 15 days notice, which will not be reconnected until the assessed amount is deposited.

Procedure in case of UUE (3/3)

- Any person aggrieved by the final order served by the Assessing Officer may, within 30 days of the said order, may appeal to an Appellate Authority;
- No appeal against an order of assessment shall be entertained unless an amount equal to half of the assessed amount is deposited in cash or by way of bank draft with the Licensee;
- The Appellate Authority will dispose of the appeal after hearing the parties and pass appropriate order and send copy of the order to the Assessing Officer and the appellant. The order of the Appellate Authority shall be final and shall not be appeal-able;
- The consumer will be served with a revised bill as per final order of the Appellate Authority to be paid in 7 days;
- If a consumer defaults in making the payment within 7 days of serving the final order of the Appellate Authority, the connection will be disconnected after serving a 15 days' notice which will not be reconnected until the bill amount is cleared;
- An interest of 16% p.a. will be charged on the amount as per final order of the Appellate Authority after thirty days from the date of final order, compounded every 6 months as per Section 127(6) of the E Act.

Thank You!

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BACHAT LAMP YOJANA

Risk of Misuse of CFLs

Forum of Regulator (FoR) Meeting

14th February2011

Vandana Thakur AEE BLY

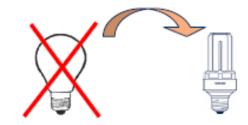


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- 2. Program Benefits For Consumers & DISCOMs
- 3. Key Project Risk
- 4. Proposal for FoR Risk Mitigation
- 5. Other Areas of Concern

I. INTRODUCTION TO BLY PROJECT

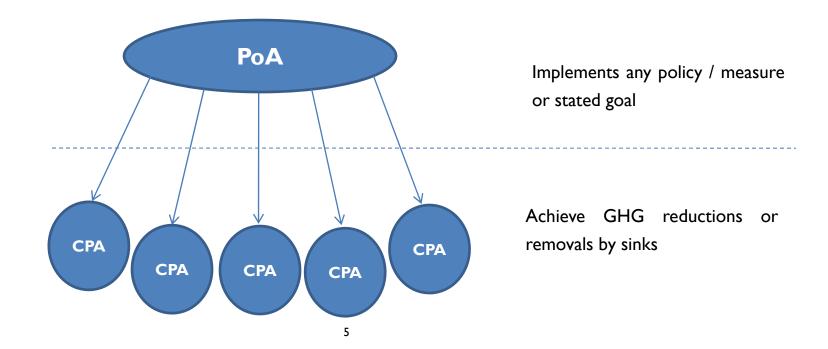
- Replacement of traditional Incandescent lamps by energy efficient Compact Fluorescent Lamps (CFLs) – Carbon Development Mechanism (CDM) Initiative – "BACHAT LAMP YOJANA"
- Public-private partnership between the Government of India, Private sector CFL Manufactures /Traders (Project Developers) and State level Electricity Distribution Companies (DISCOMs)
- Nation-wide recognized project support from Government of India through 'Bureau of Energy Efficiency (BEE)' – Managing and co-ordinating Agency
- Small scale CDM projects to be developed under Programmatic approach (PoA)
- High quality and long life CFLs at about Rs. 15 per piece to the households of the country
- Key Objectives of BLY:
 - Reduce emissions
 - Electricity savings (for both consumer & utility)
 - Reduction of peak load in the country
 - Consumer awareness and adaption towards CFLs



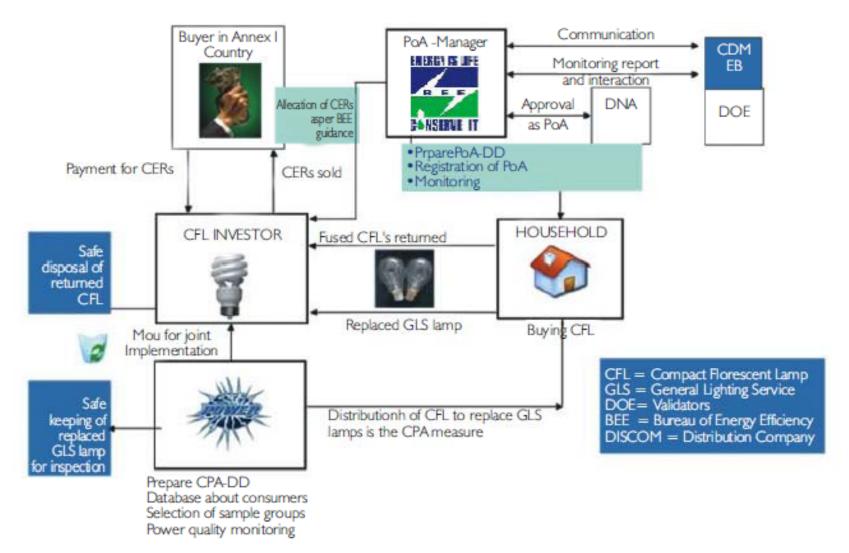
- The UNFCCC's decision (2006-2007) on CDM programs of Activities (PoAs) opens the door for demand-side energy efficiency programs
- Implementation of a policy, measure or goal (e.g., "phase out")
- Provides an aggregation framework for an institutional, financial and methodological approach for other to achieve emission reduction.

Working of P-CDM Projects:

One PoA and Many CPAs (CDM Program Activities) - One methodology & one coordinating agency



Key Constituents of the Project



2. PROGRAM BENEFITS

Expected Benefits for Consumers

Program Benefits for Consumers					
Wattage of Incandescent Bulb to be replaced	60	40	100	Total	
CFL Wattage for replacement	10	7	20		
Saving Per Household (Watts)	50	33	80	54	Þ
Usage Per Day (Hrs)	3.5	3.5	3.5	3.5	ě
Annual Saving Per CFL (Kwh)	64	42	102	69	e.
Average Purchase Cost of Power (Rs.)	Rs. 3	Rs. 3	Rs. 3	Rs. 3	
Annual Saving Per CFL (Rs.)	Rs. 192	Rs. 126	Rs. 307	Rs. 208	
Average No. of CFLs to be distributed per Household	2	0.5	0.5	3	
Total Annual Saving Per Household (Rs.)	Rs. 383	Rs. 63	Rs. 153	Rs. 600	
Rated Life of CFL (Years)	9	9	9	9	
Household Saving during project period (Rs.) @75% of potential rated life	Rs. 2,587	Rs. 427	Rs. 1,035	Rs. 4,049	

Consumer can save ~ Rs. 4,000 on his electricity bill during the project period

Program Benfits for DISCOM	
Transmission and Distribution Losses	10%
(DISCOM to give actual T&D loss %. Default value of 10% taken as PoA guidelines)	
Total Numberof Grid Connected Consumer Households	10,00,00,000
Average No. of CFLs distributed per Household	3
Total Number of CFLs distributed	30,00,00,000
Total Annual Savings (MWh)	2,08,23,250
Total Annual Savings (MWh) - including T&D losses	2,29,05,575
Total Annual Savings (Rs CRORE)	Rs. 6,247
Total Annual Savings (Rs CRORE) - including T&D losses	Rs. 6,872
Total Savings during project period (MWh)	14,05,56,938
Total Savings during project period (Rs CRORE)	Rs. 42,167
Reduction in Peak Load & Base Load (MW)	8,150

On deployment of appx. 300 Mn CFLs, DISCOMs can save ~ Rs. 6,000 Crores annually

Other Benefits for DISCOMs

Reduce the system peak load	High power factor (P.F.) of > 0.90 CFL shall require less AC operating current at the same wattage than an equivalent low power factor CFL / ICL, thus helping in reducing peak load at the DISCOM level		
Improvement of power quality	 No Inrush Current Harmonics with permissible limits 		
Additional revenue	Energy saved from the program could be sold to Industrial Commercial sectors resulting in higher sales realization		
Lower Capex investment	Utilities can defer their new power generation investments due to reduction in peak load requirement, thereby using limited capital resources in other priority activities		
Fostering customer relations	Utilities have the opportunity to strengthen consumer perception by demonstrating the program benefits to consumers in electricity saving		

3. KEY PROJECT RISK

Leakage / Misuse of CFLs by household owners

Once the CFLs are distributed to household owners, there will be certain probability of the scheme being mis-used by certain consumers.

Following possibilities of CFL misuse by certain consumers may arise:

- User may use the distributed product in some other premises of his
- Re- Sale of CFLs in the grey market
- The occupant may be living in a rented premises, which may be vacated by him
- User may damage or break the product
- Other similar reasons

UNCONTROLLABLE NATURE OF RISK

CFL Leakage / Misuse Scenarios

Scenarios	Warranty replacement	Leakage of CFL	Loss recovered for Misuse
If CFL is technically faulty within warranty period & User informs the service provider	Yes	No	N.A.
If CFL is technically faulty after warranty period & User informs the service provider	No	No	N.A.
If CFL breaks within warranty period and User informs	No	Yes	Yes
If CFL breaks after warranty period and User informs	No	Yes	Yes
If CFL is not found operating at user premises during Monitoring Survey	No	Yes	Yes

Impact of CFL Leakage on Project Returns

Assumptions

IMPACT OF LEAKAGE ON PROJECT RETURNS		
Number of Grid connected consumer households	10,00,000	
Average No. of CFLs distributed per Household	3	
Total Number of CFLs distributed	30,00,000	
Average CER per CFL earned per year	0.05	
Life of Project @ 12000 hr CFL (years)	9.5	
Project End Till Rated Life	50%	
Technical Failure Rate Each Year (for 9.5 years)	5.3%	
SCENARIOS		
(A) Technical Failure Rate @ 5.3% (No Leakage)	5.3%	
(B) Technical Failure Rate @ 5.3% + 5% Leakage	10.3%	
(C) Technical Failure Rate @ 5.3% + 10% Leakage	15.3%	

Scenario – A: Technical lamp failure rate is assumed at 5.3% per annum (as per UNFCCC methodology) and there is no leakage of CFLs

Scenario – B: Technical lamp failure rate is assumed at 5.3% per annum (as per UNFCCC methodology) and leakage is 5% p.a.

Scenario – C: Technical lamp failure rate is assumed at 5.3% per annum (as per UNFCCC methodology) and leakage is 10% p.a.

Scenario A - Impact of Leakage on Project Returns

SCENARIO A Technical Failure Rate @ 5.3% (No Misuse)	Scenario A	Scenario A (Cumulative)	Total CERs earned from the Project
Year 1	5.3%	5.3%	1,42,105
Year 2	5.3%	10.5%	1,34,211
Year 3	5.3%	15.8%	1,26,316
Year 4	5.3%	21.1%	1,18,421
Year 5	5.3%	26.3%	1,10,526
Year 6	5.3%	31.6%	1,02,632
Year 7	5.3%	36.8%	94,737
Year 8	5.3%	42.1%	86,842
Year 9	5.3%	47.4%	78,947
Year 9.5	2.6%	50.0%	74,998
Total	50.0%		10,69,734

Project Crediting Period – 9.5 years (No Leakage)

Scenario B - Impact of Leakage on Project Returns

SCENARIO B Technical Failure Rate @ 5.3% + 5% Leakage	Scenario B	Scenario B (Cumulative)	Total CERs earned from the Project
Year 1	10.3%	10.3%	1,34,605
Year 2	10.3%	20.5%	1,19,211
Year 3	10.3%	30.8%	1,03,816
Year 4	10.3%	41.1%	88,421
Year 5	8.9%	50.0%	75,006
Year 6			
Year 7			
Year 8			
Year 9			
Year 9.5			
Total	50.0%		5,21,059

Project Crediting Period reduces to 5 years

Scenario C - Impact of Leakage on Project Returns

SCENARIO C Technical Failure Rate @ 5.3% + 10% Leakage	Scenario C	Scenario C (Cumulative)	Total CERs earned from the Project
Year 1	15.3%	15.3%	1,27,105
Year 2	15.3%	30.5%	1,04,211
Year 3	15.3%	45.8%	81,316
Year 4	4.2%	50.0%	74,996
Year 5			
Year 6			
Year 7			
Year 8			
Year 9			
Year 9.5			
Total	50.0%		3,87,628

Project Crediting Period reduces to 4 years

4. PROPOSAL for FoR – RISK MITIGATION

Proposed Recovery Mechanisms - For Recovery of Capital due to CFL Leakage

(1) Recovery from Participating Consumer Households

- Take approval from SERCs to recover the cost of leakage / misuse
- Get an indemnity agreement signed from the consumer
- Based on the report of the third party validation, the Investor shall submit the working to DISCOM and request to bill the charges to all participating households

(2) DSM Cess from Consumers

- DISCOM shall recover a fixed amount per CFL per annum from each participating household as a DSM Cess (not specific to CFL program) for a period of few years (4-5 years).
- Investor shall recover the cost of its Investment on account of actual misuse from this budget.
- Any loss in excess of recovered amount shall be to Investor's account.
- Any savings from the proposed pool collected shall be passed to DISCOM.

(3) State Government Budget / DISCOM DSM Budget

- Investor shall recover the cost of its Investment on account of actual misuse from this budget
- Any loss in excess of the budgeted amount shall be a loss borne by Investor
- Any savings from the proposed budget pool shall be passed to DISCOM

THANK YOU