

Report

on

**Component wise AT&C Losses Reduction
study in the State of Tamil Nadu**

Volume I

Submitted by:

Medhaj Techno Concept Pvt. Ltd.

**This report is prepared under the guidance of the
Forum of Regulators**



Disclaimer

This report is a result of the studies carried out in four representative circles in Tamil Nadu. Data have been collected from the energy meters installed at various points in the High Tension (HT) and Low Tension (LT) network. The analysis in this report is based on these data i.e. meter reads collected from the Feeders, Distribution Transformers (DTs) and the meters installed at the consumer premises. It is important to note that the real time data were collected at particular time and date. Besides, secondary data had been collected from various sources and after thorough analysis of such data, findings of the field studies are presented in this report. Further, some of the observations presented in the report are based on the ground reality during the field studies in the four circles.

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ABBREVIATION

AT&C losses	Aggregate Technical and Commercial losses
ATM	Any Time Payment Machine
CBA	Cost Benefit Analysis
CTs	Current Transformers
DF	Distribution Franchisee
DISCOM	Distribution Company
DT	Distribution Transformer
EHV	Extra High Voltage
FoR	Forum of Regulators
GDP	Gross Domestic Production
HLP	High Level Panel
HT	High Tension
HV	High Voltage
HVDS	High Voltage Distribution System
kV	Kilo Volt
kVAh	Kilo Volt Ampere hour
kWh	Kilo Watt Hour
LT	Low Tension
LV	Low Voltage
MF	Multiplying Factor
MoA	Memorandum of Association
MU	Million Unit
NGO	Non Government Organization
PF	Power Factor
PFC	Power Finance Corporation
PTs	Potential Transformers
R-APDRP	Restructured-Accelerated Power Development and Reform Programme

RCM	Revenue Cycle Management
RCP/MCP	Remote Controlled Panel/Motor Controlled Panel
SCADA	Supervisory Control and Data Acquisition
SERC	State Electricity Regulatory Commission
TANGEDCO	Tamil Nadu Generation and Distribution Corporation Limited
T&D Losses	Transmission and Distribution losses

Executive Summary

Introduction

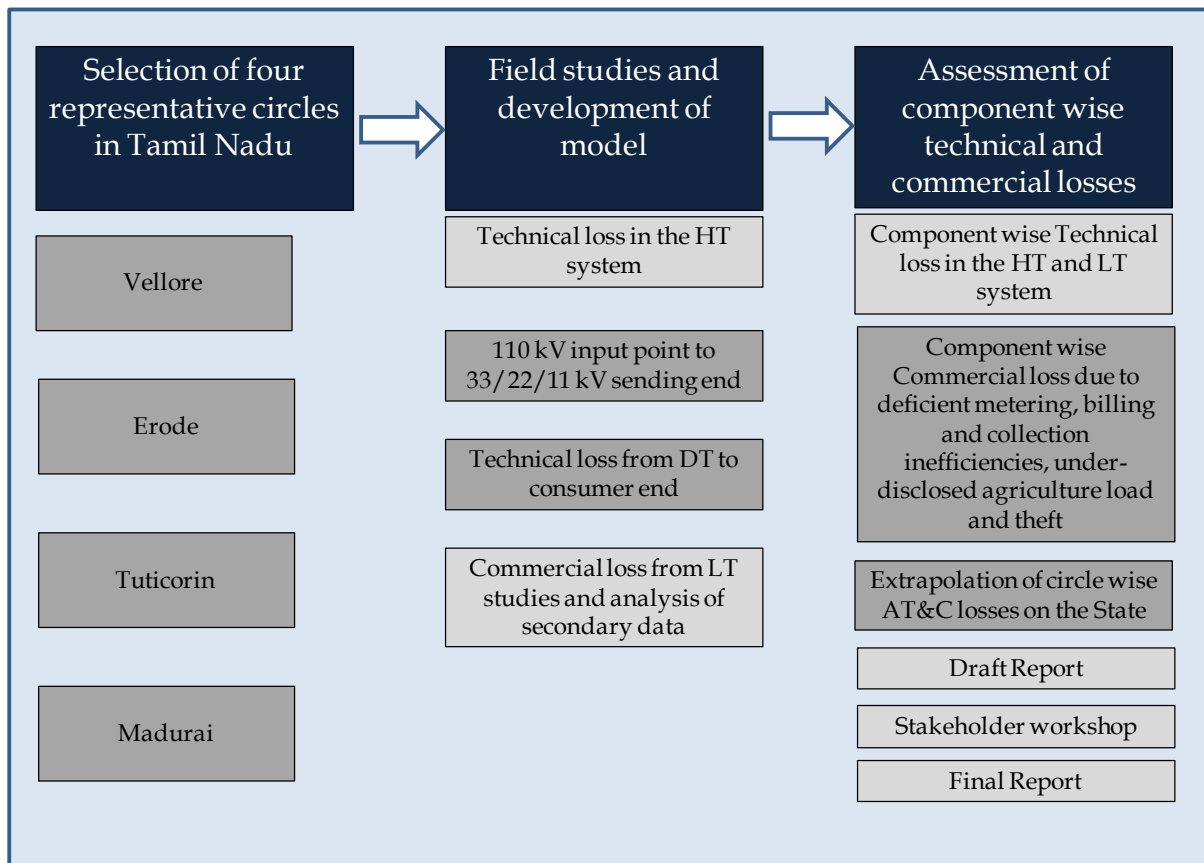
Medhaj Techno Concept Pvt. Ltd. has been entrusted the study to assess the component wise Aggregate Technical and Commercial (AT&C) losses in Tamil Nadu. The scope of work of the study included the following:

- Identify four circles representing features of the distribution system of the State of Tamil Nadu
- Identify the specific components of the AT&C losses.
- Compute the overall AT&C losses followed by calculation of component wise AT&C losses in the following manner:
 - **Technical loss:**
 - **At the EHV system (33 kV and above):** Difference of energy recorded by the energy meters at the injection points and energy sent out.
 - **At the 11 kV system of DISCOM:** Difference between the sending end energy and receiving end energy at consumer end plus energy recorded at LV side of distribution transformers (DTs) through sample meter read.
 - **Overall technical losses:** Extrapolate the results of the sample study to compute the overall technical losses in the distribution system.
 - **Commercial loss:**
 - Computation of overall commercial losses by taking into account the difference of overall AT&C losses and total technical losses of the circles.
 - Identify the various sub-components of commercial losses and estimate commercial losses for each of sub-components viz. loss on account of deficient metering, billing and collection inefficiencies and other identifiable components on the basis of sample study.
 - Assessment of energy loss due to theft by deducting the loss due to metering, billing and other identifiable component from the overall commercial loss.

Approach and methodology of the study

Approach

A step by step approach has been followed for assessment of the component wise AT&C losses in four representative circles in Tamil Nadu is presented below:



Methodology

The “Report on Loss Reduction Strategies” by the Forum of Regulators (FoR) outlined the methodology for computation of the component wise AT&C losses. Various tasks carried out under this study are as follows:

Task 1: Collection of data

- Collection of sales mix data pertaining to all the circles in the State to select the four representative circles.

- Collection of secondary information such as the number of sub-stations and feeders, input energy, number of consumers, revenue billed and realized in the four representative circles.

Task 2: Selection of four representative circles in the State

For selection of the four representative circles, the sales mix of FY 2010-11¹ for all the circles in Tamil Nadu were analyzed broadly on the following four parameters:

- (i) Sales mix of the circles (in percentage), which represents the sales mix (in percentage) of the State;
- (ii) Sales mix (in percentage) of the circles, which represents the sales mix (in percentage) of the Zone; and
- (iii) Circles having substantial share of the domestic and agriculture sales in its sales mix as the technical and commercial losses in the domestic and agriculture categories are generally higher in comparison to the HT and other LT consumers.
- (iv) Existing usage of ground water as well as requirement of ground water for agricultural purpose in each district of Tamil Nadu has been analyzed. Since the agriculture consume 18% energy in the State, this parameter has been considered for selection of the representative circles.

Based on the aforementioned selection parameters, the following four representative circles were selected for the detailed field studies:

- Vellore;
- Madurai;
- Tuticorin; and
- Madurai

¹ At the time of selection of the circles, the consultant along with the FoR Secretariat had pursued with TANGEDCO to collect the circle wise sales mix data for FY 2011-12. However, the circle wise sales mix data was not finalized by TANGEDCO at that point of time. Since, the study has to be completed within a strict timeline it was decided to select the circles based on the FY 2010-11 sales mix data.

Task 3: Field level study for assessment of AT&C losses in the representative circles

After finalization of the four representative circles, the field studies were carried out in three stages from September to November 2012:

- **High Tension (HT) study:** This involved collection of meter read from the 110/33/22/11 kV and distribution sub-stations as well as the consumers connected from 33 kV, 22 kV and 11 kV. The loss identified under this study was technical loss in the HT system.
- **Low Tension (LT) study:** This involved assessment of technical and commercial losses from the Distribution Transformers (DTs) to the consumer premises. Energy loss identified under this study is the component wise technical and commercial loss in the LT system.
- **Agriculture study:** The agriculture consumers are largely un-metered in the State. The study was carried out to cross check the actual connected load of the agriculture consumers with the sanctioned load as per the departmental records and based on this, commercial loss due to under-disclosed load was estimated.

Task 4: Assessment of component wise technical and commercial losses

The methodology and formula prescribed in the Report on “Loss Reduction Strategies” by the Forum of Regulators (FoR) formed the basis for computation of the components of AT&C losses. The methodology adopted for assessment of component wise AT&C losses is briefly described below:

Assessment of technical loss in HT System

Technical loss in the HT system has been considered as the difference of the energy input in the 110 kV system and sent out to the 11 kV feeders i.e.:

$$\begin{aligned} \text{Total energy received from 110 kV sub-stations} &= X1 \\ \text{Total energy sent out from 33/22/ 11kV feeders to the consumers} &= Y1 \\ \text{Total energy sent out to other circles} &= Y2 \end{aligned}$$

$$\begin{aligned} \text{Total energy sent out} &= Y_T = Y_1 + Y_2 \\ \text{Energy lost in the HT System} &= X_1 - Y_T \end{aligned}$$

Assessment of technical loss in LT System

Technical losses in LT system has been estimated on the basis of sample studies in the DTs. The formula for computing the distribution line losses in the LT system is presented below.

A1 = 1st read of the DT meter

A2= 2nd read of the DT meter

MF1 = Multiplying Factor of the DT meter

B1= 1st read of all the consumers connected with the DT

B2=2nd read of all the consumers connected with the DT

MF2= Multiplying Factor of the consumer meter

$$\text{Technical losses in the LT system} = (A_2 - A_1) \times MF_1 - (B_1 - B_2) \times MF_2$$

Estimation of commercial loss

For computation of the commercial loss, the overall AT&C losses have been computed first. After determination of the total technical loss in the circles, the commercial loss has been arrived as the difference between the AT&C losses and the technical loss. The sub-components of commercial loss i.e. commercial loss due to theft/pilferage, deficient metering, billing and collection inefficiencies have been determined in the following manner:

(a) Commercial loss due to deficient metering:

Actual consumption (kWh) of the consumers recorded in the field studies – Energy billed by the utility (kWh) of such consumers having defective meters as per records available with utility.

(b) Commercial loss due to billing inefficiency:

Actual energy consumption (kWh) of the consumers recorded in the field studies – Provisional Billing done by the utility (kWh) for such consumers as per records available with utility.

(c) Commercial loss due to provisional billing to metered consumers

Actual energy consumption (kWh) of the metered consumers recorded as per the field studies – Energy billed by the utility (kWh) for metered consumers billed on provisional basis.

(d) Commercial loss due to under-disclosed agriculture load

Actual energy consumption (kWh) by the agriculture consumers recorded as per the field studies – Energy billed by the utility (kWh) as per sanctioned load of agriculture consumers.

(e) Commercial loss due to collection inefficiency:

Energy Billed (kWh) – Energy Realized (kWh)

Where, Energy Realized = Energy Billed (kWh) * Collection Efficiency (%)

(f) Commercial loss due to theft/pilferage:

It is not possible to compute the extent of theft/pilferage accurately in the distribution system by formula. Therefore, the extent of energy loss due to theft of electricity has been computed by deducting the component wise commercial loss mentioned from point no. (a) to (e) from the total commercial loss of the circle². The formula for computing the energy loss from theft is given below:

Commercial loss due to theft/pilferage = Total Commercial Loss - (Commercial loss due to deficient metering + billing inefficiency + provisional billing to the metered consumers + collection inefficiency)

Based on the findings from the field studies, key factors responsible for AT&C losses are identified and separated into three categories namely “A”, “B” and “C”. The

² The same methodology has been prescribed in the FoR Report on "Loss Reduction Strategies"

factors which have major contribution to the AT&C losses and needed maximum attention were classified into Category “A”, the factors having medium contribution to the AT&C losses were classified into Category “B” and the factors having minimum contribution to the AT&C losses were classified into Category “C”. The said classification is given as follows.

Category A:

- (i) Commercial loss due to under-disclosed agriculture load and theft/pilferage of energy.
- (ii) Technical loss in the LT system.

Category B

- (i) Commercial loss due to collection inefficiency.
- (ii) Technical loss in the HT system.

Category C

- (i) Commercial loss due to deficient metering and billing inefficiency.

Task 5: Preparation of draft report

Based on the outcomes of the field studies in the four representative circles in Tamil Nadu, draft report was prepared and submitted to the FoR Secretariat for review and comments. Based on the feedback/comments, the draft report was modified.

Task 6: Stakeholder workshop

The draft report was presented to the Stakeholders’ workshop organized at the FoR Secretariat, New Delhi on June 04, 2013 to share the background, objectives and key findings of the component wise AT&C losses study in the State of Tamil Nadu. The workshop was attended by the representatives from FoR, PFC and the TANGEDCO. The stakeholders’ suggestions, comments and recommendations on the study report were presented during workshop were noted.

Task 7: Preparation of Final report

After incorporating the comments received in the Workshop, the final report of the study has been prepared and submitted to the FoR Secretariat.

Component wise AT&C losses in the four representative circles in Tamil Nadu

Table 1 depicts the AT&C losses in the four representative circles in Tamil Nadu during the study period September to November 2012.

Table 1: AT&C losses in the four representative circles (Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai
Energy input in the circle (MU) [A]	468.33	441.10	417.75	215.56
Unit billed (MU) [B]	326.98	373.03	374.75	166.49
T&D losses (%) [C] = ([A]-[B])/[A]	30.18%	15.43%	10.29%	22.76%
Revenue billed (₹ Crore) [D]	136.87	136.60	127.00	59.54
Revenue realized (₹ Crore) [E]	136.04	135.08	120.64	56.66
Collection efficiency (%) [F]=[E]/[D]	99.39%	98.89%	94.99%	95.17%
AT&C losses (%) [G] = ([A]-([B]*[F]))/[A]	30.61%	16.37%	14.79%	26.50%

Source: TANGEDCO and Field Studies

The Table 1 shows that the AT&C losses in the four representative circles were in the range of 14.79% to 30.61%.

Tuticorin circle has the lowest AT&C losses of 14.79% among the four representative circles. The T&D losses in this circle were 10.29% (lowest among the four representative circles) and the collection efficiency was 94.99% (lowest among the four representative circles).

The AT&C losses in Vellore circle were highest among the four representative circles. The circle has high T&D losses of 30.18% and collection efficiency of 99.39%

(highest among the four representative circles). As a result, the AT&C losses of Vellore circle for the period of study were computed at 30.61%.

The AT&C losses in Erode circle were 16.37% (second lowest among the four representative circles). For this circle 373.03 MU of energy was billed against the energy input of 441.10 MU during the study period, which resulted in T&D losses of 15.43% (second lowest among the four representative circles). The circle has higher collection efficiency of 98.89%.

The AT&C losses in Madurai circle were 26.50% (second highest among the four representative circles). The T&D losses in the circle were 22.76% (second highest among the four representative circles). The collection efficiency of the circle was 95.17% (second lowest among the four representative circles).

Component wise technical loss in four circles in Tamil Nadu

To measure the technical loss in the HT and LT systems, field studies were conducted during the study period September to November 2012. The information/data collected from the field studies were analyzed as per the methodology described in the "Loss Reduction Strategies" Report of FoR. Table 2 illustrates the component wise technical loss of the four representative circles.

Table 2: Component wise technical loss of the four representative circles (Period Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai
Technical loss in the HT system (%) [A]	3.18%	4.62%	3.50%	3.44%
Technical loss in the LT system (%) [B]	11.05%	8.28%	4.75%	11.41%
Total technical loss [C]	14.23%	12.90%	8.25%	14.85%

Source: Field studies

Highlights of the technical loss computed in the four selected circles are as follows:

- The technical loss in the four representative circles was in the range of 8.25% to 14.85%.
- Lowest technical loss was observed in the Tuticorin circle (8.25%) and highest in the Madurai circle (14.85%).

Component wise commercial loss in the four circles in Tamil Nadu

The circle wise commercial loss as the difference between the AT&C losses and total technical loss is presented in the following Table.

Table 3: Commercial loss in the four representative circles (Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai
AT&C losses (%) [A]	30.61%	16.37%	14.79%	26.50%
Technical loss (%) [B]	14.23%	12.90%	8.25%	14.85%
Commercial loss (%) [C] = [A] - [B]	16.37%	3.47%	6.53%	11.64%

Source: Field studies

As shown above:

- The commercial loss was highest in Vellore circle (16.37%), followed by Madurai circle (11.64%)
- The commercial loss in Erode circle was 3.47% (lowest among the four representative circles) and Tuticorin circle was 6.53%.

The components of commercial loss for the four representative circles are shown in the following Table:

Table 4: Component wise commercial loss in the four circles (Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai
Commercial loss due to deficient metering (%) [A]	0.13%	0.52%	0.48%	0.43%
Commercial loss due to billing inefficiency (%) [B]	0.19%	0.29%	0.36%	1.37%

Particulars	Vellore	Erode	Tuticorin	Madurai
Commercial loss due to under - disclosed agriculture load (%) [C]	7.25%	1.59%	1.11%	3.35%
Commercial loss due to collection inefficiency (%) [D]	0.42%	0.94%	4.49%	3.73%
Commercial loss due to theft /pilferage (%) [E]	8.39%	0.14%	0.10%	2.76%
Total commercial loss (%) [F] = SUM of [A] to [E]	16.37%	3.47%	6.53%	11.64%

Source: Field studies

The component wise commercial loss analysis in the four representative circles shows that:

- In Vellore circle, the energy loss due to under-disclosed agriculture load and theft/pilferage contributed maximum commercial loss in the circle i.e. 7.25% and 8.39% respectively. Commercial loss in other sub-components such as deficient metering, billing and collection inefficiencies were nominal.
- In Erode circle, commercial loss on account of under-disclosed agriculture load contributed highest amount of commercial loss. Other sub-components such as deficient metering, billing and collection inefficiencies and theft had marginal share in the total commercial in the circle.
- The commercial loss in the Tuticorin circle was mainly because of average collection efficiency. The commercial loss due to collection inefficiency accounts for 4.49% out of total commercial loss of 6.53%. Commercial loss in other sub-components such as deficient metering, billing inefficiency, under-disclosed agriculture load and energy theft contributed were nominal.
- In Madurai circle, commercial loss due to under-disclosed agriculture load and collection inefficiency contributed maximum commercial loss in the circle i.e. 3.35% and 3.73% respectively. Commercial loss in other sub-components such as deficient metering, billing inefficiency and theft contributed around 4.5% out of the total commercial loss of 11.64%.

Extrapolation of AT&C losses on the State

It was found during the field studies that the commercial loss in the HT category (HT industrial, HT commercial, Water Works and Lift Irrigation) in the circles was around 10%. It can be inferred that around 90% of the commercial loss in the circles was mainly in the LT categories. Based on this consideration, 90% of the commercial loss in the circles has been allocated to the LT categories to extrapolate the commercial loss of each representative circle on the State.

The commercial loss factor on account of energy billed to the LT categories in the circles has been computed. The objective of computing the commercial loss factor is to work out a unique factor for each of the four circles that can be applied on the energy input in the State for extrapolation. To compute the commercial loss factor, the commercial loss with regard to the energy input in the circles has been computed and then divided by the ratio between the energy billed (MU) to the LT consumers and the total energy billed (MU) in the circles.

As the LT sales mix of the representative circles varies with the State, it was decided that 'range estimate' would be used to extrapolate the AT&C losses of the circles on the State. The standard deviation between the LT sales mix in the representative circles and those of the State has been computed and the same has been used to compute the percentage of lower and upper limits of the commercial loss for the State.

In the next step, the percentage of lower and upper limits of the commercial loss has been applied on the energy input (MU) in the State to compute the commercial loss (MU) on account of energy billed to the LT consumers in the State.

Since, it is assumed that that 90% of the commercial loss incurred due to energy billed to the LT consumers. An extrapolation factor has been computed to project the total commercial loss for the State. The extrapolation factor is used to compute the lower and upper limits of the total commercial loss of the State (MU).

After computing the total commercial loss of the State, the percentage of the same has been computed as the ratio between the energy input (MU) and total commercial loss (MU) of the State.

In the final step, the circle wise percentage technical loss is added on the lower and upper limits of the percentage commercial loss to arrive at the AT&C losses range for the State. It is assumed that the technical loss component of the State would remain at the same level as computed for the circles.

The AT&C losses range of the State as computed above is shown in Table 5:

Table 5: AT&C losses of the State (Sept. to Nov. 2012)

Particulars	State	
	Lower Limit	Upper Limit
AT&C losses	22.14%	24.38%

From the above it can be concluded that the AT&C losses of the State during the period September to November 2012 were in the range of 22.14% to 24.38%.

Recommendations and way forward

The study proposes a set of recommendations based on the computation of components of AT&C losses from the field studies (as shown in Table 2 to Table 4) and highlights the deficiency in the present distribution system. The recommendations proposed in this report have been categorized in three buckets – “A”, “B” and “C” in order of their importance. A loss reduction framework based on the “ABC” analysis is proposed in the Table 6.

Table 6: ABC framework for the proposed interventions to reduce the AT&C losses

Components of AT&C losses	Energy loss range in the representative circles	Interventions proposed
Category A		
<p>(i) Commercial loss due to under-disclosed agriculture load</p> <p><i>(TANGEDCO should treat this as the priority area for loss reduction as the existing losses could be reduced in the short and medium time period. To reduce these losses, minimum capital investment will be required. TANGEDCO need to strengthen its existing commercial practice.)</i></p>	<p>1.11% (Tuticorin) to 7.25% (Vellore)</p>	<p>TANGEDCO should organize special camps for disclosure of actual agriculture load.</p>
<p>(ii) Commercial loss due to theft and pilferage of energy</p> <p><i>(TANGEDCO should also treat this as the priority area for loss reduction as the existing losses could be reduced in the short and medium time period. To reduce these losses, minimum capital investment will be required. TANGEDCO need to strengthen its existing commercial practice.)</i></p>	<p>0.10% (Tuticorin) to 8.39% (Vellore)</p>	<p>Identify and regularizing the un-metered and flat rate agriculture consumers to reduce agriculture theft.</p> <p>Short and medium term interventions such as metering of the un-metered consumers, regular vigilance check to reduce the energy theft in unmetered connections other than agriculture.</p> <p>Load shedding protocol to be such that load to be shed first in the high loss areas in case of shortage of electricity.</p> <p>TANGEDCO may implement community metering system to create accountability of the consumers in helping it in detecting energy theft.</p> <p>Differential tariff by way of higher tariff in the high loss areas to be proposed to the regulator for</p>

Components of AT&C losses	Energy loss range in the representative circles	Interventions proposed
		approval in medium term.
<p>(iii) Technical loss in the LT system</p> <p><i>(TANGEDCO should treat this as one of the priority areas for reduction of energy losses. Substantial capital investment would be required to minimize the technical loss in the LT system.)</i></p>	<p>4.75% (Tuticorin) to 11.41% (Madurai)</p>	<p>Medium and long terms interventions to reduce the loss through implementation of the Aerial Bunched Cabling (ABC) and Advanced Metering Infrastructure (AMI).</p>
Category B		
<p>(iv) Commercial loss due to collection inefficiency</p> <p><i>(TANGEDCO could strengthen its billing and collection department to reduce this energy loss in the short time period.)</i></p>	<p>0.42% (Vellore) to 4.49% (Tuticorin)</p>	<p>Short term measures to reduce the commercial loss due to collection inefficiency by way of linking the incentive for the staff with the increase in the billing and collection efficiency. To implement this scheme TANGEDCO should develop Key Performance Indicators (KPIs) and award scheme for the staff with an objective to reduce the commercial loss.</p> <p>In addition, TANGEDCO may consider installing pre-paid meters in the medium and long terms.</p>
<p>(v) Technical loss in the HT system</p> <p><i>(The DISCOM should take initiatives to reduce the technical loss in the HT system in the medium and long term. Substantial capital investment would be required to minimize the technical loss in the HT system.)</i></p>	<p>3.18% (Vellore) to 4.62% (Erode)</p>	<p>Segregate the agriculture load from the rural feeders and provide High Voltage Distribution System (HVDS) for the agriculture consumers to reduce the technical loss in the agriculture connections.</p>
Category C		
<p>(vi) Commercial loss due to deficient metering and billing inefficiency</p> <p><i>(To bring down the no. of consumers being billed provisionally so that losses due to deficient metering billing inefficiency could be curbed.)</i></p>	<p>0.13% (Vellore) to 1.37% (Madurai)</p>	<p>TANGEDCO should take short term measures to reduce the commercial loss by way of linking the incentive for the staff with the increase in the billing efficiency.</p>

Interventions recommended in the short, medium and long terms in the high energy loss areas (Category "A" Issues)

- 1. Camps for the voluntary disclosure of actual loads of the agriculture consumers:** TANGEDCO should organize mobile camps in the rural areas for voluntary disclosure of the actual load of the agriculture consumers. The consumers should be encouraged by TANGEDCO that no penalty would be imposed for their past usage of under-disclosed load.
- 2. Regular vigilance check:** TANGEDCO should conduct regular vigilance check in the rural and urban areas to identify un-metered connections and regularize them in a time bound manner. TANGEDCO should also conduct impromptu vigilance raids, where the energy loss is higher or revenue realization is very less.
- 3. Community metering:** This type of arrangement can be implemented in the slum areas, where the entire slum community would be metered at a single location in public view (where tempering is difficult) and the whole community is billed based on the consumption determined by pro-rating using their individual meter read. TANGEDCO will provide bulk supply to a single community meter and based on the meter read of the community meter it will bill the consumer connected with the community meter. The consumers on the other hand would share the billing amount based on their individual meter read. If one consumer pilfer energy it will result in the remaining members of the community to pay more than their fair share of energy bill, which would then create peer pressure on the energy pilfering consumer.
- 4. Implementation of load shedding first in the high loss areas in case of shortage of electricity:** TANGEDCO should consider implementing load shedding protocol with first priority in the high loss areas in case of shortage of electricity. This will create awareness among consumers in the high loss areas that due to high energy loss, TANGEDCO is forced to implement load shedding in their areas first and in turn would create pressure on them for not pilfering electricity.

5. **Implementation of differential tariff by way of higher tariff in the high loss areas:** TANGEDCO should propose differential tariff by way of higher tariff in the high loss areas. Higher tariff would force the consumers in the high loss areas to reduce energy pilferage.
6. **Theft Analytics of the un-metered consumers:** TANGEDCO should undertake theft analytics of all the un-metered consumers. Based on the random checking, detailed profiles of the consumers involved in energy theft would be prepared, followed by, an action plan to curb such energy theft and take appropriate action against such identified consumers.
7. **Metering of the un-metered connections:** At present, due to flat rate billing and highly subsidized energy rates (100%), the agriculture connections are un-metered. As a result of that actual energy consumption by the agriculture and other un-metered consumers are not known. Therefore, all the agriculture and other un-metered consumers should be metered.
8. **Aerial Bunched Cabling (ABC):** To reduce the direct theft from the LT line by hooking, ABC in all densely populated areas should be implemented.
9. **Implementation of Advance Metering Infrastructure (AMI):** AMI system allows the utility to monitor the consumption of individual consumers at specific intervals (15 minutes) and will detect the tendency of tempering or “by-passing” the meters by analyzing the data recorded. This can be implemented in phases with densely populated areas in the first instance.

Interventions recommended in the short and medium terms to reduce commercial loss (Category “B” and “C” Issues)

10. **Implementation of Key Performance Indicators (KPIs) for the Staff:**
TANGEDCO should consider implementation of incentive/disincentive scheme

by way of linking the incentive for the staff with the increase/decrease in the billing and collection efficiency. To implement this scheme TANGEDCO should develop Key Performance Indicators (KPIs) such as (a) increase in number of meter readings by each meter reader (b) Increase in number of disconnection of the defaulting consumers (c) reduction of time for replacing the defective meters, and (d) reduction of commercial loss through a road map. The KPIs should also indicate the targets for the staff and the staff will be awarded as per their actual performance vis-à-vis the targets given in the KPIs.

11. Prepaid metering: The un-metered and flat rate consumers should be encouraged for prepaid meters. Suitable rebate could be offered to the consumers opting for prepaid meters.

12. High Voltage Distribution System (HVDS) system: TANGEDCO should consider implementing HVDS system in agriculture, wherein the HV line could be extended up to the pump sets, thus avoiding the LT line except to the extent of the service cable. States like Andhra Pradesh, Gujarat, Punjab, Haryana, Karnataka and Maharashtra have already implemented the HVDS system for agriculture usage.

Interventions recommended for AT&C losses reduction in the low energy losses areas, which are more than World Standard (Category “C” Issues)

13. Revenue Cycle Management (RCM): To improve the billing and revenue collection method of the utility, one of the options would be to implement Revenue Cycle Management (RCM). This will help in improving the cash flow and liquidity by improving the existing Meter-Billing-Collection (M-B-C) process.

14. Energy Accounting and Auditing: TANGEDCO should conduct energy accounting and auditing across all the sub-divisions to accurately measure the energy losses across each consumer categories as well as to take appropriate action to control such losses.

Other recommendations

15. Component wise AT&C losses analysis: The component wise AT&C losses analysis would provide a clear insight on the energy losses of TANGEDCO. It is recommended that TANGEDCO should adopt the component wise AT&C losses method to compute and report its energy losses for each circles in the State. The component wise AT&C losses not only provide the component and sub-component wise energy losses but can also used as a strategic tool for monitoring and framing future loss reduction initiatives. From this analysis, TANGEDCO can easily identify the high loss prone areas and frame their future loss reduction initiatives accordingly.

16. Suggestion for the future AT&C losses reduction studies: The present period of the AT&C losses reduction study is envisaged for 6 months. In six months study, the seasonal factors affecting the AT&C losses could not be captured and also the study results will not be accurate. Therefore, it is suggested that the period for the future AT&C losses study should be increased to 18 months and out of that 12 months should be envisaged for field studies only.

1. Chapter 1: Background of the study

1.1 Introduction

The Aggregate Technical and Commercial (AT&C) losses in the distribution system comprises of two major components i.e. technical loss and commercial loss. The technical loss refers to the distribution network loss that is inherent in the delivery of the electrical energy. It includes losses in the conductors, transformers, switchgears and loss in the measurement system. The commercial loss is energy loss that is caused by factors external to the distribution system and is caused by direct energy theft/pilferage, and deficiencies in the energy metering, billing and collection systems, etc.

The AT&C losses are one of the key indicators to gauge the performance and operational viability of the distribution companies (DISCOMs) in the country. The technical loss in the distribution system is an engineering issue. The technical loss beyond limit represents shortcomings in the distribution system planning. The commercial loss, on the other hand is avoidable financial loss for the DISCOMs.

The DISCOMs with lower AT&C losses show the ability of the DISCOMs to convert the high proportion of the input energy to the distribution system into energy sales and also the managerial capability to collect revenue from the electricity consumers efficiently. High level of AT&C losses, on the other hand shows improper and inefficient utilization of the energy and poor revenue realization capability. Huge revenue gap, weak financial condition, high cost of electricity supply (services), poor collection efficiency are some of the key features of the DISCOMs with high level of AT&C losses.

At present, the energy losses percentage in India is much higher in comparison to other developing countries in the World. For example, in 2010 the energy losses in

Philippines³, China and Brazil⁴ were 11.52%, 6.10% and 16.63% respectively. However, the percentage of national level AT&C losses in India was 27.15% in FY 2009-10, which means more than one fourth of the total energy produced in the country was lost due to technical and commercial reasons at the time when the country is reeling under severe power shortage and requires more energy to maintain its GDP growth. This leads to enhanced need for generation capacity in the country, which in turn requires higher transmission and distribution network capacities. This situation could otherwise be avoided, if the energy losses in the distribution system are reduced to a level at par with the international level. Thus, reducing the AT&C losses would not only contribute in reducing the need for new generation and transmission capacities but also reduce the cost of supply of the electricity to the end consumers.

To address this issue, the Government of India has launched the Restructured - Accelerated Power Development and Reform Programme (R-APDRP) for all the States in the country. Under this program a number of loss reduction schemes are being implemented. The State Electricity Regulatory Commissions (SERCs) also set target and issue directives in the Tariff Orders of the DISCOMs to reduce the AT&C losses in their respective States. However, the desired outcomes of these initiatives are yet to materialize.

The Planning Commission, Government of India had constituted a High Level Panel (HLP) to review the financial position of the DISCOMs in India in July 2010. The HLP in its report has estimated that during 2006 to 2010, the accumulated losses of the DISCOMs⁵ in India was ₹ 1, 79,000 Crore without considering subsidy and ₹ 82,000 Crore after subsidy received from the Governments. One of the main reasons for such huge financial losses was the high level of AT&C losses in the DISCOMs. The HLP report specifically pointed out that the current practice of reporting the AT&C losses have many deficiencies and the actual AT&C losses are much higher

³ Source: World Development Indicators, The World Bank

⁴ T&D loss, Source: World Energy Council

⁵ Excluding West Bengal, Chhattisgarh, Goa and the North Eastern States

than reported by the DISCOMs. This necessitates the need for having a baseline data of AT&C losses for each DISCOM.

In view of the above, a need was felt to initiate a study in various States in India to gauge the component wise AT&C losses and to identify the reasons thereof. For this, the Ministry of Power (MoP), Government of India (GoI) has initiated the study to assess the component wise AT&C losses in six States in India, i.e. Tamil Nadu, Karnataka, Maharashtra, Rajasthan, Uttar Pradesh and Madhya Pradesh. Power Finance Corporation (PFC) Ltd. was given the responsibility to appoint consultants to conduct detailed studies in six States. The Forum of Regulators (FoR) has been entrusted to monitor and review the activities of the consultant as well as facilitate the consultants in collection of data and conducting the field studies with the assistance of the SERCs and the DISCOMs.

Medhaj Techno Concept Pvt. Limited (hereinafter referred to as “consultant”) was appointed by the PFC to undertake the study for the assessment of component wise AT&C loss reduction studies in the States of Rajasthan, Tamil Nadu and Uttar Pradesh.

This report brings the component wise AT&C losses in the four representative circles in the State of Tamil Nadu, extrapolation of circle wise AT&C losses for the State of Tamil Nadu, main reasons contributing the AT&C losses and proposed a set of recommendations to reduce the AT&C losses in a phase wise manner in the State.

1.2 Objective of the study

The objective of the study was to segregate the AT&C losses into various components and sub-components and estimate the component wise AT&C losses in four representative circles in Tamil Nadu.

1.3 Value addition of the study

At present, the AT&C losses are computed on the three key elements – energy input, energy billed and the collection efficiency (as the percentage of revenue realized against revenue billed). As highlighted in paragraph 1.1, a number of factors are responsible for the AT&C losses. From the total AT&C losses figure, it is difficult to judge that how much energy has been lost in the following:

- HT and LT systems of the DISCOM;
- billing and collection inefficiencies; and
- theft/pilferage and deficient metering.

While framing loss reduction strategies, the DISCOM face the following questions, which the total AT&C losses figure may not provide answers.

Table 7: Value addition of the component wise AT&C losses study

Key questions faced by the DISCOM to strategies their loss reduction initiatives	Overall AT&C losses analysis	Component wise AT&C losses analysis
What are components involved in the AT&C losses in the DISCOM ?	X	✓
What are the key areas, where the AT&C losses are higher ?	Partially	✓
Whether the existing initiatives taken by the DISCOM are in the right direction or delivering the desired results ?	Partially	✓
What will be target areas in the short, medium and long term periods and how to align the existing and future loss reduction strategies accordingly ?	Partially	✓

Thus, it is evident that the DISCOM with the analysis of the component wise AT&C losses could strategize, implement and monitor their loss reduction initiatives more effectively and efficiently.

The SERCs also faces similar questions at the time of approval of the AT&C losses reduction trajectory for the DISCOM. The component wise AT&C losses analysis would assist the SERCs in:

- Approval of the projected component wise loss reduction targets for the DISCOM based on the component wise AT&C losses figures submitted by the DISCOM.
- Monitoring of the loss reduction initiatives of the DISCOM currently in progress and suggesting mid-term course corrections for the DISCOM, if required.
- Prepare a road map on AT&C losses reduction for the DISCOM.

This study has attempted to undertake a systematic analysis of the components and sub-components of the AT&C losses in the four representative circles in Tamil Nadu and estimate energy losses in each component and sub-component.

1.4 Scope of work of the study

The scope of the study is mentioned below:

- Identify four circles representing features of the distribution system of the State of Tamil Nadu
- Identification of specific components of the AT&C losses
- Computation of the overall AT&C losses in the four representative circles followed by calculation of component wise AT&C losses in the following manner:

- **Technical loss:**

- **At the EHV system (33 kV and above):** Difference of energy recorded by the energy meters at the injection points and energy sent out in the distribution system.
- **At 11 kV system of DISCOM:** Difference between the sending end energy and receiving end energy at consumer end plus energy recorded at HV side of distribution transformers through sample meter read.
- **Overall technical loss:** Extrapolate the results of the sample study to compute the overall technical losses in the distribution system.
- **Commercial loss:**
 - Computation of overall commercial loss by taking into account the difference of overall AT&C losses and total technical loss of the circles.
 - Identify the various sub-components of commercial loss and estimate commercial loss for each of sub-components viz. loss on account of deficient metering, billing and collection inefficiencies and other identifiable components on the basis of sample study.
 - Assessment of energy loss due to theft by deducting the loss due to deficient metering, billing and collection inefficiencies from the overall commercial loss.

1.5 Limitation/constraints faced during the study

- **Seasonal impact on the AT&C losses:** The Energy requirement varies due to seasonal variation in ambient temperatures, humidity and rainfall. For example, the energy requirement in the summer season increases due to increased need of electricity by the domestic consumers (for cooling purpose) and agriculture consumers (for irrigation). The field studies were carried out during the period September to November 2012. Hence, the seasonal effect across the year could not be captured in this study. It would be useful to capture the diversity of demand and supply for computation of the component wise AT&C losses by studying the consumption pattern of the consumers over full financial year.
- **Constraints in computing the technical loss from 11 kV feeder to the HV side of the DTs:** Since the meters in the DTs are installed only at the Low Voltage

(LV) side, the actual line loss from 11 kV sending end to the High Voltage (HV) side of the DT could not be calculated from the field survey. For the same reason, the actual transformation loss in the DTs could not be calculated. Further the meters on all the DTs connected to a particular 11 kV feeder are not installed. This posed a constraint in computing the technical loss from 11 kV feeders to the DTs from field survey and actual meter read.

1.6 Structure of the Report

The report is structured as follows:

- Chapter 2 deals with the Approach and Methodology followed for selection of the circles and computation of component wise AT&C losses.
- Chapter 3 provides findings from the field study in the four circles of Tamil Nadu
- Chapter 4 presents the detailed computation of component wise AT&C losses in the four circles in Tamil Nadu and reasons thereof.
- Chapter 5 presents extrapolation of AT&C losses of the four representative circles on the State of Tamil Nadu.
- Chapter 6 presents the recommendations for reduction of AT&C losses and way forward

2. Chapter 2: Approach and Methodology of the study

This chapter of the report explains the Approach and Methodology followed for selection of the representative circles as well as the method of computation of components of AT&C losses in these circles. The Forum of Regulators (FoR) has framed a detailed methodology for assessment of component wise AT&C losses in its “Loss Reduction Strategies” Report. As suggested by the FoR secretariat, the methodology prescribed in the Report has been followed in the study.

Since, the study covers AT&C losses computation for four circles only, the focus was selection of four circles, which covers the features of the distribution system of the State. In consultation with the FoR Secretariat, a methodology was evolved to select the four representative circles in Tamil Nadu, which is explained in the next section of this chapter.

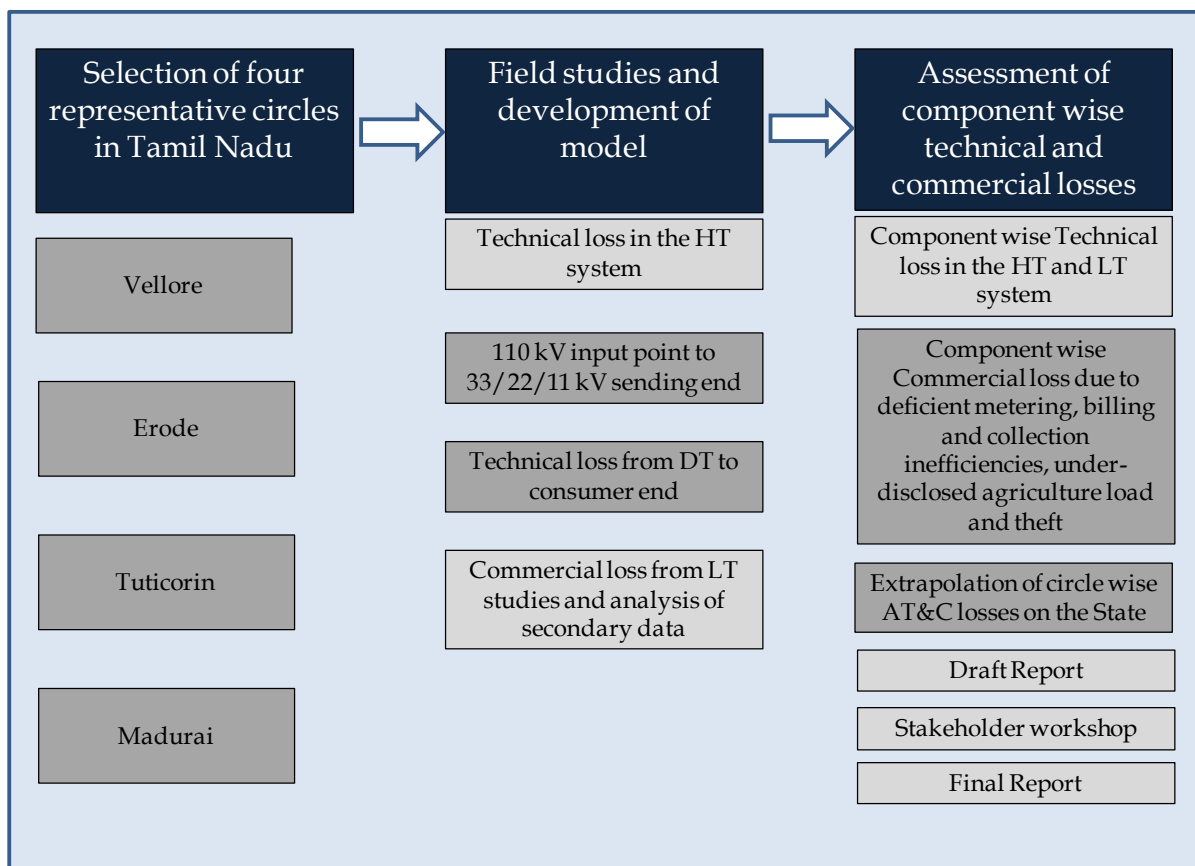
2.1 Approach to the study

The study focused on the following three broad tasks:

- Selection of four representative circles in the State to conduct detailed field studies.
- Conducting field studies in the four representative circles for assessment of component wise technical and commercial losses.
- Assessment of component wise technical and commercial losses based on the primary and secondary data collected from the four representative circles. A model has been developed to analyze the field data. The model has broadly taken into account the following calculations:
 - Technical loss in the HT and LT systems
 - Commercial loss in the areas of deficient metering, billing and collection inefficiencies, under-disclosure of agriculture load and theft/pilferage.
 - Extrapolation of circle wise AT&C losses on the State.

Following Exhibit depicts the step by step approach has been followed for assessment of the component wise AT&C losses in four representative circles in Tamil Nadu:

Exhibit 1: Approach to the study



2.2 Methodology of the study

The methodology of the study consisted of collection of existing/secondary data from DISCOM, selection of four representative circles in the State, collection of field data and segregation of components of AT&C losses.

2.2.1 Task 1: Collection of existing/secondary data

The consultant collected the data in two phases:

- **Phase I:** Collection of consumer category wise sales data for all the circles for selection of the four representative circles in the State.

- **Phase II:** Collection of secondary information such as the number of sub-stations and feeders, input energy, number of consumers, revenue billed and collected in the four representative circles.

Assessment of component wise AT&C losses involved analysis of large volume of technical and commercial data. At the commencement of the study, the consultant prepared and submitted a detailed list of the information required from the TANGEDCO to compute the component wise AT&C losses. The same have been enclosed as "Appendix 1" in this report.

2.2.2 Task II: Selection of four representative circles in the State

After completion of Phase I of Task I mentioned above, the consumer wise sales mix data for FY 2010-11⁶ for each of the 32 circles in Tamil Nadu was analyzed. The consumer wise sales mix of all the circles in Tamil Nadu is enclosed as Annexure I.

The consumer sales mix of the circles was then evaluated on the following three parameters:

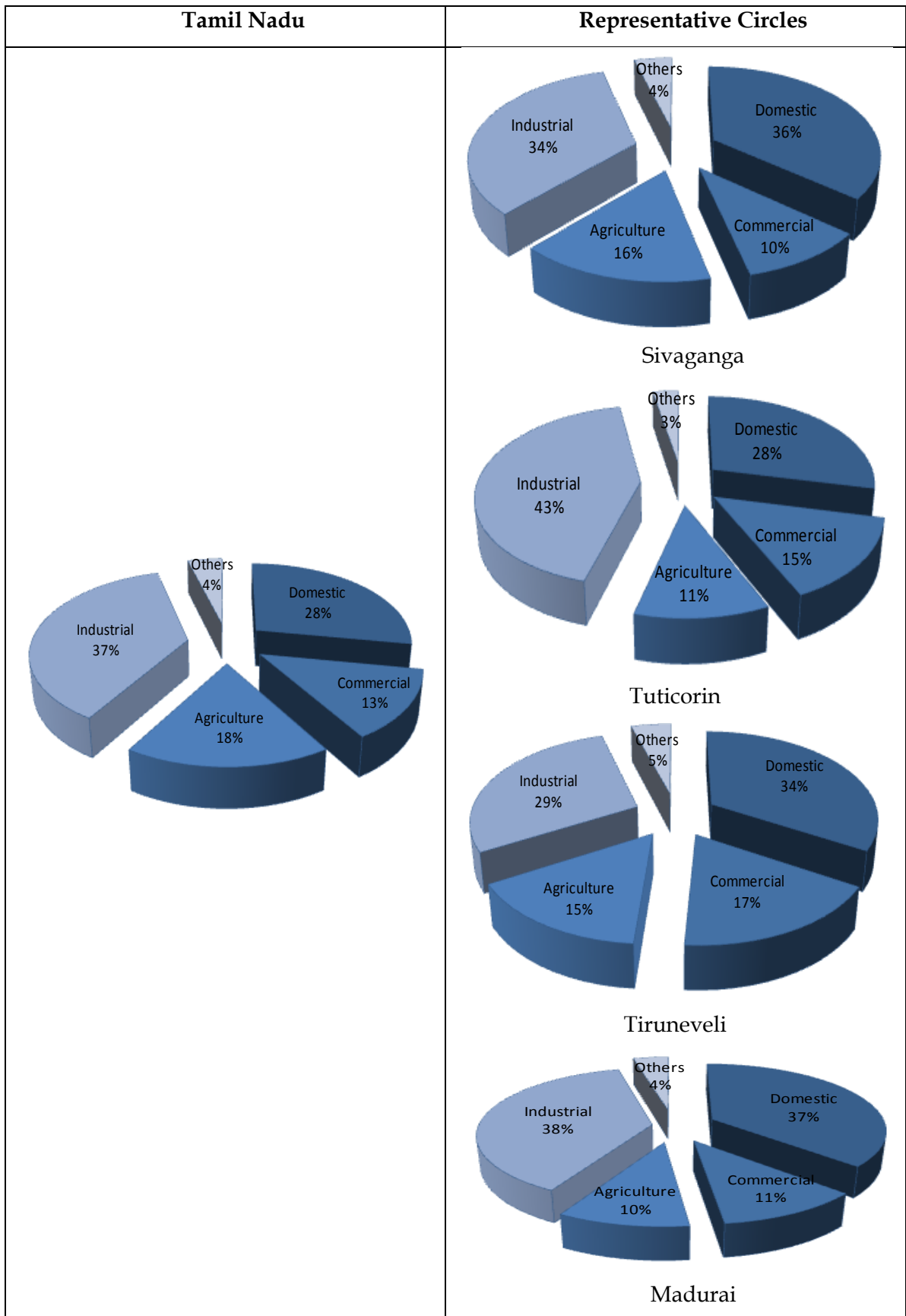
- 1. Parameter I: Comparison of the category wise sales mix of the circles with TANGEDCO:** The sales mix⁷ of the circle (in percentage term) in comparison⁸ of the sales mix (in percentage term) of the DISCOM shown in the Exhibit 2.

⁶ At the time of selection of the circles, the consultant along with the FoR Secretariat had pursued with TANGEDCO to collect the circle wise sales mix data for FY 2011-12. However, the circle wise sales mix data was not finalized by TANGEDCO at that point of time. Since, the study has to be completed within a strict timeline it was decided to select the circles based on the FY 2010-11 sales mix data.

⁷ Consumer category wise sales mix of the DISCOM has been arrived by aggregating the consumer wise sales mix of all the circles in the DISCOM.

⁸ Since, it is not possible to compare the sales mix of the circles with the DISCOM in absolute terms, $\pm 10\%$ variation in sales mix for domestic, agriculture and industrial consumption have been considered.

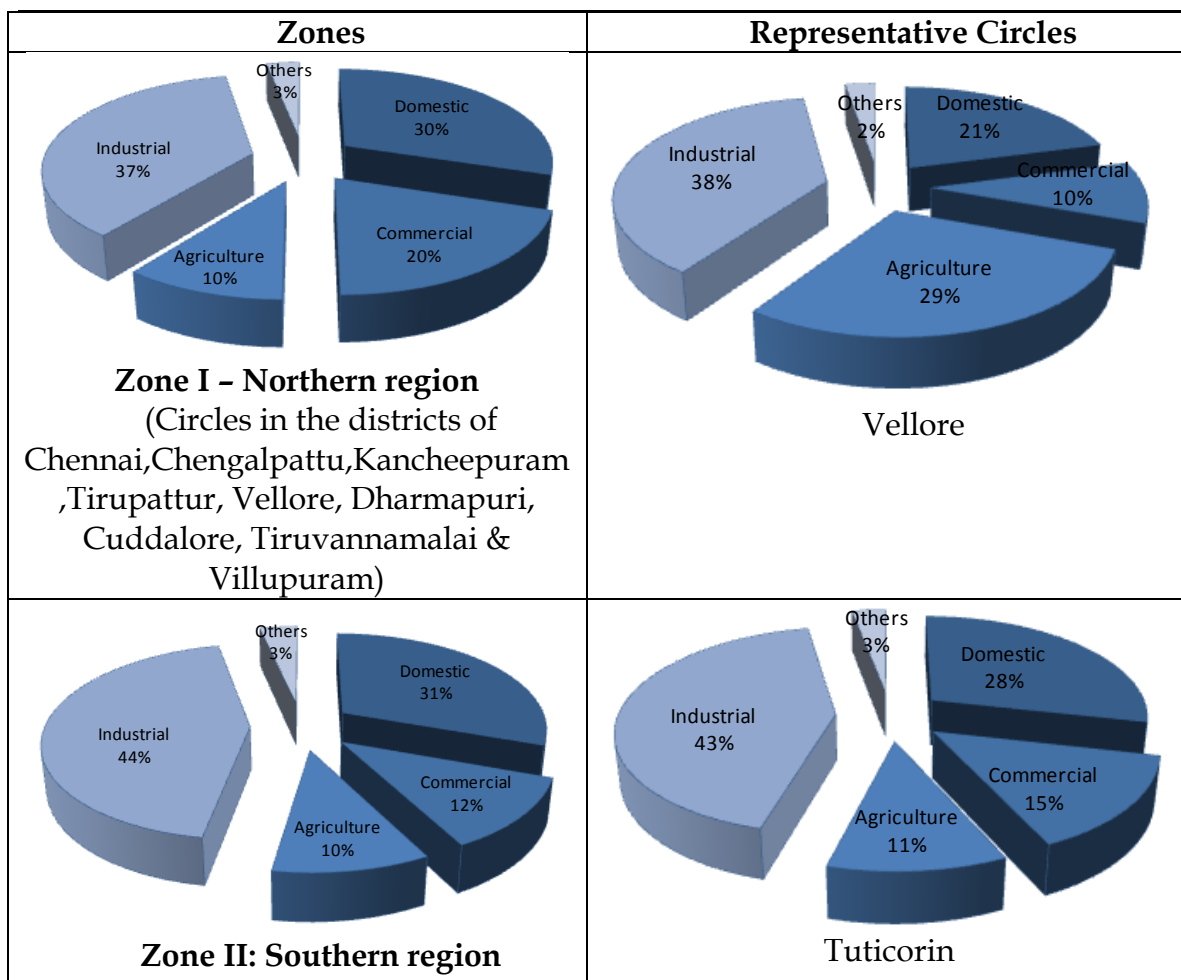
Exhibit 2: Sales mix analysis of the circles in comparison with the sales mix Tamil Nadu



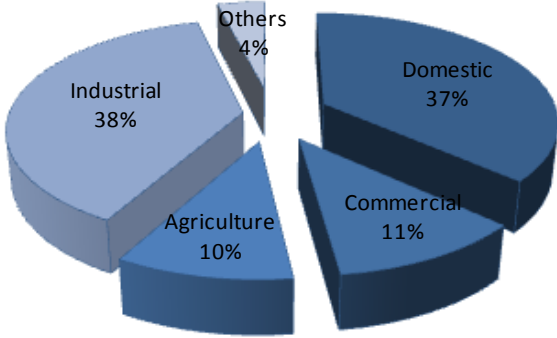
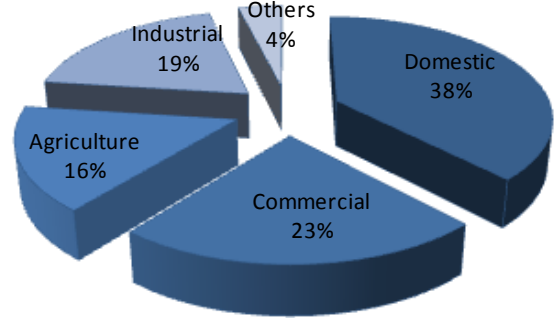
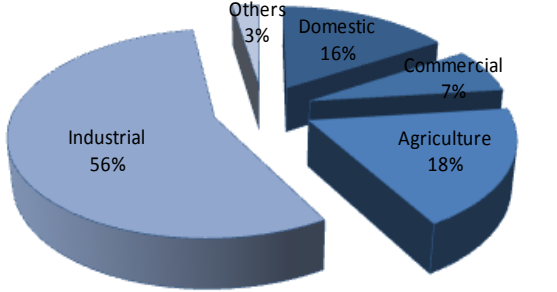
As shown in Exhibit 2 sales mix of four circles i.e. Sivaganga, Tuticorin, Tirunelveli and Madurai were matching with the sales mix of Tamil Nadu i.e. met the selection criterion of Parameter I.

2. **Parameter II: Comparison of the category wise sales mix of the circles in respect of its geographical location:** The entire State is segregated into four zones (North, South, East and West) depending on the geographical location of the circles in the State. The sales mix of the zones has been arrived by aggregating the sales mix of the circles falling in each of the three zones. Zone wise analysis of the circles⁹ is presented in the Exhibit given below:

Exhibit 3: Sales mix analysis - zone wise



⁹ Since, it is not possible to compare the sales mix of the circles with the zones in absolute terms, $\pm 10\%$ variation in sales mix for domestic, agriculture and industrial consumption have been considered.

Zones	Representative Circles
<p>(Circles in the districts of Tirunelveli, Kanyakumari, Virudunagar, Tuticorn, Ramnad, Dindugal, Madurai Theni & Sivaganga)</p>	 <p style="text-align: center;">Madurai</p>
<p style="text-align: center;">Zone III: Eastern Region (Circles in the districts of Trichy, Nagapattinam, Pudukkottai, Tanjore and Karur)</p>	 <p style="text-align: center;">Trichy Metro</p>
<p style="text-align: center;">Zone IV: Western Region (Circles in the districts of Coimbatore, Udumalpet, Nilgiris, Tiruppur, Mettur, Namakkal, Erode, Salem and Gobi)</p>	 <p style="text-align: center;">Erode</p>

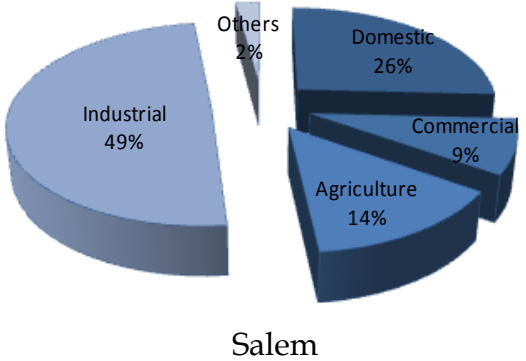
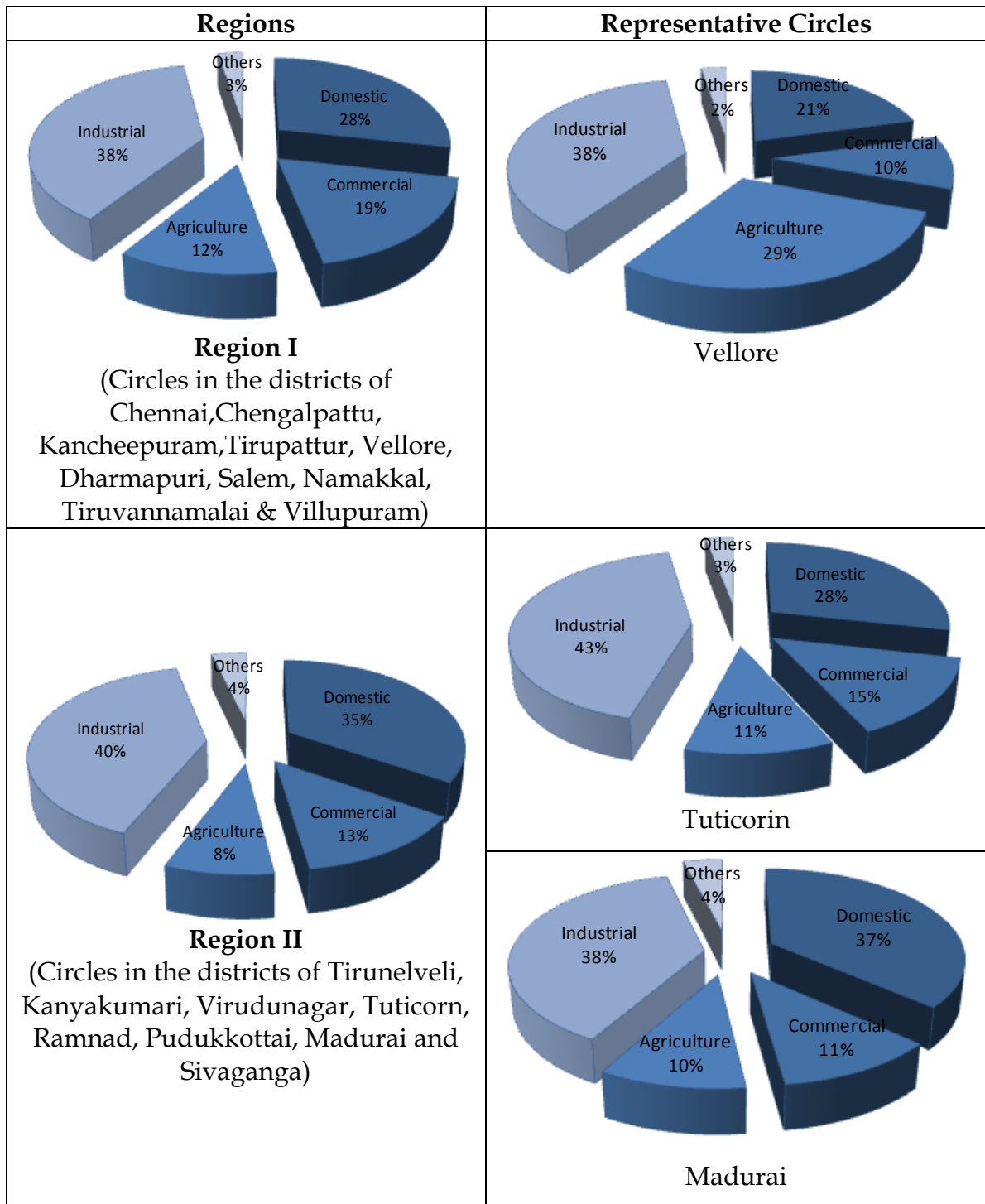
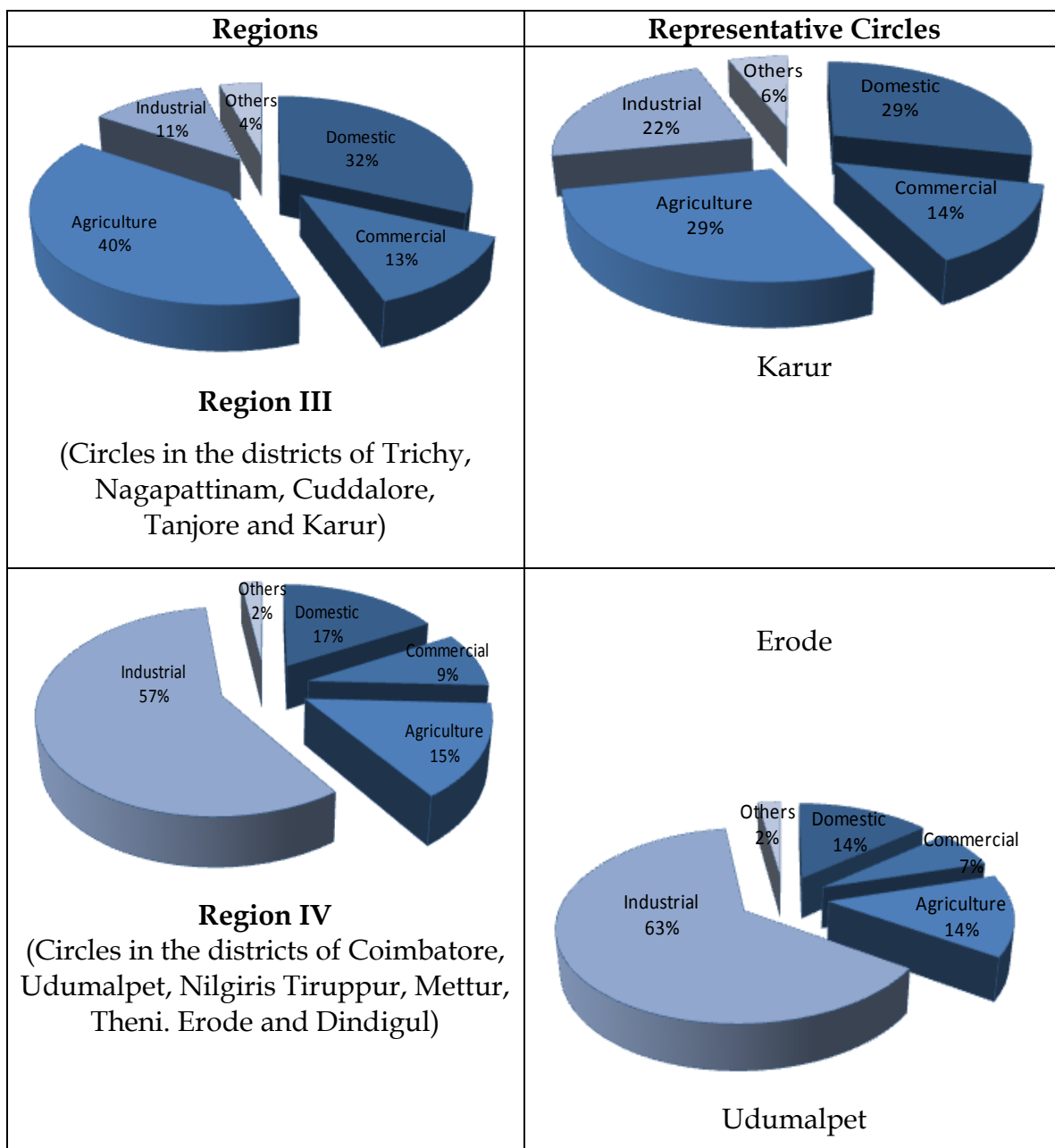
Zones	Representative Circles												
	 <p style="text-align: center;">Salem</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <caption>Salem Sales Mix Data</caption> <thead> <tr> <th>Category</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Industrial</td> <td>49%</td> </tr> <tr> <td>Domestic</td> <td>26%</td> </tr> <tr> <td>Agriculture</td> <td>14%</td> </tr> <tr> <td>Commercial</td> <td>9%</td> </tr> <tr> <td>Others</td> <td>2%</td> </tr> </tbody> </table>	Category	Percentage	Industrial	49%	Domestic	26%	Agriculture	14%	Commercial	9%	Others	2%
Category	Percentage												
Industrial	49%												
Domestic	26%												
Agriculture	14%												
Commercial	9%												
Others	2%												

Exhibit 3 shows that sales mix of six circles i.e. Vellore, Tuticorin, Madurai, Trichy Metro, Erode and Salem were matching with the sales mix of four zones (North, South, East and West) of Parameter II.

- Parameter III: Existing usage of the ground water as well as requirement of future ground water for agriculture purpose in each district of Tamil Nadu.** As shown in Data published by the Ministry of Water Resources was considered to understand the present usage of ground water as well as future ground water requirement in each district of Tamil Nadu. Firstly, the entire State is segregated in four regions based on the existing and future ground water usage and then analyzed the sales mix of the circles with respect to the four regions.

Exhibit 4: Sales mix analysis based on existing and future ground water usage in Tamil Nadu





It can be seen that sales mix of six circles i.e. Vellore, Madurai, Tuticorin, Karur, Udumalpet and Erode were matching with the selection criterion of Parameter III.

- Parameter IV: Share of the domestic and agriculture sales in the total sales mix of the circles.** In consultation with the FoR Secretariat, parameters were identified to analyze the sales mix of each circle in the State for selecting four circles.

The energy billed to the domestic and agriculture categories were nearly 50% of the total sales in state of Tamil Nadu. During discussion with the FoR Secretariat, it was agreed that the circles with same proportion of domestic and agriculture sales (within range of $\pm 10\%$ to match with the State and Zone) would be selected for field studies. This would also help to identify all the key elements/reasons associated with the AT&C losses in the State. Table 8 presents the share of domestic and agriculture sales in the sales mix of the circles in the State.

Table 8: Share of domestic and agriculture sales in the circles in Tamil Nadu in FY 2010-11¹⁰

Circles	Sales mix: Domestic and Agriculture	Score	Circles	Sales mix: Domestic and Agriculture	Score
Trichy North	93%	4	Pudukkottai	48%	2
Nagapattinam	88%	4	Madurai	47%	2
Villupuram	80%	4	Chennai South	42%	2
Tanjore	70%	3	Tiruppur	41%	2
Tiruvannamalai	66%	3	Salem	40%	2
Ramnad	65%	3	Dharmapuri	39%	1
Kanyakumari	64%	3	Tuticorn	39%	1
Kancheepuram	62%	3	Nilgiris	39%	1
Cuddalore	62%	3	Chennai Central	37%	1
Theni	60%	3	Chennai West	36%	1
Tirupattur	59%	2	Erode	34%	1
Karur	58%	2	Coimbatore Metro	30%	1
Namakkal	57%	2	Dindugal	28%	0
Trichy Metro	54%	2	Udumalpet	28%	0
Sivaganga	52%	2	Chennai North	25%	0
Gobi	52%	2	Virudunagar	20%	0
Madhurai Metro	51%	2	Chengalpattu	18%	0
Vellore	50%	2	Coimbatore South	13%	0
Tirunelveli	49%	2	Coimbatore North	11%	0
Mettur	49%	2			

¹⁰ At the time of selection of the circles data pertains to FY 2011-12 was not available from TANGEDCO

It can be seen from the above Table that 32 circles have satisfied the selection parameter 3.

Based on the sales mix analysis of the circles, a selection matrix was prepared to select four representative circles in the State. The circles meeting the selection parameters most were selected for field studies.

Table 9: Selection matrix

Circles	State wise	Geographical location wise	Water table wise	Sales mix: Domestic and Agriculture
Sivaganga	√			2
Tuticorn	√	√	√	2
Tirunelveli	√			2
Madurai	√	√	√	2
Vellor		√	√	2
Trichy Metro		√		2
Erode		√	√	1
Salem		√		2
Karur			√	2
Udumalpet			√	0
Tanjore				3
Tiruvannamalai				3
Ramnad				3
Kanyakumari				3
Kancheepuram				3
Cuddalore				3

Table 9 depicts that four circles - Vellore, Erode, Tuticorin; and Madurai had fulfilled most of the selection criteria. Domestic and agriculture sales mix of these four circles were close to the domestic and agriculture sales mix of the State.

The sales mix of Sivaganga and Tirunelveli circles were matching with the sales mix of the State. However, these two circles could not fulfill the other three selection criteria and not considered for final selection of the four representative circles.

Based on the above analysis, the following four circles were selected to undertake detailed field level studies:

- Vellore;
- Erode;
- Tuticorin; and
- Madurai

The basis for considering the “Consumer wise Sales Mix” as the parameter for selection of the representative circles is to segregate the consumer wise sales into three buckets i.e. metered consumers, un-metered consumers (excluding agriculture consumers) and agriculture consumers. Thereon, identify the component wise AT&C losses for each of the three consumer bucket (metered, un-metered and agriculture consumers) and recommend interventions required to reduce the AT&C losses of the DISCOM.

At the time of selection of four representative circles in Tamil Nadu, both the FoR Secretariat and consultant came to a conclusion that the circles with higher percentage of HT sales cannot provide the real picture of AT&C losses in the circle/State. This is because the commercial loss in the HT system is negligible. In view of that more weightage was placed on those consumer categories, where the commercial loss is high, for example domestic and agriculture consumers. This will also help in identifying maximum reasons for commercial loss.

2.2.3 Task III: Field level study for assessment of AT&C losses in the representative circles

After finalization of the representative circles, the consultant initiated the field studies in each of the four selected circles in Tamil Nadu. The start and completion period of the field studies in the four circles are presented in the following table:

Table 10: Start and completion period of field studies in the four circles in Tamil Nadu

Circles	Date of start of the field studies	Date of completion of the field studies
Vellore	10 th September 2012	25 th November 2012
Erode	17 th September 2012	5 th December 2012
Tuticorin	17 th September 2012	30 th November 2012
Madurai	9 th September 2012	24 th November 2012

- High Tension (HT) study:** This involved collection of meter read from the 110/33/22/11 kV and distribution sub-stations as well as the consumers connected at 33 kV, 22 kV and 11 kV. The loss identified under this study was technical loss in the HT system. Commercial loss in the HT network is negligible.
- Low Tension (LT) study:** This involved assessment of technical and commercial losses from the Distribution Transformers (DTs) to the consumer premises. Energy loss identified under this study is the component wise technical and commercial loss in the LT system.
- Agriculture study:** The agriculture consumers are largely un-metered in the State. The study was carried out to find out the actual connected load of the agriculture consumers as against the sanctioned load as per the departmental records and based on this, commercial loss due to under-disclosed agriculture load was estimated.

2.2.4 Task IV: Assessment of component wise technical and commercial losses

The methodology and formula given in the “Report on Loss Reduction Strategies” by the Forum of Regulators for assessment of the component wise AT&C losses were followed. Few modifications in the methodology have been done in consultation of the FoR Secretariat such as:

- The methodology of assessment of the total technical loss in the HT system due to absence of meters in the incoming side of the 33 kV sub-stations; and
- No. of hours of supply to the domestic consumers to compute the per day energy consumption of the domestic consumers.

Computation of AT&C losses of the circles

The AT&C losses of the circles have been computed as per the following formula:

$$\text{AT\&C Losses} = \frac{\{(\text{Energy input} - (\text{Energy Billed} * \text{Collection Efficiency}))\}}{\text{Energy input}}$$

Whereas, Collection efficiency = Revenue realized/Revenue billed

Assessment of component wise technical loss in the HT System

The technical losses in the HT system has been considered as the difference of the energy input in the 110¹¹kV system and sent out to the 11 kV feeders i.e.:

Total energy received from 110/33/22/11 kV sub-stations	= X1
Total energy sent out from 11kV feeders to the consumers	= Y1
Total energy sent out to other circles	=Y2
Total energy sent out	=YT =Y1+Y2
Energy lost in 110/33/22/11 kV System	= X1 - YT

¹¹ Technical loss is not computed at 33 kV level as the meters are not installed at 33 kV system.

The meters installed in the sub-stations show two types of meter reads i.e. cumulative meter read and current meter read (both in kWh and kVAh).

Further, for computing the energy input and energy sent out from the cumulative meter read, there was a time gap of 15-25 days i.e. two meter reads for both the receiving end and sending end meters were taken within a gap of 15-25 days. The amount of energy input and energy sent out are computed as the difference of the second (cumulative) and first meter read (cumulative). The formula for computing the energy input and energy sent out at the Sub-Stations is presented below.

$$X1 = (2^{\text{nd}} \text{ day cumulative meter read} - 1^{\text{st}} \text{ day cumulative meter read}) \times \text{MF}$$

$$Y1 = (2^{\text{nd}} \text{ day cumulative meter read} - 1^{\text{st}} \text{ day cumulative meter read}) \times \text{MF}$$

$$Y2 = (2^{\text{nd}} \text{ day cumulative meter read} - 1^{\text{st}} \text{ day cumulative meter read}) \times \text{MF}$$

$$\text{Total energy sent out} \qquad \qquad \qquad \text{YT} = Y1 + Y2$$

$$\text{Energy lost in 33/11 kV System} \qquad = X1 - YT$$

Technical losses in LT System of DISCOM

Technical losses in LT system has been estimated on the basis of sample studies (comprising domestic, commercial and industrial) in the DTs. The formula for computing the line losses in the LT system is presented below.

$$A1 = 1^{\text{st}} \text{ read of the DT meter}$$

$$A2 = 2^{\text{nd}} \text{ read of the DT meter}$$

$$\text{MF1} = \text{Multiplying Factor of the DT meter}$$

$$B1 = 1^{\text{st}} \text{ read of all the consumers connected with the DT}$$

$$B2 = 2^{\text{nd}} \text{ read of all the consumers connected with the DT}$$

$$\text{MF2} = \text{Multiplying Factor of the consumer meter}$$

$$\text{Technical losses in the LT system} = (A2 - A1) \times \text{MF1} - (B1 - B2) \times \text{MF2}$$

The LT study of a particular DT has been carried out in single day. In case of long power cut, the study was continued in the DTs as well as in the consumer premises next day to complete the reading cycle. It is to highlight that there are two limiting factors associated while conducting the LT studies in the next day:

- Households found un-locked on the first read but found locked on the second read. As a result of that consumption of households for a day could not be computed. During the field studies the consultant has faced this issue in 2% households.
- Meters found working in the first read but found not-working on the second read. As a result of that consumption of households for a day could not be computed. During the field studies the consultant has faced this issue in less than 1% households.

The study paid special attention to overcome the two limiting factors highlighted above. If, the above two limiting factors found during the field study in a particular DT, the reads taken in the first was not considered and the entire LT study of that DT was repeated in the next day.

Estimation of commercial loss

For the computation of commercial loss, the overall AT&C losses have been first computed as the difference between the input energy and the energy realized in the circles. After determination of the overall technical losses in the circles, commercial losses have been identified as the difference between the overall AT&C losses and the technical losses. Further, the different components of commercial losses i.e. commercial losses due to theft/pilferage, metering, billing and collection deficiencies have been separately determined as per the "Loss Reduction Strategy Report" of FoR and the same is presented below:

(a) Commercial loss due to deficient metering:

Actual consumption (kWh) of the consumers recorded in the field studies – Energy billed by the utility (kWh) of such consumers having defective meters as per records available with utility.

(b) Commercial loss due to billing inefficiency:

Actual energy consumption (kWh) of the consumers recorded in the field studies – Provisional Billing done by the utility (kWh) for such consumers as per records available with utility.

(c) Commercial loss due to provisional billing to metered consumers

Actual energy consumption (kWh) of the metered consumers recorded as per the field studies – Energy billed by the utility (kWh) for metered consumers billed on provisional basis.

(d) Commercial loss due to under-disclosed agriculture load

Actual energy consumption (kWh) by the agriculture consumers recorded as per the field studies – Energy billed by the DISCOM (kWh) as per sanctioned load of agriculture consumers.

(e) Commercial loss due to collection inefficiency:

Energy Billed (kWh) – Energy Realized (kWh)

Where, Energy Realized = Energy Billed (kWh) * Collection Efficiency (%)

(f) Commercial loss due to theft/pilferage:

It is not possible to compute the extent of theft/pilferage accurately in the distribution system by formula. Therefore, the extent of energy loss due to theft of electricity has been computed by deducting the component wise commercial loss mentioned from point no. (a) to (e) from the total commercial loss of the circle¹². The formula for computing the energy loss from theft is given below:

¹² The same methodology has been prescribed in the FoR Report on "Loss Reduction Strategies"

Commercial loss due to theft/pilferage = Total Commercial Loss - (Commercial loss due to deficient metering + billing inefficiency + provisional billing to the metered consumers + collection inefficiency)

Based on the findings from the field studies, key factors responsible for AT&C losses are identified and separated into three categories namely "A", "B" and "C". The factors which have major contribution to the AT&C losses and needed maximum attention were classified into category "A", the factors having medium contribution to the AT&C losses were classified into category "B" and the factors having minimum contribution to the AT&C losses were classified into category C. The said classification is given as follows.

Category A:

- (i) Commercial loss due to under-disclosed agriculture load and theft/pilferage of energy.
- (ii) Technical loss in the LT system.

Category B

- (i) Commercial loss due to collection inefficiency.
- (ii) Technical loss in the HT system.

Category C

- (i) Commercial loss due to deficient metering and billing inefficiency.

Task 5: Preparation of draft report

Based on the outcomes of the field studies in the four representative circles in Tamil Nadu, a draft report was prepared and submitted to the FoR Secretariat for their review and comments and the draft report was modified based on the feedback/comments received

Task 6: Stakeholder workshop

The draft report was presented to the stakeholders in the workshop organized at the FoR Secretariat, New Delhi on June 04, 2013 to share the background, objectives and key findings of the component wise AT&C losses study in Tamil Nadu. The workshop was attended by representatives of FoR, PFC and TANGEDCO. The stakeholder's suggestions, comments and recommendations on the study report presented during the workshop were noted.

Task 7: Preparation of Final report

After incorporating the comments received in the Workshop, the final report of the study has been prepared and submitted to the FoR Secretariat.

3. Chapter 3: Findings from the field studies in the four representative circles

This chapter presents key findings from the field studies in the four circles in Tamil Nadu. The sub-sections of this chapter highlight the general profiles of the circles, including AT&C losses. Chapter 3 also presents the existing status of the distribution assets, metering status at various levels, billing and collection process etc. that are closely related to the AT&C losses.

3.1 General profiles of the four representative circles in Tamil Nadu

The entire energy distribution system in Tamil Nadu is operated and maintained by the Tamil Nadu Generation and Distribution Corporation (TANGEDCO). The supply area of TANGEDCO is divided into 8 distribution zones: Coimbatore, Chennai, Madurai, Erode, Tirunelveli, Trichy, Vellore and Villupuram region. These eight zones are divided into 39 circles, which are further divided into divisions and sub-divisions.

Brief descriptions of the four representative circles of Tamil Nadu i.e. Vellore, Erode, Tuticorin and Madurai are presented below:

3.1.1 Vellore

Vellore circle comes in the Vellore distribution zone of TANGEDCO and supply energy in six divisions: Vellore, Katpadi, Arcot, Ranipet, Sholinghur and Arakkonam located in the Vellore district of Tamil Nadu.

The circle has a total of 19 nos. of 110/33/11 kV sub-stations and 14 nos. of 33/11 kV sub-stations. A total of 18 nos. of 33 kV and 143 nos. of 11 kV feeders distribute electricity in different parts of the circle.

Total number of electricity consumers in the circle is around 0.62 million. A large part of the consumer base of the circle comprises rural consumers. The total energy

sales in the circle were 1860.33 MU in FY 2011-12. Energy sales to the domestic and agriculture categories constitute around 55% of the total energy sales in the circle. Energy billed to the industrial category is about 32%, which mostly comprised of HT and LT industrial consumers. Other consumer categories such as commercial accounted for 5%, public water works, street lighting and railway traction contribute remaining 8% of the total energy sales of the circle. The consumer and sales mix of the circle is presented in the following Exhibit.

Exhibit 5: Consumer and sales mix of Vellore in FY 2011-12

Consumer type	Consumer mix	Sales mix (%)
Others	3.45%	8.03%
Agriculture	11.32%	27.06%
Industrial	2.59%	32.02%
Commercial	9.84%	4.93%
Domestic	72.80%	27.97%

Source: TANGEDGO

3.1.2 Erode

Erode circle comes in the distribution zone of TANGEDCO. The circle is segregated into three divisions Urban Erode, South Erode and Perundurai located in the Erode district of Tamil Nadu.

A total of 15 nos. of 110 kV sub-stations supplies energy in the circle. The HT network of the circle comprised of 3 nos. 33 kV feeders, 35 nos. of 22 kV feeders and 59 nos. of 11 kV feeders.

Total number of consumers in the circle is around 2.3 million. Energy billed to all the consumer categories was around 1433.54 MU in FY 2011-12. Domestic and agriculture consumption contributed almost 39% of the total energy consumption of

the circle. Industrial consumption in the circle is around 46%, mainly to the HT industrial consumers. Commercial category contributes around 11% of the total energy sales in the circle. Other consumer categories such as public water works, street lighting contributed about 4% of the total energy consumption of the circle. Exhibit 6 shows the consumer profile and sales mix of Erode circle.

Exhibit 6: Consumer and sales mix of Erode in FY 2011-12

Consumer type	Consumer mix	Sales mix (%)
Others	5.16%	4.42%
Agriculture	1.92%	17.80%
Industrial	4.41%	46.15%
Commercial	13.07%	10.76%
Domestic	75.4%	20.87%

Source: TANGEDCO

3.1.3 Tuticorin

Tuticorin circle is one of the four circles in the Tirunelveli zone of TANGEDCO. The circle is divided into four divisions Tuticorin Urban, Tuticorin Rural, Kovilpatti and Tiruchender and further segregated into 17 nos. of sub-divisions.

The circle has a total of 32 nos. of sub-stations comprising 14 nos. of 110/33/22/11 kV sub-stations, 3 nos. of 66/11 kV sub-stations and 33/11 kV sub-stations. Total number of feeders in the circle is 137 consist of 12 nos. of 33 kV feeder, 27 nos. of 22 kV feeder and 91 nos. of 11 kV feeders. In addition to that the circle has 4 nos. of 110 kV and 3 nos. of 66 kV feeder connecting the grid of the distribution system.

The circle distributes energy to 0.56 million consumers. Total energy sales of the circle were 1038.83 MU in FY 2011-12. Domestic and agriculture consumption jointly

contributed more than 44% of the total energy sales of the circle. Industrial category contributed about 37% of the total energy billed in the circle. Commercial category contributed nearly 11% of the total sales of the circle. Energy billed to other consumer categories such as street lighting, public water works had 7% share on the total energy sales of the circle. Consumer profile and sales mix of the circle is depicted in the Exhibit 7 :

Exhibit 7: Consumer and sales mix of Tuticorin in FY 2011-12

Consumer type	Consumer mix	Sales mix (%)
Others	3.95%	7.21%
Agriculture	0.77%	7.07%
Industrial	5.66%	37.21%
Commercial	11.47%	11.42%
Domestic	78.16%	37.10%

Source: TANGEDCO

3.1.4 Madurai

Madurai circle is one of the six circles in the Madurai zone of TANGEDCO. The circle is divided into four divisions: Madurai EDC East, Tirumangalam, Samayanallur and Usilampatty.

The circle has 29 nos. of 110/33/11 kV sub-station and 13 nos. of 33/11 kV sub-stations. A total of 228 nos. of 33 kV and 11 kV feeders supply energy to the consumers in the circle.

Total number of consumers in the circle is around 0.44 million. Total energy sales in the circle was 827.29 MU in FY 2011-12. Domestic and agriculture sales contributed more than 41% of the total energy sales of the circle. Energy sales to the industrial

consumers constituted 43% of the total energy billed in the circle. Energy billed to the commercial category was around 12% and other consumer categories such as water works, railway traction street lighting had 4% share of the total energy sales of the circle.

Exhibit 8 shows the consumer profile and energy sales mix of Madurai circle.

Exhibit 8: Consumer and sales mix of Madurai in FY 2011-12

Consumer type	Consumer mix	Sales mix (%)
Others	2.33%	4.09%
Agriculture	1.24%	13.48%
Industrial	10.79%	42.97%
Commercial	9.53%	12.23%
Domestic	76.10%	27.24%

Source: TANGEDCO

3.2 AT&C losses of the four representative circles

The AT&C losses reported by the four representative circles in Tamil Nadu are shown below:

Table 11: AT&C losses of four representative circles (Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai
Energy input in the circle (MU) [A]	468.33	441.10	417.75	215.56
Unit billed (MU) [B]	326.98	373.03	374.75	166.49
T&D Losses (%) [C] = $([A]-[B])/[A]$	30.18%	15.43%	10.29%	22.76%
Revenue Billed (₹ Crore) [D]	136.87	136.60	127.00	59.54
Revenue realized (₹ Crore) [E]	136.04	135.08	120.64	56.66
Collection Efficiency (%) [F]=[E]/[D]	99.39%	98.89%	94.99%	95.17%
AT&C Losses (%) [G] = $([A]-([B]*[F]))/[A]$	30.61%	16.37%	14.79%	26.50%

Source: TANGEDCO

The AT&C losses reported from September to November 2012 in the four representative circles in Tamil Nadu were in the range of 15% to 30%. The T&D losses of the circles were in the range of 10% to 30%.

- Tuticorin circle has the lowest AT&C losses (14.79%) as compared to the other three selected circles. This is due to lower T&D losses of 10.29% and higher collection efficiency of 94.99%.
- Vellore has the highest level of AT&C losses of 30.61% among the four selected circles in Tamil Nadu. The T&D losses in the circle were 30.18% and collection efficiency was 99.39%, highest among the four representative circles in Tamil Nadu.
- AT&C losses in Erode circle was 16.37% (2nd lowest among the four circles). The T&D losses in the circle were 15.43% and collection efficiency was 98.89%, second highest among the four representative circles in Tamil Nadu.
- AT&C losses in Madurai circle were 26.50%. The T&D losses in Madurai circle were 22.76% and collection efficiency was 95.17%.

AT&C losses reflect the inefficiency of the DISCOM to covert high energy input into energy sales. Reduction of AT&C losses is foremost and immediate challenge of the DISCOM that requires a number of interventions both in the technical and commercial areas in the distribution system.

This study has attempted to analyze the root causes for the AT&C losses in the distribution circles as well as the prevalent shortcomings in the distribution system of the DISCOM. The following sub-sections of this chapter highlight the key factors that are closely associated with energy losses in the circle.

3.3 Distribution system of the four representative circles in Tamil Nadu

The distribution system in the circle starts from the 110 kV sub-stations. The 110 kV sub-stations generally supply energy to the connected 33 kV sub-stations. The HT industrial connections are provided directly through the 33 kV/22 kV/11 kV feeders. There are three types of feeders that supply electricity to the consumers in the circles:

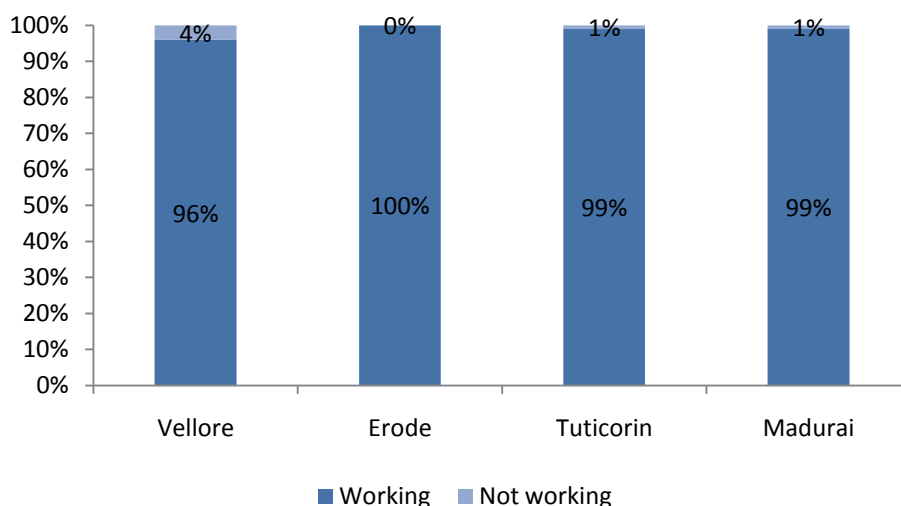
- **Urban feeders:** Serves mixed load i.e. Domestic and commercial consumers in the urban areas.
- **Rural feeders:** Serves mixed load - domestic, commercial and agriculture consumers in the rural areas.
- **Industrial feeders:** Dedicated/independent feeders supply energy to the industrial and commercial consumers from the 110 kV and 33kV sub-stations.

3.4 Metering status in the circle

Meters in the 33 kV System

Metering status in the sub-stations of the four circles in Tamil Nadu is comparatively better as compared to Uttar Pradesh and Rajasthan. In fact, in Erode circle all the HT meters were found in working condition. In other three circles, the percentage of deficient meters installed found in the sub-stations is also low i.e. (1%-4%). The metering status found in the 33 kV system is presented in the Exhibit 9.

Exhibit 9: Percentage of working and non-working meters in the 33 kV System



Source: Field Study

Few examples of defective meters found in the 33 kV is shown in the following Exhibit.

Exhibit 10: Defective meters found in distribution sub-stations in the circles in Tamil Nadu



Defective meter at FI Smith S/S in Vellore Circle



Defective meter in Erode Urban division in Erode circle

Main reason for the defective meters in the circle is on account of damaged display of the feeder meters.

Metering status at the DT level

At the start of the LT survey very few DTs meter were installed in the DTs. The following Exhibit shows the pictures of few un-metered DTs in the Vellore circle.

Exhibit 11: Defective meters found in the DTs



No. meter installed in the DT located in the ARCOT division of Vellore



Defective DT meter installed in Samayanallur division in Madurai

On the request of the consultant, TANGEDCO has installed meters on the DTs in following locations in the four represented circles.

Table 12: List of the locations, where the DT meters were installed by TANGEDCO

Sl. No.	Circle	Locations
1	Vellore	Kannikoil Street, Tajpura, Arcot
2		Thirunavukarasu Street, Thoppukana, Arcot
3		Arni Road, Arcot
4		West Thoppukana, Arcot
5		Kanagasabapathy Street, Thoppukana, Arcot
6	Tuticorin	EB Colony
7		Elumalayan Nagar
8		Pandarampatti
9		Thangamani Nagar
10		Thangammal Puram

Sl. No.	Circle	Locations
11	Erode	Ammor Road
12		Srinivasanpet
13		Manthangal Mottur
14	Madurai	Anaiyur
15		Kirshnapuram Colony
16		Ramalinga Nagar
17		Kosakulam

3.5 Exiting Commercial practice

3.5.1 Type of connections

There are three types connections provided to various categories of consumers:

- **Metered consumers:** Consumers with metered connections are billed on the basis of meter read. The domestic, commercial, industrial and other categories such as public water works, street lighting and railway tractions metered consumers in Tamil Nadu.
- **Un-metered consumers:** Kutir Jyoti (BPL) and agriculture consumers fall under this type of connection. The Kutir Jyoti consumers are charged as per the rate fixed by the Tamil Nadu State Electricity Regulatory Commission (TNSERC). The agriculture consumers are billed based on the actual sanctioned load (kW) or the pump set rating (HP) sanctioned . Billing for this type of consumers has been done on the basis of connected load of the consumers.
- **Free and subsidized consumers:** Agriculture category is fully subsidized by the State Government. In addition, Kutir Jyoti and lower slabs of the domestic consumers also received subsidy from the government.

3.5.2 Supply to agriculture consumers

Supply to the agriculture consumers varies from circle to circle. In Vellore circle, the agriculture consumers get supply for 6-8 hours, depending on the availability of

power. It is found during our field study that at present supply to the agriculture consumer in Madurai, Erode and Tuticorin circles is for 3 hours due to power crisis.

3.5.3 Meter reading and billing

The meter reading and billing is handled by the TANGEDCO in all the circles. The department has not yet opted for outsourcing of meter reading and billing as done by the other DISCOMs in India.

3.5.4 Methods of collection of revenue from the consumers

Besides the collection points the TANGEDCO has introduced several methods for collection of revenue from the consumers:

- On-line payment through internet banking/mobile phones
- Payment through post office counters
- Payment through the commercial banks
- Any Time Machine (ATM) - At present installed in the selected locations of Coimbatore and Erode zones.

4. Chapter 4: Component wise AT&C losses in the four circles in Tamil Nadu

Following sub-sections of this chapter highlight the assessment of component wise AT&C losses in the four representative circles in the State of Tamil Nadu from September to November 2012 i.e. when the field studies was conducted in the four circles.

4.1 Vellore Electricity Distribution Circle

4.1.1 AT&C losses in Vellore circle

Table 13 shows the overall estimated AT&C losses of Vellore circle.

Table 13: Estimated AT&C losses of Vellore from Sept. to Nov. 2012

Particulars	MU	In percentage
Energy input in the circle (MU) [A]	468.33	
Energy billed (MU) [B]	326.98	
T&D Losses (MU) [C] = [A]- [B]	141.35	
T&D Losses (%) [D] = ([A]-[B])/[A]	---	30.18%
Revenue Billed (₹ Crore) [E]	136.87	
Revenue realized (₹ Crore) [F]	136.04	
Collection Efficiency (%) [G]=[F]/[E]	---	99.39%
AT&C Losses (MU) [H] = [A]-([B]*[G])	143.33	
AT&C Losses (%) [I] = ([A]-([B]*[G]))/[A]	---	30.61%

Source: TANGEDCO, Field studies

Following are the highlights of the AT&C losses of the Vellore circle from September to November 2012:

- The actual energy input during the study period was 468.33 MU. Against that the circle has billed 326.98 MU, which led to T&D losses of 141.35 MU i.e. 30.18%.
- Against the energy billed, the circle has billed ₹ 136.87 Crore and realized ₹ 136.04 Crore. Hence, the collection efficiency of the circle was 99.39%.

- Based on the above, the AT&C losses of the circle have been computed at 30.61% i.e. AT&C losses of 143.33 MU against the energy input of 468.33MU.

4.1.2 Technical loss in Vellore circle

The component wise technical loss i.e. the technical loss from the 110 kV to 11 kV (HT) and below 11 kV (LT) in the Vellore circle are presented in the Table 14.

Table 14: Component wise technical loss in Vellore (Sept. to Nov. 2012)

Particulars	MU	Components of technical loss (%)
HT loss from 110 kV to 11 kV [A]	14.89	3.18%
Technical loss below 11 kV [B]	51.76	11.05%
Total technical loss [C]=[A]+[B]	66.65	
Energy input in the circle [D]	468.33	
Percentage of technical loss in terms of energy input in the circle (%) [E] = [C]/[D]		14.23%

Source: Field studies

As seen in Table 14, the total technical loss in Vellore circle was 69.38 MU i.e. 14.33% of the total energy input (448.33 MU) in the circle. The technical loss in the HT and LT systems account for 3.18% (a sample computation of the same is shown in Table 15 and Table 16) and 11.05% (a sample computation is shown in Table 17) with respect to the energy input in the circle. Detail computation of the technical loss HT and LT systems (for all the four circles) is enclosed as Annexure III and Annexure IV in Volume - II of this report.

Table 15: Sample calculation of technical loss in the HT system in Vellore circle

110kV GSS	Consump.	11 kV Feeder	Consump.
1	2	3	4
MV Puram 110kV	11952000 ¹³	Jambukulam	755600

¹³ Consumption has been calculated by considering the difference between two readings multiplied by the Multiplying Factor of the meter. Survey from a particular injection point upto the 11 kV feeders completed on a single day

110kV GSS	Consump.	11 kV Feeder	Consump.
1	2	3	4
		Marudallam	2948000
		Thalangai	3716000
		Mill	4288000
		Total	11707600
Technical loss	$= (2-4)/2$		2.04%

Source: Field studies

Energy input in the circle computed during the study period and energy sent out from the 11 kV feeders is shown in Table 16. The technical loss in the HT system is computed at 3.18%.

Table 16: Technical loss in the HT system in Vellore circle (Sept. to Nov. 2012)

Particulars	MU
Energy input as recorded during the field study (MU)	30.76
Sent energy at 11 kV as recorded during the field study (MU)	29.79
Energy loss (MU)	0.98
Technical loss in the HT system = (3/1) (%)	3.18%

Source: Field studies

The computation of technical loss in the LT system and extrapolating the same on Vellore circle is presented in Table 17.

Table 17: Computation of LT line loss and extrapolating the same in Vellore circle (Period Sept. to Nov. 2012)

Consumer category	Energy sent from the DTs ¹⁴	Energy consumption at consumer end	Line loss	Energy consumption in the circle during the study period (MU)	Energy required to sale energy to the consumers from 11 kV (MU)	LT line loss
[A]	[B]	[C]	$[D] = ([B] - [C])/[B]$	[E]	$[F] = [E]/(1-[D])$	$[G] = [F] - [E]$
Domestic and other consumers	2024.40	1632.60	19.35%	206.17	256.68	50.50

¹⁴ Energy sent and energy consumption data is based on the sample LT study. As mentioned in chapter 2, LT study for a particular DT had been carried out in a single day.

Consumer category	Energy sent from the DTs ¹⁴	Energy consumption at consumer end	Line loss	Energy consumption in the circle during the study period (MU)	Energy required to sale energy to the consumers from 11 kV (MU)	LT line loss
[A]	[B]	[C]	$[D] = ([B] - [C])/[B]$	[E]	$[F] = [E]/(1-[D])$	$[G] = [F] - [E]$
Commercial	73.60	69.00	6.25%	42.19	47.07	1.18
LT industrial	585.60	575.20	1.78%	3.80	3.88	0.08
Total [A]						51.76
Energy input in the circle [B]						468.33
Technical loss in the LT system [C] = [A]/[B]						11.05%

Source: Field studies

4.1.3 Commercial loss in Vellore circle

The commercial loss of the circle has been arrived at by deducting the total technical loss (HT and LT) from the AT&C losses of the circle. The estimated commercial loss of Vellore is computed below:

Table 18: Commercial loss of Vellore circle (Sept. to Nov. 2012)

Particulars	MU	In percentage
AT&C losses (MU) [A]	143.33	30.61%
Technical loss (MU) [B]	66.65	14.23%
Commercial loss (MU) [C] = [A] - [B]	76.68	
Energy input in the circle [D]	468.33	
Commercial loss (%) [E] = [C]/[D]		16.37%

Source: Field studies

The commercial loss of the Vellore circle was 76.68 MU i.e. 16.37% of the energy input in the circle (468.33 MU). Key factors responsible for commercial loss in the circle are discussed below.

4.1.4 Component wise commercial loss in Vellore circle

Loss due to deficient metering

The commercial loss due to deficient metering of the consumers is shown in Table 19 . This type of loss takes place at the time when the meters are defective and not replaced within 15 days as per the “Supply Code” and the consumers are billed on provisional basis over a period of time (1-3 months). Due to provisional billing to these consumers the circle has incurred commercial loss as shown below.

Table 19: Commercial loss due to deficient metering and extrapolating in the circle

Particulars	2 months consumption as per field study (Units)	2 months consumption as per the DISCOM (Units)	% of commercial loss	Energy billed by the DISCOM due to deficient metering (MU)	Energy to be billed as per the field study due to deficient metering (MU)	Commercial loss (MU)	Commercial loss in terms of energy input (%)
1	2 (M1)	3 (M2)	4 (M3=(M1-M2)/M1))	5 (M4)	6 (M5=((M4/(1-M3)))	7 (M6=M5 - M4)	8 (M7 = M6/energy input)
Loss due to deficient metering	7488	6833	9.59%	5.65	6.25	0.60	(0.60/468.33) = 0.13%

Source: Field studies

From the sample LT study in the Vellore circle, the difference between the actual energy consumed by the consumers with defective meters and billed by the circle has been arrived at 9.59% (i.e. percentage of energy loss due to deficient metering). To estimate the commercial loss due to deficient metering, the LT sample study results on deficient metering were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of deficient metering will be 6.25 MU as against 5.65 MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to deficient metering was computed at 0.60 MU, i.e. 0.13% with respect to the total energy input in the circle (468.33 MU).

The formula to extrapolate the commercial loss due to deficient metering is shown below:

(A) Energy consumption recorded in the field studies for the consumers with defective meter - M1

(B) Energy billed by the department to such consumer - M2

(C) Commercial Loss due to deficient metering (%) - $M3 = (M1 - M2) / M1$

(D) Total energy billed by the department to the consumers in the circle with defective meter - M4

(E) Extrapolating the LT survey results on the defective meter billing of the circle - $(M5 = (M4 / (1 - M3)))$

(F) Commercial loss due to deficient metering in the circle - $(M6 = M5 - M4)$

(G) Percentage of commercial loss due to deficient metering in terms of energy input in the circle - $(M7 = M6 / \text{energy input})$

Detailed computation regarding component wise energy loss in all the four circles is enclosed as "Annexure V" in Volume - II of this report.

Loss due to billing inefficiency

Table 20 shows the commercial loss due to billing inefficiency. The actual findings from the sample have been extrapolated on the overall un-metered consumers of the circle.

Table 20: Commercial loss due to billing inefficiency and extrapolating in the circle

Particulars	2 months consumption as per field study (kWh)	2 months consumption as per DISCOM (kWh)	% of commercial loss	Energy billed by the DISCOM (MU)	Energy billed as per the field study (MU)	Commercial loss (MU)	Commercial loss in terms of energy input (%)
1	2 (B1)	3 (B2)	4 (B3 = (B1-B2)/B1))	5 (B4)	6 (B5=B4/ (1-B3))	7 (B6=B5 - B4)	8 (B7=B6 /energy input)
Loss due to billing inefficiency	13170	12270	6.83%	12.16	13.06	0.89	(0.89/468.33) = 0.19%

Source: Field studies

From the sample LT study in the Vellore circle, the difference between the actual energy consumed by the consumers and billed by the circle to such consumers had been arrived at 6.83%. To estimate the commercial loss due to billing inefficiency, the LT sample study results on billing inefficiency were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of billing inefficiency would be 13.06 MU as against 12.16 MU billed by the DISCOM. Therefore, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to billing inefficiency was computed at 0.89 MU i.e. 0.19% with respect to the total energy input in the circle (468.33 MU).

The formula to extrapolate the Commercial loss due to billing inefficiency is shown below:

(A) Energy consumption recorded in the field studies for the consumers billed on provisional basis- B1

(B) Energy billed by the department to such consumer - B2

(C) Commercial Loss due to billing inefficiency (%) - B3 = (B1-B2)/B1

(D) Energy billed by the DISCOM to the consumers in the circle - B4

(E) Extrapolating the energy billed as per the field study due to billing inefficiency in the circle - $(B5=B4/(1-B3))$

(F) Commercial loss due to billing inefficiency in the circle - $(B6=B5 - B4)$

(G) Percentage of commercial loss due to billing inefficiency in terms of energy input in the circle - $(B7=B6 / \text{energy input})$

Detailed computation regarding component wise energy loss in all the four circles is enclosed as "Annexure V" in Volume- II of this report.

Commercial Loss due to under-disclosed load by the agriculture consumers

From the agriculture study it was found that a number of consumers were using higher rating pump set vis-à-vis the load sanctioned by the DISCOM. Due to usage of higher rating pump sets the actual consumption is higher than that of computed by the DISCOM. As a result, the DISCOM is incurring commercial loss on account of under-disclosure of agriculture load by the consumers.

The commercial loss due to the factors highlighted above is presented in the following Table:

Table 21: Commercial loss due to under-disclosed load by the agriculture consumers (Sept. to Nov. 2012)

Particulars	Consumption as per field study (MU)	2 months consumption as per DISCOM (MU)	Commercial loss (MU)	Commercial loss in terms of energy input (%)
1	2 (B1)	3 (B2)	4 (B3 = (B1-B2))	8 (B4=B3 /energy input)
Loss due to under-disclosed agriculture load	122.41	88.48	33.93	$(33.93/468.33) = 7.25\%$

Source: Field studies

After extrapolating the agriculture study result on the circle, it was found that actual energy consumed by the agriculture consumers in the circles would be 122.41 MU

against 88.48 MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to under-disclosed agriculture load was 33.93 MU, i.e. 7.25% with respect to the total energy input in the circle (468.33 MU).

Detailed computation regarding component wise energy loss in all the four circles is enclosed in Volume- II of this report.

Loss due to collection inefficiency

Total unit billed and unit realized and losses due to collection inefficiency of the circle are presented in the following table.

Table 22: Commercial loss due to collection inefficiency in Vellore circle (Sept. to Nov. 2012)

Particulars	MU
Units billed (MU) [A]	326.98
Units realized (MU) [B]	325.00
Unit lost (MU) [C] = [A] - [B]	1.98
Energy input in the circle (MU) [D]	468.33
Percentage of energy loss due to collection inefficiency (%) [E] = [C]/[D]	0.42%

Source: Field studies

The above Table shows that the department has billed around 326.98 MU and realized 325.00 MU due to non-recovery of payment from the consumers. Hence, the energy loss incurred by the department due to collection inefficiency was 1.98 MU, i.e. 0.42% in terms of total energy input in the circle (468.33 MU).

Commercial Loss due to theft/pilferage of energy

Table 23 shows that 39.27 MU of energy i.e. 8.39% of the total energy input of the circle.

Table 23: Commercial loss due to theft/pilferage of energy in Vellore circle

Particulars	MU	In percentage
Total commercial loss (MU) [A]	76.68	16.37%
Losses on account of efficient metering, billing inefficiency, under-disclosed load by the agriculture consumers and collection inefficiency (MU) [B]	37.41	7.99%
Energy loss due to theft/pilferage (MU) [C] = [A] - [B]	39.27	
Energy input in the circle (MU) [D]	468.33	
Percentage of energy loss due to theft/pilferage (%) [E] = [C]/[D]		8.39%

Source: Field studies

Total commercial loss in the circle was 76.68 MU. Commercial loss on account of efficient metering, under-disclosed load by the agriculture consumers, billing and collection inefficiency comes to 37.41 MU. According to the formula prescribed in the FoR Report, the commercial loss due to theft and pilferage of energy in Vellore circle was computed at 39.27 MU, i.e. 8.39% in terms of total energy input in the circle (468.33 MU).

4.2 Erode Distribution Circle

4.2.1 AT&C losses of Erode circle from September to November 2012

The estimated AT&C losses of Erode circle is presented in the following Table.

Table 24: Estimated AT&C losses of Erode circle (Sept. to Nov. 2012)

Particulars	MU	In percentage
Energy input in the circle (MU) [A]	441.10	
Unit billed (MU) [B]	373.03	
T&D Losses (MU) [C] = [A]- [B]	68.07	
T&D Losses (%) [D] = ([A]-[B])/[A]	--	15.43%
Revenue Billed (₹ Crore) [E]	136.60	
Revenue realized (₹ Crore) [F]	135.08	
Collection Efficiency (%) [G]=[F]/[E]	--	98.89%
AT&C Losses (MU) [H] = [A]-([B]*[G])	72.22	
AT&C Losses (%) [I] = ([A]-([B]*[G]))/[A]	--	16.37%

Source: TANGEDCO, Field studies

Following are the highlights of the AT&C losses of the Erode circle from September to November 2012:

- The actual energy input during the study period was 441.10 MU. Against that the circle has billed 373.03 MU, which led to T&D losses of 68.07 MU i.e. 15.43%.
- Against the energy billed, the circle has billed ₹ 136.60 Crore and realized ₹ 135.08 Crore. Hence, the collection efficiency of the circle was 98.89%.
- Based on the above, the AT&C losses of the circle have been computed at 16.37% i.e. energy loss of 72.22 MU against the energy input of 441.10 MU.

4.2.2 Technical loss in Erode circle

Detailed computation of component wise technical loss in Erode circle is shown in the Table below.

Table 25: Component wise technical loss in Erode (Sept. to Nov. 2012)

Particulars	MU	Components of technical loss (%)
HT loss in the circle [A]	20.37	4.62%
LT loss in the circle [B]	36.53	8.28%
Total technical loss [C]=[A]+[B]	56.90	
Energy input in the circle [D]	441.10	
Percentage of technical loss in terms of energy input in the circle (%) [E] = [C]/[D]	--	12.90%

Source: TANGEDCO, Field studies

As seen in Table 25, the total technical loss in Erode circle was 56.90 MU, which is 12.90% of the energy input (20.37 MU) in the circle. The HT and LT technical loss account for 4.62% and 8.28% respectively.

4.2.3 Commercial loss of Erode

Estimated commercial loss of Erode circle from September to November 2012 is presented in the following Table:

Table 26: Commercial losses of Erode circle (Sept. - Nov. 2012)

Particulars	MU	In percentage
AT&C losses (MU) [A]	72.22	16.37%
Technical loss (MU) [B]	56.90	12.90%
Commercial loss (MU) [C] = [A] - [B]	15.32	
Energy input in the circle [D]	441.10	
Commercial loss (%) [E] = [C]/[D]	--	3.47%

Source: Field studies

As depicted in the Table above commercial loss of Erode circle was 3.47%. Component wise analysis of commercial loss in Erode circle is discussed in the next section.

4.2.4 Component wise commercial loss in Erode circle

Loss due to deficient metering

As shown in the Table below, 2.29 MU i.e. 0.52% of the total energy has been lost due to deficient metering in Erode circle.

Table 27: Commercial loss due to deficient metering in Erode circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to provisional billing to the consumers (MU)	Energy loss with respect to energy billed by the DISCOM (%)
Commercial loss due to deficient metering in Erode [A]	16.72	14.44	2.29	13.68%
Percentage of energy loss due to deficient metering (%) [B] = Commercial loss due to deficient metering /Energy input in the circle	(2.29/ 441.10) = 0.52%			

Source: Field studies

From the sample LT study in the Erode circle, the difference between the actual energy consumed by the consumers with defective meters and billed by the circle on provisional billing has been arrived at 13.68% (i.e. percentage of energy loss due to deficient metering). To estimate the commercial loss due to deficient metering, the LT sample study results on deficient metering were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of deficient metering will be 16.72 MU as against 14.44 MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to deficient metering was

computed at 2.29 MU, i.e. 0.52% with respect to the total energy input in the circle (441.10 MU).

Loss due to billing inefficiency

Table 27 shows the commercial loss due to billing inefficiency in the Erode circle.

Table 28: Commercial loss due to billing inefficiency in Erode circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Commercial loss due to billing inefficiency in Erode[A]	12.48	11.19	1.29	10.35%
Percentage of energy loss due to billing inefficiency (%) [B] = Energy loss due to billing inefficiency/ Energy input in the circle	$(1.29 / 441.10) = 0.29\%$			

Source: Field studies

From the sample LT study in the Erode circle, the difference between the actual energy consumed by the consumers and billed by the circle to such consumers on provisional basis has been arrived at 10.35%. The LT sample study results on billing inefficiency were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of billing inefficiency will be 12.48 MU as against 11.19 MU billed by the DISCOM. Therefore, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to billing inefficiency was computed at 1.29 MU i.e. 0.29% with respect to the total energy input in the circle (441.10 MU).

Detailed computation of component wise energy loss in all the four circles is enclosed in Volume – II of this report.

Commercial Loss due to under-disclosed load by the agriculture consumers

The commercial loss due to under-disclosed agriculture load is presented in the following Table:

Table 29: Commercial loss due to under-disclosed load in agriculture in Erode (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Loss due to under-disclosed agriculture load	55.49	48.49	7.00	$(7.00/441.10) = 1.59\%$

Source: Field studies

After extrapolating the agriculture study result on the circle, it was found that actual energy consumed by the agriculture consumers in the circles would be 55.49 MU against 48.49 MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to under-disclosed agriculture load was 7.00 MU, i.e. 1.59% with respect to the total energy input in the circle (441.10 MU).

Loss due to collection inefficiency

Total unit billed and unit realized and losses due to collection inefficiency of the circle are presented in the following Table.

Table 30: Commercial loss due to collection inefficiency in Erode circle (Sept. to Nov. 2012)

Particulars	MU
Units billed [A]	373.03
Units realized [B]	368.88
Unit lost (MU) [C] = [A] - [B]	4.15
Energy input in the circle (MU) [D]	441.10
Percentage of energy loss due to collection inefficiency (%) [E] = [C]/[D]	0.94%

Source: Field studies

The above table shows that the department has billed 373.03MU and against that realized 368.88 MU due to non-recovery of bills from the consumers. Hence, the energy loss incurred by the department due to collection inefficiency was 4.15 MU, 0.94% of the energy input in the circle.

Commercial Loss due to theft/pilferage of energy

Table 31 shows the energy loss due to due to theft/pilferage of energy with respect to the total energy input in Erode.

Table 31: Commercial loss due to theft/pilferage of energy in Erode circle (Sept. to Nov. 2012)

Particulars	In (MU)	In percentage
Total commercial loss (MU) [A]	15.32	3.47%
Losses on account of efficient metering, billing inefficiency, under-disclosed load by the agriculture consumers and collection inefficiency (MU) [B]	14.73	3.34%
Energy loss due to theft/pilferage (MU) [C] = [A] - [B]	0.60	
Energy input in the circle (MU) [D]	441.10	
Percentage of energy loss due to theft/pilferage (%) [E] = [C]/[D]	--	0.14%

Source: Field studies

As shown above, total commercial loss in the circle was 15.32 MU. Commercial loss on account of deficient metering, under-disclosed agriculture load, billing and collection inefficiency comes to 14.73 MU. Hence, the commercial loss due to theft and pilferage of energy in Erode circle was 0.60 MU i.e. 0.14% of the total energy input in the circle.

4.3 Tuticorin Distribution circle

4.3.1 AT&C losses of Tuticorin circle from September to November 2012

The following Table shows the estimated AT&C losses of Tuticorin circle from September to November 2012.

Table 32: Estimated AT&C losses of Tuticorin circle (Sept. to Nov. 2012)

Particulars	MU	In percentage
Energy input in the circle (MU) [A]	417.75	
Unit billed (MU) [B]	374.75	
T&D Losses (MU) [C] = [A]- [B]	43.00	
T&D Losses (%) [D] = $([A]-[B])/[A]$	---	10.29%
Revenue Billed (₹ Crore) [E]	127.00	
Revenue realized (₹ Crore) [F]	120.64	
Collection Efficiency (%) [G]=[F]/[E]	---	94.99%
AT&C Losses (MU) [H] = [A]-([B]*[G])	61.76	
AT&C Losses (%) [I] = $([A]-([B]*[G]))/[A]$	---	14.79%

Source: TANGEDCO, Field studies

As shown in Table 32:

- The actual energy input in the circle during the study period was 417.75 MU. Against that the circle has billed 374.75 MU, which led to T&D losses of 43 MU i.e. 10.29%.
- Against the energy billedbilled, the circle has billed ₹ 127 Crore and realized ₹ 120.64 Crore. Hence, the collection efficiency of the circle was 94.99%.
- Based on the above, the AT&C losses of the circle have been computed at 14.79% i.e. energy loss of 61.76 MU against the energy input of 417.75 MU.

4.3.2 Technical loss of Tuticorin

The component wise technical loss in Tuticorin circle from September to November 2012 is shown in the following Table.

Table 33: Component wise technical losses in Tuticorin circle (Sept. to Nov. 2012)

Particulars	MU	Component wise technical loss (%)
HT loss from 132 kV to 11 kV [A]	14.63	3.50%
Technical loss below 11 kV [B]	19.84	4.75%
Total technical loss [C]=[A]+[B]	34.48	
Energy input in the circle [D]	417.75	
Percentage of technical loss in terms of energy input in the circle (%) [E] = [C]/[D]	---	8.25%

Source: TANGEDCO, Field studies

As seen in Table 34, the total technical loss in Tuticorin circle was 34.48 MU, which is 8.25% of the total energy input (417.75 MU) in the circle. The HT and LT technical loss account for 3.50% and 4.75% with respect to the total energy input in the circle.

4.3.3 Commercial loss of Tuticorin circle

The total commercial loss of the circle has been arrived at by deducting the technical loss of the circle from the total AT&C losses of the circle. The estimated commercial loss of Tuticorin circle is computed below:

Table 34: Commercial losses of Tuticorin circle (Sept. to Nov. 2012)

Particulars	MU	Loss (%)
AT&C losses (MU) [A]	61.76	14.79%
Technical loss (MU) [B]	34.48	8.25%
Commercial loss (MU) [C] = [A] - [B]	27.29	
Energy input in the circle [D]	417.75	
Commercial loss (%) [E] = [C]/[D]	---	6.53%

Source: Field studies

It can be seen that the commercial loss in the Tuticorin circle was 5.53%. The component wise analysis of the commercial loss has been discussed in the following section.

4.3.4 Component wise commercial loss in Tuticorin

Loss due to deficient metering

Commercial loss due to deficient metering in Tuticorin circle from September to November 2012 is shown in the following table.

Table 35: Commercial loss due to deficient metering in Tuticorin circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to provisional billing to the metered consumers (MU)	Energy loss with respect to energy billed by the DISCOM (%)
Commercial loss due to deficient metering in Tuticorin [A]	22.84	20.85	1.99	8.72%
Percentage of energy loss due to deficient metering (%) [B] = Commercial loss due to deficient metering / Energy input in the circle	(1.99/417.75) = 0.48%			

Source: Field studies

From the sample LT study in Tuticorin circle, the difference between the actual energy consumed by the consumers with defective meters and billed by the circle on provisional billing has been arrived at 8.72% (i.e. percentage of energy loss due to deficient metering). To estimate the commercial loss due to deficient metering, the LT sample study results on deficient metering were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of deficient metering will be 22.84 MU as against 20.85 MU billed by the DISCOM. Hence, the commercial loss (as the difference between

the LT study result and billed by the DISCOM) due to deficient metering was computed at 1.99 MU, i.e. 0.48% with the energy input (417.75 MU) in the circle.

Loss due to billing inefficiency

Table 36 shows the commercial loss due to billing inefficiency in Tuticorin circle from September to November 2012.

Table 36: Commercial loss due to billing inefficiency in Tuticorin circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Commercial loss due to billing inefficiency in Tuticorin [A]	12.73	11.24	1.48	11.66%
Percentage of energy loss due to billing inefficiency [B] (%) = Energy loss due to billing inefficiency/ Energy input in the circle	$(1.48/417.75) = 0.36\%$			

Source: Field studies

From the sample LT study in Tuticorin circle, the difference between the actual energy consumed by the consumers and billed by the circle to such consumers on provisional basis has been arrived at 11.66%. To estimate the commercial loss due to billing inefficiency, the LT sample study results on billing inefficiency were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of billing inefficiency will be 12.73 MU as against 11.24 MU billed by the DISCOM. Therefore, the

commercial loss (as the difference between the LT study result and billed by the DISCOM) due to billing inefficiency was computed at 1.48 MU i.e. 0.36% with respect to the total energy input in the circle (417.75 MU).

Commercial Loss due to under-disclosed load by the agriculture consumers

The commercial loss due to under-disclosed agriculture load is presented in the following Table:

Table 37: Commercial loss due to under-disclosed load in agriculture in Tuticorin (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Loss due to under-disclosed agriculture load	30.86	26.23	4.63	$(4.63 / 417.75) = 1.11\%$

Source: Field studies

After extrapolating the agriculture study result on the circle, it was found that actual energy consumed by the agriculture consumers in the circles would be 30.86 MU against 26.23 MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to under-disclosed agriculture load was 4.63 MU, i.e. 1.11% with respect to the total energy input in the circle (417.75 MU).

Loss due to collection inefficiency

Total unit billed and unit realized and the commercial loss due to collection inefficiency of the circle is presented in the following table.

Table 38: Commercial loss due to collection inefficiency in Tuticorin circle (Sept. to Nov. 2012)

Particulars	MU
Units billed (MU) [A]	374.75
Units realized (MU) [B]	355.98
Unit lost (MU) [C] = [A] - [B]	18.77
Energy input in the circle (MU) [D]	417.75
Percentage of energy loss due to collection inefficiency (%) [E] = [C]/[D]	4.49%

Source: Field studies

The above Table shows that the department has billed around 374.75 MU and against that realized 355.98 MU due to non-recovery of bills from the consumers. Hence, the energy loss incurred by the department due to collection inefficiency was 18.77 MU, around 4.49% of the total energy input (417.75 MU) in the circle.

Loss due to theft/pilferage of energy

Table 39 shows energy loss in Tuticorin circle from September to November 2012.

Table 39: Commercial loss due to theft/pilferage of energy in Tuticorin circle (Sept. to Nov. 2012)

Particulars	In (MU)	In percentage
Total commercial loss (MU) [A]	27.29	6.53%
Losses on account of efficient metering, billing inefficiency, under-disclosed load by the agriculture consumers and collection inefficiency (MU) [B]	26.87	6.43%
Energy loss due to theft/pilferage (MU) [C] = [A] - [B]	0.42	
Energy input in the circle (MU) [D]	417.75	
Percentage of energy loss due to theft/pilferage (%) [E] = [C]/[D]	---	0.10%

Source: Field studies

As shown above, total commercial loss in the circle was 27.29 MU. Commercial loss on account of efficient metering, under-disclosed agriculture load, billing and collection inefficiency comes to 26.87 MU. Therefore, the commercial loss due to theft and pilferage of energy in Tuticorin circle was computed at 0.42 MU i.e. 0.10% of the total energy input in the circle (417.75 MU).

4.4 Madurai Electricity Distribution circle

4.4.1 AT&C losses of Madurai circle from September to November 2012

The following table shows the estimated AT&C losses Madurai circle from September to November 2012.

Table 40: Estimated AT&C losses of Madurai circle (Sept. to Nov. 2012)

Particulars	MU	In percentage
Energy input in the circle (MU) [A]	215.56	
Unit billed (MU) [B]	166.49	
T&D Losses (MU) [C] = [A]- [B]	49.07	
T&D Losses (%) [D] = $([A]-[B])/[A]$	---	22.76%
Revenue Billed (₹ Crore) [E]	59.54	
Revenue realized (₹ Crore) [F]	56.66	
Collection Efficiency (%) [G]=[F]/[E]	---	95.17%
AT&C Losses (MU) [H] = $[A]-([B]*[G])$	57.11	
AT&C Losses (%) [I] = $([A]-([B]*[G]))/[A]$	---	26.50%

Source: TANGEDCO, Field studies

It can be seen from Table 40:

- The actual energy input in the circle during the study period was 215.56 MU. Against that the circle has billed 166.49 MU, which led to T&D losses of 49.07 MU i.e. 22.76%.
- Against the energy billed, the circle has billed ₹ 59.54 Crore and realized ₹ 56.66 Crore. Hence, the collection efficiency of the circle was 95.17%.
- Based on the above, the AT&C losses of the circle have been computed at 26.50% i.e. energy loss of 57.11 MU against the energy input of 215.56 MU.

4.4.2 Technical loss of Madurai

The component wise technical loss in the Madurai circle is shown in the following Table.

Table 41: Component wise technical losses in Madurai circle (Sept. to Nov. 2012)

Particulars	MU	Component wise technical loss (%)
Technical loss in HT system [A]	7.42	3.44%
Technical loss in HT system [B]	24.59	11.41%
Total technical loss [C]=[A]+[B]	32.02	
Energy input in the circle [D]	215.56	
Percentage of technical loss in terms of energy input in the circle (%) [E] = [C]/[D]	---	14.85%

Source: TANGEDCO, Field studies

As seen in Table 40, the total technical loss in Madurai circle was 32.02 MU, which is 14.85 % of the total energy input (215.56 MU) in the circle. The HT and LT technical loss account for 3.44% and 11.41% with respect to the total energy input in the circle.

4.4.3 Commercial loss of Madurai circle

The estimated commercial loss in the Madurai circle from September to November 2012 is presented below:

Table 42: Commercial loss of Madurai circle (Sept. to Nov. 2012)

Particulars	MU	Loss (%)
AT&C losses (MU) [A]	57.11	26.50%
Technical loss (MU) [B]	32.02	14.85%
Commercial loss (MU) [C] = [A] - [B]	25.10	
Energy input in the circle [D]	215.56	
Commercial loss (%) [E] = [C]/[D]	---	11.64%

Source: Field studies

It can be seen that the commercial loss in Madurai circle was 11.64%. Component wise analysis of the same is described in the following section.

4.4.4 Component wise commercial loss in Madurai circle

Loss due to deficient metering

The commercial loss due to deficient metering of the consumers in Madurai circle is shown in the following table.

Table 43: Commercial loss due to deficient metering in Madurai circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to provisional billing to the metered consumers (MU)	Energy loss with respect to energy billed by the DISCOM (%)
Commercial loss due to deficient metering in Madurai [A]	7.59	6.66	0.93	12.22%
Percentage of energy loss due to deficient metering (%) [B] = Commercial loss due to deficient metering / Energy input in the circle	$(0.93/215.56) = 0.43\%$			

Source: Field studies

From the sample LT study in the Madurai circle, the difference between the actual energy consumed by the consumers with defective meters and billed by the circle on provisional billing has been arrived at 12.22% (i.e. percentage of energy loss due to deficient metering). To estimate the commercial loss due to deficient metering, the LT sample study results on deficient metering were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of deficient metering will be as 6.66 MU against 7.59 MU billed by the DISCOM. Hence, the commercial loss (as the difference between

the LT study result and billed by the DISCOM) due to deficient metering was computed at 0.93 MU, i.e. 0.43% with the energy input (215.56MU) in the circle.

Loss due to billing inefficiency

Commercial loss due to billing inefficiency in the circle from September to November 2012 is shown below.

Table 44: Commercial loss due to billing inefficiency in Madurai circle (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Commercial loss due to billing inefficiency in Madurai [A]	27.77	24.82	2.96	10.64%
Percentage of energy loss due to billing inefficiency [B] (%) = Energy loss due to billing inefficiency/ Energy input in the circle	$(2.96/215.56) = 1.37\%$			

Source: Field studies

From the sample LT study in the Madurai circle, the difference between the actual energy consumed by the consumers and billed by the circle to such consumers on provisional basis has been arrived at 10.64%. To estimate the commercial loss due to billing inefficiency, the LT sample study results on billing inefficiency were extrapolated on the circle first and compared the same with the energy billed by the DISCOM to such consumers from September to November 2012. As per the LT sample study, it was estimated that energy billed on account of billing inefficiency will be 27.77 MU as against 24.82 MU billed by the DISCOM. Therefore, the commercial loss (as the difference between the LT study result and billed by the

DISCOM) due to billing inefficiency was computed at 2.96 MU i.e. 1.37% with respect to the total energy input (215.56 MU) in the circle.

Commercial Loss due to under-disclosed load by the agriculture consumers

The commercial loss due to under-disclosed agriculture load in Madurai circle is presented in the following Table:

Table 45: Commercial loss due to under-disclosed load in agriculture in Madurai (Sept. to Nov. 2012)

Particulars	Energy to be billed as per field studies (MU)	Energy billed by the DISCOM (MU)	Energy loss due to billing inefficiency (MU)	Energy loss due to energy billed by the DISCOM (%)
Loss due to under-disclosed agriculture load	28.86	21.64	7.21	$(7.21 / 215.56) = 3.35\%$

Source: Field studies

After extrapolating the agriculture study result on the circle, it was found that actual energy consumed by the agriculture consumers in the circles would be 28.86 MU against 21.64MU billed by the DISCOM. Hence, the commercial loss (as the difference between the LT study result and billed by the DISCOM) due to under-disclosed agriculture load was 7.21 MU, i.e. 3.35 %with respect to the total energy input in the circle (215.56 MU).

Loss due to collection inefficiency

Total unit billed and unit realized and losses due to collection inefficiency of the circle are presented in the following table.

Table 46: Commercial loss due to collection inefficiency in Madurai circle (Sept. to Nov. 2012)

Particulars	MU
Units billed (MU) [A]	166.49
Units realized (MU) [B]	158.44

Particulars	MU
Unit lost (MU) [C] = [A] - [B]	8.05
Energy input in the circle (MU) [D]	215.56
Percentage of energy loss due to collection inefficiency (%) [E] = [C]/[D]	3.73%

Source: Field studies

The above table shows that the department has billed around 166.49 MU and against that realized 158.44 MU due to non-recovery of bills from the consumers. Hence, the energy loss incurred by the department due to collection inefficiency was 8.05 MU, around 3.73% of the total energy input (215.56 MU) in the circle.

Loss due to theft/pilferage of energy

Table 45 shows the commercial loss due to energy theft/pilferage in Madurai from September to November 2012.

Table 47: Commercial loss due to theft/pilferage of energy in Madurai circle (Sept. to Nov. 2012)

Particulars	In (MU)	In percentage
Total commercial loss (MU) [A]	25.10	11.64%
Losses on account of efficient metering, billing inefficiency, under-disclosed load by the agriculture consumers and collection inefficiency (MU) [B]	19.15	8.88%
Energy loss due to theft/pilferage (MU) [C] = [A] - [B]	5.95	
Energy input in the circle (MU) [D]	215.56	
Percentage of energy loss due to theft/pilferage (%) [E] = [C]/[D]	---	2.76%

Source: Field studies

Total commercial loss in the circle was 25.10 MU. Commercial loss on account of efficient metering, under-disclosed agriculture load, billing and collection inefficiency comes to 19.15 MU. Accordingly, the commercial loss due to theft and pilferage of energy in Madurai circle was computed at 5.95 MU i.e. 2.76% of the total energy input in the circle.

4.5 Technical loss in the circles and reasons thereof:

Our findings shows that technical loss in the HT level in all the four representative circles in Tamil Nadu is in the range of 4%. Technical loss in the LT system in two circles i.e. Vellore and Madurai are more than 10%. The reasons these technical losses are highlighted below:

- **Proper maintenance:** Lack of periodic maintenance is one of the key reasons for technical loss in the HT system. Maintenance of the transformers are not been done regularly, which cause break-down of the transformers.

Further, overloading of these transformers is also a major cause of loss of energy.

4.6 Commercial loss in the circles and reasons thereof:

4.6.1 Energy loss due to theft/pilferage

Our AT&C losses analysis of the four circles has shown that a substantial energy is lost due to under-disclosed agriculture load and theft/pilferage as shown below:

1. **Under-disclosed agriculture load:** As mentioned in the previous chapter, the agriculture consumers are billed as per sectioned load maintained by the department in their records. To estimate the amount of energy theft by the agriculture consumers, the study has carried out agriculture consumer study in the four representative circles. The outcome of the agriculture consumer study in the circle is presented in Table 48.

Table 48: Outcome of agriculture study in the four representative circles (Sept. to Nov. 2012)

Circle	Sanctioned load (HP)	Energy cons.- sanctioned load (MU)	Actual load (HP)	Energy cons. - actual load (MU)	Difference (MU) 6=(5-3)	% Difference in billing
1	2	3	4	5	6	7
Vellore	294.00	88.48	419.50	122.41	33.93	27.72%
Erode	653.00	48.49	768.00	55.49	7.00	12.61%
Tuticorin	360.00	11.24	502.00	12.73	1.48	11.66%
Madurai	585.50	21.64	1124.00	28.86	7.21	25.00%
Total	1892.50	169.85	2813.50	219.49	49.62	22.61%

Source: Field studies

Results of the agriculture survey shows that energy losses due to under-disclosed load of the agriculture consumers is due to the difference of actual ratings of the pump sets and the load sanctioned to the agriculture consumers by the DISCOM, surveyed during the field study. If the findings from the agriculture loss are extrapolated on the total agriculture consumption of the four circles, the commercial losses on account of agriculture consumption would be around 49.62 MU in the four representative circles.

The complete details and outcome of the agriculture study are enclosed as “Annexure VI” in Volume. - II of this report.

Energy theft in the domestic connections also observed during the field studies. Major energy theft has been observed only in the case of un-metered connections in four representative circles in Tamil Nadu. Few domestic connections are free in the State. As a result of that the department is not keen to meter the agriculture connections or conduct regular vigilance check to control theft.

4.6.2 Energy loss due to collection inefficiency

As shown in the previous sections, energy loss due to collection inefficiency ranges between 0.42% to 4.49%. This is due to non-recovery of billed amount primarily from the domestic consumers.

Unlike the technical loss, reducing the commercial loss does not require a large amount of investment. The commercial loss can be reduced by developing a strategic objective/road map to reduce the loss and adhering to a timeline for the same. However, such things are clearly missing from the organization goals of the DISCOM.

5. Chapter 5: Extrapolation of the AT&C losses

5.1 Assumptions for extrapolation

- It was found during the field studies that the commercial loss in the HT category (HT industrial, HT commercial, Water Works and Lift Irrigation) in the circles was around 10%. It can be inferred that around 90% of the commercial loss in the circles was mainly in the LT categories. Based on this consideration, 90% of the commercial loss in the circles has been allocated to the LT categories to extrapolate the commercial loss of each representative circle on the State.
- It is also observed that as the sales mix of the LT consumers varies between the representative circles and the State, the point estimate¹⁵ of the AT&C losses of the State would not be reasonable. In consultation with the FoR Secretariat, it was decided that range estimate¹⁶ would be used to extrapolate the AT&C losses of the circles on the State. The standard deviation between the LT sales mix in the representative circles and those of the State has been computed and the same has been utilized to extrapolate the AT&C losses range for the State.
- It is further assumed that the technical loss component of the State would remain at the same level as computed for the circles.
- The extrapolation of the AT&C losses has been done only for the study period i.e. from September to November 2012 and not for the full FY 2012-13.

¹⁵ **Point estimate:** If an estimate of a population parameter is given by a single value, then the estimate is called point estimate of the parameter.

¹⁶ **Range estimate:** If an estimate of a population parameter describes a range of values between which the parameter may be considered to lie, then the estimate is called range estimate of the parameter.

5.2 Extrapolation of circle wise AT&C losses on the State

Step 1: Allocation of the commercial loss in the circles on domestic and agriculture consumers

Firstly, 90% of the commercial loss of the circles during September to November 2012 has been allocated on the LT categories. The formula for allocating the commercial loss of the circles on the LT categories is mentioned below:

$$\text{Allocation of 90\% of the commercial loss to the LT categories} = \frac{\text{Total commercial loss of the circles [A]} \times 90\%}{\text{LT categories [B]}} \quad (\text{i.e. 90\% of the commercial loss allocated to the LT categories})$$

The following Table shows the 90% commercial loss allocation of the circles to the LT categories during the period September to November 2012.

Table 49: Allocation of the commercial loss on LT categories (Sept. to Nov. 2012)

Particulars	Vellore	Erode	Tuticorin	Madurai	Total
Commercial loss in the circles [A]	76.68	15.32	27.29	25.10	144.39
Distributing 90% of the commercial loss (MU) on the LT categories [B] = [A] *90%	69.01	13.79	24.56	22.59	129.95

Step 2: Computation of commercial loss factor on account of energy billed to the domestic and agriculture consumers in each of the four representative circles.

Here, the commercial loss factor on account of energy billed to the LT categories in the circles has been computed. The objective of computing the commercial loss factor is to work out a unique factor for each of the four circles that can be applied on the energy input of the State for extrapolation.

To compute the commercial loss factor, the allocated commercial loss with respect to energy input in the circles has been computed and then divided by the ratio of energy billed (MU) to the LT categories with respect to total energy billed (MU) in the circles.

The formula for computing the commercial loss factor is presented below:

$$\text{Commercial loss factor} = \frac{\text{(Commercial loss (MU) allocated to LT categories [A]/Energy input (MU) in the circles [B])}}{\text{(Energy billed (MU) to the LT categories [C]/Total energy billed (MU) in the circle [D])}}$$

The commercial loss factor of four representative circles is shown in the Table below:

Table 50: Commercial loss factors for the domestic and agriculture consumers (Sept. to Nov. 2012)

Particulars	Total of four representative circles
Commercial loss on account of energy billed to the LT categories (MU) [A]	129.95
Energy input in the circles (MU) [B]	1542.73
Energy billed (MU) to the LT consumers [C]	843.32
Total energy billed (MU) in the circle [D]	1241.25
Commercial loss factor [E] = ([A]/ [B])/([C]/ [D])	0.12398

Step 3: Computation of Standard Deviation of energy billed to the LT consumers in the four representative circles and the State

The computation of Standard Deviation of energy billed to the LT consumers in the four representative circles and the State is presented in the following Table.

Table 51: Standard deviation

	Total of four representative circles	Tamil Nadu ¹⁷
Energy billed to the LT consumers (%)	67.94%	79.43%
Standard Deviation	0.0813 or 8.13%	

Source: TNERC, TANGEDCO and Field studies

Step 4: Computation of lower and upper limits of the commercial loss of the State.

To compute the lower and upper limits of commercial loss of the State, the commercial loss factors of the circles computed in Step 2 have been multiplied with the LT sales mix of the State by taking into account the Standard Deviations of LT sales mix between the four representative circles and State. The formula for computation of lower and upper limits of the commercial loss of the State is presented below.

$$\text{Lower limit of the commercial loss in the State} = \frac{\text{Commercial loss factors of the Circles [A]} \times (\text{LT Sales mix of the State [B]} - \text{Standard Deviation[C]})$$

$$\text{Upper limit of the commercial loss in the State} = \frac{\text{Commercial loss factors of the Circles [A]} \times (\text{LT Sales mix of the State [B]} + \text{Standard Deviation[C]})$$

The lower and upper limits of the commercial loss of the State are presented in the Table below:

¹⁷ TNERC Tariff Order for FY 2013-14

Table 52: Lower and upper limits of commercial loss of the State (Sept. to Nov. 2012)

Particulars	Total State
Commercial loss factor [A]	0.12398
LT sales mix of the State (%) [B]	79.43%
Standard Deviation (%) [C]	8.13%
Lower limit of the commercial loss in the State (%) [D] =[A]*([B]-[C])	8.84%
Upper limit of the commercial loss in the State (%) [D] =[A]*([B]+[C])	10.86%

Step 5: Computation of extrapolation factor

It is assumed that 90% of the commercial loss incurred due to energy billed to the LT categories. An extrapolation factor has been computed to extrapolate the total commercial loss of the State. The formula for computing the extrapolation factor is shown below.

$$\text{Extrapolation Factor} = 100/90 = 1.11$$

Step 6: AT&C losses of the State

- To extrapolate the AT&C losses of the State, the lower and upper limits of the commercial loss due to energy billed to the LT consumers is computed first. The formula for computation of lower and upper limits of the commercial loss is shown below:

$$\begin{array}{l} \text{Lower limit of commercial loss of} \\ \text{the State due to energy billed to} \\ \text{the LT consumers (MU)} \end{array} = \frac{\text{Energy input in the State (MU)}}{\text{Lower limit of the commercial loss in the State} \\ \text{(\%) computed in Step 4}}$$

$$\begin{array}{l} \text{Upper limit of commercial loss of} \\ \text{the State due to energy billed to} \\ \text{the LT consumers (MU)} \end{array} = \frac{\text{Energy input in the State (MU)}}{\text{Upper limit of the commercial loss in the State} \\ \text{(\%) computed in Step 4}}$$

2. The extrapolation factor computed here then applied on the lower and upper limits of the commercial loss of the State to calculate the total commercial loss of the State as shown below:

$$\begin{array}{l} \text{Total commercial loss of the State} \\ \text{- lower limit (MU)} \end{array} = \frac{\text{Lower limit of commercial loss of the State}}{\text{Extrapolation factor}} \times X$$

$$\begin{array}{l} \text{Total commercial loss of the State} \\ \text{- upper limit (MU)} \end{array} = \frac{\text{Upper limit of commercial loss of the State}}{\text{Extrapolation factor}} \times X$$

3. After calculating the total commercial loss (MU), the percentage of commercial loss in terms of energy input in the State has been computed. The formula of the same is mentioned below:

$$\begin{array}{l} \text{Percentage of commercial loss} \\ \text{of the State- lower limit (\%)} \end{array} = \frac{\text{Energy input in the State (MU)}}{\text{Total commercial loss of the State - lower limit (MU)}} \times 100$$

$$\begin{array}{l} \text{Percentage of commercial loss} \\ \text{of the State - upper limit (\%)} \end{array} = \frac{\text{Energy input in the State (MU)}}{\text{Total commercial loss of the State - upper limit (MU)}} \times 100$$

4. The AT&C losses range of the State arrived after adding the technical loss of the circles with the lower and upper limits of the commercial loss of the State as shown in the following formula.

$$\begin{array}{l} \text{AT\&C losses of the State-} \\ \text{lower limit} \end{array} = \begin{array}{l} \text{Total commercial loss of the State - lower limit} \\ + \\ \text{Technical loss} \end{array}$$

$$\begin{array}{l} \text{AT\&C losses of the State-} \\ \text{upper limit} \end{array} = \begin{array}{l} \text{Total commercial loss of the State - upper limit} \\ + \\ \text{Technical loss} \end{array}$$

5. The AT&C losses range of the State from September to November 2012 is shown in the following Table.

Table 53: Extrapolating the circle wise losses on the State (Sept. to Nov. 2012)

Sl. No.	Particulars	State
1	Energy input in the State (MU) [A]	18286.53
2	Extrapolation factor [B]	1.11
Computation of lower limit of the AT&C losses in the State		
3	Lower limit of the commercial loss in the State (%) [C]	8.84%
4	Lower limit of commercial loss of the State due to energy billed to the LT consumers (MU) [D] = [A] X [C]	1616.65
5	Total commercial loss in the State [E] = [D] X [B]	1796.28
6	Percentage of commercial loss in terms of energy input (%) [F] = [E]/[A]	9.82%
7	Technical loss in terms of energy input (%) [G]	12.32%
8	AT&C losses (%) [H] = [F]+[G]	22.14%
Computation of upper limit of the AT&C losses in the State		
9	Upper limit of the commercial loss in the State (%) [I]	10.86%
10	Upper limit of commercial loss of the State due to energy billed to the LT consumers (MU)[J] = [A] X [I]	1985.07
11	Total commercial loss in the State [K] = [J] X [B]	2205.63
12	Percentage of commercial loss in terms of energy input (%) [L] = [K]/[A]	12.06%
13	Technical loss in terms of energy input (%) [M]	12.32%
14	AT&C losses (%) [N] = [L]+[M]	24.38%

Step 7: Conclusion

The AT&C losses range of the State as computed extrapolated above is shown in the following Table:

Table 54: AT&C losses range of the State (Sept. to Nov. 2012)

Particulars	State	
	Lower Limit	Upper Limit
AT&C losses	22.14%	24.38%

From the above it can be concluded that the AT&C losses of the State from September to November 2012 were in the range of 22.14% to 24.38%.

6. Chapter 6: Recommendations and way forward

This chapter suggests a set of recommendations that could help the DISCOM in reducing losses in short, medium and long term periods. The recommendations are for each classified categories – “A”, “B” and “C” as discussed earlier.

6.1 ABC Analysis of the AT&C losses

The study proposes a set of recommendations based on the component wise AT&C losses analysis from the field studies (as shown in Chapter 4) and highlights the deficiency in the present system. The recommendations proposed in this report have been categorized in three buckets – “A”, “B” and “C” in order of their importance for TANGEDCO. A loss reduction framework based on the “ABC” analysis is proposed in the following Table.

Table 55: ABC framework -issues for the proposed interventions to reduce the AT&C losses

Components of AT&C losses	Energy loss range in the representative circles	Interventions proposed
Category A		
(i) Commercial loss due to under-disclosed agriculture load <i>(The DISCOM should treat this as the priority area for loss reduction as the existing losses could be reduced in the short and medium time period. To reduce these losses, minimum capital investment will be required. The DISCOM need to strengthen its existing commercial practice.)</i>	1.11% (Tuticorin) to 7.25% (Vellore)	The DISCOM should organize special camps for disclosure of actual agriculture load.
(ii) Commercial loss due to theft and pilferage of energy <i>(The DISCOM should also treat this as the priority area for loss reduction</i>	0.10% (Tuticorin) to 8.39% (Vellore)	Identify and regularizing the un-metered and flat rate agriculture consumers to reduce agriculture theft.

Components of AT&C losses	Energy loss range in the representative circles	Interventions proposed
<p><i>as the existing losses could be reduced in the short and medium time period. To reduce these losses, minimum capital investment will be required. The DISCOM need to strengthen its existing commercial practice.)</i></p>		<p>Short and medium term interventions such as metering of the un-metered consumers, regular vigilance check to reduce the energy theft in unmetered connections other than agriculture.</p> <p>Load shedding to be implemented first in the high loss areas in case of shortage of electricity.</p> <p>DISCOM may implement community metering system to create accountability on the consumers to assist the DISCOM in detecting energy theft.</p> <p>Differential tariff by way of higher tariff in the high loss areas to be proposed to the regulator for approval in medium term.</p>
<p>(iii) Technical loss in the LT system</p> <p><i>(The DISCOM should treat this as one of the priority areas for reduction of energy losses. Substantial capital investment would be required to minimize the technical loss in the LT system.)</i></p>	<p>4.75% (Tuticorin) to 11.41% (Madurai)</p>	<p>Medium and long terms interventions to reduce the loss through implementation of the Ariel Bunched Cabling (ABC) and Advanced Metering Infrastructure (AMI).</p>
Category B		
<p>(iv) Commercial loss due to collection inefficiency</p> <p><i>(The DISCOM could strengthen its billing and collection department to reduce this energy loss in the short time period.)</i></p>	<p>0.42% (Vellore) to 4.49% (Tuticorin)</p>	<p>Short term measures to reduce the commercial loss due to collection inefficiency by way of linking the incentive for the staff with the increase in the billing and collection efficiency. To implement this scheme the DISCOM should develop Key Performance Indicators (KPIs) and award</p>

Components of AT&C losses	Energy loss range in the representative circles	Interventions proposed
		<p>scheme for the staff with an objective to reduce the commercial loss.</p> <p>In addition, the DISCOM may consider installing pre-paid meters in the medium and long terms.</p>
<p>(v) Technical loss in the HT system <i>(The DISCOM should take initiatives to reduce the technical loss in the HT system in the medium and long term. Substantial capital investment would be required to minimize the technical loss in the HT system.)</i></p>	<p>3.18% (Vellore) to 4.62% (Erode)</p>	<p>Segregate the agriculture load from the rural feeders and provide High Voltage Distribution System (HVDS) for the agriculture consumers to reduce the loss in the agriculture connections.</p>
Category C		
<p>(iii) Commercial loss due to deficient metering and billing inefficiency <i>(To bring down the no. of consumers being billed provisionally so that losses due to deficient metering billing inefficiency could be curbed.)</i></p>	<p>0.13% (Vellore) to 1.37% (Madurai)</p>	<p>The DISCOM should take short term measures to reduce the commercial loss by way of linking the incentive for the staff with the increase in the billing efficiency.</p>

6.2 Recommendations

Interventions recommended in the short medium and long terms in the high energy loss areas (Category "A" Issues)

- 1. Camps for the voluntary disclosure of actual loads of the agriculture consumers:** TANGEDCO should organize mobile camps in the rural areas for voluntary disclosure of the actual load of the agriculture consumers. The consumers should be encouraged by TANGEDCO that no penalty would be imposed for their past usage of under-disclosed load. In this way, the TANGEDCO can bill the agriculture consumers correctly.
- 2. Regular vigilance check:** TANGEDCO should conduct regular vigilance check in the rural and urban areas to identify un-metered connections and regularize them in a time bound manner. TANGEDCO should conduct impromptu vigilance raids, where the energy loss is higher or revenue realization is very less.
- 3. Community metering:** This type of arrangement can be implemented in the slum areas, as a matter of routine where the entire slum cluster would be metered at a single in public view (where tempering is difficult) and the community is billed based on the consumption determined by their individual meter read. The DISCOM will provide bulk supply to a single community meter and based on the meter read of the community meter will bill the consumers connected with community meter. The consumers on the other hand would share the billing amount based on their individual meter reading. Should one consumer pilfer energy it will result in the remaining members of the community paying more than their actual share of energy bill.
- 4. Implementation of load shedding first in the high loss areas in case of shortage of electricity:** TANGEDCO should consider implementing load shedding first in the high loss areas in case of shortage of electricity. This will built awareness among the consumers in the high loss areas that due to high energy loss, the

TANGEDCO are forced to implement load shedding in their areas and in turn would create pressure on the consumers involved in theft of energy for not doing the same.

5. **Implementation of differential tariff by way of higher tariff in the high loss areas:** TANGEDCO should propose differential tariff by way of higher tariff in the high loss areas. Higher tariff would force the consumers in the high loss areas to reduce theft of energy.
6. **Theft Analytics of the un-metered consumers:** TANGEDCO should undertake theft analytics of all the un-metered consumers. Based on the random checking, detailed profiles of the consumers involved in energy theft would be prepared, followed by, an action plan to curb such energy theft and take appropriate action against such identified consumers.
7. **Metering of the un-metered connections:** Due to flat rate billing and subsidized billing, at present the agriculture connections are un-metered. As a result of that actual energy consumption by the agriculture consumers cannot be known accurately. In view of this all the agriculture consumers should be metered. The “National Tariff Policy” has also given a direction on this regard:

“Metering of supply to agricultural / rural consumers can be achieved in a consumer friendly way and in effective manner by management of local distribution in rural areas through commercial arrangement with franchisees with involvement of panchayat institutions, user associations, cooperative societies etc. Use of self closing load limitors may be encouraged as a cost effective option for metering in cases of “limited use consumers” who are eligible for subsidized electricity.”

Other non-agriculture un-metered connection should also be metered as per the prevalent Regulations.

8. Involving communities to reduce theft: The DISCOM should also take initiatives to involve the Gram Panchayats and User Associations to reduce energy theft. The objective of this initiative would be to secure commitment from the communities for curbing theft cases in their areas as well as spreading pros and cons of energy theft to the wider audience. Many of the factors that are driving the increase in commercial loss are beyond the control and influence of the DISCOM. Therefore, it is beneficial for the DISCOM to canvassing support from the various community groups in this matter.

9. Building awareness among the agriculture consumers: Due to lack of awareness and flat rate tariff, the farmers often overlook the energy efficiency aspect of the pump-sets they used. Improper selection of pump-sets leads to poor efficiency and wastage of energy of the pump sets. Our interactions with the farmers indicated that the pump sets do not give the desired output and hence force them to replace their pump-sets with higher capacity. It was observed from field that pumps have been selected for large range of suction & discharge heads but smaller diameter of pipes were selected by the farmers because of ignorance.

It is suggested that TANGEDCO should do a pilot project in selected villages to check the efficiency level of the pump-sets used by the farmers as well as to implement measures to improve the performance level of the pump sets. If the pilot project becomes successful to reduce the energy consumption in the pump sets, the same can be scaled-up in other villages.

10. Aerial Bunched Cabling (ABC): To reduce the direct theft from the LT line by hooking, ABC cabling in all congested area should be introduced. Cost of the ABC cables are high but in the long run it will benefit the DISCOM as hooking is difficult.

11. Implementation of Advance Metering Infrastructure (AMI): AMI system allows the utility to monitor the consumption of individual consumer at specific

intervals (15 minutes) and will detect the tendency of tempering or “by-passing” the meters by analyzing the data recorded.

Interventions recommended in the short and medium terms to reduce commercial loss (Category “B” and “C” Issues)

12. Implementation of Key Performance Indicators (KPIs) for the Staff:

TANGEDCO should consider implementation of incentive/disincentive scheme by way of linking the incentive for the staff with the increase in the billing and collection efficiency. To implement this scheme the DISCOM should develop Key Performance Indicators (KPIs) such as (a) increase in number of meter readings per meter reader (b) Increase in number of disconnection of the defaulting consumers, (c) reduction of time for replacing the defective meters, and (d) reduction of commercial loss. The KPIs should also indicate the targets for the staff and will be awarded as per their actual performance vis-à-vis the targets given in the KPIs.

13. High Voltage Distribution System (HVDS) system: TANGEDCO should consider implementing HVDS system in agriculture, wherein the HV line could be extended up to the pump sets, thus avoiding the LT line except to the extent of the service cable. States like Andhra Pradesh, Gujarat, Punjab, Haryana, Karnataka and Maharashtra have already implemented the HVDS system for the agriculture consumers.

14. Prepaid metering: The un-metered and flat rate consumers should be encouraged for prepaid meters. Suitable rebate could be offered to the consumers opting for prepaid meters. However, it needs a proper marketing network to be established for availability of Prepaid Meter cards as well as for communication with the IT Server of the utility.

15. Feeder separation work (FSP): The pipeline projects such as feeder separation work to segregate the agriculture load from other consumer categories should be

implemented immediately. This would provide the DISCOM a facility to monitor and control agriculture consumption and reducing the commercial loss in the agriculture feeders.

Interventions recommended for AT&C losses reduction in the low energy losses areas, which are more than World Standard (Category “C” Issues)

17. Revenue Cycle Management (RCM): To improve the billing and revenue collection method of the utility, one of the options would be to implementation of Revenue Cycle Management (RCM). This will help in improving the cash flow and liquidity of the DISCOM.

The entire process of RCM involves and revolves around timely data generation and intervention. The primary data for the RCM is the metering and billing, integrated for the collections, which is used for various improvement initiatives. The RCM assumes importance in optimizing the cash flow cycle in the business. The primary objectives of RCM are:

- To improve the overall commercial process involving metering, billing and collection.
- To minimize bottleneck, if any, in the existing Metering-Billing-Collection (M-B-C) process.
- To implement method through which the actual cycle time for the whole process can be reduced, with minimal investment and with the existing infrastructure
- To implement corrective measures as the case may be to enhance efficiency improvement.
- To bring in technological interventions .This would assist for improvement or better management of the Revenue Cycle.

Three types of measures included in RCM are as follow:

(a) Revenue Enhancement Measures: Revenue enhancement in the form of categorization, revision of connected load based on actual etc. Applying system analysis and targeting tools on the existing consumer and billing database can enhance the hit rate of revenue enhancement activities.

- **Preparation of the profit centre concept with fixing of responsibility;**
- Development of suitable monitoring mechanism for tracking of the energy data to arrive at reasonable measure for assessment of actual energy and revenue data
- Analysis of consumer and billing database to identify potential areas of revenue enhancement
- Based on evaluation, identification of revenue enhancement measures which may be appropriate
- Development of a Cost Benefit Analysis (CBA) framework for various investment needs and prioritize finances
- **Identification of high revenue potential areas to prioritize revenue enhancement measures**
- Assistance in monitoring of the base Energy data as a whole;

(b) Loss reduction initiatives: Some of the loss reduction initiatives that merit further contemplation include High Voltage Distribution Systems, Vigilance Activities, and System Up-gradation etc. This will include:

- Cost Benefit Analysis of proposed loss reduction projects like HVDS, System Up-gradation etc
- Identification of financing and sourcing options to make such projects feasible
- Assist in negotiations with potential financiers and suppliers
- Development of localized projects/schemes targeted at specific problem areas

(c) Customer Service Initiatives: The gap between desired and delivered level of service needs to be reduced. The same shall require adoption and adaptation of best practices in distribution services. The same shall involve:

- Undertake evaluation of typical consumption patterns for certain specific consumer categories;
- Centralize billing especially for HT industrial consumers so that it provides better customer service as well as control on revenues;
- Develop benchmarks for such industries as per the consumption norms reflected in consumers of similar nature;
- Analyze the consumption pattern, both on monthly basis and develop mechanism for deviation reporting for the top 1000 customers;

18. Energy Accounting and Auditing: TANGEDCO should conduct energy accounting and auditing across all the sub-divisions to accurately measure the energy losses across consumer categories as well as to take appropriate action to control such losses.

Other recommendations

19. Component wise AT&C losses analysis: The component wise AT&C losses analysis would provide a clear insight on the energy losses of TANGEDCO. It is recommended that TANGEDCO should adopt the component wise AT&C losses method to compute and report its energy losses. The component wise AT&C losses will not only provide the component and sub-component wise energy losses but can also used as a strategic tool for monitoring and framing future loss reduction initiatives. From the component wise AT&C losses, TANGEDCO can easily identify the high loss prone areas and frame their future loss reduction initiatives accordingly.

20. Suggestion for the future AT&C losses reduction studies: The present period of the AT&C losses reduction study is envisaged for 6 months. In six months study,

the seasonal factors affecting the AT&C losses could not be captured and also the study results will not be accurate. Therefore, it is suggested that the period for the future AT&C losses study should be increased to 18 months and out of that 12 months should be envisaged for field studies only.

7. Appendix 1: Formats prepared for collection of information from the DISCOM

Format 1: No. of Circles, Divisions and Sub-divisions of the distribution utility

S.No.	Circle Name	Division Name	Name of the Sub-Divisions
	Circe 1	Division 1	
		Division 2	
		Division ...n	
	Circe 2	Division 1	
		Division 2	
		Division ...n	
	Circe 3	Division 1	
		Division 2	
		Division ...n	

Format 2: Circle wise, division wise and category wise no. of consumers and energy sales

S.No.	Circle Name	Division Name	Category	FY 11-12	
				No. of Consumers	Sales (MU)
1	Circle 1	Division 1	Kutir Jyoti/BPL (metered)		
			Domestic (metered)		
			Commercial		
			LT Industry		
			HT Industry		
			Agricultural (metered)		
			Street Lights (metered)		
			Public Water Works		
			Railway Traction		
			Temporary Connections		
			Others (metered)		
			Total metered		
			<u>Unmetered</u>		
			Kutir Jyoti/BPL		
			Domestic		
			Commercial (
			Agricultural		
			Others		
			Total (un-metered)		
					Division 2
Domestic (metered)					
Commercial					
LT Industry					
HT Industry					
Agricultural (metered)					
Street Lights (metered)					
Public Water Works					
Railway Traction					
Temporary Connections					
Others (metered)					
Total metered					
<u>Unmetered</u>					
Kutir Jyoti/BPL					
Domestic					
Commercial					
Agricultural					
Others					
Total (un-metered)					
		Division 3			
			Domestic (metered)		
			Commercial		

S.No.	Circle Name	Division Name	Category	FY 11-12	
				No. of Consumers	Sales (MU)
			LT Industry		
			HT Industry		
			Agricultural (metered)		
			Street Lights (metered)		
			Public Water Works		
			Railway Traction		
			Temporary Connections		
			Others (metered)		
			Total metered		
			<u>Unmetered</u>		
			Kutir Jyoti/BPL		
			Domestic		
			Commercial		
			Agricultural		
			Others		
			Total (un-metered)		

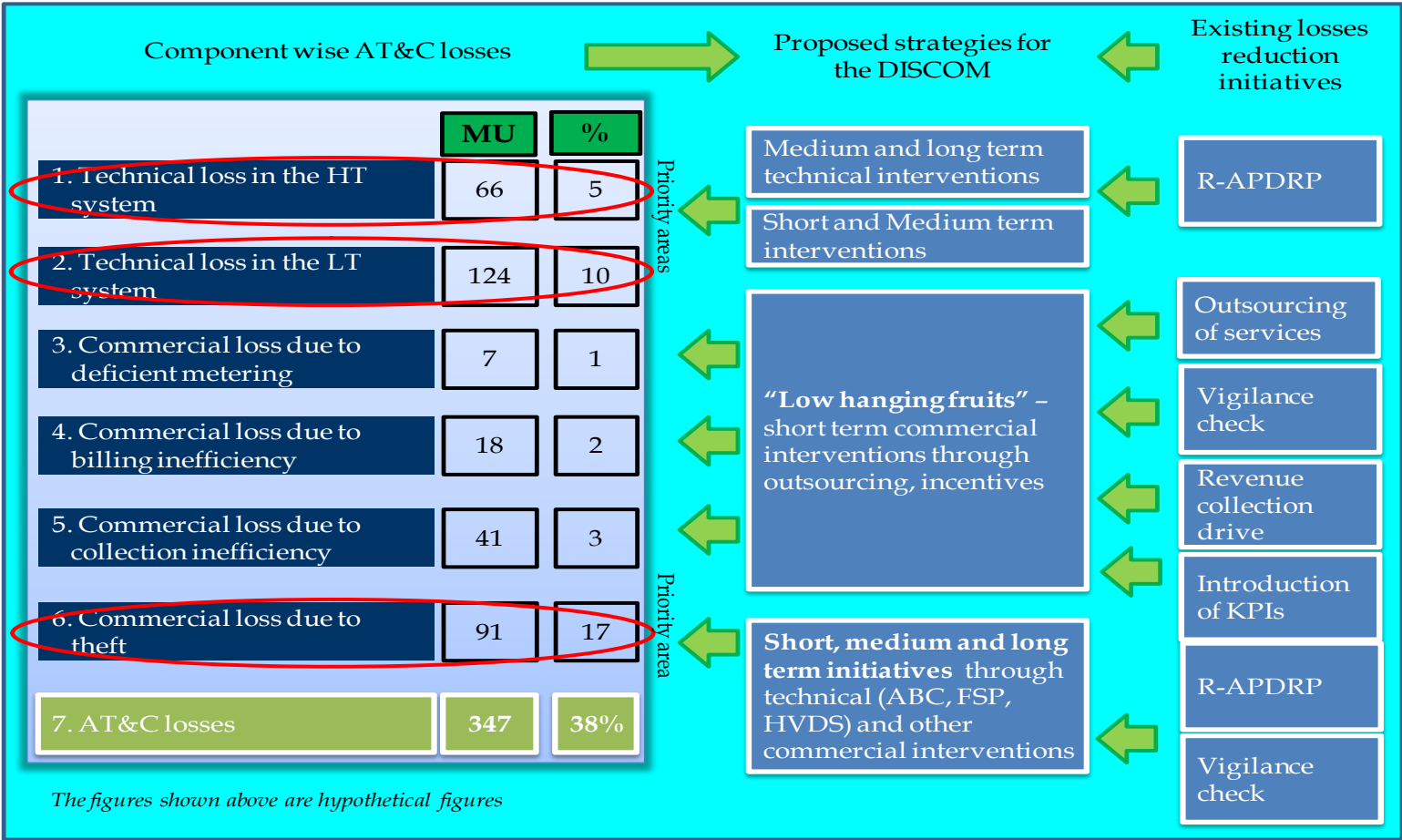
Format 3: General information on Feeders and Sub-stations

S.No.	Circle Name	Type of Feeders	No. of Feeders				No. of Sub-stations	
			110 kV	33 kV	22 kV	11 kV	Other	
	Circle 1	Urban						
		Rural						
		Agricultural						
		LT Industry						
		HT Industry						
	Circle ...n	Urban						
		Rural						
		Agricultural						
		LT Industry						
		HT Industry						

Format 4: Information regarding existing circle wise AT&C losses

S.No.	Circle Name	Division Name	Units Input	Units Billed	Distribution Losses	Amount Billed	Amount Realized	Collection Efficiency	Units Realized	AT&C Losses	
	Circle 1	Division 1									
		Division 2									
		Division ...n									
	Circle 2	Division 1									
		Division 2									
		Division ...n									
	Circle ...n	Division 1									
		Division 2									
		Division ...n									

8. Appendix 2: Strategic framework for analysis of the AT&C losses



Note: KPI = Key Performance Indicator

Report

on

**Component wise AT&C Losses Reduction
study in the State of Tamil Nadu**

Volume II

Submitted by:

Medhaj Techno Concept Pvt. Ltd.

**This report is prepared under the guidance of the
Forum of Regulators**

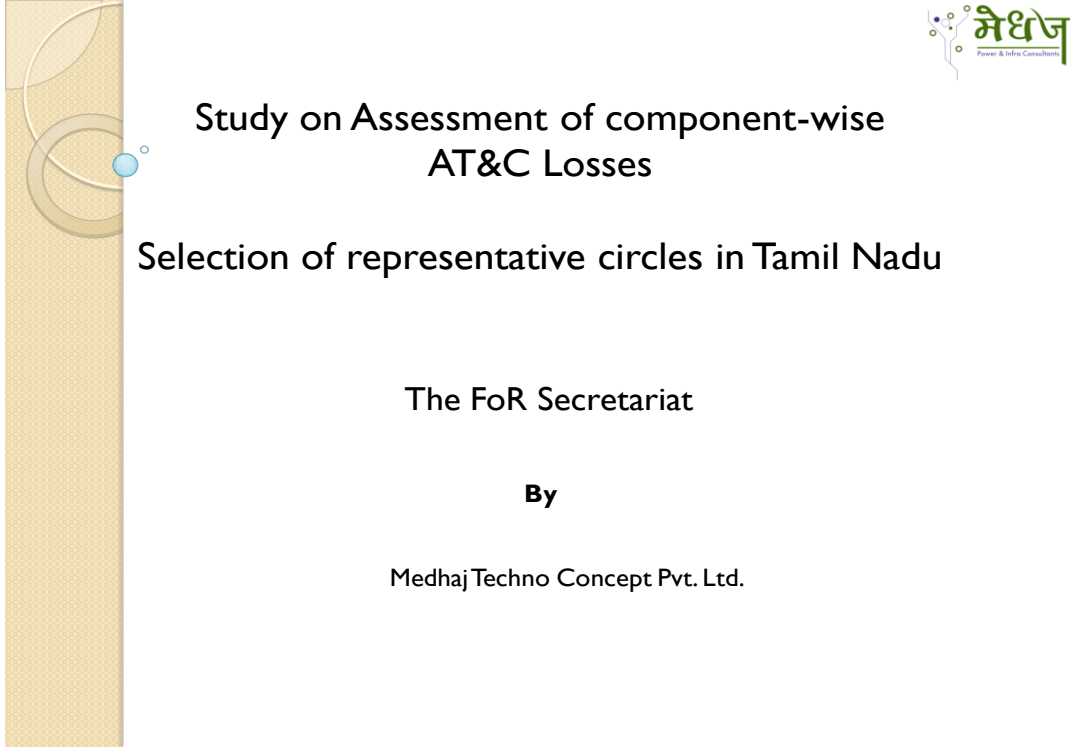


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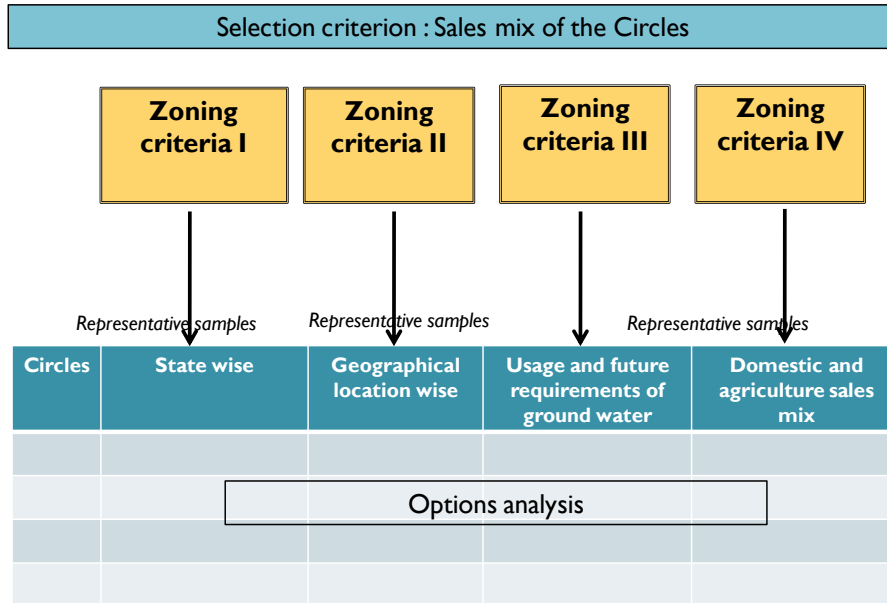
1. Annexure I: Selection of four representative circles in Tamil Nadu

1.1 Selection of the four representative circles in Tamil Nadu





Selection criteria and Methodology

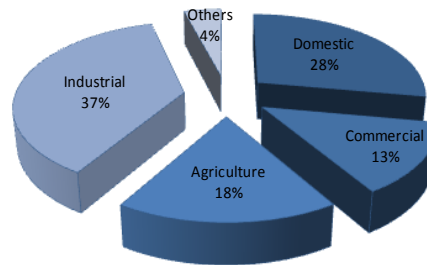


2



Sales mix in Tamil Nadu

- The whole state is divided into 8 zones i.e. Chennai, Coimbatore, Erode, Madurai, Trichy, Tirunelveli, Vellore & Villupuram
- Sales recorded in FY10-11 was around 59.75 thousand MU
- Sales mix in the state is dominated by Industrial (37%) followed by Domestic (28%) and Agriculture (18%)



Consumer category	Sales (MU)
Domestic	16599.41
Commercial	8025.94
Agriculture	10424.00
Industrial	22179.71
Others	2521.41
Total	59750.47

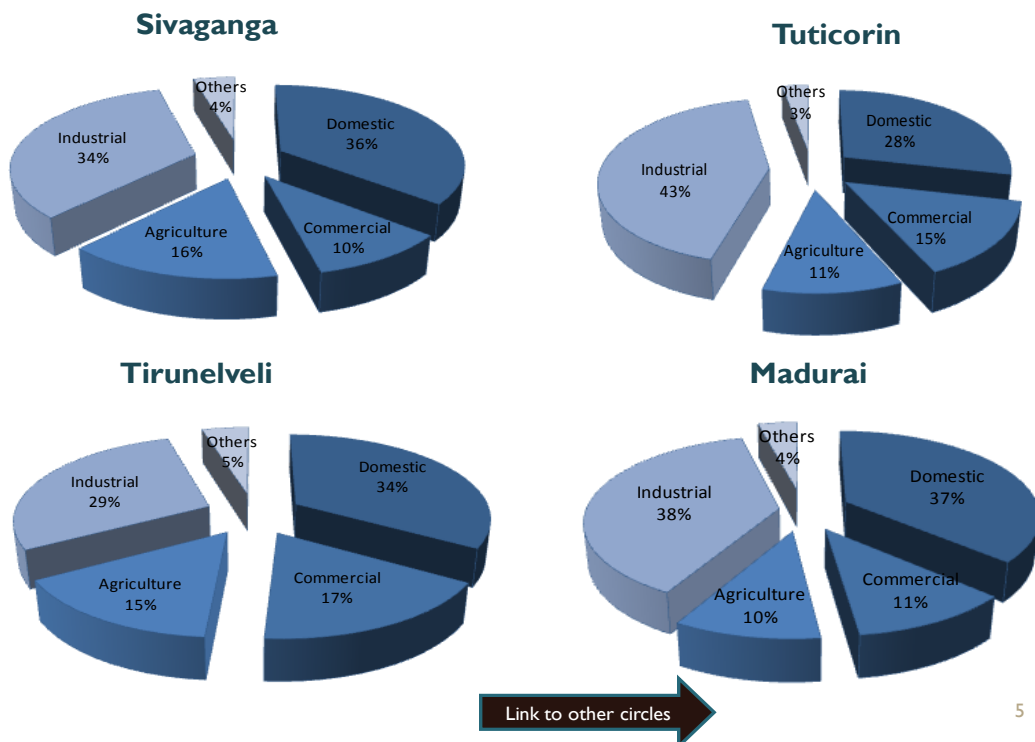
Other category includes public lighting, water works and railway traction
 * Industrial includes both LT and HT industries

3

Criteria I

4

Criteria I: Sales mix in four representative circles



5



Criteria 2

6

Zoning of Circles as per geographical locations

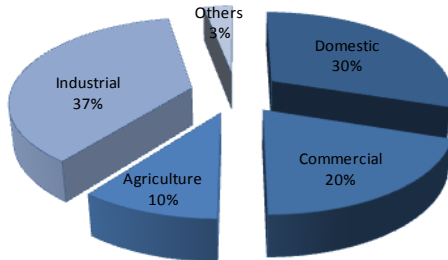


ZONE	CIRCLE
ZONE 1 (NORTH)	Chennai
	Chengalpattu
	KANCHEEPURAM
	TIRUPATTUR
	VELLORE
	DHARMAPURI
	Cuddalore
	Tiruvannamalai Villupuram
ZONE 2 (SOUTH)	Tirunelveli
	Kanyakumari
	Virudunagar
	Tuticorn
	Ramnad
	Dindugal
	Madurai
	Theni Sivaganga
ZONE 3 (EAST)	Trichy
	Nagapattinam
	Pudukkottai
	Tanjore Karur
ZONE 4 (WEST)	Coimbatore
	Udumalpet
	Nilgiris
	Tiruppur
	Mettur
	Namakkal
	Erode Salem Gobi

7

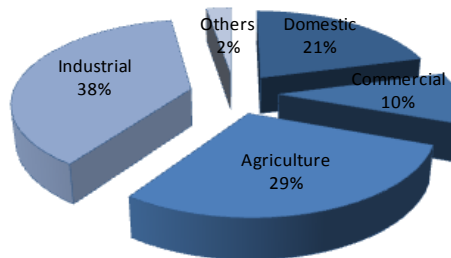
Sales mix in geographical Zone I

ZONE I – NORTHERN DISTRICTS



- Zone I comprises of 9 circles i.e. Chennai, Chengalpattu, Kancheepuram, Tirupattur, Vellore, Dharmapuri, Cuddalore, Tiruvannamalai & Villupuram
- Proposed representative circle: Vellore

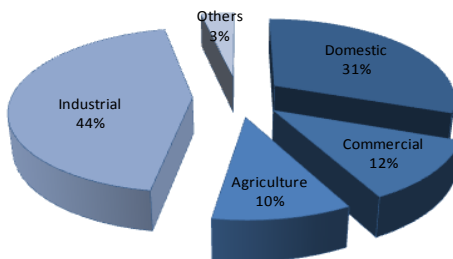
Vellore



8

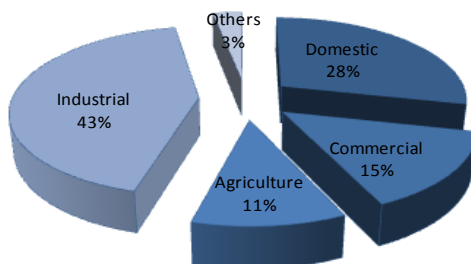
Sales mix in geographical Zone II

ZONE II – SOUTHERN DISTRICTS

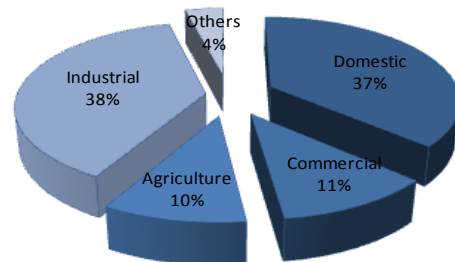


- Zone II (southern districts of Tamil Nadu) comprises of 9 circles viz. Tirunelveli, Kanyakumari, Virudunagar, Tuticorn, Ramnad, Dindugal, Madurai, Theni & Sivaganga
- Proposed representative circles: Tuticorin and Madurai

Tuticorin



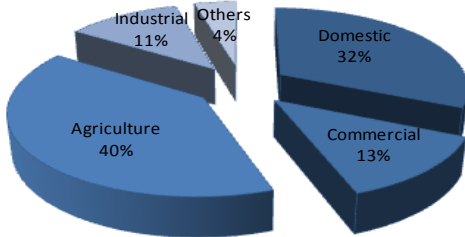
Madurai



9

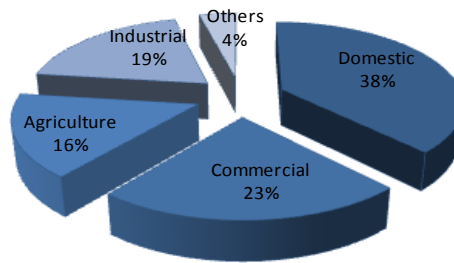
Sales mix in geographical Zone III

ZONE III – EASTERN DISTRICTS



- Zone III (eastern districts of Tamil Nadu) comprises of 5 circles i.e. Trichy, Nagapattinam, Pudukkottai, Tanjore, & Karur
- Proposed representative circle: Trichy Metro

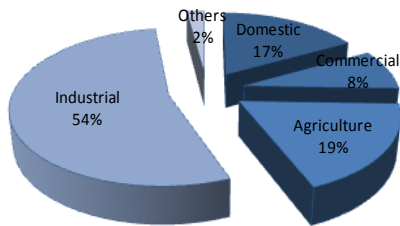
Trichy Metro



10

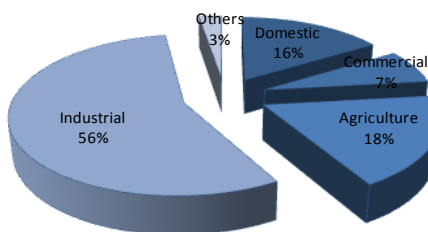
Sales mix in geographical Zone IV

ZONE IV – WESTERN DISTRICTS

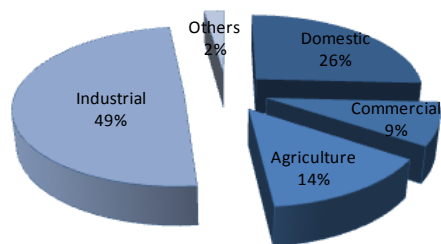


- Zone IV (Western districts of Tamil Nadu) comprises of 9 circles i.e. Coimbatore, Udumalpet, Nilgiris, Tiruppur, Mettur, Namakkal, Erode, Salem & Gobi
- Proposed representative circles: Erode & Salem

ERODE



SALEM



11

Criteria 3

12

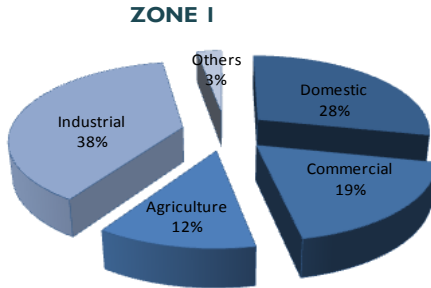
Zoning of Circles as per ground water level

ZONE	CIRCLE	
ZONE 1	Chennai	Ground water is extensively used & requires major recharging of ground water
	Chengalpattu	
	KANCHEEPURAM	
	TIRUPATTUR	
	VELLORE	
	DHARMAPURI	
	Salem	
	Namakkal	
	Tiruvannamalai	
Villupuram		
ZONE 2	Tirunelveli	Ground water is extensively used & requires minor recharging of ground water
	Kanyakumari	
	Virudunagar	
	Tuticorn	
	Ramnad	
	Pudukkottai	
	Madurai	
Sivaganga		
ZONE 3	Trichy	Ground water is extensively used & requires major to minor recharging of ground water
	Nagapattinam	
	Cuddalore	
	Tanjore	
	Karur	
ZONE 4	Coimbatore	Ground water is extensively used but has sufficient ground water to fulfill the future agriculture, domestic & industrial needs.
	Udumalpet	
	Nilgiris	
	Tiruppur	
	Mettur	
	Theni	
	Erode	
Dindigul		

13

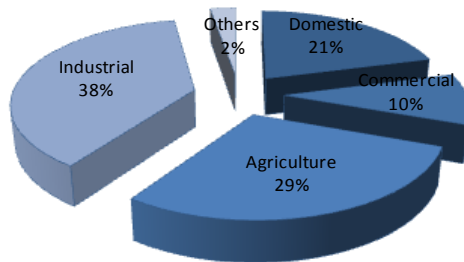


Sales mix in Zone I



- Zone I included 10 circles i.e. Chennai (North, South, Central and West), Chengalpattu, Kancheepuram, Tirupattur, Vellore, Dharmapuri, Salem, Namakkal, Tiruvannamalai & Villupuram
- Proposed representative circle: Vellore

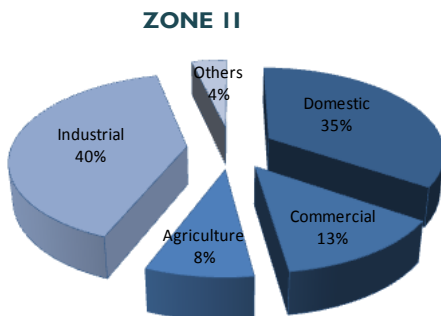
VELLORE



14

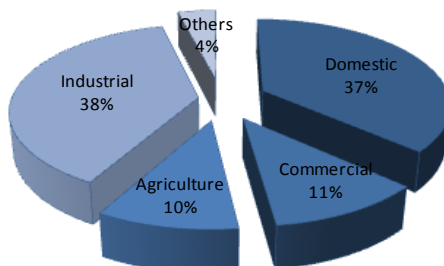


Sales mix in Zone II

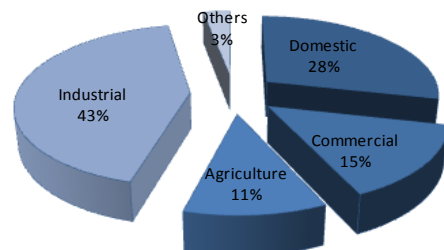


- Zone II comprises 8 circles i.e. Tirunelveli, Kanyakumari, Virudunagar, Tuticorin, Ramnad, Pudukkottai, Madurai & Sivaganga
- Proposed representative circles: Madurai and Tuticorin

MADURAI

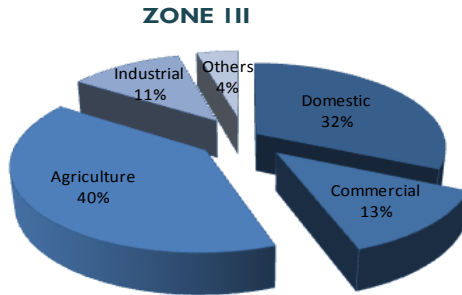


TUTICORIN



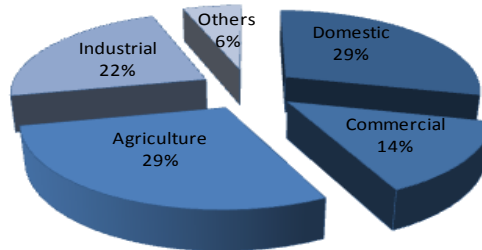
15

Sales mix in Zone III



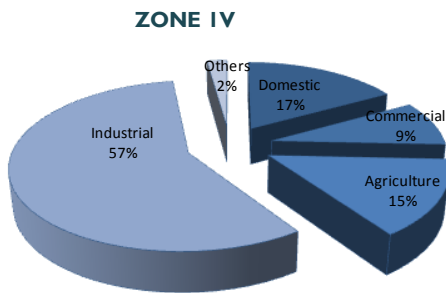
- Zone III included 5 circles i.e. Trichy, Nagapattinam, Cuddalore, Tanjore & Karur
- Proposed representative circles: Karur representing this zone

KARUR



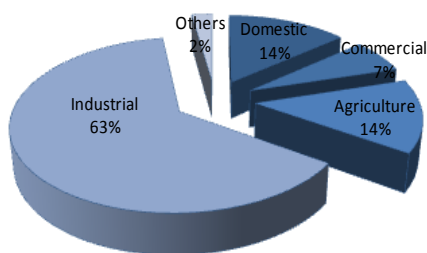
16

Sales mix in Zone IV

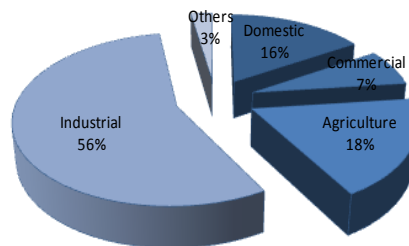


- Zone IV included 8 circles Zone IV i.e. Coimbatore, Udumalpet, Nilgiris Tiruppur, Mettur, Theni. Erode & Dindigul
- Proposed representing circles: Udumalpet & Erode

UDUMALPET



ERODE



17

Criteria 4

18

Agriculture & Domestic sales mix

- Following scores have been assigned to each circle based on the agriculture and domestic consumption:
 - Agriculture and domestic consumption > 80% - **4**
 - Agriculture and domestic consumption between 60% - 80% - **3**
 - Agriculture and domestic consumption between 40% - 60% - **2**
 - Agriculture and domestic consumption between 30%-40% - **1**
 - Agriculture and domestic consumption <30% - **None**
- Ranking of the circles has been done based on the scoring assigned to each circles i.e.
 - Circles with higher score ranked high
 - Circles with lower score ranked low

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Criteria 4

Circles	Sales mix: Domestic and Agriculture	Score	Circles	Sales mix: Domestic and Agriculture	Score
Trichy North	93%	4	Pudukkottai	48%	2
Nagapattinam	88%	4	Madurai	47%	2
Villupuram	80%	4	Chennai South	42%	2
Tanjore	70%	3	Tiruppur	41%	2
Tiruvannamalai	66%	3	Salem	40%	2
Ramnad	65%	3	Dharmapuri	39%	1
Kanyakumari	64%	3	Tuticorn	39%	1
Kancheepuram	62%	3	Nilgiris	39%	1
Cuddalore	62%	3	ChennaiCentral	37%	1
Theni	60%	3	Chennai West	36%	1
Tirupattur	59%	2	Erode	34%	1
Karur	58%	2	Coimbatore Metro	30%	1
Namakkal	57%	2	Dindugal	28%	0
Trichy Metro	54%	2	Udumalpet	28%	0
Sivaganga	52%	2	Chennai North	25%	0
Gobi	52%	2	Virudunagar	20%	0
Madhurai Metro	51%	2	Chengalpattu	18%	0
Vellor	50%	2	Coimbatore South	13%	0
Tirunelveli	49%	2	Coimbatore North	11%	0
Mettur	49%	2			

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Proposed representative circles – Tamil Nadu

21

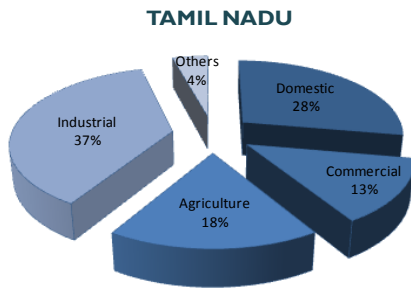
Selection of circles – Option Analysis

Circles	State wise	Geographical location wise	Water table wise	Sales mix: Domestic and Agriculture	
Sivaganga	√				2
Tuticorn	√	√	√		2
Tirunelveli	√				2
Madurai	√	√	√		2
Vellor		√	√		2
Trichy Metro		√			2
Erode		√	√		1
Salem		√			2
Karur			√		2
Udumalpet			√		0
Tanjore					3
Tiruvannamalai					3
Ramnad					3
Kanyakumari					3
Kancheepuram					3
Cuddalore					3

- The representative four circles in Tamil Nadu can be selected from Sivaganga, Tuticorn, Tirunelveli, Madurai, Vellor and Erode

22

Sales mix in the circles identified under Option Analysis



Consumer category	Vellor	Tuticorn	Tirunelveli	Madurai	Sivaganga	Erode
Domestic	457.17	356.11	599.88	327.74	218.53	348.19
Commercial	213.59	182.93	312.51	100.32	62.14	151.46
Agriculture	637.94	136.95	275.81	90.27	94.19	400.01
Industrial	828.02	535.29	514.52	339.17	205.31	1203.29
Others	58.14	37.03	80.68	34.63	26.02	55.23
Total	2194.86	1248.30	1783.41	892.13	606.19	2158.18

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Issues to be discussed with the FoR Secretariat

- Criteria for selection of circles
- Finalization of representative circles in Tamil Nadu
- Views on selection of the circles, which will represent the AT&C losses for the whole state

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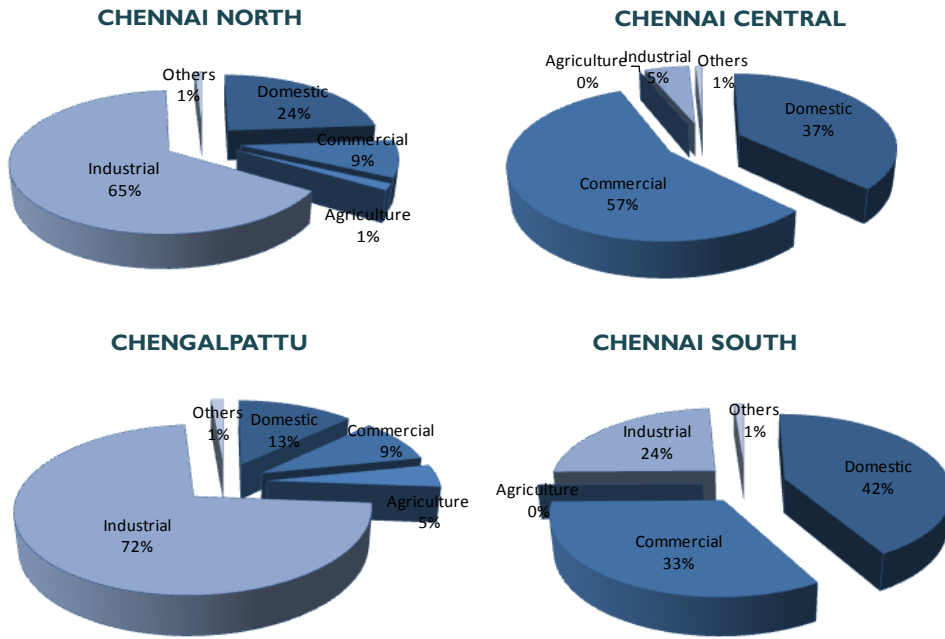


Annexure

25



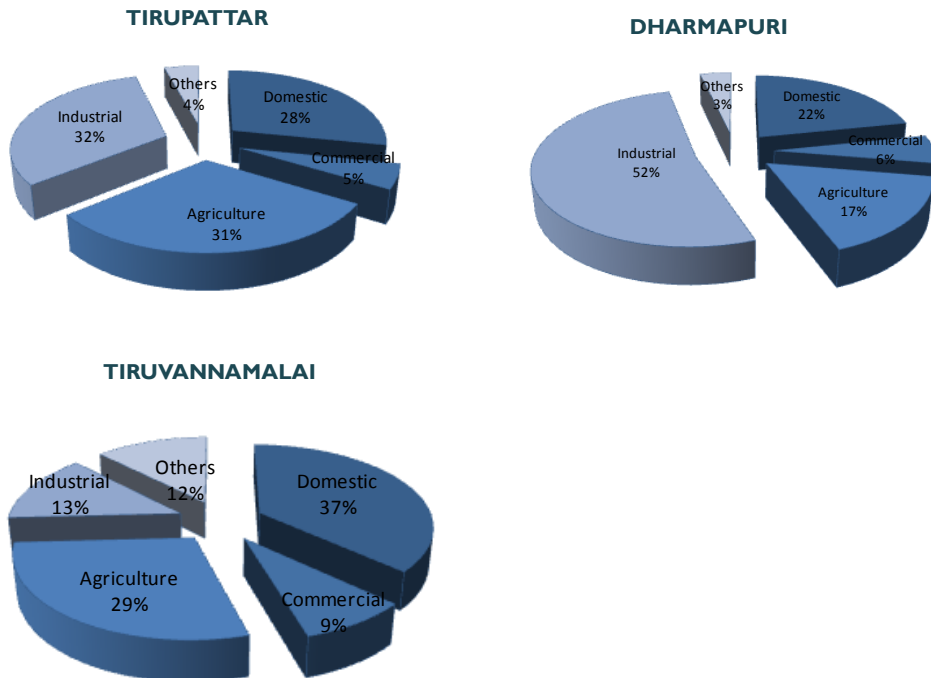
Annexure I



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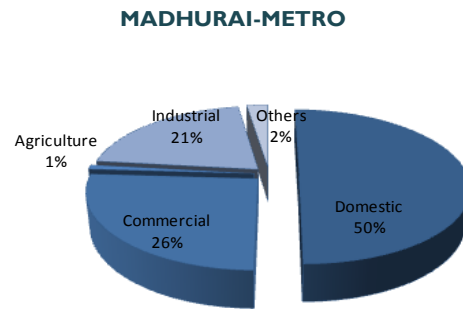
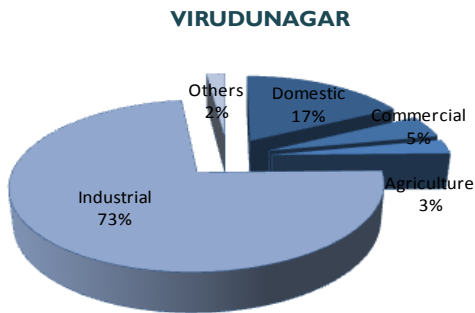
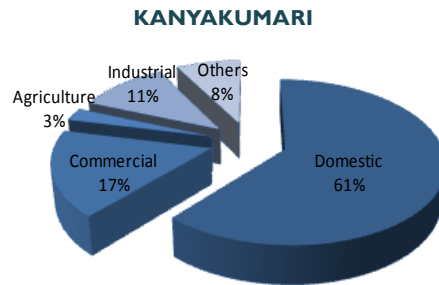
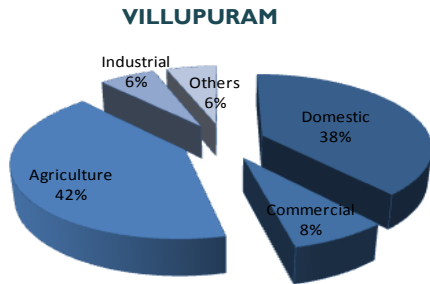
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27



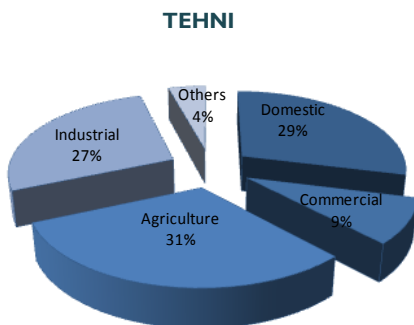
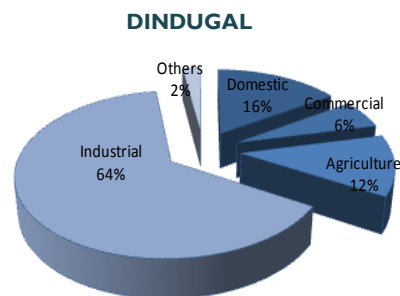
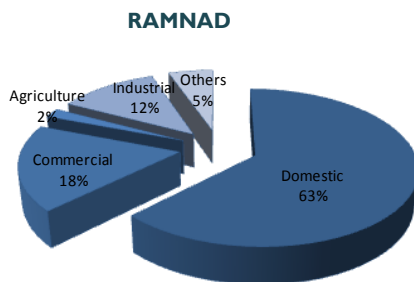
Annexure I



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Annexure I

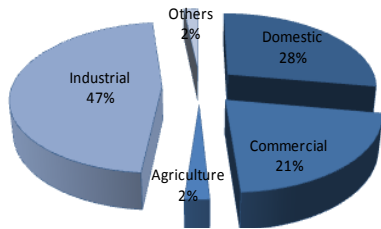


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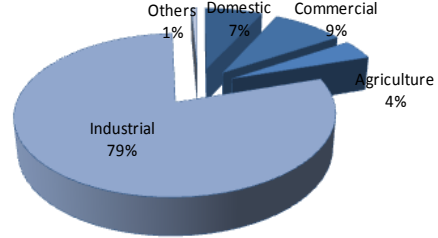


Annexure I

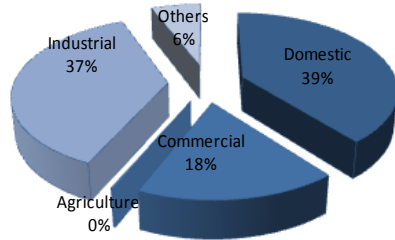
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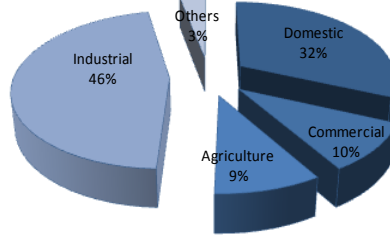
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NILGIRIS



TIRUPPUR

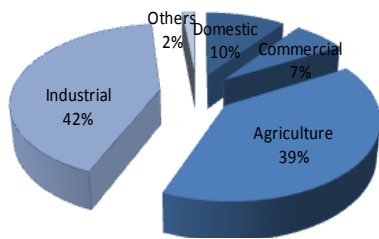


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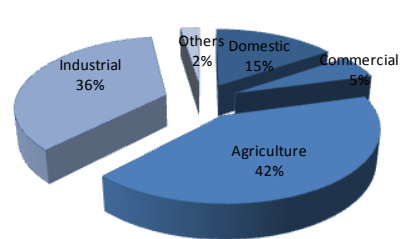


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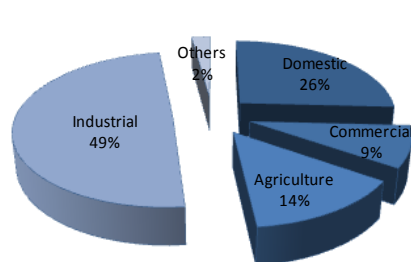
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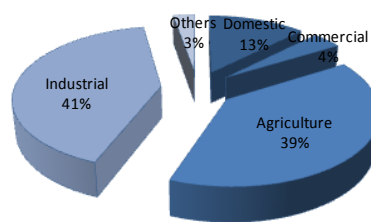
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SALEM



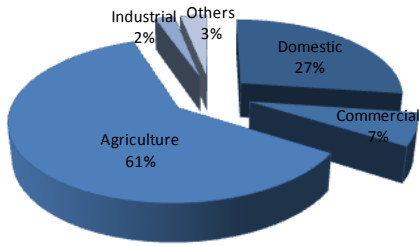
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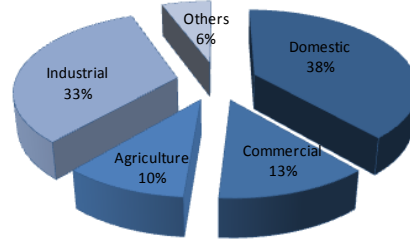
31

Annexure I

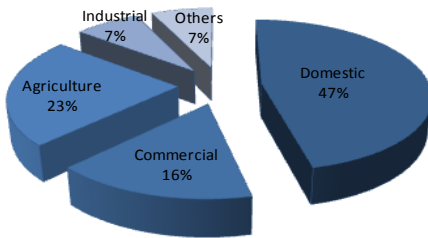
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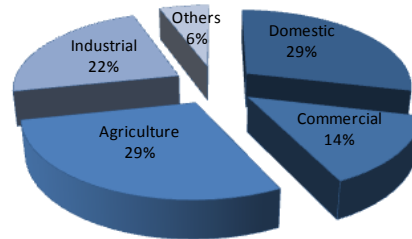
PUDUKOTTAI



TANJAVUR



KARUR



2. Annexure II: HT survey in the four representative circles in Tamil Nadu

2.1 Vellore

Particulars	Consumption (kWh)
Energy input in the Circle	30764213
Energy send from the HT system	29786636
Technical Loss - HT	3.18%

110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
MV Puram 110kV	32517.9	32816.7	298.8	40000	11952000									Jambukulam	702.32	721.21	18.89	40000	755600	2.04%
														Soorai	25634.7	Interconnected		40000		
														Marudallam	4002.2	4075.9	73.7	40000	2948000	
														Thalangai	12007.2	12100.1	92.9	40000	3716000	
														Mill	33493.4	33600.6	107.2	40000	4288000	
																			11707600	
Salai 110kV	1284.33	1330.19	45.86	15000	6879000									Mampakam Chatram	119.95	186.95	67	20000	1340000	3.54%
														Kunnathur	27307.7	27380	72.3	4000	289200	
														Anvarthi khanpet	2188.36	2253.45	65.09	20000	1301800	
														Paranchi	3459.98	3545.11	85.13	40000	3405200	
														Kainoor	25230.9	25305.7	74.8	4000	299200	
																			6635400	
Pallur 110kV	26353.2	26521	167.8	15000										Thirumal pure	1437.038	1478.7	41.662	40000	1666480	4.42%
														Ganapathi puram	13584.38	13664.9	80.52	4000	322080	
														Santhamangalam	11668.916	11712.7	43.784	4000	175136	

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
														Pallur	Not working	Not working		2000		
														Naval	3261.64	3262.9	1.26	4000	5040	
														Pullalur	14574.21	14583.9	9.69	20000	193800	
														Kamavar palayam	406.37	408.52	2.15	20000	43000	
														Attupakkam	837.6	843.3	5.7		0	
Thakkolam 110kV	Not working	Not working												Murungi	503.84	505.73	1.89	40000	75600	
														Arigilapadai	688.9	693.16	4.26	40000	170400	
														Pudhur	901.7	905.86	4.16	20000	83200	
														Water works		80.37	80.37	20	1607.4	
														Cisf	380.36	383.89	3.53	20	70.6	
														Purusai	1095.08	1104.39	9.31	20000	186200	
Mambakam 110	15626.8	15681.5	54.7	15000	820500									Penakar	19402.7	19450.3	47.6	4000	190400	3.61%
														Irunkur	14163.8	14198.1	34.3	4000	137200	
														Korukkatpur	3880.6	3898.6	18	1000	18000	
														Valapandal	16238.8	16294.2	55.4	2000	110800	
														Vadakkumedu	18510.4	18553	42.6	4000	170400	
														Chenkanapuram	23945	23986	41	4000	164000	
																			790800	
Sipcot 110kV	2178.36	2330.24	151.88	30000										Sipcot3	7798.08	7863	64.92	4000	259680	2.16%
														Sipcot2	398.2	411.6	13.4	40000	536000	
														Aol	34169	34303.7	134.7	4000	538800	
														IVPM	Not working	Not working				
														Foundry	1503.98	1510.04	6.06	4000	24240	

110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
														Bhel 1	17344.5	17366.2	21.7	4000	86800	
														Bhel 2	11526.2	11620.5	94.3	2000	188600	
														Bhel 3	788.96	794.7	5.74	40000	229600	
														Walaja	284.2	293.6	9.4	40000	376000	
														Sipcot 1	Not working	Not working				
														Secals	14835.9	15254.9	419	4000	1676000	
														Veppur	987.77	990.96	3.19	20000	63800	
														MMTCL	23512.2	23573.8	61.6	4000	246400	
														TCL	11591.2	11615.4	24.2	2000	48400	
														New Sidco	1287.23	1293.81	6.58	2000	13160	
														Mittal	2377	2419.6	42.6	4000	170400	
Katpadi 110 kV	40876.4	40920.6	44.2	30000	1326000									Katpadi	554.188	598.253	44.065	4000	176260	3.73%
														Dharapadavedu	383.499	430.033	46.534	4000	186136	
														V.G rao nagar	424.212	470.897	46.685	4000	186740	
														Gandhi nagar	604.882	646.056	41.174	4000	164696	
														Kazhinjur	591.558	643.523	51.965	4000	207860	
														Senoor	610.139	665.487	55.348	2000	110696	
														Christian pet	487.616	538.827	51.211	2000	102422	
														TEL	14093.1	14163.9	70.8	2000	141600	
																				1276410
Vaduganthanga 110kV	1317.24	1392.97	75.73	15000	1135950									Melmoil	13433.1	13461	27.9	4000	111600	4.71%
														Panamadangi	19588.2	19632.1	43.9	4000	175600	
														Latteri	20352	20380.7	28.7	4000	114800	
														Thirumani	15361.3	15400.3	39	4000	156000	

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
														Pasumathur	15131.5	15174.2	42.7	4000	170800	
														D.r kupam	19905.8	19949.3	43.5	4000	174000	
														K.v kupam	18864.6	18909.5	44.9	4000	179600	
																			1082400	
Vellore Thiruvalam-1	17096	Shut down		40																
Thiruvalam-2	145539.6	145794.8	255.2	40	10208									Katpadi	218.16	224.416	6.256	40	250.24	2.89%
														Poigai	31268.9	31279.9	11	40	440	
														Sethuvai	16940.5	16962.5	22	40	880	
														Kagaitthapattarai	176.579	180.886	4.307	40	172.28	
														CMC	37846.2	37875.7	29.5	40	1180	
														Thottapalayam	51749.2	51782	32.8	40	1312	
														SVN	273.02	281.211	8.191	40	327.64	
														Salavanpettai	45233.8	45253.9	20.1	40	804	
														Ariyur	18956.3	19012.2	55.9	40	2236	
														Mill	9410	9437.3	27.3	30	819	
														Sankranpalayam	777.512	792.795	15.283	40	611.32	
														Bagayam	390.816	395.89	5.074	40	202.96	
														Bazzar	730.387	747.324	16.937	40	677.48	
																			9912.92	
Sathuvachari - Vellore	998.13	1010.88	12.75	20	255									Netajinagar	339.8	357.532	17.732	2	35.464	2.24%
														Kalatarat	504.75	516.359	11.609	2	23.218	
														Rangapuram	677.293	694.354	17.061	2	34.122	
														Vallarnagar	718.661	735.812	17.151	4	68.604	
														Sadaipet	503.031	525.001	21.97	4	87.88	

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
																			249.288	
Sholinghur 110/33 kV	33892.4	33956	63.6	60000			Brakes India c unit	15723.5	15808.6	85.1	9000	765900								
Sholinghur 110/11kV	1110.49	1114.23	3.74	60000			Brakes India b unit	2317.1	2384.9	67.8	9000	610200								
							Kandigai	30447.6	30497.9	50.3	9000	452700								
							Banavararam	745.6	791.7	46.1	9000	414900								
							Banavararam 33kV incoming from sholinghur	Meter defect	Meter defect											
												2243700		Forge 2000	2616.4	2644.6	28.2	40000	1128000	
														Brakes india a unit	1381.4	1395.92	14.52	40000	580800	
														Sholinghur textiles	28108.4	28137.6	29.2	4000	116800	
														Erumbi	26848	26877.7	29.7	4000	118800	
														Town	53479.7	53510.8	31.1	2000	62200	
														Keelbalapuram	39802.7	39826.2	23.5	4000	94000	
														Thadur	19673.8	19703.7	29.9	4000	119600	
														Thalikkal	3154.953	3169.559	14.606	4000	58424	
														Mill	30027.7	30050.9	23.2	4000	92800	
														Banavararam	Meter defect	Meter defect				
														Mangalam	Meter defect	Meter defect				
Kaverip	49171.9	49285	113.1	30000	3393000	4.98%	Ranipet	27316.4	27428.5	112.1	9000	1008900	1.09%							

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	
akkam 110kV incoming from thiruvallam																					
							Ozhugur	18841.7	18915.7	74	9000	666000									
							Punnai	13182.4	13275.8	93.4	18000	1681200									
												3356100									
														Dharmanithi	23816.8	23898.5	81.7	4000	326800	3.93%	
														Kaveripakkam	17721.5	17798.8	77.3	4000	309200		
														Alapakkam	20621.5	20696.6	75.1	4000	300400		
														Musiri	13342.8	13437.7	94.9	4000	379600		
														Bagawali	997.48	1069.06	71.58	4000	286320		
														Chakkaramallur	7783	7863.2	80.2	4000	320800		
														Vegamangalam	34856.6	34928.9	72.3	4000	289200		
														Melkalathur	22275.9	22354.7	78.8	2000	157600		
														Kattupakkam	14620.5	14695.4	74.9	2000	149800		
														Punnai	1382.24	1454.42	72.18	4000	288720		
														Nemali	14144.1	14248	103.9	4000	415600		
																				3224040	
Mosur 110kV incoming from mosur link 1 and 2	3893.1	3953.2	60.1	60000			MRF	47258.1	47429.1	171	12000	2052000	2.06%								
							Arakkonam	43383.8	43548.2	164.4	9000	1479600									
												3531600		Town	15934	16073.6	139.6	4000	558400		
														Industrial	10757.8	10860.3	102.5	4000	410000		

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss
														Vallarpuram	1182676.8	1182815.9	139.1	4000	556400	
														Flsmith	Not working	Not working			0	
														Railway	378.264	483.445	105.181	2000	210362	
														G.r pet	143.514	185.221	41.707	4000	166828	
														Naval	96.814	146.101	49.287	2000	98574	
														Town	492.254	506.511	14.257	4000	57028	
														Nagavedu	999.57	1023.84	24.27	40000	970800	
														Authur	207.97	226.41	18.44	20000	368800	
														Ramco	270.881	287.825	16.944	2000	33888	
Arkot 110 kV	2312.66	2330.68	18.02	15000	270300	3.28%	Ranipet	1518.46	1548	29.54	9000	265860	1.64%							
														Uppupet	1179.23	1182.93	3.7	2000	7400	1.66%
														Muppathuvetti	372.8	376.4	3.6	20000	72000	
														Thoppukana	446	448.1	2.1	20000	42000	
														Bazaar	357.383	362.375	4.992	40	199.68	
														Palar	369.496	376.45	6.954	40	278.16	
														College	544.8	551.4	6.6	4000	26400	
														Visharam	20.68	25.487	4.807	2000	9614	
														Ranipet	199.52	202.41	2.89	4000	11560	
														Parry vcb	223.775	230.253	6.478	4000	25912	
														Annoor	474.868	481.042	6.174	4000	24696	
														Pingi	396.879	407.22	10.341	4000	41364	
																			261423.84	
Timiri	47563.6	47654	90.4	15000	1356000	2.58%	Ranipet	31973.8	32009.8	36	9000	324000	1.10%							

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110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss		
110kV																						
							Pudupadi	1290.4	1313	22.6	45000	1017000										
												1341000		Danarapakkam	24120.9	24180	59.1	4000	236400	1.49%		
														Pungunar	794.17	797	2.83	40000	113200			
														Villapakkam	34783.7	34859	75.3	2000	150600			
														Kavanur	456.42	459.33	2.91	40000	116400			
														Ladavaraim	24065.9	24095.9	30	4000	120000			
														Timiri	23968.8	24045	76.2	2000	152400			
														Chakkramallur	21983.4	22056	72.6	2000	145200			
														Kadapan dhangai	13274.9	13315.1	40.2	2000	80400			
														Ladavaraim	6152.8	6158.5	5.7	2000	11400			
														Mangadu	92107.5	92205	97.5	2000	195000			
																				1321000		
Karnambut 110kV	38542.8	38663.5	120.7	30000	3621000	3.97%	Pittuthakku	32820.4	32966.6	146.2	9000	1315800	1.03%									
							Melpadi	36568.7	36710.2	141.5	9000	1273500										
							Vit	72.11	188.3	116.19	4500	522855										
							Kathyawadi	30290.2	30394.9	104.7	4500	471150										
							Serakadu	34721.1	34860.5	139.4	2	278.8										
												3583583.8		Serkadu	25661.1	25765.4	104.3	2000	208600	2.96%		
														Ullipudur	29419.4	29528	108.6	2000	217200			
														Tannery	23118.3	23280.9	162.6	2000	325200			
														Visharam	20590.4	20689.3	98.9	2000	197800			
														Thalanoor	10044.2	10164.7	120.5	2000	241000			
														Ayilam	25158.8	25227.7	68.9	2000	137800			

110kV GSS	1st read	2nd read	Difference	MF	Consump.	Loss	33 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	11 kV Feeder	1st read	2nd read	Difference	MF	Consump.	Loss	
														Karigiri	10690.7	10750.1	59.4	2000		118800	
														Sugarmill	24831.1	24892.8	61.7	2000		123400	
														Keelminnal	36694.1	36772	77.9	4000		311600	
														Arapakkam	170.9	250.7	79.8	20000		1596000	
																				3477400	
Total												30764213								29786636	

2.2 Erode

Particulars	Consumption (kWh)
Energy input in the Circle	75818565
Energy send from the HT system	72318100
Technical Loss - HT	4.62%

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
9/24/2012	Kavandapady	16751.00	16831.60	80.60	30000	2418000		Odathurai 22kV		14663.1	14713.8	50.7	8000	405600	
1/10/2012								Kavandapady 22kV		252.57	265.5	12.93	60000	775800	
								Ellispettai 22kV		14901.4	14975.05	73.65	6000	441900	
								Kanjikoil 22kV		155.83	157.8	1.97	60000	118200	
									Pethampalayam 11kV	6995.5	7023.6	28.1	4000	112400	
									Singanalur 11kV	136.82	140.22	3.4	40000	136000	
									Vellank Oil	206.53	211.53	5	40000	200000	
									Kolathupalayam 11kV	9749.8	9785	35.2	4000	140800	
									G.C. meter	16751	16818.6	67.6	30000	2028000	
														2330700	3.61%
9/24/2012	Gandhinagar	379.88	386.79	6.91	150000	1036500			Naduvalasu 11kV	242.38	246.71	4.33	40000	173200	
1/10/2012									Olapalayam 11kV	286.16	291.95	5.79	40000	231600	
									Karukkampalayam 11kV	193.2	196.1	2.9	40000	116000	
									Sinthakuttai 22kV	188.27	191.88	3.61	60000	216600	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
								Ayanvallasu 22kV		270.82	275.77	4.95	60000	297000	
								G.C. meter		379.88	386.79	6.91	150000	1036500	
														1034400	0.20%
9/22/2012	Erode	1144.87	1158.78	13.91	600000	8346000		Southern Railway 22kV		148.846	161.673	12.827	120000	1539240	
1/10/2012								Solar 22kV		449.229	460.064	10.835	120000	1300200	
								Town 22kV		276.051	284.38	8.329	120000	999480	
								Market 22kV		299.788	304.313	4.525	120000	543000	
								Narayanavallasu 22kV		293.959	300.923	6.964	80000	557120	
								V.P. Chathram 22kV		605.752	620.188	14.436	60000	866160	
								Colectorate 22kV		482.004	490.175	8.171	60000	490260	
								Surampatty 22kV		299.808	302.704	2.896	120000	347520	
								Karungalpalayam 22kV		455.933	463.857	7.924	120000	950880	
								Ashokapuram 22kV		299.065	304.927	5.862	120000	703440	
								G.C. meter		1144.87	1158.78	13.91	600000	8346000	
														8297300	0.58%
9/24/2012	Suriyampalayam	1723.3	1779.9	56.6	300000	16980000		R.N. Pudur 22kV		1933	1968.7	35.7	120000	4284000	
1/10/2012								B.P.Agraharam 22kV		402.7	411.00	8.3	120000	996000	
								Nasiyanur 22kV		596.39	610.72	14.33	60000	859800	
								Milk Dairy 22kV		348.73	368.8	20.07	60000	1204200	
								IRIT 22kV		786	799.7	13.7	600000	8220000	
								G.C. meter		1723.3	1779.9	56.6	300000	16980000	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
													0		
														15564000	8.34%
9/22/2012	Mettukadai	4768118.8	4803589.1	35470.3	750	26602725		Karavaikal 22kV		548.77	585.86	37.09	60000	2225400	
1/10/2012								Vilaraspatti 22kV		300.9	354.1	53.2	60000	3192000	
								Pungampady 22kV		2728.06	2963.8	235.74	60000	14144400	
								Thindal 22kV		689.8	787.2	97.4	60000	5844000	
								G.C. meter		4768118.8	4803589.1	35470.3	120000	425643600	
														25405800	4.5%
9/25/2012	Kaspapettai	778.4	788.22	9.82	150000	1473000		Kulur 22kV		9974.2	9983.5	9.3	6000	55800	
3/10/2012								Nanjaiuthukuli 22kV		22646.9	22693.5	46.6	6000	279600	
								Chenniyampalayam 22kV		34102.6	34172.8	70.2	6000	421200	
								Lakkapuram 22kV		476.9	483.6	6.7	60000	402000	
								Kaspapettai 22kV		21307.7	21359	51.3	6000	307800	
								G.c.meter		778.4	788.22	9.82	150000	1473000	
														1466400	0.45%
9/25/2012	Arachalur	21062	21163.1	101.1	4500	454950			Mettur 11kV	14448.5	14506.7	58.2	4000	232800	
3/10/2012									Vellankut tai 11kV	17325.8	17376.8	51	4000	204000	
									G.c meter	21062	21143.1	81.1	4500	364950	
														436800	3.99%
9/25/2012	Elumathur	864.73	869.11	4.38	300000	1314000			Vellapeth ampalayam 11kV	15495	15505	10	400	4000	
3/10/2012									88 Velampalayam 11kV	19763	20045	282	400	112800	
									Elumathu	368.19	373.18	4.99	40000	199600	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									r 11kV						
									Avalpoondurai 11kV	40.95	43.88	2.93	40000	117200	
									Anandampalayam 11kV	511.91	519.07	7.16	30000	214800	
								Waterworks 22kV		11846.6	11857	10.4	2000	20800	
								Ganapathypalayam 22kV		206.23	211.33	5.1	80000	408000	
								Modakurichi 22kV		444.36	450.03	5.67	40000	226800	
								G.c.meter		864.73	869.11	4.38	30000	1314000	
														1304000	0.76%
9/26/2012	Sivagiri	437.1	440.77	3.67	150000	550500			Vettuvapalayam 11kV	109.32	110.27	0.95	40000	38000	
4/10/2012									Sivagiri 11kV	33812.3	33876.3	64	4000	256000	
									Kagam11kV	11304.5	11321.9	17.4	4000	69600	
									Minapalayam 11kV	110.21	114.34	4.13	20000	82600	
									Waterworks 11kV	6391.5	6404.45	12.95	2000	25900	
									Kallapuramkottai11kV	199.82	201.29	1.47	40000	58800	
									G.c.meter	437.1	440.77	3.67	15000	550500	
														530900	3.56%
9/26/2012	Nadupalayam	11046.4	11064.4	18	30000	540000			Amaravathipudur 11 kV	9745.9	9756.8	10.9	4000	43600	
4/10/2012									Mariamankoilpudur 11kV	11245.6	11259.5	13.9	4000	55600	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									Kollanalli water works 11kV	5184.7	5198.3	13.6	4000	54400	
								P. Kalamangalam 22kV		1753.45	1755.78	2.33	60000	139800	
								Solangapalam 22kV		1026.18	1029.85	3.67	60000	220200	
								G.C.meter		11046.4	11064.4	18	15000	270000	
														513600	4.89%
9/26/2012	Kodumudi	418.72	423.46	4.74	75000	355500			Thamarai palayam 11kV	12224.4	12239.5	15.1	4000	60400	
4/10/2012									Anjur 11kV	12648	12655.1	7.1	4000	28400	
									Waterworks 11kV	21092	21115.1	23.1	2000	46200	
									P.k.palayam 11kV	9638.6	9670.5	31.9	4000	127600	
									Kodumudi 11kV	161.83	163.74	1.91	40000	76400	
									G.c.meter	418.72	423.46	4.74	75000	355500	
														339000	4.64%
9/26/2012	K.B. Gramam	22477.1	22506.8	29.7	1500	44550			Kootham patty 11kV	222.65	234.22	11.57	2000	23140	
4/10/2012									K.S. Palayam 11kV	99.55	104.49	4.94	4000	19760	
									G.c.meter	22477.1	23590.8	1113.7	1500	1670550	
														42900	3.70%
9/28/2012	Chennimalai	1084.88	1089.97	5.09	150000	763500			Chennimalai 11kV	1325.77	1331.5	5.73	40000	229200	
6/10/2012									Pasuvapettai 11kV	74.95	76.43	1.48	40000	59200	
									Kodumal 11kV	706.3	709.7	3.4	40000	136000	
									Asokapuram 11kV	1211.25	1217.36	6.11	40000	244400	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									K.g.valasu 11kV	589.82	591.63	1.81	40000	72400	
									G.c. meter	1084.88	1089.97	5.09	150000	7635000	
												0		741200	2.92%
9/27/2012	Sipcot	732.45	737.12	4.67	150000	700500			Precot mill 11kV	370.22	374.86	4.64	4000	18560	
5/10/2012									Kadiri11kV	85074	85806	732	400	292800	
									K.m.patty 11kV	18467	18777	310	400	124000	
									P.c.etp 11kV	100194	100329	135	600	81000	
									Gangothri 11kV	20289	20533	244	700	170800	
									G.c.meter	732.45	737.12	4.67	150000	700500	
														687160	1.90%
9/27/2012	Ingur	46041361	46084851	43490	60	2609400	Agni steel 33kV			26766.90	26840.50	73.60	12000	883200	
5/10/2012							Chennimalai 33kV			31662.30	31666.80	4.50	18000	81000	
							P.G.palayam 33kV			57751.60	57828.10	76.50	12000	918000	
									Vijayamangalam 11kV	16482.90	16502.10	19.20	2000	38400	
									Palaniandavar 11kV	23679.10	23691.50	12.40	4000	49600	
									Palapalayam 11kV	26789.20	26804.80	15.60	4000	62400	
									Srinidhi 11kV	13756.60	13761.90	5.30	4000	21200	
									Myladi 11kV	165.75	168.22	2.47	40000	98800	
									Moolakara 11kV	27199.60	27223.33	23.73	4000	94920	
									Perundurai town 11kV	9583.30	9622.20	38.90	4000	155600	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									Engg.college 11kV	27156.30	27175.10	18.80	4000	75200	
									Sanatorium 11kV	25082.00	25107.30	25.30	4000	101200	
									Perundurai waterworks 11kV	15218.50	15221.80	3.30	4000	13200	
									G.C.meter	46041361.00	46084851.00	43490.00	600000	2609400000	
														2592720	0.64%
9/27/2012	Sipcot	563.75	570.9	7.15	600000	4290000	Thingalore 33kV			45798.77	45876.00	77.23	18000	1390140	
5/10/2012									M.p.shan tex 11kV	37869.00	37925.00	56	4000	224000	
									ETP 11kV	37226.00	37246.00	20	40000	800000	
									Indl-feeder-I,11kV	32823.50	32933.00	109.5	4000	438000	
									Indl-feeder-II,11kV	20312.80	20425.00	112.2	4000	448800	
									IOC 11kV	1915.01	1919.50	4.493	40000	179720	
									Srinithi 11kV	2327.33	2332.50	5.17	40000	206800	
									Rohini 11kV	901.24	905.36	4.12	40000	164800	
									Kullampalayam 11kV	2752.96	2758.47	5.51	40000	220400	
									G.c.meter	563.75	567.53	3.78	600000	2268000	
														4072660	5%
9/27/2012	Avalpoondurai	913.62	917.31	3.69	90000	332100			Avalpoondurai 11kV	908.59	911.44	2.85	40000	114000	
5/10/2012									Kangapuram 11kV	525.97	528.56	2.59	40000	103600	
									Paliyuthur 11kV	688.38	691.14	2.76	40000	110400	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									G.c.meter	913.62	917.31	3.69	90000	332100	
														328000	1.23%
9/27/2012	Anjur	1400.15	1404.3	4.15	45000	186750			Koilpalayam 11kV	423.76	425.18	1.42	40000	56800	
5/10/2012									Kurukuvalasu 11kV	446.46	447.53	1.07	40000	42800	
									N.Goundanpalayam 11kV	273.67	274.43	0.76	40000	30400	
									Vallipuram 11kV	416.86	418.24	1.38	40000	55200	
									G.c.meter	1400.15	1404.3	4.15	45000	186750	
														185200	0.83%
9/28/2012	Kunnathur	1237.25	1244.03	6.78	150000	1017000			Athiyur 11kV	405.68	408.07	2.39	40000	95600	
6/10/2012							Total input	1377000	Gomathi mill 11kV	142.63	150.08	7.45	60000	447000	
	gcmeter 1	350.18	352.58	2.4	150000	360000			K.V.palayam 11kV	1351.94	1358.51	6.57	60000	394200	
									Kunnathur 11kV	1025.19	1031.45	6.26	20000	125200	
									Chengapalli 11kV	554.82	558.16	3.34	40000	133600	
									G.c.meter 1	350.18	352.58	2.40	150000	360000	
									G.c.meter 2	1237.25	1244.03	6.78	150000	1017000	
														1195600	13.17%
9/28/2012	Thingalore	36903.5	36985	81.5	9000	733500			Siruvalur 11kV	27530.8	27594.4	63.6	4000	254400	
6/10/2012									Nallampatti 11kV	18383.5	18414.7	31.2	4000	124800	
									Seenapuram 11kV	23579.2	23615.9	36.7	4000	146800	
									Veeranampalayam 11kV	14304	14354.2	50.2	4000	200800	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
									G.c.meter	36903.5	36985	81.5	9000	733500	
														726800	0.91%
9/28/2012	P.G. Palayam	8604.6	8707	102.4	30000	3072000			Dasampalayam 11kV	94.82	97.65	2.83	40000	113200	
6/10/2012									Gomuki 11kV	107.84	112.3	4.46	40000	178400	
									Kalliampudur 11kV	44736.5	44747.2	10.7	40000	428000	
									P.g/palayam 11kV	44614	44670.1	56.1	40000	2244000	
									G.c.meter	8604.6	8707.7	103.1	30000	3093000	
														2963600	3.53%
9/29/2012	Vellode	20520.3	21394.4	874.1	900	786690			K.v.palayam 11kV	10145.5	10598	452.5	400	181000	
7/10/2012									Vellode 11kV	308.93	313.21	4.28	40000	171200	
									Mill 11kV	19179.3	20165.2	985.9	400	394360	
									G.c.meter	20520.3	21394.4	874.1	9000	7866900	
														746560	5.10%
9/29/2012	Sanatorium	29341.2	29398	56.8	9000	511200			Sullipalayam 11kV	17095.8	17131.5	35.7	4000	142800	
7/10/2012									Vavikada i 11kV	33273.8	33308.1	34.3	4000	137200	
									Vengamadu 11kV	41764	41816.6	52.6	4000	210400	
									G.c.meter	29341.2	29398	56.8	9000	511200	
														490400	4.07%
9/29/2012	Velampalayam	588.63	592.41	3.78	90000	340200			Velampalayam 11kV	607.09	611.4	4.31	40000	172400	
7/10/2012									S.m.palayam 11kV	603.03	605.84	2.81	40000	112400	
									Ganapathipalayam 11kV	90.29	91.23	0.94	40000	37600	
									G.c.meter	588.63	592.41	3.78	90000	340200	

Date	110kV SS	1st read	2nd read	Difference	MF	Consumption	33kV Feeder	22kV Feeder	11kV Feeder	1st read	2nd read	Difference	MF	Consumption	Losses
Total						75818565								322400	5.23%

2.3 Tuticorin

Particulars	Consumption (kWh)
Energy input in the Circle	25578412.50
Energy send from the HT system	24683591.68
Technical Loss - HT	3.50%

1st date	2nd date	SS Name	1st read	2nd read	Difference	MF	Consumption	Feeders name	kV Rating	1st read	2nd read	Difference	MF	Consumption	Total	Loss
15\09\12	26\09\12	Town SS	44265.3	44448.6	183.3	30000	5499000	College	22	125082	129226	4144	60	248640		2.79%
								Chemical	22	852920	875613	22693	60	1361580		
								Mill 1	22	279144	286538	7394	80	591520		
								Mill 2	22	493845	506114	12269	80	981520		
								Water works	22	503264	516810	13546	80	1083680		
								Town	22	532339	545825	13486	80	1078880		
															5345820	
14\09\12	26\9\12	AYYANAR PURAM SS	1480.95	1500.6	19.65	150000	2947500	THRESPURAM	22	798673	833634	34961	30	1048830		3.27%
								MAPPILLAI URANI	22	1082460	1121651	39191	30	1175730		
								PATINAMA RUTHUR	22	2466.68	2480.02	13.34	30000	400200		
								THARUVAI KULAM	11	1971.36	1982.68	11.32	20000	226400		
															2851160	
15\09\12	26\09\12	OTTAPIDARAM	567.79	659.94	92.15	60000	5529000	VELLARAM	11	231.8	254.3	22.5	20000	450000		2.87%
								ARASADI	11	6129	6439.7	310.7	10000	3107000		
								WATER WORKS	11	139.02	141.13	2.11	20000	42200		
								PUTHIA PUTHUR	11	112753	113732	979	200	195800		
								OSANUTHU	11	27403	35280	7877	200	1575400		

1st date	2nd date	SS Name	1st read	2nd read	Difference	MF	Consumption	Feeders name	kV Rating	1st read	2nd read	Difference	MF	Consumption	Total	Loss
															5370400	
15\09\12	27\09\12	OTTANATHAM	10328.7	10359.1	30.4	150		PARAVATHIKOTTAI	11			0		0		
								OTTANATHAM	11	857.2	865.5	8.3	200	1660		
								PUVANI	11	67.8	74.4	6.6	200	1320		
								WATERWORKS	11	11725	11732.4	7.4	200	1480		
												0				
14\09\12	27\09\12	SIPCOTTSS	47598.6	47829.5	230.9	14625	3376912.5	PANDARAMPATTI	22	525.85	545.89	20.04	30000	601200		4.74%
								STERLITE	22	2634114	2650538.5	16424.5	3	49273.5		
								RADIO 1	22	9675416	9744208.4	68792.4	6	412754.4		
								RADIO 2	22	3268045	3284797.1	16752.1	3	50256.3		
								BHARATH	22	501370	518191	16821	60	1009260		
								RAILWAY	22	651552	669786	18234	60	1094040		
															3216784.2	
17\09\12	28\10\12	AUTOSS	33335.2	33492.4	157.2	15000	2358000	TTPP	22	322898	331924	9026	40	361040		4.95%
								IOC	22	145954	152216	6262	40	250480		
								INDUSTRIAL	22	153952	161497	7545	60	452700		
								TWAD	22	14.8	15.5	0.7	30000	21000		
								HARBOUR	22	239817	247442	7625	40	305000		
								WIND	22	242040	250724	8684	60	521040		
								VOC PORT TRUST	22	220	231	11	30000	330000		
															2241260	
17\09\12	28\09\12	MANJALNE ERKAYAL	12116.2	12159.5	43.3	30000	1299000	SAYARPURAM	11	3003204.6	3205780	202575.4	2	405150.8		4.12%
								WATERWORKS	11	1532779.1	1599024	66244.9	2	132489.8		
								ERAL	11	3977567	4156902	179335	2	358670		
								PALAYAKA	11	11304	11478.6	174.6	2000	349200		

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1st date	2nd date	SS Name	1st read	2nd read	Difference	MF	Consumption	Feeders name	kV Rating	1st read	2nd read	Difference	MF	Consumption	Total	Loss
								YAL							1245510.6	
17\09\12	29\09\12	KURUMBUR	47520.6	47635.7	115.1	4500	517950	KAYAMOZHI	11	754.98	780.29	25.31	20000	506200		2.21%
								THIRUKKALUR	11	1286.654	1302.292	15.638	20	312.76		
															506512.76	
18\09\12	29\09\12	VAGAIKULAM	37905.8	38020.1	114.3	15000	1714500	MILL	22	14370.73	14463.8	93.07	4000	372280		3.83%
								KORAMPALLAM	22	883780.7	1043728.4	159947.7	3	479843.1		
								AIRPORT	22	1547.9	1556.39	8.49	40000	339600		
								VALLANADU	22	9573458.7	9661769.3	88310.6	3	264931.8		
								VVS STEEL	33	713.93	718.2	4.27	45000	192150		
															1648804.9	
18\09\12	02\10\12	VILATHIKULAM	19510.3	19832.3	322	4500	1449000	TOWN	11	2835.85	2850.68	14.83	20000	296600		4.01%
								RAMACHANDRAPURAM	11	326.05	327.77	1.72	20000	34400		
								PILLAIYARNATHAM	11	1258.02	1267.3	9.28	20000	185600		
								NAGALAPURAM	33	867.9	867.9	0	9000	0		
								KULATHUR	33	35764.2	35958.5	194.3	4500	874350		
												0			1390950	
18\09\12	02\10\12	NAGALAPURAM	not working					THOPPAMPATTI	11	5056.4	5056.5	0.1	20000	2000		
								WATERWORKS	11	98.74	99.94	1.2	20000	24000		
								PUTHUR	11	52171.7	52396.5	224.8	2000	449600		
								MILL	11	1125966.7	1266052	140085.3	2	280170.6		
								VADAMALAPURAM	11	990708.6	1043334.2	52625.6	2	105251.2		

1st date	2nd date	SS Name	1st read	2nd read	Difference	MF	Consumption	Feeders name	kV Rating	1st read	2nd read	Difference	MF	Consumption	Total	Loss
19\09\12	01\10\12	SOORANGUDI	70.2	73.6	3.4	45000		VILATHIKULAM	11	0	0	0	0	0		
								MELMANTHAI	11	109.3	116.8	7.5	20000	150000		
19\09\12	01\10\12	KULATHUR	26526.3	26635.2	108.9	4500	490050	KULATHUR	11	42829.8	42967.1	137.3	2000	274600		2.08%
								VEPPALODAI	11	12850.9	12953.52	102.62	2000	205240		
												0			479840	
19\09\12	02\09\12	SRIVAIKUNDAM	1310.65	1323.9	13.25	30000	397500	SAWERPURAM	11	40162.7	40303.5	140.8	1000	140800		2.75%
								ALWARTHIRUNAGARI	11	17044.4	17079.3	34.9	1000	34900		
								KEELAVALLANADU	11	8913.9	8991.9	78	1000	78000		
								SIVANTHIPATTI	11	19553.6	19686.4	132.8	1000	132800		
								PONNANKURUCHI	11	218.39	220.851	2.461	20	49.22		
															386549.22	
		Total					25578412.50								24683591.68	

2.4 Madurai

Particulars	Consumption (kWh)
Energy input in the Circle	50304856.57
Energy send from the HT system	48574369.50
Technical Loss - HT	3.44%

Date	110 kV GSS	1 st read	2 nd read	Diff.	MF	Consump.	33 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	11 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	Diff.	Losses
8/9/2012	Arasaredi	28473.1	28557.8	84.7	15000	1270500.00							Virattipathu	867.22	881.75	14.53	4000	58108.00		
17/9/12													Kochadai	827.68	916.24	88.56	4000	354236.00		
													Corp ⁿ 3 rd	282.28	286.04	3.76	4000	15040.00		
													Ponragaram	433.27	443.57	10.31	4000	41236.00		
													Industrial	721.62	733.69	12.06	4000	48260.00		
													Koodal	665.00	678.10	13.11	4000	52420.00		
							Mill	20043.2	20132.2	89	2000	178000								
							Araspalayam	743.36	756.637	13.277	6000	79662	Sellur	433.40	447.00	13.60	4000	54400		
													Tamilsangan	471.94	479.88	7.93	4000	31736		
													Yannaikkal	330.10	338.00	7.90	4000	31600		
													Puttutthoppu 11kVidr	163.20	213.20	50.00	4000	200000		
							Meenakshikovil	314.595	320.151	5.556	4000	22224	Kovil	0.05	0.23	0.18	4000	732		
													South avani	181.92	187.87	5.95	4000	23800		
													Simmakal	103.56	106.10	2.54	40000	101720		
													Keelamasi veethi	293.29	297.13	3.85	4000	15384		
												178000						1028672	1206672	5.02%
8/9/2012	Pasumalai	510.634	526.163	15.53	20000	310580							Thruparankulam	99.28	108.80	9.52	6000	57144		
17/9/12													Ellishnagar	81.50	90.95	9.45	6000	56712		
													S.S. Colony	361.19	368.90	7.71	400	3086		

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Date	110 kV GSS	1 st read	2 nd read	Diff.	MF	Consump.	33 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	11 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	Diff.	Losses
													Planganathan	78.99	87.48	8.49	4000	33956		
													Kalakoilkudi	34.24	37.80	3.56	4000	14236		
													Thirunagar	55.73	61.73	6.00	4000	24000		
													Mulakarai	98.79	118.23	19.44	4000	77748		
													Perangudi	31.70	33.87	2.17	4000	8672		
													T.V.S. Nagar	63.07	69.69	6.62	4000	26484		
																		302038	8542	2.75%
8/9/2012	Thrumangalam	334.5	345.3	10.80	150000	1620000							Thumangalam	797.81	811.95	14.15	40	565.84		
17/9/12													Industrial	25308.70	25417.90	109.20	4000	436800		
													NeduMadurai	14874.80	14913.60	38.80	4000	155200		
													Shithlai	12320.80	12531.60	210.80	4000	843200		
													Sathangudi	16019.30	16042.70	23.40	400	9360		
													Pathupatti	12216.50	12255.70	39.20	4000	156800		
																		1601925.84	18074.16	1.12%
8/9/2012	Kappalur	48851.3	48925.6	74.3	30000	2229000							Steel	26038.60	26084.40	45.80	6000	274800		
17/9/12													Industrial estate	590908.90	593612.90	2704.00	40	108160		
													Mepico old	42848.50	42942.20	93.70	4000	374800		
													Chemical	43037.60	43193.80	156.20	4000	624800		
													Mepico new	21247.40	21342.90	95.50	4000	382000		
													Seeta lakshmi	32947.30	33035.90	88.60	4000	354400		
																		2118960	110040	4.94%
10/9/2012	T-kallupatti	39429.9	39509.9	80	300000	24000000							Sayantur	23932.00	23976.10	44.10	4000	176400		
18/9/12													Paryur 1	28870.00	28926.20	56.20	4000	224800		

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													Paryur 2	59063.40	59115.10	51.70	4000	206800		
													Pudimpath	8063273.80	8119408.60	56134.80	400	22453920		
							Kallikudi	14988.4	15008.4	20	9000	180000	Pilaglun	47412.90	47491.70	78.80	2000	157600		
													Sundaramgund	13579.40	13635.40	56.00	2000	112000		
													Vilangulam	9347.20	9379.50	32.30	2000	64600		
													Industrial	74.47	80.02	5.55	2000	11100		
							Saptur	34565.5	34665.2	99.7	9000	897300	Vandatuli	27251.10	27286.40	35.30	4000	141200		
													Athipathu	3412.10	3432.20	20.10	4000	80400		
													Anaikaripatti	30182.20	30243.70	61.50	4000	246000		
																		23874820	125180	0.52%
11/9/2012	Thrupalai	272.8	281.9	9.1	30000	273000							Oktai	200.79	208.05	7.26	40	290.56		
19/9/12													N.R.P.M.	446.90	455.82	8.93	60	535.5		
													College	34.40	34.80	0.40	2000	800		
													O.M.K.M.	16646.80	16678.60	31.80	2000	63600		
													V.L.P.T.Y.	190814.20	190923.80	109.60	400	43840		
													N.S.M.	315.61	324.43	8.82	4000	35284		
													A.N.Y.R.	738.84	748.19	9.35	40	374		
							Kpuddur	709.385	718.406		90		Telecom	58.70	60.00	1.30	2000	2600		
													All India Radio	566.40	582.20	15.80	2000	31600		
													Express	372.70	376.50	3.80	4000	15200		
													Sellur	415.87	426.88	11.01	4000	44032		
													Government quarters	175.48	179.55	4.07	4000	16276		
													Ashok hotel	346.47	353.91	7.44	2000	14870		
																		269302.06	3697.94	1.35%
11/9/2012	Elish Nagar	338.35	343.84	5.49	15000	82350							Ponmeni	208.74	216.90	8.16	4000	32632		

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19/9/12													T.B Road	573.17	578.13	4.96	3000	14889			
													Kennet Road	155.97	163.69	7.72	4000	30888			
																		78409	3941	4.79%	
	Villapuram	5939719.4	6073098.6	133379.2	40	5335168	Mahalipatti(alt)	347.014	352.232	5.218	30000	156540									
							Subramaniapuram	304.306	308.285	3.979	30000	119370									
													South Masi	263.05	282.47	19.42	20000	388480			
													West Valley	575.47	588.54	13.07	20000	261500			
							Mahalipatti (main)	285.528	290.56	5.032	30000	150960									
													Kovil	27.45	27.98	0.53	30000	15870			
													Mahal	397.10	403.68	6.58	30000	197370			
													South gate	300.74	303.01	2.27	30000	68010			
													Keerathurai	273.63	277.46	3.83	30000	114900			
													S.t Marys	327.96	334.48	6.52	30000	195600			
							Subramaniapuram (alt)	260.038	265.345	5.307	30000	159210									
													Soaialzupuram	512.56	527.03	14.48	30000	434310			
													Villampuram	710.61	723.45	12.84	20000	256700			
													Avaniapuram	825.21	830.23	5.02	20000	100420			
													City express	368.12	376.41	8.29	30000	248670			
													Sulramaniapuram	266.20	273.13	6.93	30000	207990			
													Jaihindupuram	629.98	701.10	71.12	30000	2133540			
												315750									
																		4939110	5254860	1.51%	
12/9/2012	Samayanllur	355	367.21	12.21	15000	183150							Industrial	411.87	419.23	7.36	2000	14716			
20/9/12													Tonichiyam	146.87	149.87	3.00	4000	12004			
													Alangandur	333.81	339.14	5.32	4000	21288			
													Pepsi	112.06	113.67	1.61	4000	6452			

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													Mill	534.50	542.17	7.67	6000	46014		
													Solvandam	175.17	176.12	0.95	6000	5676		
													Textile	773.12	790.63	17.50	4000	70016		
																		176166	6984	3.81%
12/9/2012	Solavandan am	581.13	588.21	7.08	15000	106200							Thiruvandkham	462.05	463.78	1.73	4000	6920		
20/9/12													Payapuram	618.20	620.67	2.47	20000	49400		
													Wattrose	1004.66	1011.68	7.02	4000	28080		
													Nagar Solawandhanam	1039.71	1045.89	6.18	4000	24720		
																		109120		
12/9/2012	Anaiyur	331.28	336.8	5.52	150000	828000							Vilagudi	169.96	173.19	3.24	40000	129440		
21/9/12													Sanyli Nagar	237.05	239.35	2.30	20000	45960		
													Houring Board	261.71	265.93	4.22	20000	84320		
													Vadigudi	702.65	716.30	13.64	40000	545720		
																		805440	22560	2.72%
12/9/2012	Manikampat ti	528.88	530.68	1.8	150000	270000							Sandamanglam	1059.79	1061.11	1.32	20000	26400		
21/9/12													Devshri	1713.13	1716.67	3.54	20000	70800		
													Earpatti	1413.33	1418.47	5.14	20000	102800		
													Badayapatti	671.75	672.95	1.20	20000	24000		
													Idus. Estate	23.96	25.01	1.05	40000	42000		
																		266000	4000	1.48%
13/9/2012	Vandiur	96.9	101.7	4.8	150000								Vandiur	807.72	822.08	14.36	40000	574480		
21/9/12												Not workin g feeder	Viraganoor	1.00	1.00	0.00	20000	0		
													Pandikovil	572.50	582.12	9.62	20	192.48		

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																			574672.48		
14/9/2012	Urangpatti	24835.5	24894.6	59.1	15000	886500							Vaibow	35738.20	35803.30	65.10	4000	260400			
22/9/12													Industrial	11149.50	11182.50	33.00	4000	132000			
													Karuppaurani	21639.60	21680.20	40.60	4000	162400			
													Varichiyur	12840.80	12869.80	29.00	4000	116000			
													Rajakkoor	31545.20	31642.92	97.72	2000	195440			
																		866240	20260	2.29%	
14/9/2012	Narsingham patti	46129.9	46236.6	106.7	30000	3201000							Alagar Kovil	14553.10	14756.70	203.60	4000	814400			
22/9/12													Ab rural	22191.50	22217.90	26.40	4000	105600			
													Melur	15160.20	15249.70	89.50	2000	179000			
													Industrial	47480.70	48304.90	824.20	2000	1648400			
													Mill	413.55	416.01	2.46	2000	4920			
													Amool	22273.58	22311.10	37.52	2000	75040			
													Thakadrai	2522.10	2548.50	26.40	2000	52800			
													Chemical	55179.30	55301.10	121.80	2000	243600			
																		3123760	77240	2.41%	
14/9/2012	Melur Gss	155.6	159.1	3.5	150000	525000							Town	436.60	443.65	7.06	6000	42336			
22/9/12													College	15477.60	15506.60	29.00	4000	116000			
													Thirupalai	12316.80	12350.20	33.40	4000	133600			
													Thurudawaus	12323.60	12353.90	30.30	6000	181800			
													Industrial	2261.10	2266.50	5.40	6000	32400			
																		506136	18864	3.59%	
14/9/2012	Thaniyaman galam	866.53	869.89	3.36	150000	504000							Geminipatti	535.49	538.15	2.66	40000	106400			
22/9/12													Attampatti	557.70	559.10	1.40	40000	56000			

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													Kottampatti	1219.61	1224.05	4.44	40000	177600		
													Kurinjpatti	1075.29	1078.94	3.65	40000	146000		
																		486000	18000	3.57%
14/9/2012	Kotampatti	8668	8697.9	29.9	15000	448500							Thonilingapuram	11169.30	11196.10	26.80	4000	107200		
22/9/12													Kotampatti	20090.80	20118.40	27.60	4000	110400		
													Sukalingapuram	756.10	782.10	26.00	4000	104000		
													Karanglakudi	19254.10	19281.50	27.40	4000	109600		
																		431200	17300	3.86%
14/9/2012	Urangpatti	24835.5	24894.6	59.1	15000	886500							Vaibow	35738.20	35803.30	65.10	4000	260400		
22/9/12													Industrial	11149.50	11182.50	33.00	4000	132000		
													Karuppaurani	21639.60	21680.20	40.60	4000	162400		
													Varichiyur	12840.80	12869.80	29.00	4000	116000		
													Rajakkoor	31545.20	31642.92	97.72	2000	195440		
																		866240	20260	2.29%
15/9/2012	Uasilampatti	217.2	222.8	5.6	150000	840000	Thumakudu	30088.8	30153.4	64.6	4500	290700	Alagsarai	7296.60	7329.80	33.20	3000	99600		
23/9/12													Sedapatti	6448.90	6466.30	17.40	3000	52200		
													Madipunur	17335.80	17370.90	35.10	1000	35100		
													Mill	12761.30	12762.30	1.00	2000	2000		
							Vikaramaglam	26659.11	26700.2	41.09	4500	184905	Kotikullam	29008.00	29088.35	80.35	2000	160700		
													Nariyampatti	28731.70	28760.11	28.41	2000	56820		
													Vaiymaanpatti	8021.60	8023.60	2.00	2000	4000		
													Pappatti	13646.20	13691.60	45.40	2000	90800		
													Valanpur	28529.60	28561.69	32.09	2000	64180		
													Chinnakatalai	17308.80	17361.10	52.30	2000	104600		
													Chettaipatti	13712.70	13775.20	62.50	2000	125000		

Report (Vol. – II) on component wise AT&C losses reduction study in the State of Tamil Nadu

Date	110 kV GSS	1 st read	2 nd read	Diff.	MF	Consump.	33 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	11 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	Diff.	Losses
													Usilam patti tn	582.64	591.56	8.92	2000	17838		
																		812838	27162	3.23%
15/9/2012	Mandi kundu	14748.9	14776.1	27.2	15000	408000							Kalayanaipatti	23780.60	23820.10	39.50	4000	158000		
23/9/12													Koppalpatti	21150.10	21171.18	21.08	4000	84320		
													Vellaimalai	20858.80	20885.30	26.50	4000	106000		
													Upnra	11510.10	11532.00	21.90	2000	43800		
																		392120	15880	3.89%
15/9/2012	Achampathu	7841.9	7902.4	60.5	15000	907500							Alawarnagar	23194.30	23270.80	76.50	4000	306000		
23/9/12													Achampathu	12634.10	12703.40	69.30	4000	277200		
													Kilamathur	12559.80	12635.60	75.80	4000	303200		
																		886400	21100	2.33%
16/9/2012	Elumalai	747.25	752.5	5.25	150000	787500							Vandapulai	5796.00	5820.90	24.90	4000	99600		
24/9/12													Jothinacanaur	17394.90	17435.80	40.90	4000	163600		
													Uthapuram	10013.50	10044.30	30.80	4000	123200		
													Gopalpuram	15413.70	15436.80	23.10	4000	92400		
													M.S. Puram	8629.10	8663.00	33.90	4000	135600		
													Krishanampuram	14461.70	14499.30	37.60	4000	150400		
																		764800	22700	2.88%
16/9/2012	Chenakatlai	476.15	477.4	1.25	150000	187500							Thirumanikampatti	1602.66	1606.44	3.78	2000	7560		
24/9/12													S.kotampatti	559.45	561.51	2.06	20000	41200		
													Kanawayipatti	1600.12	1601.44	1.32	20000	26400		
													Solar power	2001.12	2004.24	3.12	20000	62400		
													Totiyapatti	5734.50	5756.00	21.50	2000	43000		
																		180560	6940	3.70%

Report (Vol. – II) on component wise AT&C losses reduction study in the State of Tamil Nadu

Date	110 kV GSS	1 st read	2 nd read	Diff.	MF	Consump.	33 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	11 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	Diff.	Losses
16/9/2012	Chekkarurani	8974532.4	8995764.9	21232.5	15	318487.5							Karumathure	10729.00	10758.60	29.60	1000	29600		
24/9/12													Gandhi Nagar	19355.40	19401.20	45.80	2000	91600		
													University	10320.10	10340.20	20.10	2000	40200		
													Kannanour	12800.00	12853.30	53.30	2000	106600		
													Thenpalanji	7793.40	7807.20	13.80	2000	27600		
													Power grid	6180.90	6188.80	7.90	2000	15800		
																		311400	7087.5	2.23%
16/9/2012	Vadipatti	20766.8	20874.1	107.3	15000	1609500							Theiture	14053.30	14060.92	7.62	30000	228600		
24/9/12													Mill	24355.90	24363.30	7.40	30000	222000		
													Kulase Kulamkotai	15820.10	15829.70	9.60	40000	384000		
													Ayyankottai	25859.90	25868.10	8.20	40000	328000		
													Industrial	9363.00	9370.30	7.30	60000	438000		
																		1600600	8900	0.55%
16/9/2012	Annuppunady	38300.1	38413.8	113.7	9000	1023300							Dami 33 kV	334.97	342.68	7.70	6000	46212		
24/9/12													Milk Project	672.32	682.26	9.94	6000	59622		
													Vandaur	8046.50	8058.80	12.30	4000	49200		
													Pulioangulam	21876.70	21969.80	93.10	4000	372400		
													Kallambal	10530.20	10562.90	32.70	4000	130800		
													Paonaivur	35719.10	35801.90	82.80	4000	331200		
													T.N.H.B.	283.47	287.94	4.47	3000	13413		
																		1002847	20453	2.00%
16/9/2012	Avaniyapuram	22977.2	23041.5	64.3	4500	289350							Industrial	366.61	373.64	7.03	4000	28116		
24/9/12													Rural	26492.40	26576.20	83.80	3000	251400		
																		279516	9834	3.40%

Date	110 kV GSS	1 st read	2 nd read	Diff.	MF	Consump.	33 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	11 kV feeder	1 st read	2 nd read	Diff.	MF	Consump.	Diff.	Losses	
	Total					50304856.57													48574369.50		

3. Annexure III: LT survey in four representative circles in Tamil Nadu

3.1 Vellore

Domestic DTs

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Energy Loss
11429111	Kannikoil street, Tajpura, Arcot	6162.36	6169.11	6.75	L&T	100	40	270	12.52%

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 1	529938		2150.70	2152.00	1.30
Consumer 2	40033664		3210.30	3211.60	1.30
Consumer 3	337338		4630.40	4631.70	1.30
Consumer 4	3096972		2670.00	2671.30	1.30
Consumer 5	3013931		200.90	202.30	1.40
Consumer 6	2859529		5380.50	5381.80	1.30
Consumer 7	40390082		15650.60	15651.90	1.30
Consumer 8	10262667		4160.70	4162.00	1.30
Consumer 9	385026		8130.30	8131.60	1.30
Consumer 10	2915575		2310.10	2311.40	1.30
Consumer 11	1212649626		7930.80	7932.10	1.30
Consumer 12	889899		5380.90	5382.30	1.40
Consumer 13	904408	Defective meter as meter reading showing no consumption during the survey	0.00	0.00	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 14	40032155		3450.00	3451.30	1.30
Consumer 15	415713		11400.10	11401.40	1.30
Consumer 16	40033168	Defective meter as meter reading showing no consumption during the survey	0.00	0.00	1.20
Consumer 17	9881156		8230.90	8232.20	1.30
Consumer 18	4041642		790.80	792.20	1.40
Consumer 19	2985739		10010.90	10012.20	1.30
Consumer 20	3265084	Defective meter as meter reading showing no consumption during the survey	4810.30	4810.30	1.20
Consumer 21	432457		6720.80	6722.10	1.30
Consumer 22	94545		12410.40	12411.70	1.30
Consumer 23	217884		6520.70	6522.10	1.40
Consumer 24	2469739		4790.40	4791.70	1.30
Consumer 25	829210		4090.30	4091.60	1.30
Consumer 26	327450		2780.10	2781.50	1.40
Consumer 27	615650		4610.30	4611.60	1.30
Consumer 28	561735		16770.90	16772.20	1.30
Consumer 29	240879		9620.60	9621.90	1.30
Consumer 30	6396305		10150.00	10151.30	1.30
Consumer 31	2470241		9350.10	9351.40	1.30
Consumer 32	1401658737		5550.80	5552.10	1.30
Consumer 33	887190	Defective meter as meter reading showing no consumption during the survey	14880.50	14880.50	1.20
Consumer 34	2916442		1680.40	1681.80	1.40
Consumer 35	655564		15900.30	15901.60	1.30

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 36	1401657048	Defective meter as meter reading showing no consumption during the survey	14790.60	14790.60	3.50
Consumer 37	6668704		1910.20	1911.50	1.30
Consumer 38	6470995		2270.10	2271.40	1.30
Consumer 39	2481934		11380.00	11381.30	1.30
Consumer 40	204721		10730.70	10732.10	1.40
Consumer 41	4109746		2980.00	2981.40	1.40
Consumer 42	3096226	Defective meter as meter reading showing no consumption during the survey	3370.60	3370.60	1.20
Consumer 43	4136955		7630.50	7631.80	1.30
Consumer 44	2584992		4120.30	4121.60	1.30
Consumer 45	2523632	Defective meter as meter reading showing no consumption during the survey	6620.40	6620.40	1.20
Consumer 46	1339243		1200.40	1201.70	1.30
Consumer 47	1209522936		4320.70	4322.00	1.30
Consumer 48	40418435		1850.80	1852.10	1.30
Consumer 49	3656642		8410.40	8411.80	1.40
Consumer 50	3236977		1680.50	1681.80	1.30
Consumer 51	1322324		4680.20	4681.60	1.40
Consumer 52	522386		3210.60	3211.90	1.30
Consumer 53	40178883		350.30	351.70	1.40
Consumer 54	306743	Defective meter as meter reading showing no consumption during the survey	1480.30	1480.30	2.00
Consumer 55	187876		11400.90	11402.20	1.30

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 56	500489		2160.80	2162.10	1.30
Consumer 57	046716		10660.60	10661.90	1.30
Consumer 58	TN0184306		3880.40	3881.70	1.30
Consumer 59	4163155		4090.20	4091.50	1.30
Consumer 60	3096179		4300.10	4301.60	1.50
Consumer 61	396741		1180.50	1181.80	1.30
Consumer 62	2864776		8540.70	8542.00	1.30
Consumer 63	4164221		2470.60	2471.90	1.30
Consumer 64	593115		1110.80	1112.10	1.30
Consumer 65	2917437		2630.60	2632.00	1.40
Consumer 66	3264787	Defective meter as meter reading showing no consumption during the survey	830.10	830.10	1.40
Consumer 67	6666181		2390.70	2392.10	1.40
Consumer 68	40034055		1490.00	1491.30	1.30
Consumer 69	3264210		680.80	682.10	1.30
Consumer 70	3273198		2240.90	2242.20	1.30
Consumer 71	3274573		680.50	681.90	1.40
Consumer 72	20822429		8670.80	8672.20	1.40
Consumer 73	2985866	Defective meter as meter reading showing no consumption during the survey	5040.10	5040.10	2.10
Consumer 74	708666		1500.90	1502.20	1.30
Consumer 75	042833		1430.30	1431.80	1.50
Consumer 76	1393599		5660.90	5662.20	1.30
Consumer 77	597614		2990.40	2991.90	1.50
Consumer 78	4266997		1670.10	1671.40	1.30
Consumer 79	544705		11800.00	11801.40	1.40

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 80	2907836		6120.70	6122.00	1.30
Consumer 81	366965		8850.20	8851.50	1.30
Consumer 82	599027		6950.10	6951.50	1.40
Consumer 83	166105		9620.90	9622.20	1.30
Consumer 84	1619383		13590.70	13592.20	1.50
Consumer 85	2587807		15390.30	15391.70	1.40
Consumer 86	396760	Defective meter as meter reading showing no consumption during the survey	200.60	200.60	1.50
Consumer 87	775506		23470.90	23472.20	1.30
Consumer 88	0634868		11150.20	11151.50	1.30
Consumer 89	484792		13830.80	13832.10	1.30
Consumer 90	835562		11210.60	11211.90	1.30
Consumer 91	3012301		5670.90	5672.20	1.30
Consumer 92	40402472		970.10	971.40	1.30
Consumer 93	36961		6480.20	6481.60	1.40
Consumer 94	598321		3300.10	3301.40	1.30
Consumer 95	TN0182128		10280.80	10282.10	1.30
Consumer 96	16656	Defective meter as meter reading showing no consumption during the survey	12480.50	12480.50	3.00
Consumer 97	D13382		9230.20	9231.60	1.40
Consumer 98	6843911		4260.10	4261.50	1.40
Consumer 99	615176		7220.40	7222.70	2.30
Consumer 100	40418482		2800.40	2801.70	1.30
Consumer 101	40402734	Defective meter as meter reading showing no consumption during the survey	990.10	990.10	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 102	964982		13860.80	13862.10	1.30
Consumer 103	488564		310.90	312.20	1.30
Consumer 104	3096469		1360.70	1362.00	1.30
Consumer 105	1389334		5070.20	5071.60	1.40
Consumer 106	4164227	Defective meter as meter reading showing no consumption during the survey	4580.50	4580.50	0.40
Consumer 107	768127		2240.60	2242.90	2.30
Consumer 108	542226		7880.30	7881.70	1.40
Consumer 109	644261		8250.60	8251.90	1.30
Consumer 110	632915		8570.80	8572.10	1.30
Consumer 111	188927	Defective meter as meter reading showing no consumption during the survey	2000.20	2000.20	2.00
Consumer 112	3097954		12310.90	12312.20	1.30
Consumer 113	593256		4390.10	4391.40	1.30
Consumer 114	377537		22180.50	22182.00	1.50
Consumer 115	816184		9110.30	9111.70	1.40
Consumer 116	1391264		5060.80	5062.10	1.30
Consumer 117	1306550473		7140.30	7141.70	1.40
Consumer 118	3097500		3840.80	3842.10	1.30
Consumer 119	2859527		8040.90	8042.20	1.30
Consumer 120	596973		4340.60	4341.90	1.30
Consumer 121	199466		1160.20	1161.50	1.30
Consumer 122	199476		1210.50	1211.90	1.40
Consumer 123	199456	Defective meter as meter reading showing no consumption during the survey	870.10	870.10	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 124	3264786	Defective meter as meter reading showing no consumption during the survey	790.60	790.60	1.20
Consumer 125	4265624		2550.80	2552.10	1.30
Consumer 126	3263872		2800.70	2802.00	1.30
Consumer 127	0334844		9810.50	9811.80	1.30
Consumer 128	40559689		3050.60	3052.00	1.40
Consumer 129	411260		1000.80	1002.20	1.40
Consumer 130	40178982		1850.30	1851.60	1.30
Consumer 131	40182056		2010.20	2011.50	1.30
Consumer 132	3274275		2450.10	2451.50	1.40
Consumer 133	3946053		6670.60	6671.90	1.30
Consumer 134	204732		6920.90	6922.20	1.30
Consumer 135	1571131		5550.60	5551.90	1.30
Consumer 136	2525242		9320.10	9321.50	1.40
Consumer 137	3094132		4300.80	4302.10	1.30
Consumer 138	40402659	Defective meter as meter reading showing no consumption during the survey	980.70	980.70	2.50
Consumer 139	1338736		18210.30	18211.80	1.50
Consumer 140	1342461		5820.20	5821.50	1.30
Consumer 141	4189743		900.10	901.40	1.30
Consumer 142	1944088		25980.00	25984.40	4.40
Consumer 143	4188689		4400.10	4401.40	1.30
Consumer 144	2916448		3140.40	3141.70	1.30
Consumer 145	416165		7580.20	7581.60	1.40
Consumer 146	2932284		1390.10	1391.40	1.30
Consumer 147	1393578		4230.50	4231.80	1.30

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 148	076201		8980.00	8981.30	1.30
Consumer 149	167458		2640.90	2642.20	1.30
Consumer 150	40178887		2050.50	2051.80	1.30
Consumer 151	309590		2220.00	2221.40	1.40
Consumer 152	1210547450		8750.20	8751.50	1.30
Consumer 153	908152		2130.80	2132.10	1.30
Consumer 154	40034051		2571.90	2573.20	1.30
Consumer 155	700245		1555.40	1556.70	1.30
Consumer 156	166136		5321.20	5322.60	1.40
Consumer 157	582376		3872.60	3874.80	2.20
Consumer 158	3094469		3601.70	3603.00	1.30
Consumer 159	40178906		2290.90	2292.20	1.30
Consumer 160	907236		2761.20	2762.50	1.30
Consumer 161	40032583	Defective meter as meter reading showing no consumption during the survey	1811.40	1811.40	1.20
Consumer 162	1572298		1729.70	1731.00	1.30
Consumer 163	3013923		2005.30	2006.60	1.30
Consumer 164	043098		37121.90	37123.20	1.30
Consumer 165	182129		5138.00	5139.30	1.30
Consumer 166	2527123		6960.30	6961.60	1.30
Consumer 167	199650		1850.70	1852.10	1.40
Consumer 168	66340710		3582.60	3583.90	1.30
Consumer 169	904301		18571.50	18573.00	1.50
Total					236.20

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429112	Thirunavukarasu street, Thoppukana,Arcot	9961.06	9965.75	4.69	L&T	250	80	375.20	24.68%

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 1	3016262		4620.20	4621.40	1.20
Consumer 2	3267558		7671.60	7672.80	1.20
Consumer 3	587858		12620.50	12621.80	1.30
Consumer 4	894330		8834.50	8835.70	1.20
Consumer 5	214295		7882.60	7883.80	1.20
Consumer 6	44241337		1233.30	1234.50	1.20
Consumer 7	2002154		4410.10	4411.30	1.20
Consumer 8	182784		2233.50	2234.70	1.20
Consumer 9	243824		7546.90	7548.10	1.20
Consumer 10	1393554		4360.20	4361.40	1.20
Consumer 11	915302		5200.00	5201.20	1.20
Consumer 12	198912		101.10	102.30	1.20
Consumer 13	198914		1214.20	1215.40	1.20
Consumer 14	492029		8353.40	8354.60	1.20
Consumer 15	466790		6790.20	6791.50	1.30
Consumer 16	2915412		2717.70	2718.90	1.20
Consumer 17	326678		7772.30	7773.50	1.20
Consumer 18	40032065		8090.30	8091.60	1.30
Consumer 19	2273537		1179.70	1180.90	1.20
Consumer 20	917520		13191.20	13192.50	1.30
Consumer 21	915826		9220.40	9221.60	1.20
Consumer 22	915491		7482.50	7483.70	1.20
Consumer 23	585458		2100.00	2101.20	1.20
Consumer 24	1570743		8817.30	8818.50	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 25	459713		6.00	7.20	1.20
Consumer 26	436099		5247.10	5248.40	1.30
Consumer 27	198920		1690.40	1691.60	1.20
Consumer 28	216204		13160.80	13162.00	1.20
Consumer 29	198938		1242.40	1243.60	1.20
Consumer 30	1319020		8900.00	8901.20	1.20
Consumer 31	627317		14683.50	14684.70	1.20
Consumer 32	4162402	Defective meter as meter reading showing no consumption during the survey	4464.70	4464.70	1.30
Consumer 33	197628		4849.90	4851.10	1.20
Consumer 34	0177346		13340.60	13341.80	1.20
Consumer 35	366924		5986.20	5987.50	1.30
Consumer 36	A041387		9570.40	9571.60	1.20
Consumer 37	002257	Defective meter as meter reading showing no consumption during the survey	22051.60	22051.60	3.00
Consumer 38	626464		2444.10	2445.30	1.20
Consumer 39	628877		16560.70	16562.00	1.30
Consumer 40	039982		9630.50	9631.70	1.20
Consumer 41	2498759		2290.70	2291.90	1.20
Consumer 42	380088		1122.40	1123.60	1.20
Consumer 43	956768	Defective meter as meter reading showing no consumption during the survey	390.60	390.60	1.40
Consumer 44	1055100		8220.50	8221.70	1.20
Consumer 45	40443302		2933.40	2934.60	1.20
Consumer 46	827028		3420.60	3421.80	1.20
Consumer 47	214582		7415.20	7416.40	1.20
Consumer 48	413362		1352.90	1354.10	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 49	1175881		35896.70	35898.00	1.30
Consumer 50	349546		1460.80	1462.00	1.20
Consumer 51	3272448		3761.30	3762.50	1.20
Consumer 52	1393594		13450.20	13451.40	1.20
Consumer 53	1308601653		14590.60	14591.80	1.20
Consumer 54	39806		1983.60	1986.80	3.20
Consumer 55	2861614		2720.80	2722.00	1.20
Consumer 56	022690		55533.30	55534.50	1.20
Consumer 57	377167		5640.70	5642.00	1.30
Consumer 58	3584920		19111.30	19112.50	1.20
Consumer 59	057499		6781.60	6782.80	1.20
Consumer 60	450058		21193.80	21196.80	3.00
Consumer 61	629096		23790.30	23791.50	1.20
Consumer 62	524864		3113.40	3114.60	1.20
Consumer 63	857387		28330.90	28332.10	1.20
Consumer 64	0787746		5172.60	5173.80	1.20
Consumer 65	497729		9090.10	9091.30	1.20
Consumer 66	3945630		5791.30	5792.50	1.20
Consumer 67	0585601		7089.50	7090.70	1.20
Consumer 68	859831		1171.80	1173.00	1.20
Consumer 69	908142		3652.60	3653.80	1.20
Consumer 70	725040		4168.20	4169.40	1.20
Consumer 71	1401698839		5580.40	5581.70	1.30
Consumer 72	923040		1289.60	1290.80	1.20
Consumer 73	0012371		10481.90	10483.10	1.20
Consumer 74	3096224		12743.20	12744.50	1.30
Consumer 75	684941		21300.70	21301.90	1.20
Consumer 76	1581383		13351.20	13352.40	1.20
Consumer 77	217128		1900.70	1901.90	1.20
Consumer 78	829407		34300.50	34301.70	1.20
Consumer 79	074110		10940.30	10941.60	1.30

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 80	546084		5681.40	5682.60	1.20
Consumer 81	219094		1349.80	1351.00	1.20
Consumer 82	003330		20120.90	20122.10	1.20
Consumer 83	35593		2760.30	2762.80	2.50
Consumer 84	628262		16461.80	16463.00	1.20
Consumer 85	862664		4230.10	4231.30	1.20
Consumer 86	126858		1730.40	1731.60	1.20
Consumer 87	661434		18651.90	18655.70	3.80
Consumer 88	3348332		12680.40	12681.60	1.20
Consumer 89	663615		25358.10	25364.50	6.40
Consumer 90	602778		8510.70	8511.90	1.20
Consumer 91	11087		138957.80	138962.30	4.50
Consumer 92	039565		9440.20	9441.40	1.20
Consumer 93	3265326		1919.30	1920.50	1.20
Consumer 94	413412	Defective meter as meter reading showing no consumption during the survey	120.70	120.70	2.60
Consumer 95	413396		1010.50	1011.70	1.20
Consumer 96	413392		610.90	612.10	1.20
Consumer 97	1571129		22729.10	22730.30	1.20
Consumer 98	215258		4170.80	4172.00	1.20
Consumer 99	3945628		2021.70	2022.90	1.20
Consumer 100	1338786		12170.30	12171.50	1.20
Consumer 101	3263678		4021.70	4022.90	1.20
Consumer 102	582235		3882.30	3883.50	1.20
Consumer 103	1338735	Defective meter as meter reading showing no consumption during the survey	9489.20	9489.20	2.00
Consumer 104	2528123		5941.80	5943.00	1.20
Consumer 105	635999	Defective meter as meter reading showing no	870.90	870.90	1.60

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
		consumption during the survey			
Consumer 106	767607		5500.40	5501.60	1.20
Consumer 107	2936245		7531.80	7533.00	1.20
Consumer 108	579114		3320.20	3321.40	1.20
Consumer 109	128877		12561.10	12562.30	1.20
Consumer 110	593267		560.90	562.10	1.20
Consumer 111	820546		6531.60	6536.80	5.20
Consumer 112	317305		10950.10	10953.70	3.60
Consumer 113	2080565		1020.00	1021.30	1.30
Consumer 114	2080581		5369.40	5370.60	1.20
Consumer 115	2434675		1650.60	1651.80	1.20
Consumer 116	1018506		390.30	391.50	1.20
Consumer 117	2080568		8112.70	8113.90	1.20
Consumer 118	1319035		3933.90	3935.10	1.20
Consumer 119	1387983		7889.50	7890.70	1.20
Consumer 120	4109745		3120.20	3121.40	1.20
Consumer 121	907250		3140.90	3142.10	1.20
Consumer 122	1317913		4260.40	4261.60	1.20
Consumer 123	4108663		4600.30	4601.50	1.20
Consumer 124	3093904		7530.20	7531.50	1.30
Consumer 125	40034238		4771.30	4772.50	1.20
Consumer 126	599429		2549.70	2550.90	1.20
Consumer 127	2083451		5180.50	5181.70	1.20
Consumer 128	422591		1511.50	1512.70	1.20
Consumer 129	2493113		10392.80	10394.00	1.20
Consumer 130	6715708		2360.10	2361.40	1.30
Consumer 131	225770		3960.20	3961.40	1.20
Consumer 132	40401249		2559.50	2560.80	1.30
Consumer 133	593783		4561.10	4562.30	1.20
Consumer 134	704294		5892.80	5894.00	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 135	443086		3600.90	3602.10	1.20
Consumer 136	400942		5941.50	5942.70	1.20
Consumer 137	493319		4309.40	4310.60	1.20
Consumer 138	1498918		3079.30	3080.50	1.20
Consumer 139	4190293		670.10	671.30	1.20
Consumer 140	4190292	Defective meter as meter reading showing no consumption during the survey	372.00	372.00	1.30
Consumer 141	667662		19660.70	19661.90	1.20
Consumer 142	684417	Defective meter as meter reading showing no consumption during the survey	7670.40	7670.40	1.30
Consumer 143	1211620326		11310.30	11311.50	1.20
Consumer 144	2445189		7589.20	7590.40	1.20
Consumer 145	2442837		6009.10	6010.30	1.20
Consumer 146	412603		12650.80	12652.00	1.20
Consumer 147	147401		768.60	769.80	1.20
Consumer 148	335084		3471.40	3472.90	1.50
Consumer 149	599399		1610.20	1611.40	1.20
Consumer 150	908828		26680.10	26681.40	1.30
Consumer 151	128370		8880.80	8882.00	1.20
Consumer 152	1280529		11458.80	11460.00	1.20
Consumer 153	598147		800.60	801.80	1.20
Consumer 154	669663		4500.30	4501.50	1.20
Consumer 155	937032		11372.10	11373.40	1.30
Consumer 156	593253		11110.80	11112.00	1.20
Consumer 157	0640673		4671.30	4672.50	1.20
Consumer 158	183758		2260.20	2261.50	1.30
Consumer 159	4191384		2580.80	2582.00	1.20
Consumer 160	0648693		3809.50	3810.80	1.30

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 161	167678		5451.60	5452.80	1.20
Consumer 162	908643		2571.80	2573.00	1.20
Consumer 163	040741		14219.00	14220.20	1.20
Consumer 164	4223835		969.50	970.70	1.20
Consumer 165	47022		10512.20	10513.40	1.20
Consumer 166	2082401	Defective meter as meter reading showing no consumption during the survey	3861.30	3861.30	1.30
Consumer 167	64174		12109.60	12110.80	1.20
Consumer 168	0864402		780.40	781.60	1.20
Consumer 169	1697436		7131.70	7132.90	1.20
Consumer 170	908285		2968.40	2969.60	1.20
Consumer 171	3264219		1708.90	1710.10	1.20
Consumer 172	40402474		11393.10	11394.30	1.20
Consumer 173	40033671		1589.20	1590.40	1.20
Consumer 174	247014		28160.70	28162.00	1.30
Consumer 175	1401658826		5959.60	5960.80	1.20
Consumer 176	0585853		226333.50	226334.80	1.30
Consumer 177	2851649		4850.60	4851.80	1.20
Consumer 178	651148		15431.20	15432.50	1.30
Consumer 179	5185446		7861.50	7862.70	1.20
Consumer 180	40032326		5530.80	5532.00	1.20
Consumer 181	40402651		6689.60	6690.80	1.20
Consumer 182	0152737		6548.00	6549.20	1.20
Consumer 183	0102617		12060.00	12061.20	1.20
Consumer 184	4894360		34501.60	34502.80	1.20
Consumer 185	286012		5630.80	5632.00	1.20
Consumer 186	076733		18411.50	18412.80	1.30
Consumer 187	3274574		2883.30	2884.50	1.20
Consumer 188	0174182		22161.80	22163.00	1.20

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 189	2871370		2080.50	2081.70	1.20
Consumer 190	40416622		900.80	902.00	1.20
Consumer 191	2434682		132102.80	132104.00	1.20
Consumer 192	1212649657		11569.60	11570.80	1.20
Consumer 193	40178988		3350.30	3351.50	1.20
Consumer 194	40033407		3200.10	3201.40	1.30
Consumer 195	1308526537		22511.00	22512.20	1.20
Consumer 196	4267013	Defective meter as meter reading showing no consumption during the survey	230.80	230.80	1.30
Consumer 197	11547		160432.10	160437.90	5.80
Consumer 198	436259		7160.50	7161.70	1.20
Consumer 199	1396804		4969.60	4970.80	1.20
Consumer 200	1308586548		8930.70	8931.90	1.20
Consumer 201	491293		1959.40	1960.60	1.20
Consumer 202	40419614		1261.30	1262.50	1.20
Consumer 203	3655918		18732.10	18733.40	1.30
Consumer 204	475969		9890.70	9892.00	1.30
Consumer 205	739424		4170.80	4172.00	1.20
Consumer 206	182796		4909.30	4910.60	1.30
Total					282.60

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429110	Arni Road, Arcot	1711.26	1716.76	5.50	L&T	100	40	220	7.91%

Consumer name	Meter No.	Remarks	1st read	2nd read	Difference
Consumer 1	01949560		202040.70	202041.80	1.10
Consumer 2	3264799		1200.30	1201.90	1.60
Consumer 3	201820		62569.10	62571.70	2.60
Consumer 4	1381576		8471.90	8473.20	1.30
Consumer 5	6396069		11470.50	11473.80	3.30
Consumer 6	2323380		1151.90	1154.10	2.20
Consumer 7	5123754	Defective meter as meter reading showing no consumption during the survey	750.30	750.30	2.10
Consumer 8	1210547398		19219.30	19220.70	1.40
Consumer 9	2524330		421.80	423.30	1.50
Consumer 10	1570812		4119.10	4121.10	2.00
Consumer 11	197755		2270.50	2271.50	1.00
Consumer 12	7292388	Defective meter as meter reading showing no consumption during the survey	2.90	2.90	1.30
Consumer 13	076410	Defective meter as meter reading showing no consumption during the survey	29040.40	29040.40	0.50
Consumer 14	40033171		2921.70	2923.10	1.40
Consumer 15	3275034		590.60	591.90	1.30
Consumer 16	501501		909.10	910.50	1.40
Consumer 17	275958		31542.80	31544.30	1.50
Consumer 18	397891		16821.90	16824.10	2.20
Consumer 19	2308103		20569.30	20570.40	1.10
Consumer 20	3757405		8970.20	8971.20	1.00
Consumer 21	3657291		6639.70	6641.30	1.60
Consumer 22	2525160		1071.60	1072.70	1.10
Consumer 23	547265		16220.40	16221.40	1.00

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 24	547973		2241.70	2242.80	1.10
Consumer 25	355875	Defective meter as meter reading showing no consumption during the survey	460.40	460.40	1.30
Consumer 26	547005		3652.80	3653.40	0.60
Consumer 27	143799		4119.70	4120.80	1.10
Consumer 28	547370		16292.40	16293.30	0.90
Consumer 29	496198		6059.90	6061.10	1.20
Consumer 30	2907998		660.20	661.50	1.30
Consumer 31	11677		82391.60	82393.00	1.40
Consumer 32	VE67187		2390.30	2391.00	0.70
Consumer 33	2081997		3271.10	3272.20	1.10
Consumer 34	1840244		6640.80	6642.00	1.20
Consumer 35	226098		10451.30	10452.30	1.00
Consumer 36	877942		14572.30	14573.30	1.00
Consumer 37	0948888		6000.80	6002.00	1.20
Consumer 38	0149894		9840.60	9841.00	0.40
Consumer 39	40034060		1220.60	1221.90	1.30
Consumer 40	120784		7810.80	7812.00	1.20
Consumer 41	366998		9869.10	9870.20	1.10
Consumer 42	178089		23933.20	23934.50	1.30
Consumer 43	4043374		6679.40	6680.30	0.90
Consumer 44	169644		9658.80	9660.00	1.20
Consumer 45	94457		4331.90	4333.10	1.20
Consumer 46	0668694		19302.60	19303.50	0.90
Consumer 47	0634211		10868.50	10869.40	0.90
Consumer 48	647500		1110.40	1111.40	1.00
Consumer 49	927996		17701.20	17702.30	1.10
Consumer 50	588901		5330.70	5332.30	1.60
Consumer 51	244461		97160.30	97161.40	1.10
Consumer 52	1570822		27728.50	27729.80	1.30
Consumer 53	3264809		1890.20	1891.50	1.30
Consumer 54	2083459		4658.90	4660.10	1.20
Consumer 55	40419618		1991.10	1992.00	0.90
Consumer 56	520548		9210.50	9211.00	0.50
Consumer 57	40416628		1710.20	1711.10	0.90

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 58	834353		9431.80	9432.90	1.10
Consumer 59	438600		3529.60	3530.90	1.30
Consumer 60	2470312		9080.60	9081.80	1.20
Consumer 61	10057808		20949.30	20950.50	1.20
Consumer 62	059775		210.20	211.30	1.10
Consumer 63	87567		3840.60	3841.60	1.00
Consumer 64	2855220		17303.00	17304.20	1.20
Consumer 65	12365		281232.70	281236.40	3.70
Consumer 66	1924448		1700.30	1701.70	1.40
Consumer 67	40178983		3560.00	3561.40	1.40
Consumer 68	046045		12311.50	12313.00	1.50
Consumer 69	1306548132		11219.30	11220.40	1.10
Consumer 70	0651542		22709.00	22710.40	1.40
Consumer 71	0504125		1500.60	1502.00	1.40
Consumer 72	097867		29457.30	29458.80	1.50
Consumer 73	0948089		5482.70	5484.10	1.40
Consumer 74	030965		6480.30	6481.70	1.40
Consumer 75	034321		9230.10	9231.20	1.10
Consumer 76	250970		10490.50	10491.90	1.40
Consumer 77	1401657015		11170.90	11172.30	1.40
Consumer 78	891469		9369.40	9370.30	0.90
Consumer 79	025822		13962.70	13964.30	1.60
Consumer 80	150600		1860.70	1862.00	1.30
Consumer 81	196144		2820.90	2822.40	1.50
Consumer 82	639899		10050.10	10051.10	1.00
Consumer 83	199140		13782.70	13784.50	1.80
Consumer 84	383865		8660.90	8662.60	1.70
Consumer 85	2524729		1550.40	1551.90	1.50
Consumer 86	41613		18079.80	18081.60	1.80
Consumer 87	243988		9619.30	9620.70	1.40
Consumer 88	41617		17320.30	17321.80	1.50
Consumer 89	908645		1420.20	1420.20	0.00
Consumer 90	2089424		6759.80	6761.10	1.30
Consumer 91	2081111		6800.40	6801.90	1.50
Consumer 92	102115		7110.20	7111.30	1.10
Consumer 93	196881		22919.50	22921.70	2.20
Consumer 94	216538		7270.50	7271.50	1.00

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 95	901032		770.00	771.20	1.20
Consumer 96	395663		810.40	811.70	1.30
Consumer 97	393632		1551.80	1553.00	1.20
Consumer 98	593633		461.90	463.00	1.10
Consumer 99	526388		3650.60	3651.60	1.00
Consumer 100	461695		14000.50	14001.20	0.70
Consumer 101	217880		1949.40	1950.60	1.20
Consumer 102	197817		14472.80	14474.10	1.30
Consumer 103	926353		6131.90	6133.20	1.30
Consumer 104	688128		18603.80	18605.50	1.70
Consumer 105	4111441		1050.60	1053.00	2.40
Consumer 106	2114431121		10120.60	10122.10	1.50
Consumer 107	197962		9561.90	9563.40	1.50
Consumer 108	853653		23742.50	23743.00	0.50
Consumer 109	4763789		2330.10	2331.10	1.00
Consumer 110	1306548149		6605.50	6606.50	1.00
Consumer 111	599332		10274.60	10276.40	1.80
Consumer 112	403234		2970.20	2971.70	1.50
Consumer 113	030996		11800.4	11801.70	1.30
Consumer 114	40018760		1861.80	1863.60	1.80
Consumer 115	255096		1860.00	1861.20	1.20
Consumer 116	598670	Disconnected			
Consumer 117	06514078		1517.50	1521.40	3.90
Consumer 118	000319		16450.90	16452.50	1.60
Consumer 119	366974		10681.40	10682.80	1.40
Consumer 120	3947306		26071.10	26072.10	1.00
Consumer 121	12126518		28069.90	28071.00	1.10
Consumer 122	1568385		9810.80	9812.30	1.50
Consumer 123	047248		23142.50	23143.70	1.20
Consumer 124	3848898		3300.00	3301.30	1.30
Consumer 125	183643		40200.10	40201.40	1.30
Consumer 126	599206		13459.60	13460.70	1.10
Consumer 127	007249		5180.30	5181.80	1.50
Consumer 128	087860		7771.30	7773.00	1.70
Consumer 129	335862		29010.70	29013.50	2.80
Consumer 130	4208919		9870.60	9871.70	1.10
Consumer 131	0179852		14811.30	14812.70	1.40

Consumer name	Meter No.	Remarks	1 st read	2 nd read	Difference
Consumer 132	240883		9951.90	9953.10	1.20
Consumer 133	0106070		1440.40	1441.90	1.50
Consumer 134	000250		11701.70	11703.90	2.20
Consumer 135	858680		31400.80	31402.10	1.30
Consumer 136	281196		15849.60	15850.90	1.30
Consumer 137	660980		5669.20	5670.50	1.30
Consumer 138	025650		742002.10	742003.40	1.30
Consumer 139	531206	Defective meter as meter reading showing no consumption during the survey	110.90	110.90	1.30
Consumer 140	3910682727		4690.40	4692.00	1.60
Consumer 141	3350410		19990.30	19991.60	1.30
Consumer 142	852820		27879.10	27880.30	1.20
Consumer 143	027842		7279.60	7280.70	1.10
Consumer 144	40179161		4900.80	4902.10	1.30
Consumer 145	501499		5270.10	5271.40	1.30
Consumer 146	23765		2960.40	2961.70	1.30
Consumer 147	079809		9830.80	9832.00	1.20
Consumer 148	3910682775		5081.20	5084.00	2.80
Consumer 149	1368832		12602.80	12604.20	1.40
Consumer 150	042162		9620.10	9621.10	1.00
Consumer 151	503836		3991.30	3992.40	1.10
Total					202.60

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429109	West ThoppuKana,Arcot	4472.17	4477.14	4.97	L&T	100	40	198.8	16.60%

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 1	1427179		77580.30	77581.50	1.20
Consumer 2	218644		9731.20	9732.30	1.10
Consumer 3	40419612		2360.50	2362.60	2.10
Consumer 4	40416004		5651.80	5653.00	1.20
Consumer 5	4268089		1242.60	1244.70	2.10
Consumer 6	017969		4209.80	4211.80	2.00
Consumer 7	2307912		20600.70	20601.90	1.20
Consumer 8	1212996		9650.20	9651.30	1.10
Consumer 9	5019420		3308.40	3310.80	2.40
Consumer 10	0787979		640.60	642.90	2.30
Consumer 11	246256		3991.80	3994.90	3.10
Consumer 12	0934642		2841.90	2844.00	2.10
Consumer 13	244197		16662.00	16663.00	1.00
Consumer 14	2919282		3680.30	3681.70	1.40
Consumer 15	322900		4664.60	4665.50	0.90
Consumer 16	40419655		2179.10	2180.90	1.80
Consumer 17	212649661		10328.70	10329.90	1.20
Consumer 18	200563		6819.00	6822.00	3.00
Consumer 19	924416		20380.70	20382.90	2.20
Consumer 20	5018229		7590.20	7591.30	1.10
Consumer 21	032238		8228.10	8230.00	1.90
Consumer 22	027714		15649.90	15651.00	1.10
Consumer 23	0949072		6779.30	6780.10	0.80
Consumer 24	1212888		1809.70	1811.80	2.10
Consumer 25	235024		2960.40	2961.50	1.10

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 26	074977		19272.70	19273.50	0.80
Consumer 27	6470998		4881.60	4882.70	1.10
Consumer 28	225021		2670.90	2672.90	2.00
Consumer 29	488033		4090.30	4091.70	1.40
Consumer 30	036147		1580.40	1581.50	1.10
Consumer 31	34657		409.60	411.70	2.10
Consumer 32	416183		17560.30	17561.40	1.10
Consumer 33	1387782		1440.20	1441.20	1.00
Consumer 34	1515740		51048.90	51050.90	2.00
Consumer 35	3848922		6381.80	6383.50	1.70
Consumer 36	2871376		4300.10	4301.70	1.60
Consumer 37	2001323		7168.70	7169.90	1.20
Consumer 38	046448		3160.80	3163.40	2.60
Consumer 39	1568882		14190.30	14192.70	2.40
Consumer 40	068824		24220.60	24223.90	3.30
Consumer 41	2859528		2400.80	2401.90	1.10
Consumer 42	053271		20622.30	20623.30	1.00
Consumer 43	046518		8119.30	8120.30	1.00
Consumer 44	500985		2410.80	2411.70	0.90
Consumer 45	0746504		12781.90	12784.00	2.10
Consumer 46	032594		3600.40	3601.90	1.50
Consumer 47	3350419		9519.10	9520.60	1.50
Consumer 48	698312		5588.60	5589.60	1.00
Consumer 49	2583134		8279.10	8280.70	1.60
Consumer 50	335409		46231.80	46235.90	4.10
Consumer 51	4894423		55070.30	55071.50	1.20
Consumer 52	152365		149911.20	149914.10	2.90
Consumer 53	486952	Disconnected			0.00
Consumer 54	2910667		5850.90	5853.00	2.10
Consumer 55	183743		3310.40	3311.40	1.00
Consumer 56	438780		2471.30	2473.40	2.10

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 57	210557		11150.80	11151.80	1.00
Consumer 58	022416		17432.60	17433.70	1.10
Consumer 59	3096988		5451.90	5454.90	3.00
Consumer 60	2910662		7376.10	7377.80	1.70
Consumer 61	2910671		10280.70	10284.00	3.30
Consumer 62	599326		1400.80	1404.30	3.50
Consumer 63	1216145		6890.20	6892.20	2.00
Consumer 64	503705		5233.10	5236.10	3.00
Consumer 65	3346694		11600.40	11601.60	1.20
Consumer 66	279946		9268.20	9269.30	1.10
Consumer 67	30981954		2389.60	2391.60	2.00
Consumer 68	0734778		16941.10	16944.20	3.10
Consumer 69	396756		1560.90	1562.40	1.50
Consumer 70	279205		16050.50	16051.80	1.30
Consumer 71	040414		15159.30	15162.60	3.30
Consumer 72	865329		4960.10	4962.20	2.10
Consumer 73	3245089		160.00	161.00	1.00
Consumer 74	188478		18372.50	18373.50	1.00
Consumer 75	599260		1988.30	1991.30	3.00
Consumer 76	628768		17499.80	17500.90	1.10
Consumer 77	2082430		10670.00	10672.00	2.00
Consumer 78	376835		11840.20	11841.70	1.50
Consumer 79	3093303		5287.50	5288.90	1.40
Consumer 80	957386		18156.00	18158.00	2.00
Consumer 81	03932		14420.40	14422.90	2.50
Consumer 82	28699		32303.10	32305.10	2.00
Consumer 83	3348321		6990.40	6993.50	3.10
Consumer 84	4896260		34600.80	34602.80	2.00
Consumer 85	219118		11210.60	11213.80	3.20
Consumer 86	608687		46625.70	46627.70	2.00
Consumer 87	2906354		11986.20	11987.60	1.40

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 88	385781		8937.90	8939.70	1.80
Consumer 89	148953		82160.90	82165.30	4.40
Consumer 90	581297		3171.40	3172.50	1.10
Consumer 91	3947170		6619.10	6620.20	1.10
Consumer 92	2082450		8491.30	8493.30	2.00
Total					165.80

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429113	Ganapathy nagar, Arni road, Arcot	7762.1	7770.81	8.71	L&T	100	40	348.4	20.35%

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 1	334919		22380.20	22382.80	2.60
Consumer 2	2482720		780.30	781.50	1.20
Consumer 3	3347061		11991.80	11994.00	2.20
Consumer 4	6668713	Defective meter as meter reading showing no consumption during the survey	2000.50	2000.50	1.50
Consumer 5	2481060		641.00	643.00	2.00
Consumer 6	183756		409.60	412.60	3.00
Consumer 7	2084028	Defective meter as meter reading showing no consumption during the survey	2418.20	2418.20	1.50
Consumer 8	2084935		6509.80	6514.00	4.20
Consumer 9	3910682570		5932.40	5934.00	1.60
Consumer 10	3237014		590.40	592.30	1.90
Consumer 11	3237009	Defective meter as meter reading showing no consumption during the survey	290.90	290.90	1.50
Consumer 12	3237025		355.20	357.40	2.20
Consumer 13	165053		7949.40	7950.60	1.20
Consumer 14	4189860		391.10	392.90	1.80
Consumer 15	642017		3992.80	3995.00	2.20
Consumer 16	12875		12170.80	12172.90	2.10
Consumer 17	6668574		4118.40	4119.90	1.50
Consumer 18	6668592		2342.30	2343.80	1.50

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 19	306121		42170.60	42176.30	5.70
Consumer 20	718328		5864.20	5865.10	0.90
Consumer 21	188020	Defective meter as meter reading showing no consumption during the survey	2000.70	2000.70	1.50
Consumer 22	209491	Defective meter as meter reading showing no consumption during the survey	1159.90	1159.90	1.50
Consumer 23	597479		230.60	233.60	3.00
Consumer 24	1316915		4108.20	4109.90	1.70
Consumer 25	1316910		3760.00	3761.80	1.80
Consumer 26	627562		23422.10	23423.80	1.70
Consumer 27	2523577		5080.80	5082.00	1.20
Consumer 28	1319008		6590.50	6591.80	1.30
Consumer 29	699576		21092.40	21095.00	2.60
Consumer 30	89151		1861.20	1861.60	0.40
Consumer 31	3265130	Defective meter as meter reading showing no consumption during the survey	450.90	450.90	1.50
Consumer 32	1354170		9388.10	9389.10	1.00
Consumer 33	729394	Defective meter as meter reading showing no consumption during the survey	4.80	4.80	1.50
Consumer 34	074119		6560.60	6561.80	1.20
Consumer 35	412033		11192.30	11193.60	1.30
Consumer 36	2083477		3350.70	3351.90	1.20
Consumer 37	166920		1771.00	1772.70	1.70
Consumer 38	168544		2791.80	2793.80	2.00
Consumer 39	40401246		760.20	761.90	1.70
Consumer 40	166426		1948.90	1950.00	1.10

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 41	339067		11900.00	11901.20	1.20
Consumer 42	819576		6170.30	6171.70	1.40
Consumer 43	390132		2220.60	2222.60	2.00
Consumer 44	3274569		1321.30	1322.70	1.40
Consumer 45	40419656		1878.10	1879.80	1.70
Consumer 46	831222		3192.00	3193.90	1.90
Consumer 47	151514		4000.30	4001.80	1.50
Consumer 48	1859839		27118.60	27121.00	2.40
Consumer 49	1381049		12712.70	12714.70	2.00
Consumer 50	323697	Disconnected			0.00
Consumer 51	40559674	Defective meter as meter reading showing no consumption during the survey	2580.90	2580.90	1.50
Consumer 52	40559673		1940.00	1943.10	3.10
Consumer 53	699588		12392.30	12393.20	0.90
Consumer 54	VE33112		2859.40	2861.40	2.00
Consumer 55	492456		13491.10	13492.30	1.20
Consumer 56	435747		2958.60	2959.90	1.30
Consumer 57	797975		3850.90	3852.20	1.30
Consumer 58	410056		6149.80	6151.00	1.20
Consumer 59	1853226		44338.10	44343.50	5.40
Consumer 60	1446176		1540.20	1541.90	1.70
Consumer 61	1339815		18472.80	18475.00	2.20
Consumer 62	629614		24688.70	24691.70	3.00
Consumer 63	628544		15280.50	15281.70	1.20
Consumer 64	335372		135550.90	135552.10	1.20
Consumer 65	40032065		5430.50	5431.70	1.20
Consumer 66	201636		6050.30	6051.50	1.20
Consumer 67	3083930		15272.10	15275.20	3.10
Consumer 68	2915568		5528.40	5529.60	1.20

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 69	197553	Defective meter as meter reading showing no consumption during the survey	13319.80	13319.80	3.00
Consumer 70	143761		17760.50	17761.70	1.20
Consumer 71	391864		6182.50	6188.30	5.80
Consumer 72	162080	Defective meter as meter reading showing no consumption during the survey	18500.40	18500.40	1.60
Consumer 73	2864538		1578.30	1579.50	1.20
Consumer 74	256321		730.70	731.90	1.20
Consumer 75	886952		3250.80	3252.00	1.20
Consumer 76	3403604820		5771.90	5776.10	4.20
Consumer 77	1852707	Defective meter as meter reading showing no consumption during the survey	21410.60	21410.60	1.60
Consumer 78	853222		19780.40	19781.70	1.30
Consumer 79	596960		4800.20	4801.40	1.20
Consumer 80	3657973		9030.90	9032.40	1.50
Consumer 81	3658278	Defective meter as meter reading showing no consumption during the survey	16109.10	16109.10	1.60
Consumer 82	307642		23030.40	23032.80	2.40
Consumer 83	0066912		15209.70	15211.70	2.00
Consumer 84	0066231		18620.70	18621.90	1.20
Consumer 85	2085264		8258.40	8259.60	1.20
Consumer 86	384071	Defective meter as meter reading showing no consumption during the survey	20909.10	20909.10	1.60
Consumer 87	1212652735		9261.20	9262.40	1.20

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 88	6661530		650.10	651.30	1.20
Consumer 89	583116		15190.40	15191.60	1.20
Consumer 90	2915572		9138.60	9139.90	1.30
Consumer 91	3098558		5239.80	5241.00	1.20
Consumer 92	3584798	Defective meter as meter reading showing no consumption during the survey	3341.90	3341.90	1.60
Consumer 93	40418267	Defective meter as meter reading showing no consumption during the survey	531.70	531.70	1.60
Consumer 94	500053		4630.90	4633.10	2.20
Consumer 95	815764		6189.30	6191.60	2.30
Consumer 96	607934		5161.30	5162.60	1.30
Consumer 97	2524854		7288.90	7290.10	1.20
Consumer 98	3018077		9270.30	9271.50	1.20
Consumer 99	442849		480.70	481.90	1.20
Consumer 100	197281		24338.60	24339.80	1.20
Consumer 101	0101341		19531.80	19533.00	1.20
Consumer 102	258480	Defective meter as meter reading showing no consumption during the survey	18911.90	18911.90	1.60
Consumer 103	460999		11840.50	11841.80	1.30
Consumer 104	1570484		8491.30	8492.50	1.20
Consumer 105	579183		17588.00	17590.70	2.70
Consumer 106	392489		2670.20	2670.70	0.50
Consumer 107	2910661		390.10	391.40	1.30
Consumer 108	682812		92602.70	92603.70	1.00
Consumer 109	4189859		4218.80	4220.60	1.80
Consumer 110	212558		5611.20	5612.90	1.70
Consumer 111	416993		7310.70	7311.80	1.10

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 112	245739		11360.60	11361.80	1.20
Consumer 113	862145	Defective meter as meter reading showing no consumption during the survey	15208.90	15208.90	1.60
Consumer 114	1401657016		7641.20	7642.40	1.20
Consumer 115	1401657013		5320.40	5321.60	1.20
Consumer 116	40559035	Defective meter as meter reading showing no consumption during the survey	80.10	80.10	1.60
Consumer 117	3159958		4288.10	4289.40	1.30
Consumer 118	908651		2849.70	2850.90	1.20
Consumer 119	1308587244		9792.80	9794.00	1.20
Consumer 120	682812		15818.40	15819.70	1.30
Consumer 121	542171	Defective meter as meter reading showing no consumption during the survey	820.90	820.90	1.60
Consumer 122	537633		19088.70	19089.90	1.20
Consumer 123	544027		940.10	941.70	1.60
Consumer 124	4109847		6809.20	6810.40	1.20
Consumer 125	043536		19630.80	19632.30	1.50
Consumer 126	144123		14280.70	14281.90	1.20
Consumer 127	735221		1061.30	1062.50	1.20
Consumer 128	740568	Defective meter as meter reading showing no consumption during the survey	1919.10	1919.10	1.60
Consumer 129	3236978		1708.60	1709.90	1.30
Consumer 130	203585	Defective meter as meter reading showing no consumption during the survey	6385.90	6385.90	1.60

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 131	2085802		6427.60	6429.60	2.00
Consumer 132	688392		12641.20	12642.50	1.30
Consumer 133	367296		11387.90	11389.30	1.40
Consumer 134	074084		9321.40	9322.70	1.30
Consumer 135	1390790		12360.50	12362.20	1.70
Consumer 136	497409		6700.50	6702.00	1.50
Consumer 137	247002		20248.90	20251.10	2.20
Consumer 138	226465		2300.50	2301.50	1.00
Consumer 139	3096341		1970.40	1972.30	1.90
Consumer 140	5192180		4561.30	4562.50	1.20
Consumer 141	261860		1208.10	1210.50	2.40
Consumer 142	660611		11999.70	12000.80	1.10
Consumer 143	609712		18037.20	18038.70	1.50
Consumer 144	2491191		4235.50	4237.00	1.50
Consumer 145	1314598		6640.80	6643.00	2.20
Consumer 146	1300306		2151.00	2153.00	2.00
Consumer 147	4265268		639.40	640.60	1.20
Consumer 148	593357		1707.30	1708.90	1.60
Consumer 149	3097019		900.30	901.50	1.20
Consumer 150	3910682622		23310.30	23316.20	5.90
Consumer 151	1210547393		9420.80	9422.00	1.20
Consumer 152	3097018		1267.30	1268.70	1.40
Consumer 153	121054739		8080.90	8083.00	2.10
Consumer 154	879618		16517.40	16519.20	1.80
Consumer 155	500547		8850.20	8852.20	2.00
Consumer 156	579778		10352.60	10353.80	1.20
Consumer 157	3852829		8449.10	8451.30	2.20
Consumer 158	378540		13879.20	13880.50	1.30
Consumer 159	251587	Defective meter as meter reading showing no consumption during the	1500.90	1500.90	1.60

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
		survey			
Consumer 160	7047623		16521.70	16524.90	3.20
Consumer 161	1250771		18310.30	18313.00	2.70
Consumer 162	183747		3571.40	3573.40	2.00
Total					277.50

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429388	Periyar Nagar,Arcot	2488.83	2492.27	3.44	L&T	250	80	275.2	19.84%

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 1	695419		8890.3	8892.4	2.10
Consumer 2	2904258		2330.7	2332.8	2.10
Consumer 3	863490		5248.1	5250.3	2.20
Consumer 4	132389		1871.6	1873.5	1.90
Consumer 5	697439		2829.7	2832.3	2.60
Consumer 6	683240		12368.4	12370	1.60
Consumer 7	633367		14391.4	14393.4	2.00
Consumer 8	630770		9169.3	9170.7	1.40
Consumer 9	2469353		5770.1	5771.4	1.30
Consumer 10	461344		13330.8	13332.5	1.70
Consumer 11	229491		990.9	993.2	2.30
Consumer 12	437089		21701	21702.5	1.50
Consumer 13	6396204		25279.3	25281	1.70
Consumer 14	573313		9588.3	9590.1	1.80
Consumer 15	172887		1850.9	1852.7	1.80
Consumer 16	241782		13966.4	13968.4	2.00
Consumer 17	590395		39625.1	39630.1	5.00
Consumer 18	393159		1739.6	1741.6	2.00
Consumer 19	393160		1440.4	1442.5	2.10
Consumer 20	Not Available			0	0.00
Consumer 21	38587		7541.9	7543.2	1.30
Consumer 22	34512		9800.3	9801.9	1.60
Consumer 23	661224	Locked		0	0.00
Consumer 24	304755		5930.5	5933.6	3.10
Consumer 25	797935		1141.9	1143.4	1.50
Consumer 26	167141	Defective meter as meter reading showing no consumption during the survey	6138.6	6138.6	1.60
Consumer 27	5016473		24908.6	24910	1.40
Consumer 28	48171		7700.2	7701.7	1.50

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 29	3910682579		2881.8	2884.1	2.30
Consumer 30	415715		10000.1	10001.4	1.30
Consumer 31	65914		29501.7	29503.4	1.70
Consumer 32	225022		9087	9088.6	1.60
Consumer 33	2492467	Locked		0	0.00
Consumer 34	2252006		5350.3	5351.6	1.30
Consumer 35	244940		16308.2	16310.4	2.20
Consumer 36	390131		1529.7	1531.1	1.40
Consumer 37	246705		25931.8	25933.6	1.80
Consumer 38	669604		28915.2	28916.8	1.60
Consumer 39	317288		13670.9	13673	2.10
Consumer 40	879562		7526.8	7529.3	2.50
Consumer 41	324903		18850.4	18852.5	2.10
Consumer 42	530688	Defective meter as meter reading showing no consumption during the survey	600	600	1.60
Consumer 43	2915571		6831.1	6832.8	1.70
Consumer 44	629960		9586.2	9587.8	1.60
Consumer 45	203771	Defective meter as meter reading showing no consumption during the survey	100.7	100.7	1.60
Consumer 46	977353		4469.3	4470.8	1.50
Consumer 47	323015		8688.2	8690.4	2.20
Consumer 48	1852799		11091	11093.1	2.10
Consumer 49	3096717		11368.9	11371.1	2.20
Consumer 50	2861760		2228.7	2230.8	2.10
Consumer 51	463118		3290.6	3291.7	1.10
Consumer 52	463121	Locked		0	0.00
Consumer 53	436696		7240	7241.5	1.50
Consumer 54	2491676		4818.4	4819.8	1.40
Consumer 55	2526579		8442.6	8444.1	1.50
Consumer 56	8803808		37391.1	37392.3	1.20
Consumer 57	1969003		12972.6	12975.2	2.60
Consumer 58	1881989		19520.7	19522.8	2.10
Consumer 59	40032122		5129.3	5130.7	1.40

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 60	3584581	Defective meter as meter reading showing no consumption during the survey	8608.7	8608.7	1.60
Consumer 61	2437560		14670.9	14672.2	1.30
Consumer 62	4002330		4828.4	4829.9	1.50
Consumer 63	1212650635		7819.7	7821.1	1.40
Consumer 64	555023	Defective meter as meter reading showing no consumption during the survey	6406.9	6406.9	1.60
Consumer 65	1212651156		9538.1	9539.4	1.30
Consumer 66	699816		19807	19811.1	4.10
Consumer 67	40559309		1329.6	1331.1	1.50
Consumer 68	3019027		5660.2	5660.2	0.00
Consumer 69	1393562		4318.4	4319.6	1.20
Consumer 70	Not Available		30907.8	30909.9	2.10
Consumer 71	664244	Locked		0	0.00
Consumer 72	3405610805		7560.2	7562.5	2.30
Consumer 73	584224		13942.3	13943.7	1.40
Consumer 74	1852558		22791.9	22793.2	1.30
Consumer 75	393780		3280.6	3282.7	2.10
Consumer 76	766900		8939.2	8940.6	1.40
Consumer 77	599034		8920.5	8921.9	1.40
Consumer 78	46500	Defective meter as meter reading showing no consumption during the survey	5381	5381	1.60
Consumer 79	3236045		2188.9	2190.2	1.30
Consumer 80	461341		26410.3	26411.5	1.20
Consumer 81	40417710		3449.2	3450.4	1.20
Consumer 82	866428		13038.1	13039.5	1.40
Consumer 83	866819		13120.8	13122.9	2.10
Consumer 84	3406619289		5171	5173.1	2.10
Consumer 85	664665		5459.7	5461.8	2.10
Consumer 86	1212651148		4968.2	4970.7	2.50
Consumer 87	10055922		7740.2	7741.6	1.40
Consumer 88	1761209		52815.2	52816.3	1.10

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 89	817025		1180.5	1182.6	2.10
Consumer 90	40559534	Locked		0	0.00
Consumer 91	1852798		30770.5	30773.7	3.20
Consumer 92	695420		9979.3	9980.6	1.30
Consumer 93	661847		6432.1	6434.2	2.10
Consumer 94	1154391		34201.8	34203.8	2.00
Consumer 95	40402124		3352.9	3354.2	1.30
Consumer 96	1376405		7268.5	7269.9	1.40
Consumer 97	700699		3985.2	3988.3	3.10
Consumer 98	879925		21860.3	21861.7	1.40
Consumer 99	661403		6000.8	6003.9	3.10
Consumer 100	3097063		6348.2	6349.6	1.40
Consumer 101	1212649810		9170.4	9171.9	1.50
Consumer 102	335135		10961.9	10963.9	2.00
Consumer 103	6716366		370.2	371.6	1.40
Consumer 104	442074	Defective meter as meter reading showing no consumption during the survey		0	1.60
Consumer 105	40034966		3070.4	3072.5	2.10
Consumer 106	47236		2829.7	2831.1	1.40
Consumer 107	45788		1718.4	1719.9	1.50
Consumer 108	6668800		1351.4	1353	1.60
Consumer 109	1608030		2919.7	2921.1	1.40
Consumer 110	192677		3148.3	3149.8	1.50
Consumer 111	192679		1430.8	1434.1	3.30
Consumer 112	4041644		340.7	342.7	2.00
Consumer 113	1308574708		2908.6	2909.9	1.30
Consumer 114	3403604859		2327.5	2328.6	1.10
Consumer 115	502110	locked		0	0.00
Consumer 116	120538		11070.4	11072.4	2.00
Consumer 117	40559206		1728.5	1730	1.50
Consumer 118	201208		5100.7	5102.3	1.60
Consumer 119	1393572	Defective meter as meter reading showing no consumption during the survey	6445.9	6445.9	1.60

Consumer name	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 120	74478		21881.9	21883.2	1.30
Consumer 121	48844		7100.6	7102	1.40
Consumer 122	27392		7700.3	7701.7	1.40
Consumer 123	386847		16108.8	16110.3	1.50
Consumer 124	41613		18080.2	18083.2	3.00
Consumer 125	291570		11509.6	11511.4	1.80
Consumer 126		Disconnected		0	0.00
Consumer 127	598331		3210.7	3214.4	3.70
Consumer 128	598332	Defective meter as meter reading showing no consumption during the survey		0	1.60
Consumer 129	4107362	Defective meter as meter reading showing no consumption during the survey	4840	4840	1.60
Consumer 130	199467		1060.3	1062.9	2.60
Total					220.60

DT NO.	Location	1st read	2nd read	Difference	Meter make	DT Capacity (kVA)	M.F	Consumption	Loss
11429066	Kanagasabapathy street, Thoppukana,Arcot	6971.22	6975.43	4.21	L&T	250	80	336.8	26.57%

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 1	396988		1970.40	1972.20	1.80
Consumer 2	166395		10651.50	10653.30	1.80
Consumer 3	497602		7829.90	7831.90	2.00
Consumer 4	505988		740.10	742.00	1.90
Consumer 5	0949908		4018.30	4019.60	1.30
Consumer 6	0950157		10068.50	10069.90	1.40
Consumer 7	237709		8160.10	8161.50	1.40
Consumer 8	462132		11191.90	11193.20	1.30
Consumer 9	213020	Defective meter as meter reading showing no consumption during the survey	9781.60	9781.60	1.40
Consumer 10	048522		11988.70	11989.90	1.20
Consumer 11	201390		5489.70	5491.10	1.40
Consumer 12	2985740		7720.10	7721.80	1.70
Consumer 13	4152294		5841.80	5842.90	1.10
Consumer 14	2527795		3266.40	3267.80	1.40
Consumer 15	519823		9890.20	9891.60	1.40
Consumer 16	076725		9551.40	9552.50	1.10
Consumer 17	0938039		9989.20	9990.60	1.40
Consumer 18	1401658823		5168.90	5170.10	1.20
Consumer 19	229440		16960.40	16961.70	1.30
Consumer 20	40402767		1752.30	1753.70	1.40
Consumer 21	060489		7308.30	7310.30	2.00
Consumer 22	204732		5870.60	5872.50	1.90

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 23	0795834		10559.90	10561.20	1.30
Consumer 24	5603410		27909.10	27910.50	1.40
Consumer 25	184384		16850.40	16852.40	2.00
Consumer 26	5466983		24860.80	24862.50	1.70
Consumer 27	2083015		6821.50	6822.70	1.20
Consumer 28	904616	Defective meter as meter reading showing no consumption during the survey	9700.90	9700.90	1.40
Consumer 29	1050599		22271.20	22273.20	2.00
Consumer 30	518212		9480.30	9482.20	1.90
Consumer 31	058204		8457.80	8459.10	1.30
Consumer 32	839431	Defective meter as meter reading showing no consumption during the survey	9269.90	9269.90	1.40
Consumer 33	215963		16090.70	16092.10	1.40
Consumer 34	074979		12941.40	12942.60	1.20
Consumer 35	1306550572		1889.10	1890.60	1.50
Consumer 36	1571095		10951.90	10953.30	1.40
Consumer 37	029535		2228.60	2229.80	1.20
Consumer 38	3273180	Defective meter as meter reading showing no consumption during the survey	520.00	520.00	1.40
Consumer 39	413918		3307.40	3308.60	1.20
Consumer 40	1571089		8920.50	8921.90	1.40
Consumer 41	2861786		6290.90	6292.20	1.30
Consumer 42	343102		740.50	742.10	1.60
Consumer 43	1581486	Defective meter as meter reading showing no consumption during the survey	23991.20	23991.20	1.40
Consumer 44	1376526		6258.10	6259.60	1.50

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 45	442068		1527.80	1529.50	1.70
Consumer 46	4042944		13910.50	13912.50	2.00
Consumer 47	0794792		22328.60	22330.40	1.80
Consumer 48	545039		21921.00	21922.20	1.20
Consumer 49	1306550383		14218.80	14220.20	1.40
Consumer 50	34535		14220.30	14222.00	1.70
Consumer 51	3019015		11740.60	11741.90	1.30
Consumer 52	385155		10502.30	10503.60	1.30
Consumer 53	91864		12829.40	12830.80	1.40
Consumer 54	0634064		18441.80	18443.80	2.00
Consumer 55	152338		490.30	492.00	1.70
Consumer 56	211613	Defective meter as meter reading showing no consumption during the survey	61771.90	61771.90	1.40
Consumer 57	210967		10110.50	10111.70	1.20
Consumer 58	4042940		5509.60	5511.20	1.60
Consumer 59	2077814		2511.30	2512.40	1.10
Consumer 60	854193		1861.70	1863.50	1.80
Consumer 61	566789	Defective meter as meter reading showing no consumption during the survey	6070.00	6070.00	1.40
Consumer 62	120973		14911.20	14913.30	2.10
Consumer 63	627516		17891.90	17893.70	1.80
Consumer 64	915393		10231.80	10233.90	2.10
Consumer 65	2470901		16089.00	16090.70	1.70
Consumer 66	907248		2168.40	2169.50	1.10
Consumer 67	147000		1770.50	1772.10	1.60
Consumer 68	193410		3891.90	3893.50	1.60
Consumer 69	236331		7569.20	7570.30	1.10
Consumer 70	0946584		9220.40	9222.20	1.80

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 71	1291938		11268.60	11270.20	1.60
Consumer 72	1401658836		7050.10	7051.70	1.60
Consumer 73	4120968	Defective meter as meter reading showing no consumption during the survey	2881.30	2881.30	1.40
Consumer 74	030258		7080.40	7082.30	1.90
Consumer 75	3093078		7969.20	7970.50	1.30
Consumer 76	1390163		11888.70	11890.10	1.40
Consumer 77	40402652		2651.50	2652.90	1.40
Consumer 78	2078200		4778.80	4780.10	1.30
Consumer 79	582401		2071.30	2075.40	4.10
Consumer 80	1890862		8360.40	8361.60	1.20
Consumer 81	346064		6770.60	6772.00	1.40
Consumer 82	2876449		1350.70	1352.40	1.70
Consumer 83	245457		8758.40	8759.50	1.10
Consumer 84	2494093		4791.10	4792.50	1.40
Consumer 85	269932		6257.60	6259.00	1.40
Consumer 86	1250452		4391.70	4392.80	1.10
Consumer 87	6667002	Defective meter as meter reading showing no consumption during the survey	660.30	660.30	1.40
Consumer 88	335130		21259.70	21260.90	1.20
Consumer 89	628298		21290.20	21292.30	2.10
Consumer 90	082045		3940.90	3942.10	1.20
Consumer 91	882905		15250.50	15251.90	1.40
Consumer 92	229381		12688.30	12689.60	1.30
Consumer 93	4164237		3981.80	3983.40	1.60
Consumer 94	40419549		1808.20	1809.50	1.30
Consumer 95	212767		14331.60	14333.10	1.50
Consumer 96	1581934		10201.70	10203.40	1.70

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 97	503829		1238.90	1240.90	2.00
Consumer 98	032489	Defective meter as meter reading showing no consumption during the survey	3400.00	3400.00	1.40
Consumer 99	915385		11968.20	11969.90	1.70
Consumer 100	0698392		8850.50	8851.60	1.10
Consumer 101	4192295		1978.50	1979.90	1.40
Consumer 102	074114		4160.30	4161.60	1.30
Consumer 103	1581330		10068.70	10069.90	1.20
Consumer 104	997978		6848.90	6850.00	1.10
Consumer 105	1570837		12571.60	12572.80	1.20
Consumer 106	2997626		7630.30	7631.40	1.10
Consumer 107	1051272		11500.20	11501.40	1.20
Consumer 108	2466585		3910.30	3911.70	1.40
Consumer 109	1251090		14370.70	14372.00	1.30
Consumer 110	718314		21091.80	21093.40	1.60
Consumer 111	8887		14969.30	14970.60	1.30
Consumer 112	10040841		11610.60	11612.10	1.50
Consumer 113	633421		3728.90	3730.20	1.30
Consumer 114	2499810		1785.60	1787.00	1.40
Consumer 115	3019030		8327.90	8329.20	1.30
Consumer 116	4265267	Defective meter as meter reading showing no consumption during the survey	240.00	240.00	1.40
Consumer 117	218032		2830.60	2832.20	1.60
Consumer 118	076726		5890.50	5891.80	1.30
Consumer 119	1571117		6021.80	6023.30	1.50
Consumer 120	2453681		3219.80	3221.50	1.70
Consumer 121	279931		13210.70	13212.70	2.00
Consumer 122	129669		14517.20	14517.90	0.70

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 123	2906339		5050.30	5052.00	1.70
Consumer 124	40418433		1801.20	1802.30	1.10
Consumer 125	913871		14140.50	14141.70	1.20
Consumer 126	40178916		2389.80	2390.90	1.10
Consumer 127	153355		10518.40	10519.60	1.20
Consumer 128	2915568		6210.80	6212.20	1.40
Consumer 129	178502		5481.00	5482.30	1.30
Consumer 130	416746		8070.30	8071.40	1.10
Consumer 131	1376511		5050.20	5051.40	1.20
Consumer 132	593255		4068.10	4069.50	1.40
Consumer 133	3053299		3117.60	3118.90	1.30
Consumer 134	4042199		6270.30	6271.90	1.60
Consumer 135	388421		4189.80	4191.10	1.30
Consumer 136	251030		14892.40	14893.90	1.50
Consumer 137	2086116		2657.30	2658.60	1.30
Consumer 138	027085		5229.60	5230.70	1.10
Consumer 139	030883		11420.20	11421.40	1.20
Consumer 140	244069		12791.80	12793.50	1.70
Consumer 141	182132		3359.10	3360.20	1.10
Consumer 142	510273		9488.90	9490.30	1.40
Consumer 143	2078144		5470.70	5472.00	1.30
Consumer 144	40560183		2957.40	2958.50	1.10
Consumer 145	1308601077		4755.30	4757.40	2.10
Consumer 146	2613250		2110.70	2111.90	1.20
Consumer 147	195839		10000.40	10000.50	0.10
Consumer 148	40401245		11222.40	11223.60	1.20
Consumer 149	197943		5740.80	5742.00	1.20
Consumer 150	6313307		2500.60	2502.00	1.40
Consumer 151	3011580		7600.10	7601.40	1.30
Consumer 152	191005		6467.30	6468.90	1.60
Consumer 153	864917		7751.70	7753.00	1.30

Consumer	Meter No.	Remarks	Ist read	2nd read	Difference
Consumer 154	706237	Defective meter as meter reading showing no consumption during the survey	500.50	500.50	1.40
Consumer 155	2526671		6826.30	6827.60	1.30
Consumer 156	864574		11732.80	11733.90	1.10
Consumer 157	309180		5870.70	5872.70	2.00
Consumer 158	593254		5619.00	5620.90	1.90
Consumer 159	1308587262		14109.40	14110.70	1.30
Consumer 160	444908		3600.50	3601.90	1.40
Consumer 161	3265125		3670.20	3671.70	1.50
Consumer 162	30139934		2020.10	2021.40	1.30
Consumer 163	40558967	Defective meter as meter reading showing no consumption during the survey	950.00	950.00	1.40
Consumer 164	3247479		680.90	682.10	1.20
Consumer 165	3267547		6278.70	6280.10	1.40
Consumer 166	0180362		10719.20	10720.90	1.70
Consumer 167	681448		2832.00	2833.10	1.10
Consumer 168	599578		2381.90	2383.30	1.40
Consumer 169	40559564		2230.60	2231.90	1.30
Consumer 170	386268		12916.20	12917.30	1.10
Consumer 171	396748		1840.20	1841.90	1.70
Total					247.30

Commercial DT

DT Name	1st read	2nd read	Difference	DT Company	DT NO.	DT Capacity	MF	Consumption	Loss
Auto nagar ss 3	396.03	396.95	0.92	L&T	11428930	500	80.00	73.60	6.25%

Consumer Name	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	6685.90	6686.30	0.40	60.00	24.00	Secure	TEB17648
Consumer 2	18530.50	18530.90	0.40	50.00	20.00	Capital	664216
Consumer 3	150.70	151.20	0.50	50.00	25.00	Secure	TNB78431
Total					69.00		

Industrial DTs

DT Name	1 st read	2 nd read	DT Capacity(kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 1	579.05	581.21	500	L&T	11428929	80	172.8	1.04%

Consumer	1 st read	2 nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	12385.70	12386.85	1.15	60.00	69.00	Secure	TEB21519
Consumer 2	358180.50	358181.50	1.00	60.00	60.00	L&T	1931843
Consumer 3	115314.70	115315.10	0.40	60.00	24.00	Landis Gyr	TN011216
Consumer 4	105886.00	105886.30	0.30	60.00	18.00	Secure	TEB10980
Total			2.85		171.00		

DT Name	1 st read	2 nd read	DT Capacity(kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 4	441.98	442.89	250	L&T	11428995	40	36.40	1.10%

Consumer	1 st read	1 st read	Difference	MF	Consumption	Meter Make	Meter No.
Consumer 1	1520.80	1521.40	0.60	20	12.00	L&T	TEB 21765
Consumer 2	223.60	223.90	0.30	20	6.00	Indian Meters	1426870
Consumer 3	5996.30	5996.70	0.40	20	8.00	L&T	11230894
Consumer 4	5285.30	5285.50	0.20	20	4.00	Capital	819539
Consumer 5	22202.50	22202.70	0.20	20	4.00	L&T	TN 04351
Consumer 6	18645.60	18645.70	0.10	20	2.00	Secure	TEB18266
Total					36.00		

DT Name	1st read	2nd read	DT Capacity(kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 7	212.45	213.32	500	L&T	11428932	80	69.60	3.74%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter make	Meter No.
Consumer 1	3143.30	3143.80	0.50	40	20.00	Secure	TEB31503
Consumer 2	1531.50	1531.70	0.20	40	8.00	Secure	TEB31212
Consumer 3	45098.30	45098.90	0.60	40	24.00	Elster	4682465
Consumer 4	23865.70	23866.20	0.50	30	15.00	Secure	TEB17938
Total					67.00		

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 9	136.33	136.99	500	L&T	11428991	80	52.80	1.52%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	14646.00	14646.30	0.30	30	9.00	Elster	4682200
Consumer 2	87898.80	87899.10	0.30	30	9.00	L&T	1931789
Consumer 3	128.50	128.90	0.40	40	16.00	L&T	6514397
Consumer 4	2885.30	2885.90	0.60	30	18.00	Secure	TEB31214
Total					52.00		

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 11	160.95	161.74	250	L&T	11429133	40	31.60	1.90%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	6040.32	6040.63	0.31	100	31	L&T	6514118

DT Name	2nd read	3rd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Auto Nagar SS 12	47.89	47.91	250	L&T	11429132	40	0.80	0.00%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	5886.3	5886.4	0.1	8	0.8	L&T	922823

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Old Thirutani SS 5	1113.09	1113.99	500	L&T	11428990	80	72.00	2.78%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	7340.50	7340.90	0.40	40.00	16.00	L&T	11800
Consumer 2	2894.70	2895.20	0.50	40.00	20.00	L&T	31213
Consumer 3	543.00	543.40	0.40	40.00	16.00	L&T	189938
Consumer 4	2866.94	2867.30	0.36	50.00	18.00	L&T	9547499
Total					70.00		

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Old Thirutani SS 9	1035.91	1036.54	500	L&T	11429129	80	50.40	0.79%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	6768.4	6768.9	0.5	60.00	30.00	Elster	4682203
Consumer 2	6754.1	6754.4	0.3	60.00	18.00	Secure	TEB 17659
Consumer 3	5890.71	5890.76	0.05	40.00	2.00	L&T	9547967
Total					50.00		

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Manthangal Mottur SS 1	1347.78	1347.96	250	L&T	11428904	40	7.20	2.78%

Consumer	1st read	1st read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	8089.9	8090.2	0.3	10.00	3.00	Secure	TEB31123
Consumer 2	6959.4	6959.8	0.4	10.00	4.00	Secure	TEB 31102
Total					7.00		

DT Name	1st read	2nd read	DT Capacity (kVA)	Meter make	DT NO.	M.F	Consumption	Loss
Manthangal Mottur SS 2	1696.76	1697.91	500	L&T	11429130	80	92.00	1.74%

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 1	37204.5	37204.9	0.4	30.00	12.00	Landis Gyr	TN04344
Consumer 2	40755.8	40756.2	0.4	30.00	12.00	Capital	661244
Consumer 3	114746.8	114747.4	0.6	30.00	18.00	L&T	1944273
Consumer 4	9235.3	9235.8	0.5	30.00	15.00	Secure	TEB31104

Consumer	1st read	2nd read	Difference	MF	Consumption	Meter Company	Meter No.
Consumer 5	23968.3	23969.1	0.8	20.00	16.00	Simco	2925063
Consumer 6	9100.3	9100.7	0.4	20.00	8.00	Secure	TEB31174
Consumer 7	1755.65	1756.12	0.47	20.00	9.40	L&T	11134966
Total					90.40		

3.2 Erode

Domestic DTs

DT NO.	Ist read	2nd read	Difference	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18022	38171.68	38175.42	3.74	46.00	100	11/10/2012	10.44%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
772	39526	6938.00		6938.70	0.70
778	200108	1445.00		1446.00	1.00
873	238426	1755.00		1756.00	1.00
872	361479	1373.00		1373.20	0.20
779	517198	3402.00		3402.30	0.30
1199	3141516		Closed		0.00
473	3328613	969.50		969.80	0.30
629	60711	6019.00		6020.00	1.00
170	747875	2875.00		2876.00	1.00
645	6072371	10073.00		10073.50	0.50
828	47574	2406.00		2407.00	1.00
1170	43453	9.70		10.40	0.70
1103	82092	1730.20		1731.10	0.90
1029	328386	3715.00		3715.80	0.80
944	318119	7332.00		7332.50	0.50
1215	3178445	0.60		1.10	0.50
1058	356165	1694.00		1695.00	1.00
1160	18963	1469.50		1470.20	0.70
701	200722	4877.00		4877.80	0.80
1101	452709	4818.00		4819.00	1.00

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
1061	40539921	674.50		675.30	0.80
854	500042	2192.70		2193.60	0.90
1194	677011	88.30		89.00	0.70
773	605362	473.90		475.10	1.20
1124	3405613101	1112.70		1113.40	0.70
780	305875	5033.20		5034.00	0.80
1146	40026504	1997.80		1998.10	0.30
1038	347935	2735.20		2735.60	0.40
996	565184	5396.10		5396.70	0.60
1205	60011018	43.20		43.90	0.70
1198	60012385	151.10		152.00	0.90
1197	60012387	98.10		98.70	0.60
135	847325	12231.80		12232.10	0.30
728	201335	345.70		346.10	0.40
230	175421	1069.80		1070.40	0.60
725	289204	650.00		651.10	1.10
892	40567635	233.20		233.80	0.60
893	45867	2381.60		2382.30	0.70
1032	26441	885.20		885.70	0.50
1117	311713162	1228.90		1229.70	0.80
1035	81348262	1261.50		1262.50	1.00
866	435217	1860.10		1860.80	0.70
860	349631	4466.00		4467.00	1.00
861	349636	3226.50		3226.90	0.40
862	212873	3993.50		3994.50	1.00
863	349633	3140.00		3141.00	1.00
864	81698	5463.30		5464.00	0.70
766	664601	19490.90		19491.70	0.80
921	627705	5438.90		5439.50	0.60
859	349623	4315.30		4316.00	0.70

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
858	349624	3999.00		4000.00	1.00
857	349622	6563.80		6564.50	0.70
856	348899	748.80		750.00	1.20
978	307899	4216.10		4216.60	0.50
1188	564876	3388.50		3389.10	0.60
1171	3119126	494.30		495.70	1.40
724	527766	18564.80		18565.20	0.40
	TOTAL				41.20

DT NO.	Ist read	2nd read	Difference	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18493	8427.5	8428.8	1.3	49.92	100	12/10/2012	4.23%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
100	304136	3094.90		3095.40	0.50
103	663902	8150.20		8150.80	0.60
212	356946	199.90		200.80	0.90
102	623554	1919.50		1920.00	0.50
66	7122	3518.70		3519.30	0.60
67	12203	3312.90		3313.40	0.50
68	511821	221.70		222.40	0.70
69	12197	4821.40		4822.00	0.60
70	12167	6368.80		6369.50	0.70
71	12183	9748.50		9749.10	0.60
72	12146	5354.20		5354.90	0.70
174	4625789	2735.00		2736.00	1.00
30	1375382	100.00		101.00	1.00
42	88958	140.00		141.00	1.00
41	598331	3915.70		3916.40	0.70
36	95192	410.30		411.00	0.70
35	1323774	544.40		545.10	0.70
34	1328876	4317.10		4317.80	0.70
38	1324572	5507.40		5507.80	0.40
20	1325873	3387.40		3388.00	0.60
65	7121	1278.20		1278.80	0.60
88	2125	1042.00		1043.00	1.00
89	255430	880.70		881.70	1.00
90	879801	7684.40		7685.00	0.60
84	502436	108.20		108.80	0.60

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
54	1375074	4862.50		4863.50	1.00
53	1375169	2249.60		2250.20	0.60
52	769815	4653.70		4654.70	1.00
46	26261	1413.40		1414.00	0.60
1011	664260	4371.90		4372.80	0.90
188	666951	3264.70		3265.30	0.60
116	667952	4881.40		4882.20	0.80
73	680818	2240.30		2240.90	0.60
74	663261	3387.50		3388.30	0.80
75	191899	1891.10		1891.80	0.70
76	666044	1109.70		1110.60	0.90
77	665880	1291.90		1292.80	0.90
78	664078	4107.20		4107.80	0.60
79	662968	3757.50		3758.40	0.90
80	663954	2511.60		2512.40	0.80
26	199644	3141.50		3142.50	1.00
29	127414	1.30		1.70	0.40
217	135770	188.60		189.40	0.80
216	135770	87.80		88.40	0.60
39	135770	424.40		425.00	0.60
12	135770	462.10		463.10	1.00
13	135770	287.70		288.40	0.70
223	135770	688.90		689.50	0.60
28	13244565	281.50		282.00	0.50
58	1324881	248.10		248.50	0.40
60	1324460	591.60		592.00	0.40
31	173097	2243.90		2245.10	1.20
32	175427	5911.10		5912.40	1.30
214	11337489	1979.80		1980.20	0.40

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
64	838982	1510.91		1511.62	0.71
63	622519	3986.60		3987.20	0.60
228	40115140	329.90		330.40	0.50
82	168168	137.90		138.60	0.70
91	255424	337.90		338.40	0.50
61	255788	1802.00		1803.00	1.00
62	1325083	683.80		684.40	0.60
37	1375384	6557.80		6558.90	1.10
45	1374697	4476.00		4477.00	1.00
47	1375388	6613.60		6614.80	1.20
196	91846	3089.80		3090.60	0.80
			TOTAL		47.81

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 17986	26118.6	26119.4	0.8	60	48.00	100	13/10/12	11.04%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
12	1237935	6990		6991	1	1
25	13224467	2270		2271	1	1
24	255693	608.2		609.1	0.9	0.9
191	88534	7404.1		7404.8	0.7	0.7
21	238428	541.6		542.4	0.8	0.8
22	1323894	1804.7		1805.2	0.5	0.5
23	325146	763.1		763.4	0.3	0.3
99	663349	1875.7		1876.9	1.2	1.2
98	6632040	584.3		585.4	1.1	1.1
175	40493529	3890.8		3891.2	0.4	0.4
141	823400	157515.2		157516.4	1.2	1.2
155	1401666534	5449.5		5450.1	0.6	0.6
143	822960	7720.2		7721.6	1.4	1.4
152	17113	9605.4		9606	0.6	0.6
167	6081153	12411.2		12412.4	1.2	1.2
233	60006736	48.3		48.7	0.4	0.4
165	388525	6260.2		6260.8	0.6	0.6
160	388970	6207		6208	1	1
171	438960	5605		5606	1	1
156	1401166	11521.4		11521.8	0.4	0.4
178	256916	2693		2694	1	1
168	399456	7050		7051	1	1
169	392978	6450		6451	1	1
158	1009046	8866.8		8867.1	0.3	0.3

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
159	3319255	6218.2		6219	0.8	0.8
201	40117975	522.7		522.8	0.1	0.1
13	1325718	7271.4		7271.9	0.5	0.5
14	1325738	5531.2		5532	0.8	0.8
92	146838	3409.4		3410.9	1.5	1.5
93	570	3323.5		3324.2	0.7	0.7
94	256460	3536.5		3537.8	1.3	1.3
200	1007	2077.4		2078.4	1	1
96	12347	2459		2460	1	1
95	255965	1555.2		1555.8	0.6	0.6
97	25593	2813.1		2814.4	1.3	1.3
104	12435	4078.9		4079.4	0.5	0.5
115	12567	2923.6		2923.8	0.2	0.2
114	12570	2175.8		2176.1	0.3	0.3
113	12528	6222.4		6222.8	0.4	0.4
112	565844	5178.1		5178.7	0.6	0.6
107	679825	3353.7		3354.3	0.6	0.6
108	236814	2053.4		2054	0.6	0.6
105	223746	3346.2		3346.9	0.7	0.7
106	831472	2632.6		2632.8	0.2	0.2
111	280920	4452.1		4452.8	0.7	0.7
109	12438	3232.3		3233	0.7	0.7
110	280115	4452.1		4452.6	0.5	0.5
170	397323	7609.6		7610.1	0.5	0.5
148	39835	6108.2		6108.8	0.6	0.6
100	39885	1100.3		1100.8	0.5	0.5
232	60006735	5.8		6.2	0.4	0.4
229	60006734	11.2		11.8	0.6	0.6
397	8734654	6218.4		6218.8	0.4	0.4
988	6529812	8866.8		8867.2	0.4	0.4

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
221	527760	4869.4		4870	0.6	0.6
138	806552	7750.1		7750.9	0.8	0.8
150	16633	6707.5		6708.2	0.7	0.7
136	514363	7117.3		7117.8	0.5	0.5
172	438945	4205.4		4205.9	0.5	0.5
202	40117916	1978		1979	1	1
	TOTAL				42.7	42.7

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 06583	32766.40	32766.83	0.42	60	25.5	100	15/10/12	9.02%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
425	1589448	577.80		578.40	0.60	0.60
211	7214	8503.40		8503.80	0.40	0.40
687	5209	9956.20		9956.80	0.60	0.60
978	347835	1885.90		1886.40	0.50	0.50
400	85722	10053.80		10054.20	0.40	0.40
763	7058870	10954.90		10955.50	0.60	0.60
208	23592	6576.30		6576.80	0.50	0.50
847	987477	10238.10		10238.60	0.50	0.50
678	2437759	9398.90		9399.50	0.60	0.60
908	2803893	3977.40	NOT WORKING	3977.40	0.00	0.50
474	32824	1454.10		1454.80	0.70	0.70
840	3222848	3536.00		3536.70	0.70	0.70
841			HOME CLOSED		0.00	0.00
690	663901	55599.50		55599.90	0.40	0.40
747	192602	7226.10		7226.80	0.70	0.70
689	663260	6668.40		6668.80	0.40	0.40
866	645232	4287.20		4288.10	0.90	0.90
490	48743	9695.50		9696.00	0.50	0.50
693	7200	4621.90		4622.40	0.50	0.50
33	94286	714.70		715.20	0.50	0.50
262	73705	7636.30		7636.90	0.60	0.60
261	489526		NOT WORKING		0.00	0.50
779	1364228	3861.10		3861.60	0.50	0.50
805	4503871	4828.80		4829.40	0.60	0.60

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
967	304457	1068.30		1068.70	0.40	0.40
30	89802	7604.60		7605.20	0.60	0.60
388	322784	9776.00		9776.60	0.60	0.60
209	412468	10562.00		10562.40	0.40	0.40
210	212616	3055.40		3056.00	0.60	0.60
972	25040	4168.40		4168.80	0.40	0.40
636	9771008	4510.70		4511.20	0.50	0.50
491	81085	6801.90		6802.00	0.10	0.10
280	85812	96830.00		96831.00	1.00	1.00
823	4363931	7330.50		7331.50	1.00	1.00
396	84287	1857.20		1857.80	0.60	0.60
220	36580	238.10		238.80	0.70	0.70
385	271551	2734.40		2735.00	0.60	0.60
692	545839	2049.00		2050.00	1.00	1.00
688	322864	2882.80		2883.00	0.20	0.20
356	681090	62.60		63.40	0.80	0.80
1250	420901		NOT WORKING		0.00	0.50
504	562957	6713.00		6714.00	1.00	1.00
503	440357		HOME CLOSED		0.00	0.00
950	3906565	1512.50		1512.90	0.40	0.40
951	207397	4195.40		4196.00	0.60	0.60
	TOTAL				23.20	23.20

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18024	4439.9	4440.6	0.7	20	13.3	63	15/10/12	7.52%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
907	678458	4670.7		4671.2	0.5	0.5
1153	4038862	1173.9		1174.7	0.8	0.8
1184	12043354	450.8		451.2	0.4	0.4
690	138957	1981.4		1981.8	0.4	0.4
675	138928	5895.8		5896.4	0.6	0.6
186	116155	2479.2		2480	0.8	0.8
55	1324379	8651.4		8651.9	0.5	0.5
120	631919	12123.9		12124.6	0.7	0.7
121	2533348	1293.8		1294.3	0.5	0.5
183	280302	2954.7		2955.2	0.5	0.5
184	300054	4938		4939	1	1
185	280303	4367.9		4368.5	0.6	0.6
186	280298	2967.9		2968.5	0.6	0.6
56	67827	7988.8		7989.2	0.4	0.4
206	328364	13695		13696	1	1
215	311701596	10336.1		10336.9	0.8	0.8
975	191315	3800.8		3801.5	0.7	0.7
406	259923	14503.5		14504	0.5	0.5
1189	6203916	19068		19069	1	1
			TOTAL		12.3	12.3

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 19660	8537.5	8538.4	0.9	60	55.8	100	16/10/12	14.00%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
183	34899	10104.1		10104.8	0.7	0.7
360	1499843	2294.1		2294.4	0.3	0.3
384	630435	9236.4		9236.9	0.5	0.5
385	1315057	13746.3		13747.1	0.8	0.8
389	117999	1478.5		1478.9	0.4	0.4
402	451778	10515		10516	1	1
206	3364821	14670.3		14671	0.7	0.7
844	82085	13894		13895	1	1
948	524476	912		912	0	0
949	512414	3168.5		3168.8	0.3	0.3
950	512420	2678.6		2679.3	0.7	0.7
951	15301	5088.6		5089.1	0.5	0.5
728	152450	3875		3876	1	1
718	269741	4409.9		4410.7	0.8	0.8
717	2121150	2377.7		2378.6	0.9	0.9
1233	38985	379.7		380.6	0.9	0.9
1013	44455	7291.8		7292.5	0.7	0.7
1012	398124	6002.7		6003.7	1	1
660	280919	7341.2		7341.7	0.5	0.5
661	398123	2323.2		2323.9	0.7	0.7
662	1208148	5746.6		5747.4	0.8	0.8
663	6329739	4918.6		4919.6	1	1
665	398183	8376.2		8376.8	0.6	0.6
580	564328	11497.7		11498.6	0.9	0.9

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
364	709816	10263		10264	1	1
365	238207	2974.5		2975	0.5	0.5
366	557791	3734.9		3735.5	0.6	0.6
616	332344	1886.1		1886.9	0.8	0.8
617	443527	1448.1		1448.8	0.7	0.7
618	4625769	5092.1		5093.2	1.1	1.1
273	550187	3178.8		3179.3	0.5	0.5
388	20255	8905.2		8906.3	1.1	1.1
387	20100	15302.1		15302.9	0.8	0.8
386	205733	12959.2		12959.7	0.5	0.5
786	3117159	1834.9		1835.4	0.5	0.5
478	101666	4800.2		4801.6	1.4	1.4
1003	440115	1289.9		1290.7	0.8	0.8
947	2988317	6756.7		6757.5	0.8	0.8
946	512413	3699.4		3700	0.6	0.6
945	603824	3523.7		3524.1	0.4	0.4
944	512424	4178.1		4178.8	0.7	0.7
943	511518	2812		2813	1	1
942	329703	269.4		270.1	0.7	0.7
714	61724	3294.9		3295.8	0.9	0.9
715	152045	4846.7		4847.6	0.9	0.9
716	152044	5708.1		5709.3	1.2	1.2
878	88771	6835.5		6836.6	1.1	1.1
225	2520053	23111.16		23111.65	0.49	0.49
1040	4031599	2210.5		2211.8	1.3	1.3
312	332791	8084.2		8085	0.8	0.8
313	332758	5894.1		5895.2	1.1	1.1
314	332797	5575.4		5576.5	1.1	1.1
339	733651	12041.1		12042	0.9	0.9
357	7041546	7690.3		7691.4	1.1	1.1

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
359	1499842	18006.9		18007.6	0.7	0.7
358	695813	8361		8362	1	1
954	192626	4044.3		4045.5	1.2	1.2
955	40294963	1889.6		1890.4	0.8	0.8
430	191445	3924.6		3925.8	1.2	1.2
132	5067021	17436.4		17437.4	1	1
			TOTAL		47.99	47.99

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 17893	52314.60	52315.13	1.30	60.00	31.85	100	17/10/12	9.29%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc201	3392444	19635.00		19635.20	0.20	0.20
sc328	40307681	584.50		585.20	0.70	0.70
sc214	286826	327.50		328.10	0.60	0.60
sc213	3502179	25681.00		25681.40	0.40	0.40
sc133	1347889	2257.00		2257.60	0.60	0.60
sc46	528689	4352.40		4353.20	0.80	0.80
sc277	241318	6407.20		6407.90	0.70	0.70
sc82	672817	4138.70		4139.20	0.50	0.50
sc303	627961	2214.60		2214.80	0.20	0.20
sc292	361179	5512.10		5512.80	0.70	0.70
sc211	66739	5808.20		5808.90	0.70	0.70
sc285	304140	651.90		652.30	0.40	0.40
sc295	601971	1112.90		1113.50	0.60	0.60
sc296	601970	1629.60		1630.50	0.90	0.90
sc202	3391842	5327.40		5327.50	0.10	0.10
sc193	631333	6321.40		6321.80	0.40	0.40
sc24	140166	8250.80		8251.40	0.60	0.60
sc70	543018	7383.60		7384.20	0.60	0.60
sc145	563161	10430.50		10430.70	0.20	0.20
sc136	604981	9133.88		9134.73	0.85	0.85
sc234	504423	10382.30		10382.80	0.50	0.50
sc154	737004	9462.20		9463.10	0.90	0.90
sc97	974313	6050.40		6051.20	0.80	0.80
sc65	47293	3940.70		3941.30	0.60	0.60

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc341	40517057	2348.40		2349.00	0.60	0.60
sc336	622830	1418.00		1418.30	0.30	0.30
sc335	622833	560.40		560.90	0.50	0.50
sc334	622831	553.60		553.80	0.20	0.20
sc333	1009070	3178.00		3179.00	1.00	1.00
sc219	823472	3540.20		3540.80	0.60	0.60
sc228	504741	1997.40		1998.20	0.80	0.80
sc245	1009041	1107.20		1107.90	0.70	0.70
sc161	2318976	6942.70		6943.20	0.50	0.50
sc160	39833	6340.00		6340.10	0.10	0.10
sc356	1011599	6500.70		6501.40	0.70	0.70
sc282	293248	2890.70		2891.20	0.50	0.50
sc281	293253	1331.20		1331.70	0.50	0.50
sc272	223651	2472.00		2473.00	1.00	1.00
sc273	249718	1813.50		1814.10	0.60	0.60
sc274	222477	2164.80		2165.40	0.60	0.60
sc275	238627	1074.40		1075.10	0.70	0.70
sc276	222479	2724.50		2725.00	0.50	0.50
sc331	12308238	424.11		424.87	0.76	0.76
sc304	627912	5033.10		5033.70	0.60	0.60
sc355	451683	360.00		360.50	0.50	0.50
sc326	40307682	741.60		742.40	0.80	0.80
sc792	47865126	1333.20		1333.40	0.20	0.20
sc325	40316000	2020.60		2021.10	0.50	0.50
sc367	12308158	62.66		63.24	0.58	0.58
sc360	tnb18966	565.50		565.80	0.30	0.30
sc361	tnb19708	194.60		195.20	0.60	0.60
sc297	60116	1549.70		1549.80	0.10	0.10
			TOTAL		28.89	28.89

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18365	46389.70	46389.98	0.28	60	17.08	100	18/10/12	15.69%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc1042	514332	14904.60		14905.80	1.20	1.20
sc1041	622840	1312.70		1313.10	0.40	0.40
sc468	3392101	33599.20		33600.00	0.80	0.80
sc1121	491529	1078.40		1078.80	0.40	0.40
sc969	40024468	2457.70		2458.20	0.50	0.50
sc403	3591849	28223.70		28224.30	0.60	0.60
sc396	3501366	10057.70		10058.10	0.40	0.40
sc507	3499910	18546.90		18547.70	0.80	0.80
sc400	3502241	6947.70		6948.40	0.70	0.70
sc529	109435	41774.70		41774.80	0.10	0.10
sc1000	40115330	72155.50		72155.60	0.10	0.10
sc1062	3557703	15627.10		15627.50	0.40	0.40
sc1098	311702676	51154.40		51155.10	0.70	0.70
sc1025	604956	2827.20		2827.80	0.60	0.60
sc715	tn26247	1961.00		1961.20	0.20	0.20
sc1203	6011011	75.00		75.60	0.60	0.60
sc1204	6011012	50.90		51.20	0.30	0.30
sc1166	268013	4460.20		4460.70	0.50	0.50
sc804	3632977	53.00		53.30	0.30	0.30
sc945	535581	8042.80		8042.90	0.10	0.10
sc163	514364	3327.20		3327.40	0.20	0.20
sc164	187514	737.30		737.90	0.60	0.60
sc213	201481	38657.50		38658.10	0.60	0.60
sc203	604671	4811.80		4812.40	0.60	0.60

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc135	656834	6719.10		6719.70	0.60	0.60
sc134	592890	10997.50		10998.10	0.60	0.60
sc144	330230	12791.90		12792.80	0.90	0.90
sc194	tn235396	3706.40		3707.00	0.60	0.60
			TOTAL		14.40	14.40

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 19181	11546.70	11547.64	0.94	100.00	94.38	150	19/10/12	12.48%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc158	803921	6344.90		6345.80	0.90	0.90
sc826	634414	13749.60		13749.70	0.10	0.10
sc1183	392993	7026.60		7027.20	0.60	0.60
sc880	282765	5302.50		5302.60	0.10	0.10
sc1274	572280	3064.70		3064.80	0.10	0.10
sc1264	153028	2738.10		2738.60	0.50	0.50
sc523	5337108	13037.00		13037.30	0.30	0.30
sc1626	tn0238650	1901.70		1902.10	0.40	0.40
sc1627	311702366	1749.20		1749.80	0.60	0.60
sc1346	282650	4528.00		4528.40	0.40	0.40
sc1044	7057718	5597.00		5597.60	0.60	0.60
sc783	2483601	4918.00		4918.50	0.50	0.50
sc409	1823037	9992.90		9993.80	0.90	0.90
sc1251	9772330	9293.70		9293.90	0.20	0.20
sc1252	9772325	7297.10		7297.50	0.40	0.40
sc466	624315	14281.30		14281.80	0.50	0.50
sc469	448175	9693.50		9693.80	0.30	0.30
sc1711	7357	23491.20		23492.10	0.90	0.90
sc1710	7356	22697.60		22698.50	0.90	0.90
sc1541	210115738	5267.60		5267.90	0.30	0.30
sc744	5078170	6047.20		6048.20	1.00	1.00
sc1697	372126	735.00		735.80	0.80	0.80
sc925	7057332	4626.00		4626.50	0.50	0.50
sc890	3318466	3439.00		3440.00	1.00	1.00

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc547	56665	7611.00		7611.30	0.30	0.30
sc920	170673	4052.40		4053.80	1.40	1.40
sc1012	4154142	5947.90		5948.80	0.90	0.90
sc1067	395434	2078.10		2079.80	1.70	1.70
sc482	4321496	5614.00		5615.00	1.00	1.00
sc678	36804	7639.80		7640.80	1.00	1.00
sc1174	392435	9499.80		9500.70	0.90	0.90
sc1636	302327	53032.40		53032.80	0.40	0.40
sc1168	61754	20402.10		20403.50	1.40	1.40
sc1499	3068194	2047.90		2048.90	1.00	1.00
sc429	80633	5944.50		5945.00	0.50	0.50
sc321	1001576	62486.40		62487.00	0.60	0.60
sc1674	452456	2081.80		2082.80	1.00	1.00
sc958	3448916	3267.10		3267.90	0.80	0.80
sc1072	875864	2828.00		2829.00	1.00	1.00
sc1500	612572	3880.20		3881.50	1.30	1.30
sc1501	559041	3620.40		3621.50	1.10	1.10
sc1315	223619	44555.40		44556.20	0.80	0.80
sc569	1774097	24845.00		24846.00	1.00	1.00
sc936	653405	48709.00		48710.00	1.00	1.00
sc1690	372117	1159.00		1160.00	1.00	1.00
sc568	13774	3192.00		3193.00	1.00	1.00
sc264	70977082	5073.70		5074.80	1.10	1.10
sc992	350125	62309.70		62310.50	0.80	0.80
sc1693	372124	372.30		373.30	1.00	1.00
sc993	7327	50131.90		50132.50	0.60	0.60
sc1689	372128	863.50		864.00	0.50	0.50
sc566	3112316	52011.00		52012.00	1.00	1.00
sc536	751543	8880.30		8881.10	0.80	0.80
sc1578	311218830	391.10		391.90	0.80	0.80

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc1245	9772835	4692.80		4693.70	0.90	0.90
sc260	327021	2830.80		2831.50	0.70	0.70
sc1107	61782	4501.60		4502.40	0.80	0.80
sc1022	562296	4920.90		4921.80	0.90	0.90
sc998	619955	2440.40		2441.10	0.70	0.70
sc327	1588917	18298.20		18299.20	1.00	1.00
sc178	434259	2926.30		2927.00	0.70	0.70
sc182	3423564	13089.90		13090.40	0.50	0.50
sc741	8906603	47215.30		47216.00	0.70	0.70
sc179	810692	9917.00		9918.00	1.00	1.00
sc317	2871456	11488.40		11489.20	0.80	0.80
sc497	1544568	7065.70		7066.30	0.60	0.60
sc789	3586	17450.50		17451.00	0.50	0.50
sc796	16830	19404.10		19405.00	0.90	0.90
sc154	448615	4870.40		4871.10	0.70	0.70
sc561	116750	9110.20		9111.00	0.80	0.80
sc435	987228779	67038.60		67039.20	0.60	0.60
sc645	181517	7231.40		7232.10	0.70	0.70
sc1680	3306792	1719.40		1720.40	1.00	1.00
sc815	264528	338.60		339.50	0.90	0.90
sc844	63428	14775.50		14776.60	1.10	1.10
sc556	61808	12853.40		12854.20	0.80	0.80
sc1600	40493324	1303.50		1304.00	0.50	0.50
sc753	1374767	2134.40		2135.10	0.70	0.70
sc1419	536767	2747.90		2748.80	0.90	0.90
sc746	5077075	15952.00		15953.00	1.00	1.00
sc848	210774	67176.20		67177.40	1.20	1.20
sc509	39808	4460.10		4460.50	0.40	0.40
sc786	222896	8042.10		8043.30	1.20	1.20
sc727	7057078	16002.30		16003.50	1.20	1.20

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc258	40307432	676.90		677.80	0.90	0.90
sc553	61764	14755.30		14756.20	0.90	0.90
sc507	38161	12027.90		12028.70	0.80	0.80
sc814	21229	6063.30		6064.20	0.90	0.90
sc1613	85213	5791.00		5792.00	1.00	1.00
sc816	24044	10695.40		10696.20	0.80	0.80
sc126	5324	6041.60		6042.40	0.80	0.80
sc897	960467	8064.10		8064.90	0.80	0.80
sc1257	2873111	2429.80		2430.40	0.60	0.60
sc418	96981	8067.00		8068.00	1.00	1.00
sc1443	734663	1269.40		1270.20	0.80	0.80
sc253	8577	6270.10		6271.30	1.20	1.20
sc877	50619	9483.40		9484.50	1.10	1.10
sc505	30056	4329.80		4330.50	0.70	0.70
sc434	1273723	4161.30		4162.10	0.80	0.80
sc1068	338257	5599.10		5600.20	1.10	1.10
sc666	2308088	1900.20		1901.00	0.80	0.80
sc1567	630114	2707.40		2708.10	0.70	0.70
sc1042	7058336	6802.50		6803.20	0.70	0.70
sc1043	7059142	7806.40		7806.70	0.30	0.30
sc1568	636115	2026.10		2027.10	1.00	1.00
			TOTAL		82.60	82.60

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18247	20915.90	20916.88	0.97	60	58.5	100	20/10/12	8.17%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc959	5479	6784.8		6785.2	0.4	0.4
sc1060	2804315	6246.2		6247.1	0.9	0.9
sc602	584083	2836.6		2837.2	0.6	0.6
sc1096	200261	4349		4350	1	1
sc1097	348437	4241		4242	1	1
sc1191	513937	3654.6		3655.4	0.8	0.8
sc384	448156	1836.6		1837.7	1.1	1.1
sc1066	529973	3997.3		3998.3	1	1
sc1082	9772981	5778.9		5779.5	0.6	0.6
sc382	437630	8761.9		8762.4	0.5	0.5
sc1275	448542	7891.3		7892	0.7	0.7
sc648	66031	2285		2286	1	1
sc987	35009709	10174.1		10175.3	1.2	1.2
sc198	2800700	222.6		223.8	1.2	1.2
sc962	38575	5097.6		5098.1	0.5	0.5
sc1193	432457	152.4		153.2	0.8	0.8
sc385	237648	7166.5		7167.5	1	1
sc383	713140	92215		92216	1	1
sc989	140166424	6354.2		6355	0.8	0.8
sc583	194140	4750.2		4751.3	1.1	1.1
sc752	50792	9378.4		9379.2	0.8	0.8
sc582	442200	2872.1		2872.8	0.7	0.7
sc1055	438046	3246		3247	1	1
sc1176	448770	2851		2852	1	1

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc853	565534	3357.2		3358.4	1.2	1.2
sc952	881939	4904.8		4905.4	0.6	0.6
sc1154	10461065	14019.5		14020	0.5	0.5
sc8	53588	47238.4		47239.1	0.7	0.7
sc432	61872	28178.2		28179.3	1.1	1.1
sc574	40517636	1233.7		1234.2	0.5	0.5
sc652	667062	9949.7		9950.5	0.8	0.8
sc3	104667	20235.8		20236	0.2	0.2
sc638	726654	666.9		667.4	0.5	0.5
sc529	40117772	55956		55957	1	1
sc795	3308366	10159.3		10160.5	1.2	1.2
sc597	503647	1463.8		1464.7	0.9	0.9
sc5	2285408	4819		4820	1	1
sc936	879647	13027.6		13028.4	0.8	0.8
sc1247	40292645	1610.6		1611.8	1.2	1.2
sc1470	10152653	50521.9		50522.5	0.6	0.6
sc422	22552	3983.9		3984.9	1	1
sc348	446545	4884.9		4885.7	0.8	0.8
sc1245	1401667557	4375.9		4376.8	0.9	0.9
sc1135	1013945	6398.6		6399.2	0.6	0.6
sc1273	449574		Fault		0	0.5
sc533	19111	3204.4		3205.1	0.7	0.7
sc733	50895	4072.4		4073.2	0.8	0.8
sc1272	10461049	14390.33		14390.85	0.52	0.52
sc694	87928	872.6		873.4	0.8	0.8
sc328	223157	3486.2		3486.8	0.6	0.6
sc344	124379	8426.9		8427.7	0.8	0.8
sc293	527938	6374.1		6375.2	1.1	1.1
sc1302	3141048	65.2		65.9	0.7	0.7
sc1107	2967478	8126		8127	1	1

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc292	279384	8494.1		8494.8	0.7	0.7
sc324	513404	4690		4691	1	1
sc374	8165	8931.4		8932.5	1.1	1.1
sc879	3364379	1710		1711	1	1
sc573	7097121	13562.6		13563.2	0.6	0.6
sc537	8137	1126.6		1127.8	1.2	1.2
sc56	576392	4073.6		4074.2	0.6	0.6
sc621	25225	4494.6		4495.1	0.5	0.5
sc501	489337	5511.6		5512.6	1	1
sc1075	15491	3265.7		3266.4	0.7	0.7
sc565	4626431	6049.9		6050.5	0.6	0.6
sc767	330841	1176.9		1177.8	0.9	0.9
			TOTAL		53.72	53.72

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 17937	69654.60	69655.08	0.48	60	28.8	100	26/10/12	3.06%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc1000	210324	9506.00		9507.00	1.00	1.00
sc752	210712	478.00		478.20	0.20	0.20
sc419	29798	7927.80		7928.60	0.80	0.80
sc1004	628271	1094.60		1095.30	0.70	0.70
sc1005	13162	17398.70		17399.40	0.70	0.70
sc476	53464	19425.50		19426.20	0.70	0.70
sc560	77078	30396.00		30396.40	0.40	0.40
sc536	636603	17653.40		17654.20	0.80	0.80
sc911	9774419	6431.60		6432.40	0.80	0.80
sc910	617980	16494.10		16495.00	0.90	0.90
sc310	392174	490.70		491.10	0.40	0.40
sc449	1012277	5939.00		5939.40	0.40	0.40
sc780	635184	6032.20		6032.40	0.20	0.20
sc1146	612245	3025.40		3026.10	0.70	0.70
sc669	395480	5881.00		5882.00	1.00	1.00
sc1253	224809	6035.20		6035.60	0.40	0.40
sc668	7012285	54264.00		54265.00	1.00	1.00
sc463	158990	13051.70		13051.80	0.10	0.10
sc462	665826	8656.70		8657.20	0.50	0.50
sc726	8903136	1791.50		1792.30	0.80	0.80
sc1056	443602	5253.50		5254.50	1.00	1.00
sc1057	360933	2499.00		2500.00	1.00	1.00
sc323	4614275	4155.55		4155.87	0.32	0.32
sc329	21849	17322.90		17323.60	0.70	0.70

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
sc940	1312639338	2876.50		2876.90	0.40	0.40
sc1185	512953	2900.40		2901.30	0.90	0.90
sc1251	270698	1119.00		1119.50	0.50	0.50
sc1119	282729	4546.00		4546.20	0.20	0.20
sc1076	511854	4144.90		4145.60	0.70	0.70
sc517	tn023681	1877.00		1877.30	0.30	0.30
sc738	552532	13905.40		13906.20	0.80	0.80
sc417	281066	4449.30		4450.00	0.70	0.70
sc511	118487	18543.40		18544.10	0.70	0.70
sc376	303081	4113.80		4114.30	0.50	0.50
sc912	303845	6942.80		6943.40	0.60	0.60
sc922	1500478	9977.60		9978.00	0.40	0.40
sc986	31710	1409.20		1410.00	0.80	0.80
sc1113	282979	3829.60		3830.20	0.60	0.60
sc569	837281	85121.40		85122.10	0.70	0.70
sc1188	36799	475.20		476.10	0.90	0.90
sc665	1128367	854.90		855.10	0.20	0.20
sc937	566392	23039.40		23040.20	0.80	0.80
sc730	50790	4233.60		4234.40	0.80	0.80
sc1244	40517791	1588.80		1589.70	0.90	0.90
			TOTAL		27.92	27.92

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 19643	24375.8	24376.69	0.89	60	53.4	100	27/10/12	5.81%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
658	770025	10753.40		10754.20	0.80	0.80
220	823637	16379.10		16379.80	0.70	0.70
295	388523	10934.40		10935.00	0.60	0.60
296	388540	25444.60		25445.30	0.70	0.70
718	267894	2692.00		2693.00	1.00	1.00
719	268984	2634.00		2635.00	1.00	1.00
720	269200	1688.10		1688.90	0.80	0.80
721	267880	997.00		998.00	1.00	1.00
722	292310	1110.00		1111.00	1.00	1.00
723	292303	3536.00		3537.00	1.00	1.00
264	574963	10816.00		10817.00	1.00	1.00
143	5095615	20881.40		20882.20	0.80	0.80
268	1009067	7524.30		7525.10	0.80	0.80
821	12448366	13.90		14.80	0.90	0.90
570	311117	7554.10		7554.60	0.50	0.50
695	288820	508.10		508.90	0.80	0.80
697	288795	796.10		796.70	0.60	0.60
698	288793	885.00		886.00	1.00	1.00
700	288795	388.00		389.00	1.00	1.00
701	288840	679.00		680.00	1.00	1.00
702	288822	653.00		654.00	1.00	1.00
703	288833	401.60		402.40	0.80	0.80
386	296503		closed		0.00	0.00
526	190530	1694.60		1695.80	1.20	1.20

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
527	191988	2632.40		2633.30	0.90	0.90
528	191999	2311.10		2311.60	0.50	0.50
529	190523	2826.60		2827.40	0.80	0.80
530	623276	1612.80		1613.40	0.60	0.60
470	96338	4141.40		4142.80	1.40	1.40
279	1213250	11240.80		11241.30	0.50	0.50
278			closed		0.00	0.00
127	22212	11181.40		11182.20	0.80	0.80
340	523471	14183.40		14184.80	1.40	1.40
342	27549	18576.00		18577.00	1.00	1.00
341	523441	20389.40		20390.00	0.60	0.60
410	237113	3581.00		3582.00	1.00	1.00
370	173059	11325.40		11326.20	0.80	0.80
67	173060	25209.20		25210.40	1.20	1.20
239	34838	5310.30		5311.10	0.80	0.80
289	320863	9249.00		9250.00	1.00	1.00
290	320854	11677.00		11678.00	1.00	1.00
312	436655	8862.00		8863.00	1.00	1.00
338	452741	806.00		807.00	1.00	1.00
339	524930	990.00		991.00	1.00	1.00
413	244027	520.10		521.40	1.30	1.30
1073	346366	10906.20		10906.80	0.60	0.60
1264	21289573	415.80		416.60	0.80	0.80
1265	21289571	520.10		521.70	1.60	1.60
1266	21289570	375.80		376.90	1.10	1.10
1267	21289572	326.10		326.80	0.70	0.70
1263	21269574	386.80		387.40	0.60	0.60
1262	21269575	395.60		396.30	0.70	0.70
1255	21269789	427.10		427.80	0.70	0.70
1256	21269790	319.00		320.00	1.00	1.00

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
1258	21269579	755.80		756.70	0.90	0.90
1257	21269580	459.80		460.50	0.70	0.70
1259	21269578	510.70		511.60	0.90	0.90
1260	21269577	330.10		330.80	0.70	0.70
1261	21269576	448.90		449.60	0.70	0.70
696	288835		closed			
	TOTAL				50.30	50.30

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 06204	4916.90	4918.20	1.30	50.00	65.00	100	28/10/12	15.23%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
518	4893054	9840.5		9841.2	0.7	0.7
224	546279	867		868	1	1
222	880012	6742.1		6742.8	0.7	0.7
166	823746	764.3		765	0.7	0.7
173	54387	5427		5428	1	1
122	988645	2568.6		2569.5	0.9	0.9
123	988873	7852.6		7853.7	1.1	1.1
124	988779	2518		2519	1	1
125	988812	4628.8		4629.7	0.9	0.9
218	658447	11654		11655	1	1
162	922517	3626.8		3627.8	1	1
18	148812	7764.7		7765.7	1	1
17	148837	7538.2		7538.3	0.1	0.1
554	23765	245		246	1	1
498	118913	2549.98		2550.56	0.58	0.58
441	600143	7418		7419	1	1
440	19980816	7527.6		7528.8	1.2	1.2
439	648132	3597.12		3598.45	1.33	1.33
438	523430	8962.9		8963.7	0.8	0.8
437	642347	8639.6		8640	0.4	0.4
436	7894112	6792.3		6793.4	1.1	1.1
265	658179	2213.1		2213.9	0.8	0.8
287	678130	2517.7		2518.3	0.6	0.6
288	733451	901		902	1	1
235	730321	1435.7		1436.8	1.1	1.1

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
236	651974	1265.4		1265.9	0.5	0.5
627	7529528	2575.65		2576.75	1.1	1.1
749	3566896	874		875	1	1
453	246740	2476.4		2477.2	0.8	0.8
454	10065442	8654		8655	1	1
456	10065908	2590.5		2591.3	0.8	0.8
455	10065124	964		965	1	1
608	876544	6384		6384.6	0.6	0.6
610	876124	6897.1		6897.7	0.6	0.6
625	871987	5057.6		5058.3	0.7	0.7
994	385942	1122		1122.7	0.7	0.7
793	463849	4375		4375.3	0.3	0.3
842	128449	7867.65		7868.28	0.63	0.63
894	752925	1010.6		1011.5	0.9	0.9
932	369429	11.2		12.4	1.2	1.2
933	9693566	786.4		787	0.6	0.6
935	1879894	2080.45		2081.34	0.89	0.89
931	2472437	4441.1		4442.3	1.2	1.2
930	1175085	9786.1		9786.5	0.4	0.4
929	3533709	6352.7		6353.2	0.5	0.5
899	113268	3167.4		3168.7	1.3	1.3
898	9087634	1017.6		1018.5	0.9	0.9
516	3476618	1005		1006	1	1
458	462898	9719.5		9720	0.5	0.5
227	892952	4418.4		4419.5	1.1	1.1
118	764920	9213.7		9214.5	0.8	0.8
378	582869	1128.5		1129	0.5	0.5
377	88547	223		223.5	0.5	0.5
542	5875124	874		875	1	1
543	7676652	4512.8		4513.7	0.9	0.9

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
544	4457046	54376.9		54377.5	0.6	0.6
545	19542396	1513.7		1514.2	0.5	0.5
546	6542876	9842.5		9843.6	1.1	1.1
19	124741	1263.7		1264.1	0.4	0.4
11	49002180	8807.4		8808.2	0.8	0.8
15	1148045	7715.9		7716.7	0.8	0.8
16	964158	152		153	1	1
180	4679854	8812.56		8813.23	0.67	0.67
181	8764054	9877.5		9878.5	1	1
128	1209836	5267.6		5268	0.4	0.4
129	584489	4844.3		4844.9	0.6	0.6
130	965267	5487.2		5488.1	0.9	0.9
131	2537175	4523.8		4524.2	0.4	0.4
	TOTAL				55.1	55.1

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18617	18268.40	18269.73	1.33	60	68	100	29/10/12	7.50%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
392	932577	1098.20		1098.90	0.70	0.70
393	983112	388.40		389.50	1.10	1.10
394	831352	4055.10		4056.20	1.10	1.10
395	935107	4188.10		4188.60	0.50	0.50
991	893115	3015.50		3016.50	1.00	1.00
901	983195	5581.10		5582.20	1.10	1.10
902	788921	1082.10		1082.80	0.70	0.70
903	810335	8215.10		8215.70	0.60	0.60
904	325513	981.10		981.60	0.50	0.50
905	813501	435.50		436.80	1.30	1.30
906	381192	765.80		766.70	0.90	0.90
849	783201	9872.70		9873.50	0.80	0.80
787	588510	889.20		890.40	1.20	1.20
819	388151	5907.00		5908.00	1.00	1.00
818	1881117	7802.10		7802.40	0.30	0.30
822	901104893	657.60		658.70	1.10	1.10
850	853361	3089.10		3090.00	0.90	0.90
851	812283	729.30		729.80	0.50	0.50
852	569843	555.40		556.40	1.00	1.00
938	422432	968.00		969.00	1.00	1.00
567	135784	9897.10		9897.80	0.70	0.70
513	145922	628.90		629.80	0.90	0.90
514	189358	678.50		679.60	1.10	1.10
515	121134	1081.50		1082.50	1.00	1.00

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
117	887793	837.00		838.00	1.00	1.00
119	181722	981.10		982.40	1.30	1.30
81	525629	1022.80		1023.80	1.00	1.00
307	434713	1257.50		1258.10	0.60	0.60
484	985112	4051.70		4052.40	0.70	0.70
538	1008436	6076.90		6077.80	0.90	0.90
654	129465	6590.00		6591.00	1.00	1.00
426	585639	4309.10		4310.50	1.40	1.40
427	413649	435.10		435.80	0.70	0.70
428	397218	765.10		765.70	0.60	0.60
368	227155	329.60		330.20	0.60	0.60
369	8761149	4053.20		4054.10	0.90	0.90
311	317843	6507.70		6508.80	1.10	1.10
256	485443	570.80		571.90	1.10	1.10
204	2629311	782.30		783.40	1.10	1.10
205	1443217	3058.30		3059.10	0.80	0.80
266	892761	851.20		852.00	0.80	0.80
267	684359	739.90		740.40	0.50	0.50
558	9867432	5082.30		5083.40	1.10	1.10
451	157791	7159.80		7160.40	0.60	0.60
398	110018987	7651.20		7652.00	0.80	0.80
761	1357191	5123.20		5124.10	0.90	0.90
760	124783	9085.50		9086.40	0.90	0.90
759	273468	3556.90		3557.40	0.50	0.50
758	110756	788.40		789.20	0.80	0.80
735	830521	4372.90		4373.60	0.70	0.70
736	956620	6381.80		6382.70	0.90	0.90
737	8255574	2035.50		2036.50	1.00	1.00
734	58944463	5181.30		5182.10	0.80	0.80
670	11778319	1540.80		1541.70	0.90	0.90

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
606	5885139	7991.60		7992.70	1.10	1.10
322	1238572	4851.70		4852.60	0.90	0.90
548	9842385	7891.00		7892.00	1.00	1.00
349	1100845	854.60		855.00	0.40	0.40
270	1200512	1222.40		1223.40	1.00	1.00
401	80489143	1886.50		1887.20	0.70	0.70
231	79841	9042.30		9043.10	0.80	0.80
176	9250991	6974.90		6975.70	0.80	0.80
177	111000894	8328.60		8329.40	0.80	0.80
433	4428279	1542.30		1543.40	1.10	1.10
541	317228	432.60		433.00	0.40	0.40
257	189433	1266.00		1267.00	1.00	1.00
956	5695511	4813.80		4814.40	0.60	0.60
802	5213579	5861.20		5862.30	1.10	1.10
807	856887	1122.70		1123.00	0.30	0.30
836	4387771	52179.50		52180.70	1.20	1.20
837	90018101	18018.30		18019.00	0.70	0.70
838	581683	13958.20		13959.40	1.20	1.20
839	7818946	1056.60		1057.40	0.80	0.80
			TOTAL		62.90	62.90

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18758	8439.60	8440.40	0.80	55	44	100	30/10/12	11.36%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
913	52859	1817.30		1818.10	0.80	0.80
966	180119	5249.80		5250.40	0.60	0.60
825	9914481	7778.10		7778.90	0.80	0.80
820	260918	52.50		53.70	1.20	1.20
247	864521	1108.20		1108.70	0.50	0.50
246	975364	1519.50		1520.10	0.60	0.60
442	138293	3783.90		3784.70	0.80	0.80
443	1102566	3387.40		3388.40	1.00	1.00
207	1100097	544.20		545.10	0.90	0.90
151	125934	5578.50		5579.20	0.70	0.70
499	1810054	1207.50		1208.40	0.90	0.90
555	1026141	4862.50		4863.50	1.00	1.00
667	76825	1413.40		1414.00	0.60	0.60
57	8495213	885.20		886.00	0.80	0.80
10	5717981	1261.50		1262.30	0.80	0.80
43	2863155	1448.60		1449.70	1.10	1.10
40	8678776	3140.10		3140.80	0.70	0.70
488	129928	752.10		752.70	0.60	0.60
375	7883546	483.70		484.70	1.00	1.00
353	2677680	1525.80		1526.80	1.00	1.00
241	4123869	7729.50		7730.00	0.50	0.50
243	4132527	8731.50		8732.20	0.70	0.70
575	5312961	7217.60		7218.00	0.40	0.40
742	849627	1593.20		1593.80	0.60	0.60
743	865389	2678.70		2679.90	1.20	1.20

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
600	849855	392.90		393.40	0.50	0.50
373	1239560	3346.60		3347.40	0.80	0.80
315	8001098	6218.40		6219.30	0.90	0.90
316	8181177	7750.60		7751.30	0.70	0.70
997	558712	1978.40		1979.30	0.90	0.90
953	9289720	15985.70		15986.40	0.70	0.70
909	1158346	2450.60		2451.80	1.20	1.20
824	4592873	4670.40		4670.90	0.50	0.50
829	682482	7053.20		7054.10	0.90	0.90
775	1233461	5599.10		5599.80	0.70	0.70
782	2263517	4621.90		4622.10	0.20	0.20
788	123346	3861.10		3861.80	0.70	0.70
811	2263517	6801.90		6802.80	0.90	0.90
963	1811017	6830.50		6831.40	0.90	0.90
237	524405	1834.90		1835.00	0.10	0.10
244	4765541	4044.80		4045.00	0.20	0.20
520	213740	7231.60		7232.40	0.80	0.80
521	5663801	10023.50		10024.20	0.70	0.70
522	7110232	3699.80		3700.40	0.60	0.60
519	1830587	8905.40		8906.20	0.80	0.80
263	95624	8361.90		8362.40	0.50	0.50
684	19997832	1885.60		1886.00	0.40	0.40
685	1999825	6576.30		6577.40	1.10	1.10
686	19999513	1453.40		1454.10	0.70	0.70
238	8261107	7226.10		7227.40	1.30	1.30
255	189324	1666.50		1667.40	0.90	0.90
306	1214430	682.80		683.40	0.60	0.60
			TOTAL		39.00	39.00

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18527	48932.70	48933.89	1.19	60.00	71.50	100	31/10/12	19.86%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
1473	109498	5632.60		5633.20	0.60	0.60
1446	109497	2332.70		2333.70	1.00	1.00
1464	109158	1916.00		1917.00	1.00	1.00
1462	109156	128.20		129.50	1.30	1.30
1461	109155	4263.80		4264.80	1.00	1.00
1445	109151	1061.30		1062.20	0.90	0.90
456	109153	1725.10		1725.90	0.80	0.80
1481	108652	2215.60		2216.30	0.70	0.70
1467	108651	1893.90		1894.60	0.70	0.70
1469	108650	1128.20		1129.10	0.90	0.90
1466	108649	2965.90		2966.50	0.60	0.60
1468	108648	310.10		311.30	1.20	1.20
1470	108703	1726.50		1727.40	0.90	0.90
1465	108646	22106.10		22107.70	1.60	1.60
1444	108864	9634.20		9635.10	0.90	0.90
1489	108663	1713.40		1714.20	0.80	0.80
1488	108662	920.70		921.90	1.20	1.20
1485	108661	1706.50		1707.30	0.80	0.80
1486	108660	2224.20		2225.00	0.80	0.80
1487	34340	310.00		310.50	0.50	0.50
1490	108658	3106.60		3107.70	1.10	1.10
1478	108657	4053.30		4054.40	1.10	1.10
1596	642642	191.00		192.00	1.00	1.00
1574	21211441	564.40		565.20	0.80	0.80

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
1575	21211389	920.50		921.10	0.60	0.60
1573	21211445	462.40		463.20	0.80	0.80
1576	21211377	379.40		380.10	0.70	0.70
1597	642628	16.90		17.80	0.90	0.90
1551	36535	571.30		572.30	1.00	1.00
1598	642627	371.80		372.70	0.90	0.90
1599	642266	283.50		284.00	0.50	0.50
1600	642625	508.30		509.20	0.90	0.90
1601	642644	123.30		124.50	1.20	1.20
1577	21211455	520.50		521.40	0.90	0.90
1480	108653	1909.10		1909.60	0.50	0.50
1476	108654	2088.00		2089.00	1.00	1.00
1448	108655	1438.60		1439.40	0.80	0.80
1477	108657	3441.00		3442.00	1.00	1.00
526	611332	5213.80		5214.70	0.90	0.90
2043	811017	9385.00		9386.00	1.00	1.00
1443	324405	2380.00		2381.00	1.00	1.00
1492	65541	2365.40		2366.70	1.30	1.30
1484	213740	1912.60		1913.00	0.40	0.40
1447	5663801	3486.20		3486.80	0.60	0.60
1491	110232	141.90		142.80	0.90	0.90
1483	1830587	5567.70		5568.70	1.00	1.00
1472	1814567	1229.50		1230.20	0.70	0.70
1471	524405	3081.00		3082.00	1.00	1.00
1479	476541	1943.50		1944.50	1.00	1.00
1473	213740	438.60		439.70	1.10	1.10
1474	763801	2140.10		2141.30	1.20	1.20
220.9	610232	3150.40		3151.60	1.20	1.20
1452	5210587	2887.30		2888.10	0.80	0.80
1450	60153	1043.30		1044.50	1.20	1.20

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
1451	109152	1648.30		1649.20	0.90	0.90
1460	109153	63.80		64.30	0.50	0.50
1456	108640	8.70		9.80	1.10	1.10
1458	108641	1831.90		1832.70	0.80	0.80
1453	108642	2363.50		2364.70	1.20	1.20
1459	108643	1447.10		1448.30	1.20	1.20
1454	108644	2503.60		2504.70	1.10	1.10
1457	108826	5220.90		5221.60	0.70	0.70
1455	109148	1632.40		1633.00	0.60	0.60
			TOTAL		57.30	57.30

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 18935	15673.60	15674.80	1.20	60.00	72.00	100	1/11/2012	4.44%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
83	170673	4052.40		4053.20	0.80	0.80
946	4154142	5947.90		5948.70	0.80	0.80
1236	395434	2078.10		2079.10	1.00	1.00
843	4321496	5614.00		5615.00	1.00	1.00
78	36804	7639.80		7640.60	0.80	0.80
139	392435	9499.80		9500.50	0.70	0.70
141	302327	53032.40		53033.10	0.70	0.70
326	61754	20402.10		20403.10	1.00	1.00
338	3068194	2047.90		2048.60	0.70	0.70
926	80633	5944.50		5945.60	1.10	1.10
994	1001576	62486.40		62487.20	0.80	0.80
1234	452456	2081.80		2082.80	1.00	1.00
1235	3448916	3267.10		3268.10	1.00	1.00
884	875864	2828.00		2829.00	1.00	1.00
222	612572	3880.20		3881.40	1.20	1.20
993	559041	3620.40		3621.50	1.10	1.10
114	223619	44555.40		44556.00	0.60	0.60
1246	1774097	24845.00		24846.00	1.00	1.00
1098	653405	48709.00		48710.00	1.00	1.00
104	372117	1159.00		1159.60	0.60	0.60
118	13774	3192.00		3192.80	0.80	0.80
124	70977082	5073.70		5074.60	0.90	0.90
148	350125	62309.70		62310.50	0.80	0.80
725	372124	372.30		373.40	1.10	1.10

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
342	7327	50131.90		50132.70	0.80	0.80
340	372128	863.50		864.40	0.90	0.90
341	3112316	52011.00		52012.00	1.00	1.00
343	751543	8880.30		8881.10	0.80	0.80
345	311218830	391.10		391.30	0.20	0.20
345	189358	678.50		679.70	1.20	1.20
347	121134	1081.50		1082.40	0.90	0.90
348	887793	837.00		838.00	1.00	1.00
349	181722	981.10		982.00	0.90	0.90
350	525629	1022.80		1023.70	0.90	0.90
627	434713	1257.50		1276.40	18.90	18.90
626	985112	4051.70		4052.50	0.80	0.80
628	1008436	6076.90		6077.80	0.90	0.90
629	129465	6590.00		6591.00	1.00	1.00
630	585639	4309.10		4310.00	0.90	0.90
631	413649	435.10		436.20	1.10	1.10
632	397218	765.10		766.50	1.40	1.40
551	227155	329.60		330.00	0.40	0.40
552	8761149	4053.20		4054.10	0.90	0.90
553	317843	6507.70		6508.80	1.10	1.10
554	485443	570.80		571.70	0.90	0.90
555	2629311	782.30		783.30	1.00	1.00
556	1443217	3058.30		3059.50	1.20	1.20
557	892761	851.20		852.00	0.80	0.80
558	684359	739.90		740.60	0.70	0.70
1026	9867432	5082.30		5083.20	0.90	0.90
1027	157791	7159.80		7160.50	0.70	0.70
1028	110018987	7651.20		7652.30	1.10	1.10
1029	1357191	5123.20		5124.10	0.90	0.90
1030	124783	9085.50		9086.40	0.90	0.90

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
266	273468	3556.90		3557.70	0.80	0.80
267	110756	788.40		789.10	0.70	0.70
268	830521	4372.90		4373.60	0.70	0.70
			TOTAL		68.80	68.80

DT NO.	Ist read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Date	Loss
M35 19665	78435.60	78436.40	0.8	55	44	100KVA	2/11/2012	7.23%

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
678	574963	10816.00		10817.00	1.00	1.00
1174	5095615	20881.40		20882.20	0.80	0.80
1636	1009067	7524.30		7525.60	1.30	1.30
1168	12448366	13.90		14.80	0.90	0.90
1499	311117	7554.10		7555.00	0.90	0.90
429	288820	508.10		509.20	1.10	1.10
321	288795	796.10		797.00	0.90	0.90
1674	288793	885.00		886.20	1.20	1.20
958	288795	388.00		389.00	1.00	1.00
1072	288840	679.00		680.00	1.00	1.00
1500	288822	653.00		654.00	1.00	1.00
1501	288833	401.60		402.40	0.80	0.80
1315	296503	4521.60		4522.20	0.60	0.60
569	190530	1694.60		1695.30	0.70	0.70
936	191988	2632.40		2633.10	0.70	0.70
1690	191999	2311.10		2312.20	1.10	1.10
568	190523	2826.60		2827.40	0.80	0.80
264	623276	1612.80		1613.70	0.90	0.90
992	96338	4141.40		4142.00	0.60	0.60
1693	1213250	11240.80		11241.70	0.90	0.90
993	224809	6035.20		6036.10	0.90	0.90
1689	7012285	54264.00		54265.00	1.00	1.00
566	158990	13051.70		13052.80	1.10	1.10
536	665826	8656.70		8657.80	1.10	1.10

Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
1578	8903136	1791.50		1792.00	0.50	0.50
1245	443602	5253.50		5253.80	0.30	0.30
260	360933	2499.00		2500.00	1.00	1.00
1107	4614275	4155.55		4156.87	1.32	1.32
1022	21849	17322.90		17323.70	0.80	0.80
998	1639338	2876.50		2877.20	0.70	0.70
327	512953	2900.40		2901.60	1.20	1.20
178	270698	1119.00		1120.00	1.00	1.00
182	282729	4546.00		4547.00	1.00	1.00
741	511854	4144.90		4145.60	0.70	0.70
179	234681	1877.00		1878.00	1.00	1.00
317	552532	13905.40		13906.20	0.80	0.80
497	281066	4449.30		4450.10	0.80	0.80
789	118487	18543.40		18544.60	1.20	1.20
796	303081	4113.80		4114.70	0.90	0.90
154	303845	6942.80		6943.50	0.70	0.70
561	150478	9977.60		9978.80	1.20	1.20
435	31710	1409.20		1410.10	0.90	0.90
645	282979	3829.60		3830.50	0.90	0.90
1680	837281	85121.40		85122.40	1.00	1.00
815	36799	475.20		475.80	0.60	0.60
			TOTAL		40.82	40.82

Commercial DTs

DT NO.	1st read	2nd read	Difference	MF	DT Capacity (kVA)	DT Name	Consumption (kWh)	Loss
M35 17805	26726.1	26727.4	1.3	30	100	Chennimalai -1	39	4.87%

Sl. No	Consumer Name	1st read	2nd read	Difference (A)	Meter No.	
1	Reliance Tower	5942.00	5947.40	5.40	3404607806	
Sl. No.	Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
1	773	12347	2459.00		2462.40	3.40
2	1124	255965	1555.20		1557.80	2.60
3	780	25593	2813.10		2815.40	2.30
4	1146	12435	4078.90		4080.40	1.50
5	1038	12567	2923.60		2924.80	1.20
6	996	12570	2175.80		2178.10	2.30
7	1205	12528	6222.40		6223.80	1.40
8	1198	565844	5178.10		5179.70	1.60
9	1197	679825	3353.70		3355.30	1.60
10	135	236814	2053.40		2054.80	1.40
11	728	223746	3346.20		3347.90	1.70
12	230	831472	2632.60		2633.80	1.20
13	725	280920	4452.10		4452.80	0.70
14	892	12438	3232.30		3233.00	0.70
15	893	280115	4452.10		4454.60	2.50
16	1032	397323	7609.60		7611.10	1.50
17	1117	39835	6108.20		6109.80	1.60
18	1035	39885	1100.30		1102.80	2.50
				Total (B)		31.70
				TOTAL	(A+B)	37.10

DT NO.	1st read	2nd read	Difference	MF	DT Capacity (kVA)	DT Name	Consumption (kWh)	Loss
M35 18228	27823.4	27824.1	0.7	82.5	100.00	Chennimalai -2	57.75	3.48%

Sl. No	Consumer Name	1st read	2nd read	Difference (A)	Meter No.
1	Idea Tower	92823.18	92845.23	22.05	10460750

Sl. No.	Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
1	949	512414	3168.50		3168.80	0.30
2	950	512420	2678.60		2679.30	0.70
3	951	15301	5088.60		5089.10	0.50
4	728	152450	3875.00		3876.00	1.00
5	718	269741	4409.90		4410.70	0.80
6	717	2121150	2377.70		2378.60	0.90
7	1233	38985	379.70		380.60	0.90
8	1013	44455	7291.80		7292.50	0.70
9	1012	398124	6002.70		6003.70	1.00
10	660	280919	7341.20		7341.70	0.50
11	661	398123	2323.20		2323.90	0.70
12	662	1208148	5746.60		5747.40	0.80
13	663	6329739	4918.60		4919.60	1.00
14	665	398183	8376.20		8376.80	0.60
15	580	564328	11497.70		11498.60	0.90
16	364	709816	10263.00		10264.00	1.00
17	365	238207	2974.50		2975.00	0.50
18	366	557791	3734.90		3735.50	0.60
19	616	332344	1886.10		1886.90	0.80
20	617	443527	1448.10		1448.80	0.70
21	618	4625769	5092.10		5093.20	1.10
22	273	550187	3178.80		3179.30	0.50

Sl. No.	Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
23	388	20255	8905.20		8906.30	1.10
24	387	20100	15302.10		15302.90	0.80
25	386	205733	12959.20		12959.70	0.50
26	786	3117159	1834.90		1835.40	0.50
27	478	101666	4800.20		4800.60	0.40
28	1003	440115	1289.90		1290.70	0.80
29	947	2988317	6756.70		6757.50	0.80
30	946	512413	3699.40		3700.00	0.60
31	945	603824	3523.70		3524.10	0.40
32	944	512424	4178.10		4178.80	0.70
33	943	511518	2812.00		2813.00	1.00
34	942	329703	269.40		270.10	0.70
35	714	61724	3294.90		3295.80	0.90
36	715	152045	4846.70		4847.60	0.90
37	716	152044	5708.10		5709.30	1.20
38	878	88771	6835.50		6836.60	1.10
39	225	2520053	23111.16		23111.65	0.49
40	1040	4031599	2210.50		2211.80	1.30
41	312	332791	8084.20		8085.00	0.80
42	313	332758	5894.10		5895.20	1.10
43	314	332797	5575.40		5576.50	1.10
					Total (B)	33.69
				Total	(A+B)	55.74

Sl. No	DT NO.	1st read	2nd read	Difference	MF	DT Capacity (kVA)	DT Name	Consumption (kWh)	Loss
1	M35 17893	16124.30	16126.60	2.30	20.00	250.00	Perundururai RS	46.00	7.39%

Sl. No	Consumer Name	1st read	2nd read	Difference (A)	Meter No.
1	Airtel tower	2229.5	2258.7	29.20	TNE 43747

Sl. No.	Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
1	sc1076	511854	4144.9		4146.6	1.7
2	sc517	tn023681	1877		1878.3	1.3
3	sc738	552532	13905.4		13906.2	0.8
4	sc417	281066	4449.3		4450	0.7
5	sc511	118487	18543.4		18544.1	0.7
6	sc376	303081	4113.8		4115.3	1.5
7	sc912	303845	6942.8		6943.4	0.6
8	sc922	1500478	9977.6		9979.5	1.9
9	sc986	31710	1409.2		1410.8	1.6
10	sc1113	282979	3829.6		3832.2	2.6
					Total (B)	13.4
				Total	(A+B)	42.6

Sl. No	DT NO.	1st read	2nd read	Difference	MF	Capacity	DT Name	Consumption (kWh)	Loss
1	M35 18027	38240.10	38241.50	1.40	25	100	Koonampatti	35.0	6.00%

Sl. No	Consumer Name	1st read	2nd read	Difference (A)	Meter No.
1	Vodafone tower	47563.3	47575.9	12.6	11337477

Sl. No.	Consumer No	Meter No.	Ist read	Remarks	2nd read	Difference
1	570	311117	7554.10		7555.60	1.50
2	695	288820	508.10		508.90	0.80
3	697	288795	796.10		797.70	1.60
4	698	288793	885.00		888.50	3.50
5	700	288795	388.00		391.20	3.20
6	701	288840	679.00		683.70	4.70
7	702	288822	653.00		655.00	2.00
8	703	288833	401.60		403.40	1.80
9	386	296503		Closed		0.00
10	526	190530	1694.60		1695.80	1.20
					Total (B)	20.30
				TOTAL	(A+B)	32.90

Sl. No	Feeder no.	1st read	2nd read	Difference	MF	Capacity	DT Name	Consumption (kWh)	Loss
1	M3518365	49200.1	49201.8	1.7	20.00	150.00	Karukampalayam	34	9.91%

Sl. No	Consumer Name	1st read	2nd read	Difference	Meter No.
1	Vodafone tower	38865.89	38870.42	4.53	1137327
2	BSNL Tower	32445.20	32452.10	6.90	346579
			Total (A)	11.43	

Sl. No.	Consumer No	Meter No.	1st read	Remarks	2nd read	Difference
1	749	3566896	874.00		877.20	3.20
2	453	246740	2476.40		2479.20	2.80
3	454	10065442	8654.00		8655.00	1.00
4	456	10065908	2590.50		2593.30	2.80
5	455	10065124	964.00		966.50	2.50
6	608	876544	6384.00		6385.60	1.60
7	610	876124	6897.10		6898.70	1.60
8	625	871987	5057.60		5058.30	0.70
9	994	385942	1122.00		1122.70	0.70
10	793	463849	4375.00		4377.30	2.30
					Total (B)	19.20
				TOTAL	(A+B)	30.63

Industrial DTs

SR. NO.	Feeder	1st read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Loss
1	M35 18121	2970.50	2973.23	2.73	260	709.80	100.00	1.10%

SC.NO	Industry	1st read	2nd read	Difference	MF	Consumption (kWh)	Meter no	Date
172	Consumer 1	1860.84	1878.39	17.55	40	702	7516171	8/10/2012

SR. NO.	Feeder	1st read	2nd read	Difference	MF	Consumption (kWh)	Capacity	Loss
1	M35 18153	27681.3	27684.8	3.50	430	1505	200	0.33%

SC.NO	Industry	1st read	2nd read	Difference	MF	Consumption (kWh)	Meter no	Date
325	Ariya Hi tech	562.1	599.6	37.5	40	1500	3070083.00	9/10/2012

SR. NO.	Feeder	1st read	2nd read	Difference	MF	Consumption (kWh)	DT Capacity (kVA)	Loss
1	M35 18519	11713.3	11743.8	30.50	300	9150	250	0.82%

SC.NO	Industry	1st read	2nd read	Difference	MF	Consumption (kWh)	Meter no	Date
204	Consumer 1	74317.76	74544.64	226.88	40	9075.2	922740.00	9/10/2012

3.3 Tuticorin

Domestic DTs

DT NO	Location	1 ST READ	2 ND READ	DIFFERENCE	MF	CONSUMPTIO N	DT CAPACITY (kVA)	LOSSES
P2182	STATE BANK COLONY-1	123398.90	123419.00	20.10	1.00	20.10	25	13.93%

DATE	CONSUMER NO	METER NO	1ST READING	REMARKS	2ND READING	REMARKS	DIFFERENCE
5/10/2012	KS 213	140813	6030.00		6030.40		0.40
	KS 83	2265856	1224.90		1225.70		0.80
	KS 422	178493	7099.20		7099.50		0.30
	KS 421	256198	10130.90		10131.30		0.40
	KS 423	4598320	8681.90		8682.20		0.30
	KS 83	732987	10292.90		10293.10		0.20
	KS 84	2461967	7826.80		7827.10		0.30
	KS 197	398728	14239.00		14239.90		0.90
	KS 79	4033014	1604.00		1604.90		0.90
	KS 86	548530	25437.70		25438.10		0.40
	KS 87	40453976	1687.60		1687.80		0.20
	KS 55	40450041	2496.00		2496.60		0.60
	KS 94	118045	12936.10		12936.40		0.30
	KS 91	1401824	18264.10		18264.90		0.80
	KS 90	516632	14921.70		14922.10		0.40
	KS 272	656628	3219.90		3220.30		0.40
	KS 304	25151211	7487.80		7488.40		0.60
	KS 91	3553592	12370.80		12371.10		0.30
	KS 92	4510691	2833.60		2833.80		0.20
	KS 119	761220	18727.30		18728.80		1.50

DATE	CONSUMER NO	METER NO	1ST READING	REMARKS	2ND READING	REMARKS	DIFFERENCE
	KS 534	1608998	2081.50		2081.80		0.30
	KS 517	439249	109.30		109.70		0.40
	KS 419	2583484	13894.50		13894.80		0.30
	KS 545	40144831	5130.20		5130.90		0.70
	KS 120	551467	16234.40		16235.30		0.90
	KS 121	3553586	18013.40		18014.20		0.80
	KS 122	864337	0.00	Meter not working			0.50
	KS 267	77147	16066.90		16067.40		0.50
	KS 293	410139	11147.00		11147.60		0.60
	KS 89			Locked			0.00
	KS 420			Locked			0.00
	KS 419			Locked			0.00
	KS 69	876443	26764.00		26764.40		0.40
	KS 593	377898	1610.90		1611.20		0.30
	KS 211	46689	3761.90		3762.50		0.60
	KS 89	64890	21673.00		21673.80		0.80
						Total	17.30

DT NO	Location	1 ST READ	2 ND READ	Difference	MF	Consumption	DT Capacity (kVA)	Loss
379292	STATE BANK COLONY-2	5305.01	5306.03	1.01	100.00	101.10	250	9.10%

Date	Consumer no	Meter no	1 ST Read	Remarks	2 ND Read	Remarks	Difference
6/10/2012	ks10	910111	14853.10		14854.10		1.00
	ks260	150839	9491.10		9491.90		0.80
	ks123	465846	19755.20		19755.90		0.70
	ks117	86473	10102.50		10103.20		0.70
	ks116	352344	3649.80		3650.30		0.50
	ks115	1764819	39915.40		39916.10		0.70
	ks114			Locked			0.00
	ks565	3198632	1468.60		1469.20		0.60
	ks518	122811	6536.60		6537.20		0.60
	ks214	736996	26542.20		26542.80		0.60
	ks113	384780	20237.70		20238.20		0.50
	ks314	102682	20689.70		20690.30		0.60
	ks203	153445	8343.20		8343.60		0.40
	ks349	761630	7669.40		7669.90		0.50
	ks111	421196	32394.20		32394.80		0.60
	ks269	18579	41430.00		41430.70		0.70
	ks223	237238	8374.70		8375.40		0.70
	ks224	218312	14605.30		14605.90		0.60
	ks218	3627405	17495.60		17496.20		0.60
	ks299	594173	432.70		433.20		0.50
	ks109	2193349	12445.70		12446.40		0.70
	ks384	565604	975.60		976.20		0.60
	ks385	3630656	111.80		112.50		0.70
	ks254	32875	15596.50		15597.00		0.50
	ks275	598021	13453.30		13453.90		0.60

Date	Consumer no	Meter no	1ST Read	Remarks	2ND Read	Remarks	Difference
	ks346	350522	11604.20		11604.90		0.70
	ks461	45638	3511.20		3511.90		0.70
	ks487	3136253	1568.50		1569.10		0.60
	ks587	126777	28496.10		28496.90		0.80
	ks599	3734484	1130.10		1130.90		0.80
	ks300	595376	16607.00		16607.90		0.90
	ks491	1801856	5727.60		5728.20		0.60
	ks380	122207	22925.00		22925.80		0.80
	ks390	328006	23481.70		23482.40		0.70
	ks547			Locked			0.00
	ks215	234424	5195.90		5196.80		0.90
	ks348	491909	5379.70		5380.40		0.70
	ks355			Locked			0.00
	ks366	2459560	16135.70		16136.40		0.70
	ks258	1133075	17792.80		17793.50		0.70
	ks256			Locked			0.00
	ks209	281693	53332.70		53333.40		0.70
	kb193	224304	1210.90		1211.60		0.70
	kb194	437611	9523.80		9524.80		1.00
	kb277	667626	7084.80		7085.70		0.90
	kb195			Locked			0.00
	kb196	446768	37193.60		37194.40		0.80
	kb197	129850	20264.10		20264.90		0.80
	kb513	3728402	10190.90		10191.80		0.90
	kb346			Locked			0.00
	kb338	7185489	9561.80		9562.80		1.00
	kb199	693669	4324.50		4325.30		0.80
	kb200			Locked			0.00
	kb202	123690	17121.10		17121.90		0.80
	kb203	722951	3914.60		3915.30		0.70
	kb204	7020130	48153.20		48153.90		0.70

Date	Consumer no	Meter no	1ST Read	Remarks	2ND Read	Remarks	Difference
	kb205	2594795	22223.30		22224.00		0.70
	kb709	529955	1574.60		1575.40		0.80
	kb156	762709	22679.20		22680.20		1.00
	kb157			Locked			0.00
	kb158	32796	14163.00		14163.90		0.90
	kb160			Locked			0.00
	kb442	236400	1519.50		1520.30		0.80
	kb159	88639	23134.30		23135.20		0.90
	kb162	98626	9294.60		9295.30		0.70
	kb199	181228	11232.00		11232.80		0.80
	kb483	383748	14912.80		14913.50		0.70
	kb400	723351	29624.20		29625.00		0.80
	kb170	6308033	31474.00		31474.90		0.90
	kb779	4254935	1953.90		1954.30		0.40
	kb688	301910	9844.30		9847.50		3.20
	kb463	1981868	14105.30		14110.20		4.90
	ks267	82601	438.20		438.70		0.50
	ks612	7037369	498.90		499.50		0.60
	ks616	566699	214.10		215.00		0.90
	ks614	547104	532.60		533.20		0.60
	ks123		19755.20		19756.30		1.10
	ks110	2583118	35037.10		35037.90		0.80
	ks416	122715	13729.10		13729.90		0.80
	ks108	1334004	7744.10		7745.30		1.20
	ks414		5239.00		5240.70		1.70
	ks413	237658	14725.60		14726.20		0.60
	ks265	158277	17909.60		17910.70		1.10
	ks334			Meter not working			0.70
	ks468	4023614	7057.50		7058.20		0.70
	ks357	1070254	11296.30		11297.10		0.80
	ks258	202370	31715.70		31716.50		0.80

Date	Consumer no	Meter no	1ST Read	Remarks	2ND Read	Remarks	Difference
	ks539	19374	1865.20		1866.00		0.80
	ks326	235685	20804.90		20805.90		1.00
	ks541			Locked			0.00
	ks473	405821	4067.60		4068.80		1.20
	ks663	115209	12300.40		12301.30		0.90
	ks606			Locked			0.00
	ks465	295267	8257.70		8258.30		0.60
	ks617			Locked			0.00
	ks615			Locked			0.00
	ks523	331981	4843.10		4844.00		0.90
	ks451	105960	16689.50		16690.60		1.10
	ks195	133659	20828.80		20829.70		0.90
	ks190	94539	9573.90		9574.30		0.40
	kb719	295207	5204.50		5205.70		1.20
	kb189	282995	873.50		874.70		1.20
	kb405			Meter not working			0.70
	kb455	106036	12119.40		12120.60		1.20
	kb187	178395	15435.60		15436.30		0.70
	kb186	7148647	34550.00		34550.60		0.60
	kb185	178356	11352.70		11353.20		0.50
	kb184	117691	10569.80		10570.60		0.80
	kb183	374701	12453.40		12454.30		0.90
	kb465	597649	14080.70		14081.30		0.60
	kb182	284092	1265.50		1266.40		0.90
	kb181	438684	3634.40		3635.30		0.90
	kb180	1618984	29190.70		29191.90		1.20
	kb498	100089	9865.20		9866.20		1.00
	kb172	422905	5962.70		5963.70		1.00
	kb856	551918	1765.60		1766.30		0.70
	kb155	6167677	16082.60		16083.70		1.10
	kb693	302369	3713.30		3713.90		0.60

Date	Consumer no	Meter no	1ST Read	Remarks	2ND Read	Remarks	Difference
	kb704	620668	11212.20		11212.90		0.70
	kb492			Meter not working			0.70
	kb163	216453975	2347.60		2348.20		0.60
	kb164	705	25988.90		25989.60		0.70
	kb165	823344	19.60		20.40		0.80
	kb692			Locked			0.00
	ks141			Locked			0.00
	ks152			Locked			0.00
	ks164			Locked			0.00
	ks369			Locked			0.00
						Total	91.90

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
EB Colony	72799.40	72847.50	48.10	1.00	48.10	25	7.90%

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
8/10/2012	RWN 786	348980	14952.30		14955.00		2.70
	RWN 186	348981	6716.70		6718.10		1.40
	RWN 56	3191466	6504.20		6507.20		3.00
	RWN 169	416173	6266.30		6268.30		2.00
	RWN 57	241515	61.00		61.50		0.50
	RWN 59	249911	8947.20		8947.60		0.40
	RWN 58	44080	7926.70		7929.80		3.10
	RWN 481	1801851874	4036.20		4038.10		1.90
	RWN 490	497646	6051.70		6054.60		2.90
	RWN 628	3144104	19.90		21.50		1.60
	RWN 582	426860	920.60		923.60		3.00
	RWN 60	124934	2443.20		2443.80		0.60
	RWN 62	6347274	9295.30		9296.40		1.10
	RWN 57	219190	6254.80		6256.40		1.60
	RWN 411	209802	3630.30		3631.20		0.90
	RWN 54	6346495	12152.90		12153.40		0.50
	RWN 609	176889	9255.80		9257.60		1.80
	RWN 79	6307803	12445.80		12448.80		3.00
	RWN 53	734138	33221.50		33224.10		2.60
	RWN 77	273497	19967.50		19970.50		3.00
	RWN 481	295207	3119.40		3120.70		1.30
	RWN 158	82682	11475.80		11478.20		2.40
	RWN 55	86663	1317.70		1319.40		1.70
	RWN 61	382673	887.60		888.90		1.30
						TOTAL	44.30

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
Elumalayan Nagar	153821.20	153841.10	19.90	1.00	19.90	25	9.55%

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
9/10/2012	RWP 9	405895	5096.70		5097.50		0.80
	RWP 10	13010	17357.00		17357.90		0.90
	RWP 13	965851	13990.90		13991.50		0.60
	RWP14	45712	14936.00		14936.70		0.70
	RWP15	87027	2587.10		2587.90		0.80
	RWP16	15642	24863.40		24864.10		0.70
	RWP252	31252	18763.80		18764.50		0.70
	RWP263	393616	2051.80		2052.60		0.80
	RWP341	506404	3322.20		3322.90		0.70
	RWP345			Locked			0.00
	RWP8	3630915	14829.50		14830.10		0.60
	RWP7	596801	13050.90		13051.90		1.00
	RWP6	15246	11599.20		11599.90		0.70
	RWP4	544333	21753.80		21754.60		0.80
	RWP2	140045	13076.50		13077.20		0.70
	RWP17			Locked			0.00
	RWP19			Locked			0.00
	RWP26	16425	2465.20		2466.10		0.90
	RWP21			Locked			0.00
	RWP38	949525	3784.60		3785.40		0.80
	RWP34	989694	19452.40		19453.50		1.10
	RWP39	25461	4215.30		4216.10		0.80
	RWP46	145241	14526.20		14527.30		1.10
	RWP41	364512	1025.50		1025.90		0.40
	RWP65	415424	14547.60		14548.50		0.90

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	RWP53	254611	6452.60		6453.40		0.80
	RWP71	985421	5216.20		5216.90		0.70
	RWP54			Locked			0.00
	RWP64			Locked			0.00
						TOTAL	18.00

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
Pandarampatti	45724.2	45736.9	12.7	1.00	12.7	25	4.72%

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
11/10/2012	RWX455	561272	4984.80		4985.00		0.20
	RWX936	43610	957.70		957.80		0.10
	RWX1007	6495826	0.00	Meter No.t working	0.00	Meter No.t working	0.20
	RWX456		0.00	Locked	0.00	Locked	0.00
	RWX457		0.00	Locked	0.00	Locked	0.00
	RWX458		0.00	Locked	0.00	Locked	0.00
	RWX790	3188665	3442.30		3442.40		0.10
	RWX851	40146106	5921.80		5922.10		0.30
	RWX826	3198676	3930.60		3931.30		0.70
	RWX869	164132	2872.00		2872.10		0.10
	RWX209	156423	2617.50		2617.90		0.40
	RWX822	438034	3978.10		3978.40		0.30
	RWX823	379748	279.50		279.80		0.30
	RWX1047	512542	622.00		622.10		0.10
	RWX1073	180125	13479.00		13479.10		0.10
	RWX1052	512564	547.40		547.50		0.10
	RWX1082	635044	133.40		133.80		0.40
	RWX1034	366483	221.20		221.40		0.20
	RWX1121	21377380	17.90		18.00		0.10
	RWX1120		0.00	Locked	0.00	locked	0.00
	RWX1094	21303224	50.00		50.20		0.20
	RWX963	540192	37.10		37.20		0.10
	RWX1103	21275658	236.80		237.20		0.40
	RWX952	40453860	931.60		931.80		0.20
	RWX841	359078	2350.20		2350.30		0.10
	RWX842		0.00	Locked	0.00	locked	0.00

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	RWX843		0.00	Locked	0.00	locked	0.00
	RWX845		0.00	Locked	0.00	locked	0.00
	RWX844		0.00	Locked	0.00	locked	0.00
	RWX481	474915	9753.10		9753.30		0.20
	RWX836	420182	3546.00		3546.20		0.20
	RWX583	622642	8931.20		8931.30		0.10
	RWX584	1564234	253.40		254.00		0.60
	RWX586			Locked		locked	0.00
	RWX1113	7242719	0.00	Locked	0.00	locked	0.00
	RWX1114		0.00	Locked	0.00	locked	0.00
	RWX978	359957	5123.10		5123.50		0.40
	RWX1124	21385777	20.90		21.30		0.40
	RWX636	267173	37033.40		37033.80		0.40
	RWX483	279872	4156.20		4156.40		0.20
	RWX1022	416996	0.00	Meter No.t working	0.00	Meter No.t working	0.40
	RWX1023	416968	85.30		85.40		0.10
	RWX769	647654	2736.10		2736.50		0.40
	RWX534	101600	28205.00		28205.40		0.40
	RWX866	172240	1217.60		1217.70		0.10
	RWX821		0.00	Locked	0.00	locked	0.00
	RWX944	40435824	1843.60		1843.70		0.10
	RWX1104	21362573	11.00		11.10		0.10
	RWX888	40145708	1997.20		1997.70		0.50
	RWX708		0.00	Locked	0.00	locked	0.00
	RWX863		0.00	Locked	0.00	locked	0.00
	RWX1070	7037845	301.40		301.50		0.10
	RWX1123	21380379	4521.20		4521.90		0.70
	RWX959	6327852	2316.30		2316.40		0.10
	RWX858	5086792	6358.10		6358.60		0.50
	RWX1020	415351	233.20		233.30		0.10

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	RWX1111	775110	7.70		7.80		0.10
	RWX1095		0.00	Locked	0.00	locked	0.00
	RWX762	352797	16573.90		16574.10		0.20
	RWX820	3227807	5093.40		5093.50		0.10
	RWX1054	502336	121.50		122.00		0.50
	RWX919	4254714	5306.60		5306.90		0.30
	RWX1039	581832	1053.10		1053.20		0.10
						TOTAL	12.1

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
Thangamani Nagar	89528.80	89554.50	25.70	1	25.7	25	5.45%

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
12/10/2012	TP250	14216		14217.3		1.30
	TP373	11734.1		11735.3		1.20
	TP349	7505.5		7506.7		1.20
	TP267	10131.7		10131.9		0.20
	TP258	15771		15772.2		1.20
	TP468	10872.8		10874		1.20
	TP411	8725.8		8727		1.20
	TP406	5387		5388.1		1.10
	TP46	5119.5		5120.7		1.20
	TP347	6814.5		6814.7		0.20
	TP45	6623.4		6623.5		0.10
	TP143	7214.1		7214.3		0.20
	TP48	10886.7		10886.9		0.20
	TP145	22839.2		22839.4		0.20
	TP214	13197.7		13197.9		0.20
	TP263	5673.6		5674.7		1.10
	TP216	9823.4		9824.6		1.20
	TP470	868.5		869.7		1.20
	TP87	754		755.2		1.20
	TP170	23229.8		23230.9		1.10
	TP209	13212.2		13212.4		0.20
	TP89	3866.5		3866.6		0.10
	TP174	11401.9		11402		0.10
	TP175	595.7		596.8		1.10
	TP81	10774.7		10775.8		1.10
	TP85	8806.7		8807.9		1.20

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
	TP82	8572.3		8573.5		1.20
	TP79	2991.3		2992.4		1.10
	TP600	1845.7		1846.9		1.20
	TP601	11390.3		11390.4		0.10
	TP599	6893.2		6893.4		0.20
					TOTAL	24.30

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
THANGAMMAL PURAM	88159.10	88218.80	59.70	1.00	59.70	25.00	7.25%

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
12/10/2012	TP471	9671701	1560.70		1562.20		1.50
	TP472	12307700	223.18		223.75		0.57
	TP564	247024	14311.40		14312.90		1.50
	TP340	2424469	4644.30		4645.90		1.60
	TP345	243545	8462.20		8463.80		1.60
	TP403	114165	9281.30		9282.80		1.50
	TP320	636058	7931.30		7932.80		1.50
	TP527	517897	4497.70		4499.20		1.50
	TP364	137647	11007.00		11008.50		1.50
	TP316	826972	11655.80		11657.30		1.50
	TP503	271531	5363.40		5364.80		1.40
	TP344	249426	6325.00		6326.50		1.50
	TP369	271907	6149.10		6150.40		1.30
	TP368	235343	10003.70		10005.10		1.40
	TP561	233720	13989.90		13991.40		1.50
	TP560	413256	1212.50		1213.80		1.30
	TP415	398166	3389.50		3391.00		1.50
	TP277	176682	11898.90		11900.50		1.60
	TP568	551785	11488.00		11489.40		1.40
	TP275	40145365	1643.50		1644.90		1.40
	TP569	437460	15351.00		15352.40		1.40
	TP570	40145366	2321.70		2323.20		1.50
	TP276	40145367	2565.60		2567.60		2.00
	TP571	14311	15803.20		15804.60		1.40
	TP273	40145368	2014.30		2015.80		1.50
	TP551	849201	5393.70		5395.70		2.00

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	TP339	3227071	3950.90		3952.20		1.30
	TP279	168861	5930.60		5932.00		1.40
	TP336	85588	27931.00		27932.30		1.30
	TP322	506781	1391.80		1393.10		1.30
	TP321	506778	11442.30		11443.60		1.30
	TP230	7180866	6212.90		6216.50		3.60
	TP485	694538	211.50		213.50		2.00
	TP486	1333289	16712.40		16713.90		1.50
	TP379	551656	17747.00		17748.60		1.60
	TP185			Locked		Locked	0.00
	TP353	133700	1748.30		1749.10		0.80
	TP211	226653	8427.10		8428.00		0.90
						TOTAL	55.37

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
ABIRAMI NAGAR	113037.30	113040.60	3.30	20.00	66.00	63.00	16.97%

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
13/10/12	B161	254621	12199.90		12200.90		1.00
	B964	286453	3268.90		3269.80		0.90
	B638	278099	39399.40		39400.60		1.20
	B637	288651	79133.20		79134.30		1.10
	B1074	472220	252.70		253.30		0.60
	B1076	486899	583.60		584.30		0.70
	B191	2705454	2577.50		2578.20		0.70
	B974	906056	7671.60		7672.30		0.70
	B975	451246	351.20		352.20		1.00
	B1310	582348	9026.00		9027.00		1.00
	B20	457812	202.50		203.20		0.70
	B1059	124568	5095.50		5096.10		0.60
	B196	2846512	4702.80		4703.80		1.00
	B729	2458647	14489.70		14491.20		1.50
	B857	145425	6452.30		6453.20		0.90
	B858	451246	10738.40		10739.60		1.20
	B920	241789	1024.30		1025.30		1.00
	B730	244598	3246.50		3247.20		0.70
	B1005	254687	8323.70		8324.50		0.80
	B527	154247	2935.20		2936.10		0.90
	B528	122452	8067.50		8068.30		0.80
	B529	13365	8883.00		8883.90		0.90
	B937	210455	9455.00		9456.00		1.00
	B521	654254	4407.10		4408.10		1.00
	B523	1524222	6873.20		6873.90		0.70
	B367	145144	7231.30		7232.00		0.70

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	B473	5079602	14803.90		14805.00		1.10
	B209	624554	3869.30		3869.90		0.60
	B213	452144	3103.20		3104.20		1.00
	B467	644514	7194.10		7195.00		0.90
	B203	144451	12523.80		12525.20		1.40
	B818	954425	1410.20		1411.00		0.80
	B805	745542	3940.80		3941.60		0.80
	B808	356644	5887.10		5887.90		0.80
	B811	254888	1141.70		1142.30		0.60
	B820	965488	4434.70		4435.30		0.60
	B1162	141318	320.80		321.30		0.50
	B1358	12063181	1264.20		1264.70		0.50
	B655	168317	3081.50		3082.20		0.70
	B1071	544414	1661.50		1662.30		0.80
	B1072	456897	939.10		940.00		0.90
	B1073	280145	1453.50		1454.30		0.80
	B450	654871	12235.50		12236.90		1.40
	B516	522546	1288.10		1288.90		0.80
	B193	377843	11904.10		11905.30		1.20
	B511	6347254	11334.00		11334.90		0.90
	B1101	495032	3343.30		3344.10		0.80
	B199	2522893	7852.30		7853.10		0.80
	B491	1260105	8414.90		8415.60		0.70
	B522	139139	7219.50		7220.30		0.80
	B867	2156235	3706.20		3707.50		1.30
	B1094	3190419	3453.70		3455.00		1.30
	B665	125903	6318.60		6319.50		0.90
	B210	254411	7050.00		7051.30		1.30
	B211	366542	20477.00		20478.50		1.50
	B212	821142	4635.70		4636.80		1.10
	B819	974512	1446.80		1447.60		0.80

Date	Consumer No.	Meter No.	1st Read	Remarks	2nd Read	Remarks	Difference
	B806	1204547	1315.50		1316.50		1.00
	B807	541242	2107.40		2108.30		0.90
	B812	654214	1184.90		1186.10		1.20
	B1164		0	Locked	0	Locked	0.00
	B1165		0	Locked	0	Locked	0.00
	B1166		0	Locked	0	Locked	0.00
						TOTAL	54.80

Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
MUTHAIYA PURAM	1833.10	1834.90	1.80	20.00	36.00	63.00	8.33%

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
16/10/12	A125	31838.40		31839.40		1.00
	A141	5802.00		5803.10		1.10
	A123	681.50		682.60		1.10
	A124	7438.30		7439.40		1.10
	A121	15426.10		15427.00		0.90
	A417	1963.90		1964.70		0.80
	A434	17928.70		17929.70		1.00
	A128	15423.50		15424.00		0.50
	A129	29795.90		29797.00		1.10
	A130	35222.30		35223.30		1.00
	A126	0.00	Locked	0.00	Locked	0.00
	A131	8201.20		8202.00		0.80
	A133	17425.10		17426.10		1.00
	A139	845.60		846.40		0.80
	A147	2543.60		2544.30		0.70
	A135	10254.60		10255.40		0.80
	A149	0.00	Locked	0.00	Locked	0.00
	A143	25414.10		25415.10		1.00
	A157	5246.80		5247.60		0.80
	A150	1245.60		1246.40		0.80
	A167	524.40		525.10		0.70
	A154	7561.20		7561.80		0.60
	A149	1954.50		1955.20		0.70
	A163	984.60		985.40		0.80
	A155	4542.60		4543.30		0.70
	A134	11242.30		11243.30		1.00

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
	A415	1452.60		1453.30		0.70
	A425	0.00	Locked	0.00	Locked	0.00
	A421	2654.20		2655.00		0.80
	A430	502.00		502.80		0.80
	A410	6521.20		6522.00		0.80
	A401	6245.20		6245.90		0.70
	A406	1546.30		1547.10		0.80
	A426	14572.30		14573.10		0.80
	A439	2564.30		2565.00		0.70
	A445	4572.80		4573.60		0.80
	A427	9652.20		9653.10		0.90
	A433	754.60		755.30		0.70
	A459	15676.00		15676.90		0.90
	A478		Meter Not working		Meter Not working	1.00
	A449	1459.30		1460.10		0.80
	A463	5247.80		5248.80		1.00
					TOTAL	33.00

DT NO	Location	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
D5915	SUNAMI COLONY	15406.10	15408.80	2.70	20.00	54.00	63.00	14.63%

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
17/10/12	SUN184	1828.60		1829.40		0.80
	SUN185	1169.60		1171.00		1.40
	SUN186	1524.20		1525.00		0.80
	SUN187	950.20		951.40		1.20
	SUN188	1726.40		1727.20		0.80
	SUN189	0.00	Locked	0.00	Locked	0.00
	SUN191	0.00	Locked	0.00	Locked	0.00
	SUN192	2013.10		2013.90		0.80
	SUN190	1421.70		1423.00		1.30
	SUN194	825.10		825.90		0.80
	SUN197	1654.20		1655.00		0.80
	SUN193	1754.20		1755.10		0.90
	SUN198	1248.60		1249.90		1.30
	SUN199	1748.60		1749.90		1.30
	SUN201	1854.60		1856.00		1.40
	SUN205	1624.90		1625.80		0.90
	SUN204	1789.60		1790.40		0.80
	SUN202	0.00	Locked	0.00	Locked	0.00
	SUN200	0.00	Locked	0.00	Locked	0.00
	SUN206	1699.30		1700.60		1.30
	SUN207	1821.60		1822.90		1.30
	SUN208	4882.30		4884.00		1.70
	SUN209	1887.30		1888.00		0.70
	SUN210	0.00	Locked	0.00	Locked	0.00
	SUN214	0.00	Locked	0.00	Locked	0.00

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
	SUN211	0.00	Locked	0.00	Locked	0.00
	SUN216	1473.60		1474.30		0.70
	SUN213	1665.80		1666.60		0.80
	SUN217	1822.40		1823.10		0.70
	SUN218	1258.40		1259.10		0.70
	SUN219	3542.10		3542.90		0.80
	SUN220	3112.20		3113.00		0.80
	SUN221	3005.60		3006.40		0.80
	SUN224	0.00	Locked	0.00	Locked	0.00
	SUN226	2546.10		2546.90		0.80
	SUN227	1998.40		1999.70		1.30
	SUN225	1854.30		1855.60		1.30
	SUN222	866.20		867.00		0.80
	SUN223	0.00	Locked	0.00	Locked	0.00
	SUN228	0.00	Locked	0.00	Locked	0.00
	SUN229	2456.10		2456.90		0.80
	SUN230	2584.30		2585.20		0.90
	SUN240	1428.90		1429.70		0.80
	SUN238	2154.30		2155.20		0.90
	SUN232	2113.20		2114.00		0.80
	SUN234	0.00	Locked	0.00	Locked	0.00
	SUN237	1556.30		1557.70		1.40
	SUN241	1662.40		1664.00		1.60
	SUN242	943.10		944.00		0.90
	SUN256	0.00	Locked	0.00	Locked	0.00
	SUN257	1645.30		1646.10		0.80
	SUN258	1546.30		1547.20		0.90
	SUN260	1246.30		1247.10		0.80
	SUN261	1465.20		1466.60		1.40
	SUN259	1577.60		1578.90		1.30
	SUN262	1879.30		1880.60		1.30

Date	Consumer No.	1st Read	Remarks	2nd Read	Remarks	Difference
	SUN263	1796.30		1797.10		0.80
	SUN264	2015.30		2016.20		0.90
					TOTAL	46.10

Commercial DTs

Location	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	Loss
PANDARAMPAT TI	4894.31	4894.99	0.68	100.00	68.00	200.00	10.56%

DATE	CONSUMER NO	METER NO	1ST READ	REMARKS	2ND READ	REMARKS	DIFFERENCE
10/10/2012	RWX214	39096659	26629.70		26636.70		7.00
	RWX993	308992	14945.60		14951.40		5.80
	RWX1028	415486	7454.30		7454.80		0.50
	RWX814	407403	1045.20		1045.80		0.60
	RWX215	6053079	50848.40		50862.20		13.80
	RWX1112	7237700	243.40		243.80		0.40
	RWX500	400122	25636.90		25637.10		0.20
	RWX220	308420	10850.50		10850.70		0.20
	RWX1032	366470	374.40		374.50		0.10
	RWX221	509494	4340.00		4340.10		0.10
	RWX219	987718	20291.70		20291.80		0.10
	RWX776	425162	3015.90		3016.00		0.10
	RWX568	551587	7190.70		7190.80		0.10
	RWX546	516277	10866.10		10866.20		0.10
	RWX504	685611	5555.10		5555.40		0.30
	RWX410	627633	13891.40		13891.80		0.40
	RWX411	230730	8482.30		8482.40		0.10
	RWX688	3874918	6615.00		6615.20		0.20
	RWX709	270296	6144.50		6144.60		0.10
	RWX1096	256432	16.70		16.80		0.10
	RWX593	688402	4398.70		4398.80		0.10
	RWX839	364600	3777.70		3777.80		0.10
	RWX211	654256	12814.20		12814.30		0.10
	RWX754	419079	6413.00		6413.10		0.10

DATE	CONSUMER NO	METER NO	1ST READ	REMARKS	2ND READ	REMARKS	DIFFERENCE
	RWX753	919095	11834.90		11835.00		0.10
	RWX646	858469	4680.60		4680.70		0.10
	RWX894	123500	10642.00		10642.10		0.10
	RWX1099	88764	142.60		142.70		0.10
	RWX217	4687949	80185.60		80207.20		21.60
	RWX330	2305358	3252.50			LOCKED	0.00
	RWX683	387366	577.67		578.28		0.62
	RWX749	456415	14780.30		14781.50		1.20
	RWX972	392919	420.30		420.40		0.10
	RWX910	154624	6869.50		6872.10		2.60
	RWX591	458714	2753.90			LOCKED	0.00
	RWX825	626166	136.10		136.70		0.60
	RWX503	352017	8295.30		8295.80		0.50
	RWX470	913098	15060.60		15060.70		0.10
	RWX222	825211	8610.60		8610.70		0.10
	RWX327	119771	8297.70		8297.80		0.10
	RWX938	344625	8131.70		8131.80		0.10
	RWX501	309480	25220.40		25220.60		0.20
	RWX676	781340	3403.10		3403.20		0.10
	RWX331	210597	8052.00		8052.10		0.10
	RWX662	419822	8584.50		8584.70		0.20
	RWX680	1376794	27312.30		27312.40		0.10
	RWX681	8717	29033.70		29033.80		0.10
	RWX870	40145714	10346.10		10346.20		0.10
	RWX521	122844	14618.30			LOCKED	0.00
	RWX1029	415492	1045.50		1045.80		0.30
	RWX206	936145	14570.60		14570.70		0.10
	RWX207	2040905	9098.50		9098.60		0.10
	RWX971	83011	2119.90		2120.10		0.20
	RWX213	5051626	4713.40		4713.60		0.20
	RWX1026			LOCKED		LOCKED	0.00

DATE	CONSUMER NO	METER NO	1ST READ	REMARKS	2ND READ	REMARKS	DIFFERENCE
	RWX946	32800	4391.00		4391.20		0.20
	RWX684	123032	2071.90		2072.00		0.10
						TOTAL	60.82

DT NO.	Location	1st read	2nd read	Difference	MF	Consumption	DT CAPACITY (kVA)	Loss
86421	PALAYAKAYAL	124.15	124.26	0.11	100.00	11.00	25.00	5.45%

DATE	CONSUMER NO	1st read	2nd read	REMARKS	Difference	Consumption
18/10/12	A492	32858.60	32864.00		5.40	5.40
	A460	1056.10	1056.40		0.30	0.30
	A452	854.60	854.90		0.30	0.30
	A463	2651.40	2651.80		0.40	0.40
	A467	2015.50	2015.90		0.40	0.40
	A488			LOCKED	0.00	0.00
	A472	725.30	725.60		0.30	0.30
	A456	944.10	944.50		0.40	0.40
	A478	1964.30	1964.70		0.40	0.40
	A459	3012.20	3012.70		0.50	0.50
	A475	1254.20	1254.50		0.30	0.30
	A457	612.40	612.60		0.20	0.20
	A495	3121.20	3121.50		0.30	0.30
	A481	2457.60	2457.90		0.30	0.30
	A483	1844.90	1845.20		0.30	0.30
	A482	1247.20	1247.50		0.30	0.30
	A488	928.10	928.40		0.30	0.30
					TOTAL	10.40

DT NO.	Location	1st read	2nd read	Difference	MF	Consumption	DT CAPACITY (kVA)	Loss
86421	KURUNCHI NAGAR	2872.7	2873.85	1.15	100.00	115.00	25	9.65%

DATE	CONSUMER NO	1st read	2nd read	REMARKS	Difference	Consumption
19/10/12	RNC1094	2739.40	2768.90		29.50	29.50
	RNC1090	4501.30	4511.50		10.20	10.20
	RNC1091	1688.30	1698.60		10.30	10.30
	RNC1088			LOCKED	0.00	0.00
	RNC1089			LOCKED	0.00	0.00
	RNC1092	6512.20	6522.50		10.30	10.30
	RNC1093	5124.60	5134.90		10.30	10.30
	RNC1095	3547.90	3558.20		10.30	10.30
	RNC1096	4245.20	4255.60		10.40	10.40
	RNC1097	2897.60	2899.80		2.20	2.20
	RNC1098	4897.10	4907.50		10.40	10.40
					TOTAL	103.90

DT NO.	Location	1st read	2nd read	Difference	MF	Consumption	DT CAPACITY (kVA)	Loss
16773	Kurunchi Nagar	5128.92	5129.06	0.14	100.00	14.10	25	7.80%

DATE	CONSUMER NO	1st read	2nd read	REMARKS	Difference	Consumption
20/10/12	RNC1012	13790.60	13796.60		6.00	6.00
	RNC1016	1245.10	1245.30		0.20	0.20
	RNC1015	1452.30	1452.60		0.30	0.30
	RNC1014	2578.40	2578.80		0.40	0.40
	RNC1013	9524.10	9524.80		0.70	0.70
	RNC1010	7546.20	7546.70		0.50	0.50
	RNC1017	6875.40	6875.80		0.40	0.40
	RNC1018	7421.30	7421.60		0.30	0.30
	RNC1019	4564.00	4564.10		0.10	0.10
	RNC1020			LOCKED	0.00	0.00
	RNC1021	5268.30	5268.80		0.50	0.50
	RNC1022	10246.10	10246.70		0.60	0.60
	RNC1023	9146.10	9146.80		0.70	0.70
	RNC1025			LOCKED	0.00	0.00
	RNC1026	8854.10	8854.60		0.50	0.50
	RNC1028	8542.30	8542.90		0.60	0.60
	RNC1029	956.30	956.40		0.10	0.10
	RNC1030	7052.30	7052.60		0.30	0.30
	RNC1035			LOCKED	0.00	0.00
	RNC1037	4587.30	4587.60		0.30	0.30
	RNC1038	5698.90	5699.40		0.50	0.50
					TOTAL	13.00

DT NO.	Location	1st read	2nd read	Difference	MF	Consumption	CAPACITY (kVA)	Loss
14564	KURUNCHI NAGAR	1524.61	1524.82	0.20	100.00	20.10	25	8.46%

DATE	1st read	2nd read	Difference	Consumption	Meter No.
26/10/12	71085.00	71096.60	11.60	11.60	6146
	1452.20	1452.60	0.40	0.40	125461
	8056.30	8057.50	1.20	1.20	456721
	7987.40	7987.90	0.50	0.50	114561
	11254.30	11256.30	2.00	2.00	987245
	12564.10	12566.20	2.10	2.10	5642
	5468.30	5468.90	0.60	0.60	124561
			TOTAL	18.40	

Industrial DTs

DT NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	Loss
3847111	499.16	504.26	5.10	30.00	153.00	25.00	0.13%

DATE	CONSUMER	CONSUMER NO	METER NO	1ST READ	2ND READ	REMARKS	DIFFERENCE
8/10/2012	Consumer 1	RWP 288	20796	42269.90	42372.10		102.20
	Consumer 2	RWP 289	20794	25941.40	25992.00		50.60
						TOTAL	152.80

DT NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	LOSS
385513	3061.48	3062.00	0.52	100	52.00	250	0.19%

DATE	CONSUMER	CONSUMER NO	METER NO	1ST READ	2ND READ	REMARKS	DIFFERENCE
22/10/12	Consumer 1	EK 86	98659	44784.80	44793.90		9.10
	Consumer 2	EK85	278150	111.70	115.20		3.50
	Consumer 3	EK271	3503	27946.50	27976.50		30.00
	Consumer 4	EK146	1949466	166963.60	166972.90		9.30
						TOTAL	51.90

DT NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	LOSS
385513	4343.16	4343.88	0.72	100	72	250	0.56%

DATE	Consumer	CONSUMER NO	METER NO	1ST READ	2ND READ	REMARKS	DIFFERENCE
22/10/12	Consumer 1	EK63	1003497	190985.4	190997.9		12.5
	Consumer 2	EK65		66223.5	66233.8		10.3
	Consumer 3	EK218	3405614579	76627.8	76645.5		17.7
	Consumer 4	EK230	1003204	26905.5	26925.9		20.4
	Consumer 5	EK72	98657	2627.2	2637.9		10.7
						TOTAL	71.6

DT NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	LOSS
385513	341.25	341.504	0.254	500	127	1000	0.24%

DATE	Consumer	CONSUMER NO	METER NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION
25/10/12	Consumer 1	EM738		49569.3	49571.5	2.2	30	66
	Consumer 2	EM208	98118	21273.7	21286.4	12.7	1	12.7
	Consumer 3	EM638	4725224	41872.9	41874.5	1.6	30	48
						TOTAL		126.7

DT NO	1ST READ	2ND READ	DIFFERENCE	MF	CONSUMPTION	CAPACITY (kVA)	LOSS
385513	8594.042	8596.366	2.324	75	174.3	250	0.17%

DATE	Consumer	CONSUMER NO	METER NO	1ST READ	2ND READ	MF	DIFFERENCE	CONSUMPTION
25/10/12	Consumer 1	EM207	138145	1948698.4	1948754.4	1	56	56
	Consumer 2	EM276		75438.6	75442.2	30	3.6	108
	Consumer 3	EN1000	122657	10260.3	10270.3	1	10	10
							TOTAL	174

3.4 Madurai

Domestic DTs

DT NO.	Ist read	2nd read	Difference	Consumption	DT Capacity (kVA)	Loss
4,678,891	63501.2	63503.6	2.4	96.00	250	22.60%

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	4203874	16568.20		16568.40	0.20
Consumer 2	16223	15303.40		15303.60	0.20
Consumer 3	40071046	1290.40		1290.80	0.40
Consumer 4	4619810	7831.60		7831.90	0.30
Consumer 5	1633822	6408.30		6408.60	0.30
Consumer 6	1801834982	41519.30		41519.70	0.40
Consumer 7			closed		0.00
Consumer 8	40071043	1178.40		1178.60	0.20
Consumer 9	40071267	1334.30		1334.60	0.30
Consumer 10	40071263	2202.70		2202.90	0.20
Consumer 11	40071044	3489.40		3489.60	0.20
Consumer 12	66533	20819.60		20819.70	0.10
Consumer 13	3406301	15193.10		15193.20	0.10
Consumer 14	3752	9182.10		9182.20	0.10
Consumer 15	346827	1673.00		1673.20	0.20
Consumer 16	2820587	5635.90		5636.10	0.20
Consumer 17	7030416	3778.20		3778.40	0.20
Consumer 18	151564	3081.10		3081.20	0.10
Consumer 19	4026691	12591.00		12591.20	0.20
Consumer 20	563514	9492.20		9492.30	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 21	1371135	5047.70		5047.80	0.10
Consumer 22	295519	1282.00		1282.40	0.40
Consumer 23	7302022	6786.50		6786.70	0.20
Consumer 24	6754186	188.20		188.40	0.20
Consumer 25	closed				0.00
Consumer 26	3414394	5314.60		5314.70	0.10
Consumer 27	6827995	9406.80		9406.90	0.10
Consumer 28			closed		0.00
Consumer 29			closed		0.00
Consumer 30	850902	16710.60		16710.80	0.20
Consumer 31	892536	3196.00		3196.20	0.20
Consumer 32	32028	7117.40		7117.50	0.10
Consumer 33	7099103	5043.30		5043.40	0.10
Consumer 34	1333958	7115.20		7115.30	0.10
Consumer 35	1902497	15379.50		15379.70	0.20
Consumer 36	27806	2276.50		2276.60	0.10
Consumer 37	7175695	15118.50		15118.60	0.10
Consumer 38	2557642	17774.60		17774.80	0.20
Consumer 39	4203368	5915.30		5915.40	0.10
Consumer 40	3406484	7781.40		7781.50	0.10
Consumer 41	1450913	3363.70		3363.90	0.20
Consumer 42	600699	4215.30		4215.40	0.10
Consumer 43	889873	7510.30		7510.40	0.10
Consumer 44	4136212	7296.50		7296.60	0.10
Consumer 45	4196582	12877.70		12877.90	0.20
Consumer 46	527817	6172.20		6172.40	0.20
Consumer 47	4500973	21868.90		21869.20	0.30
Consumer 48	7405600	7415.80		7415.80	0.00
Consumer 49			closed		0.00
Consumer 50	92829	29191.00		29192.70	51.00

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 51	2464813	10440.90		10441.20	0.30
Consumer 52	722874	6100.50		6100.80	0.30
Consumer 53	250617	5606.90		5606.90	0.00
Consumer 54	40235923	4463.00		4463.10	0.10
Consumer 55	537381	7747.00		7747.20	0.20
Consumer 56	1348189	4948.10		4948.20	0.10
Consumer 57	7425482	12908.30		12908.60	0.30
Consumer 58	272705	3420.30		3420.40	0.10
Consumer 59	4616800	7850.00		7850.10	0.10
Consumer 60	533490	3819.20		3819.20	0.30
Consumer 61	524592	10378.40		10378.50	0.10
Consumer 62	340081	1726.30		1726.50	0.20
Consumer 63	tn0433769	1796.10		1796.20	0.10
Consumer 64	7434828	2.90		2.90	0.30
Consumer 65	7434874	18.60		18.80	0.20
Consumer 66	1274695	21793.70		21793.80	0.10
Consumer 67	648691	4557.30		4557.30	0.30
Consumer 68	116355	3712.20		3712.20	0.30
Consumer 69	closed				0.00
Consumer 70	closed				0.00
Consumer 71	543927	3392.90		3393.10	0.20
Consumer 72	3451862	11497.10		11497.20	0.10
Consumer 73	63266	1188.40		1188.50	0.10
Consumer 74	317855	4261.40		4261.40	0.30
Consumer 75	271384	6192.70		6192.80	0.10
Consumer 76	21557.1	1241.70		1241.80	0.10
Consumer 77	4243593	3068.70		3068.90	0.20
Consumer 78	269169	13499.00		13499.30	0.30
Consumer 79	3643884	13527.40		13527.50	0.10
Consumer 80	51123	51070.70		51070.70	0.30

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 81	4200816	8982.80		8982.90	0.10
Consumer 82	303846	3560.20		3560.30	0.10
Consumer 83	4076434	7904.60		7904.80	0.20
Consumer 84	453076	4947.80		4947.80	0.30
Consumer 85	3699748	10935.20		10935.40	0.20
Consumer 86	3698748	6641.00		6641.10	0.10
Consumer 87	7406307	8637.70		8637.80	0.10
Consumer 88	1158881	15359.10		15359.30	0.20
Consumer 89	659367	1043.00		1043.00	0.30
Consumer 90	7033209	717.90		718.00	0.10
Consumer 91	52317	23.80		23.90	0.10
Consumer 92	4616948	5502.10		5502.20	0.10
Consumer 93			closed		0.00
Consumer 94	2551459	2008.20		2008.30	0.10
Consumer 95	722358	1539.10		1539.10	0.30
Consumer 96	436728	10223.20		10223.30	0.10
Consumer 97	3319732	11.80		11.90	0.10
Consumer 98	4079745	8820.70		8820.80	0.10
Consumer 99	7063908	66596.10		66596.20	0.10
Consumer 100	3398936	38782.30		38782.40	0.10
Consumer 101	690226	18948.20		18948.30	0.10
Consumer 102	870950	19192.00		19192.00	0.30
Consumer 103	214512	81266.70		81266.80	0.10
Consumer 104	346428	3323.40		3323.50	0.10
Consumer 105	40071270	2329.80		2329.90	0.10
Consumer 106	463716	5701.20		5701.20	0.30
Consumer 107	416672	1176.70		1176.90	0.20
Consumer 108	679073	2522.60		2522.80	0.20
Consumer 109	4353766	7978.50		7978.60	0.10
Consumer 110	652389	5964.70		5964.80	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 111	1334795	20426.10		20426.20	0.10
Consumer 112	151564	3081.10		3081.10	0.30
Consumer 113	4374447	4307.10		4307.50	0.40
Consumer 114	6390033	12503.40		12503.60	0.20
Consumer 115	4383101	8842.40		8842.80	0.40
Consumer 116	3537639	11796.10		11796.70	0.60
Consumer 117	40464244	367.40		367.80	0.40
Consumer 118	158821	39565.30		39565.90	0.60
Consumer 119	105926	6966.20		6966.60	0.40
Consumer 120	156023	7998.20		7998.60	0.40
Consumer 121	4616604	6368.40		6368.70	0.30
Consumer 122	328992	4601.50		4601.90	0.40
Consumer 123	7273710	77.50		77.90	0.40
Consumer 124	160928	18876.50		18876.90	0.40
Consumer 125	3319733	329.70		329.80	0.10
Consumer 126	7139220	5592.00		5592.20	0.20
Consumer 127	425072	9163.60		9163.80	0.20
Consumer 128	161018	8671.20		8671.30	0.10
Total					74.30

DT NO.	1st read	2nd read	Difference	Consumption	DT Capacity (kVA)	Loss
TNB38549	1270.29	1271.84	1.55	62	250	6.84%

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 1	40382615	1263.20		1263.30	0.10
Consumer 2	40382618	893.09		893.20	0.11
Consumer 3	40382620	846.10		846.10	0.20
Consumer 4	40382619	471.55		471.80	0.25
Consumer 5	40370803	2201.20		2201.30	0.10
Consumer 6	40370804	1606.00		1606.20	0.20
Consumer 7	40370202	1666.80		1668.10	1.30
Consumer 8	40370209	1260.20		1260.40	0.20
Consumer 9	40370204	702.40		702.50	0.10
Consumer 10	40370205	1398.20		1398.30	0.10
Consumer 11	40370210	716.60		716.80	0.20
Consumer 12	40370203	1215.40		1215.50	0.10
Consumer 13	40370207	1102.40		1102.90	0.50
Consumer 14	40370206	1087.30		1087.40	0.10
Consumer 15	40370208	837.80		837.90	0.10
Consumer 16	40370201	864.40		864.50	0.10
Consumer 17	40368458	1453.10		1453.20	0.10
Consumer 18	40368460	1008.90		1009.10	0.20
Consumer 19	40368459	754.90		755.00	0.10
Consumer 20	40368453	1082.40		1082.60	0.20
Consumer 21	40368454	1162.20		1162.40	0.20
Consumer 22	40368456	915.00		915.10	0.10
Consumer 23	40368455	1017.20		1017.30	0.10
Consumer 24	40382617	1711.90		1712.00	0.10
Consumer 25	40382616	891.70		891.80	0.10
Consumer 26	40370473	1723.80		1724.10	0.20
Consumer 27	40382613	1074.10		1074.20	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 28	40382614	1437.50		1437.60	0.10
Consumer 29	40382611	819.10		819.10	0.20
Consumer 30	40382612	104.20		104.30	0.10
Consumer 31	40368451	579.70		579.80	0.10
Consumer 32	40368452	1015.80		1015.90	0.10
Consumer 33	40370713	855.20		855.30	0.10
Consumer 34	40370715	1239.80		1239.90	0.10
Consumer 35	40370720	465.60		465.80	0.20
Consumer 36	40370717	1056.90		1057.10	0.20
Consumer 37	40370718	653.40		653.50	0.10
Consumer 38	40370719	1326.80		1327.00	0.20
Consumer 39	40370714	1366.40		1366.50	0.10
Consumer 40	623428	689.70		690.40	0.70
Consumer 41	40370474	569.10		569.20	0.10
Consumer 42	40370475	1149.00		1149.20	0.20
Consumer 43	40370476	1871.30		1871.60	0.20
Consumer 44	40370477	2573.10		2573.40	0.30
Consumer 45	40370478	1044.50		1044.60	0.10
Consumer 46	40370480	1135.80		1135.90	0.10
Consumer 47	4037049	1026.70		1026.80	0.10
Consumer 48	40368457	1059.70		1059.90	0.20
Consumer 49	40370843	1064.50		1064.70	0.20
Consumer 50	40382494	1475.60		1475.80	0.20
Consumer 51	40382493	5.90		5.90	0.20
Consumer 52	40370472	176.80		177.00	0.20
Consumer 53	40370471	937.20		937.30	0.10
Consumer 54	40370844	1370.50		1370.60	0.10
Consumer 55	403824492	1464.30		1464.40	0.10
Consumer 56	40382496	1605.60		1605.80	0.20
Consumer 57	4038495	1156.10		1156.20	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 58	40382498	1237.00		1238.00	1.00
Consumer 59	40382497	1089.90		1090.00	0.10
Consumer 60	40382500	1407.60		1407.70	0.10
Consumer 61	40382499	1078.80		1078.90	0.10
Consumer 62	40370712	947.40		947.50	0.10
Consumer 63	40370711	687.30		687.40	0.10
Consumer 64	40370723	1390.60		1390.70	0.10
Consumer 65	40370727	960.30		960.35	0.05
Consumer 66	40370728	950.20		950.30	0.10
Consumer 67	40370730	971.30		971.40	0.10
Consumer 68	40370729	941.50		941.60	0.10
Consumer 69	40370725	260.80		260.90	0.10
Consumer 70	40370726	153.50		153.60	0.10
Consumer 71	40370847	480.80		480.90	0.10
Consumer 72	40370848	1484.70		1484.90	0.20
Consumer 73	40370846	661.60		661.70	0.10
Consumer 74	40370846	1005.50		1005.60	0.10
Consumer 75	40370850	708.10		708.20	0.10
Consumer 76	40233960	880.80		880.90	0.10
Consumer 77	40370849	490.60		490.60	0.20
Consumer 78	40370842	1499.90		1500.10	0.20
Consumer 79	40370842	1163.30		1163.85	0.55
Consumer 80	866525	24040.20		24040.90	0.70
Consumer 81	4163254	23251.90		23252.10	0.20
Consumer 82	164713	26059.80		26060.00	0.20
Consumer 83	204869	2001.70		2001.80	0.10
Consumer 84	1334590	19776.00		19776.10	0.10
Consumer 85	250851	9087.90		9088.10	0.20
Consumer 86	6278254	8595.80		8595.90	0.10
Consumer 87	4163593	15538.30		15538.40	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 88	1616647	22092.40		22092.50	0.10
Consumer 89	12915	3075.90		3076.00	0.10
Consumer 90	7346928	23091.50		23091.80	0.30
Consumer 91	7136877	26126.30		26126.40	0.10
Consumer 92	12799	13156.20		13156.30	0.10
Consumer 93	4625493	11145.20		11145.30	0.10
Consumer 94	1903220	16736.70		16736.80	0.10
Consumer 95	4163919	9467.00		9467.20	0.20
Consumer 96	3065857	5237.70		5237.80	0.10
Consumer 97	6234256	2151.00		2151.10	0.10
Consumer 98	3644752	17784.69		17784.99	0.30
Consumer 99	314182	7032.30		7032.40	0.10
Consumer 100	3641202	18297.60		18297.70	0.10
Consumer 101	4126862	15508.00		15508.20	0.20
Consumer 102	2371188	12512.40		12512.50	0.10
Consumer 103	587448	30431.50		30431.60	0.10
Consumer 104	4246163	1208.10		1208.10	0.20
Consumer 105	4246162	1638.90		1638.90	0.20
Consumer 106	4246178	1586.90		1587.20	0.30
Consumer 107	4246175	2420.30		2420.70	0.40
Consumer 108	4246171	1849.90		1850.20	0.30
Consumer 109	4246176	31.10		31.10	0.20
Consumer 110	4246169	762.80		763.00	0.20
Consumer 111	4246170	884.70		884.80	0.10
Consumer 112	4245173	2085.40		2085.70	0.30
Consumer 113	4245168	1876.40		1876.60	0.20
Consumer 114	4245177	1136.50		1136.50	0.20
Consumer 115	4246174	1170.80		1170.80	0.20
Consumer 116	4246167	1436.50		1436.70	0.20
Consumer 117	4246164	1552.00		1552.10	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 118	4246165	891.70		891.70	0.20
Consumer 119	4246172	819.50		819.60	0.10
Consumer 120	4246161	1020.60		1020.60	0.20
Consumer 121	4246166	987.50		987.60	0.10
Consumer 122	40383579	1106.00		1106.00	0.20
Consumer 123	40383729	921.40		921.60	0.20
Consumer 124	40383573	1077.50		1077.70	0.20
Consumer 125	40383574	1005.60		1005.70	0.10
Consumer 126	40383571	1062.30		1062.50	0.20
Consumer 127	40383572	1232.30		1232.50	0.20
Consumer 128	40383580	1123.00		1123.20	0.20
Consumer 129	40371500	1024.20		1024.30	0.10
Consumer 130	40371437	877.40		877.50	0.10
Consumer 131	40371431	965.60		965.60	0.20
Consumer 132	40371432	1112.30		1112.50	0.20
Consumer 133	40371433	980.20		980.30	0.10
Consumer 134	40371435	936.20		936.30	0.10
Consumer 135	40371436	1329.50		1329.50	0.20
Consumer 136	4244316	878.30		878.30	0.20
Consumer 137	4244317	2264.50		2264.50	0.20
Consumer 138	4244315	1509.90		1510.30	0.20
Consumer 139	4244314	833.70		833.90	0.20
Consumer 140	4244323	864.60		864.70	0.20
Consumer 141	4244324	1103.60		1103.80	0.20
Consumer 142	4244311	824.70		824.70	0.20
Consumer 143	40233954	1412.70		1412.70	0.20
Consumer 144	4235604	542.70		542.70	0.20
Consumer 145	547031	959.50		959.50	0.20
Consumer 146	4235606	1010.00		1010.10	0.20
Consumer 147	4235609	916.40		916.40	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 148	4235601	1452.60		1452.70	0.20
Consumer 149	4235598	1089.70		1089.90	0.20
Consumer 150	4235612	2427.70		2427.80	0.20
Consumer 151	4235595	1472.30		1472.50	0.20
Consumer 152	4235610	2089.30		2089.50	0.20
Consumer 153	4235536	1568.40		1568.60	0.20
Consumer 154	4235523	1885.90		1886.20	0.20
Consumer 155	4235538	2324.50		2326.80	0.20
Consumer 156	4235086	370.00		370.00	0.20
Consumer 157	4335083	893.30		893.30	0.20
Consumer 158	4023395	987.70		987.90	0.20
Consumer 159	623421	1035.10		1035.20	0.20
Consumer 160	642169	32703.00		32703.00	0.20
Consumer 161	424587	1724.20		1724.30	0.20
Consumer 162	424589	2214.70		2215.20	0.20
Consumer 163	623427	957.50		957.60	0.20
Consumer 164	623439	3558.80		3559.00	0.20
Consumer 165	430521	2573.40		2573.40	0.20
Consumer 166	4235419	1721.00		1721.20	0.20
Consumer 167	4235423	487.50		487.60	0.20
Consumer 168	4235429	1598.30		1598.50	0.20
Consumer 169	4245973	1176.80		1176.90	0.20
Consumer 170	371796	1270.20		1270.30	0.20
Consumer 171	4245966	841.30		841.30	0.20
Consumer 172	371794	1133.90		1134.10	0.20
Consumer 173	371795	1232.10		1232.20	0.20
Consumer 174	4233417	1875.10		1875.30	0.20
Consumer 175	4244422	1291.80		1291.90	0.20
Consumer 176	1036328	3794.90		3795.00	0.20
Consumer 177	3487691	15812.10		15812.30	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 178	2593324	22832.90		22832.90	0.20
Consumer 179	997273	24814.30		24814.50	0.20
Consumer 180	87168	6730.00		6730.10	0.20
Consumer 181	70639	5397.20		5397.30	0.20
Consumer 182	2370570	19608.80		19608.90	0.20
Consumer 183	4991245	7340.80		7340.90	0.20
Consumer 184	4091232	13229.50		13229.70	0.20
Consumer 185	422078	4159.00		4159.10	0.20
Consumer 186	40370952	1335.70		1335.90	0.20
Consumer 187	7346072	483.90		483.90	0.20
Consumer 188	10344695	26159.30		26159.40	0.20
Consumer 189	22970	24234.40		24234.60	0.20
Consumer 190	4182319	2391.00		2391.10	0.20
Consumer 191	5344443	4503.90		4504.00	0.20
Consumer 192	7132712	17623.70		17623.90	0.20
Consumer 193	7345822	93776.60		93776.80	0.20
Consumer 194	926357	22229.70		22229.90	0.20
Consumer 195	874245	33443.10		33443.20	0.20
Consumer 196	874249	8975.70		8975.80	0.20
Consumer 197	40371582	493.30		495.50	0.20
Consumer 198	40371587	1366.90		1367.10	0.20
Consumer 199	40371589	1191.70		1191.70	0.20
Consumer 200	40371590	1502.60		1502.80	0.20
Consumer 201	40371584	771.80		771.80	0.20
Consumer 202	40371583	1078.90		1078.90	0.20
Consumer 203	40371581	1117.30		1117.30	0.20
Consumer 204	40369493	627.40		627.50	0.20
Consumer 205	40369494	813.70		813.70	0.20
Consumer 206	40369497	1531.70		1531.80	0.20
Consumer 207	40369498	697.80		697.80	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 208	40369492	1795.50		1795.60	0.20
Consumer 209	40369491	1023.40		1023.50	0.20
Consumer 210	40369495	976.50		976.70	0.20
Consumer 211	40369496	1319.50		1319.70	0.20
Consumer 212	40371588	508.90		508.90	0.20
Consumer 213	40369500	888.30		888.30	0.20
Consumer 214	40383552	1007.90		1008.00	0.20
Consumer 215	40383559	1530.50		1530.70	0.20
Consumer 216	40383560	755.80		755.80	0.20
Consumer 217	40383554	1519.40		1519.70	0.20
Consumer 218	40383553	931.00		931.10	0.20
Consumer 219	40369499	1635.60		1635.60	0.20
Consumer 220	40383575	825.80		825.80	0.20
Consumer 221	40383576	1305.20		1305.30	0.20
Consumer 222	40383577	1427.50		1427.70	0.20
Consumer 223	40383578	1318.20		1318.30	0.20
Consumer 224	40383555	424.80		424.90	0.20
Consumer 225	40383556	357.30		357.40	0.20
Consumer 226	40383558	1029.70		1029.70	0.20
Consumer 227	40383557	912.10		912.10	0.20
Consumer 228	40383551	1555.10		1555.30	0.20
Consumer 229	40371499	1122.80		1122.90	0.20
Consumer 230	40371497	1278.60		1278.80	0.20
Consumer 231	40371498	1247.00		1247.20	0.20
Consumer 232	40371491	3015.30		3015.30	0.20
Consumer 233	40371492	1455.10		1455.20	0.20
Consumer 234	40371493	1318.60		1318.80	0.20
Consumer 235	40371494	1376.60		1376.70	0.20
Consumer 236	40371495	1789.10		1789.20	0.20
Consumer 237	40371496	1521.20		1521.40	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 238	6747525	788.70		788.90	0.20
Consumer 239	4244313	1031.70		1031.90	0.20
Consumer 240	1244322	847.20		847.50	0.20
Consumer 241	4244307	865.80		865.80	0.20
Consumer 242	4244319	786.10		786.20	0.20
Consumer 243	40371440	1346.40		1346.50	0.20
Consumer 244	40371439	382.80		382.80	0.20
Consumer 245	40371438	1107.00		1107.20	0.20
Consumer 246	40371434	1157.20		1157.20	0.20
Consumer 247	4244321	457.60		457.60	0.20
Consumer 248	546500	590.50		590.60	0.20
Consumer 249	4244309	1167.70		1168.00	0.20
Consumer 250	4244318	337.50		337.50	0.20
Consumer 251	4244310	999.10		999.80	0.20
Consumer 252	4244312	807.50		807.60	0.20
Consumer 253	4235257	932.70		932.70	0.20
Consumer 254	4235255	1128.50		1128.70	0.20
Consumer 255	40233959	1103.50		1103.60	0.20
Consumer 256	4235597	1837.50		1837.70	0.20
Consumer 257	4235602	1211.60		1211.70	0.20
Consumer 258	4235611	1079.60		1079.70	0.20
Consumer 259	6753243	868.70		868.80	0.20
Consumer 260	371782	1026.20		1026.30	0.20
Consumer 261	4235607	1582.10		1582.30	0.20
Consumer 262	4235537	2011.60		2011.80	0.20
Consumer 263	4235539	1542.00		1542.10	0.20
Consumer 264	4235535	2597.60		2597.90	0.20
Consumer 265	4235528	2020.70		2020.70	0.20
Consumer 266	4245091	1618.20		1618.40	0.20
Consumer 267	4245094	1388.90		1389.10	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 268	4245082	1795.00		1795.60	0.20
Consumer 269	4245090	708.80		708.80	0.20
Consumer 270	4235540	1731.10		1731.40	0.20
Consumer 271	4235529	1321.80		1321.80	0.20
Consumer 272	371806	1397.80		1398.00	0.20
Consumer 273	4245098	23357.50		23359.20	0.20
Consumer 274	4245092	1517.60		1517.80	0.20
Consumer 275	4245096	1796.00		1796.10	0.20
Consumer 276	4235424	1909.40		1909.70	0.20
Consumer 277	4235430	1341.50		1341.50	0.20
Consumer 278	4245084	3856.90		3857.30	0.20
Consumer 279	4245088	655.40		655.50	0.20
Consumer 280	4245095	2299.80		2299.90	0.20
Consumer 281	4245081	107.40		107.40	0.20
Consumer 282	4235432	1834.40		1834.50	0.20
Consumer 283	4235422	1838.80		1839.00	0.20
Consumer 284	4235436	2594.10		2594.50	0.20
Consumer 285	1235420	1965.10		1965.30	0.20
Consumer 286	4235965	3090.80		3090.90	0.20
Consumer 287	4235425	2273.70		2274.00	0.20
Consumer 288	4235972	1298.00		1298.00	0.20
Consumer 289	4063941	1250.60		1250.80	0.20
Consumer 290	4245979	746.10		746.20	0.20
Consumer 291	4245963	2242.60		2243.00	0.20
Consumer 292	4235427	1833.60		1833.80	0.20
Consumer 293	511799	4152.50		4152.60	0.20
Consumer 294	7346101	9723.00		9723.20	0.20
Consumer 295	7138109	21836.30		21836.50	0.20
Consumer 296	7131015	22609.60		22609.80	0.20
Consumer 297	7426557	13614.50		13614.50	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Difference
Consumer 298	9268	33852.90		33853.00	0.20
Consumer 299	6489754	1312.60		1312.80	0.20
Consumer 300	7163043	4759.70		4760.00	0.20
Consumer 301	105728	6291.40		6291.40	0.20
Consumer 302	6631080	1931.16		1931.70	0.20
Consumer 303	A702978	1047.90		1048.00	0.20
Consumer 304	257406	2568.10		2568.40	0.20
Total					57.76

DT NO.	Ist read	2nd read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
372005	6918.72	6919.12	0.40	80	32.40	250.00	10.19%

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	4084120	6636.80		6636.90	0.10
Consumer 2	460481	8097.00		8097.20	0.20
Consumer 3	646272	0.80		0.80	0.20
Consumer 4	4285747	362.50		362.70	0.20
Consumer 5	626701	537.20		537.40	0.20
Consumer 6	40526788	36658.80		36658.90	0.10
Consumer 7	40526789	2202.90		2203.10	0.20
Consumer 8	723777	24.00		24.20	0.20
Consumer 9	280097	3628.90		3629.00	0.10
Consumer 10	2181162	7718.40		7718.60	0.20
Consumer 11	452438	2955.90		2956.00	0.10
Consumer 12	114259	2322.70		2322.90	0.20
Consumer 13	17008	20360.40		20360.40	0.20
Consumer 14	148117	143.50		143.60	0.10
Consumer 15	5207861	4052.30		4052.40	0.10
Consumer 16	540000	689.80		690.00	0.20
Consumer 17	524646	1446.00		1446.10	0.10
Consumer 18	523547	13661.90		13661.90	0.20
Consumer 19	7067761	21544.10		21544.30	0.20
Consumer 20	686980	41706.10		41706.40	0.30
Consumer 21	7346401	6324.70		6324.80	0.10
Consumer 22	249590	12665.70		12665.90	0.20
Consumer 23	3370613	15102.20		15102.40	0.20
Consumer 24	1371295	1910.60		1910.80	0.20
Consumer 25	4117541	6224.40		6224.60	0.20
Consumer 26	35153	19833.20		19833.40	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 27	346756	6323.70		6323.70	0.20
Consumer 28	1806487	8853.30		8853.40	0.10
Consumer 29	78086	3391.60		3391.60	0.20
Consumer 30	339091	1035.50		1035.60	0.10
Consumer 31	4003873	15080.90		15081.00	0.10
Consumer 32	40141099	653.90		654.00	0.10
Consumer 33	40141095	2322.20		2322.40	0.20
Consumer 34	237715	810.70		810.90	0.20
Consumer 35	4078133	4856.50		4856.70	0.20
Consumer 36	1142144	3316.40		3316.60	0.20
Consumer 37	1415787	5086.30		5086.40	0.10
Consumer 38	79610	97.80		98.00	0.20
Consumer 39	1801815008	2467.20		2467.40	0.20
Consumer 40	1801815014	2384.80		2385.00	0.20
Consumer 41	1801815007	2620.10		2620.20	0.10
Consumer 42	1801815009	2566.00		2566.10	0.10
Consumer 43	425166	1462.00		1462.20	0.20
Consumer 44	1801813866	1911.50		1911.70	0.20
Consumer 45	1801815065	3527.50		3527.70	0.20
Consumer 46	1801813862	1078.80		1078.90	0.10
Consumer 47	1801413864	2597.80		2597.90	0.10
Consumer 48	40526154	3710.80		3710.90	0.10
Consumer 49	40141547	2941.20		2941.40	0.20
Consumer 50	4229401	888.70		888.90	0.20
Consumer 51	626702	766.30		766.50	0.20
Consumer 52	3403282	3618.60		3618.80	0.20
Consumer 53	4297716	7.20		7.30	0.10
Consumer 54	523297	1857.80		1857.80	0.20
Consumer 55	524864	16183.70		16188.90	5.20
Consumer 56	7137634	9565.80		9565.90	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 57	452821	502.60		502.80	0.20
Consumer 58	3359732	7821.60		7821.70	0.10
Consumer 59	7322420	5308.30		5308.50	0.20
Consumer 60	7406560	2863.60		2863.80	0.20
Consumer 61	3315490	7981.10		7981.30	0.20
Consumer 62	7426811	2174.20		2174.30	0.10
Consumer 63	7035963	5298.20		5298.30	0.10
Consumer 64	373254	6357.60		6357.80	0.20
Consumer 65	373251	3544.40		3544.50	0.10
Consumer 66	373258	3669.40		3669.50	0.10
Consumer 67	373249	4070.30		4070.40	0.10
Consumer 68	373256	3233.70		3233.80	0.10
Consumer 69	4082985	5326.00		5326.20	0.20
Consumer 70	7361506	19056.00		19056.00	0.20
Consumer 71	1801833975	3207.10		3207.20	0.10
Consumer 72	7346401	6324.70		6324.80	0.10
Consumer 73	4084385	3679.70		3679.90	0.20
Consumer 74	237709	267.20		267.30	0.10
Consumer 75	3405846	4490.20		4490.30	0.10
Consumer 76	537305	2253.80		2253.90	0.10
Consumer 77	249592	2419.40		2419.50	0.10
Consumer 78	7025027	5327.70		5327.90	0.20
Consumer 79	3347206	6073.60		6073.80	0.20
Consumer 80	7273701	103.10		103.30	0.20
Consumer 81	7137355	4614.30		4614.40	0.10
Consumer 82	647954	1264.10		1264.20	0.10
Consumer 83	341128	4390.80		4390.90	0.10
Consumer 84	7334304	20631.20		20631.30	0.10
Consumer 85	3370662	7620.90		7621.00	0.10
Consumer 86	40373504	1370.90		1371.00	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 87	40373503	1420.10		1420.30	0.20
Consumer 88	40373944	1143.90		1143.90	0.20
Consumer 89	271962	3766.10		3766.30	0.20
Consumer 90	269298	1787.80		1787.90	0.10
Consumer 91	269290	2324.20		2324.30	0.10
Consumer 92	269297	3082.00		3082.20	0.20
Consumer 93	890121	1949.00		1949.10	0.10
Consumer 94	649287	5156.20		5156.30	0.10
Consumer 95	7345289	5106.10		5106.20	0.10
Consumer 96	66506	9163.30		9163.40	0.10
Consumer 97	121806	14732.60		14732.70	0.10
Consumer 98	3403407	11462.60		11462.70	0.10
Consumer 99	3002216	2289.50		2289.70	0.20
Consumer 100	4252807	2586.30		2586.40	0.10
Consumer 101	TN0936041	457.10		457.20	0.10
Consumer 102	621128	600.80		600.90	0.10
Consumer 103	621129	567.10		567.20	0.10
Consumer 104	670359	52.50		52.60	0.10
Consumer 105	10526153	1377.00		1377.20	0.20
Consumer 106	10526290	659.50		659.70	0.20
Consumer 107	4338092	2659.60		2659.80	0.20
Consumer 108	270524	5191.30		5191.40	0.10
Consumer 109	7361110	6805.60		6805.70	0.10
Consumer 110	2255108	2156.20		2156.30	0.10
Consumer 111	276285	1968.80		1969.00	0.20
Consumer 112	3591224	369122.40		369122.50	0.10
Consumer 113	42482	9933.60		9933.70	0.10
Consumer 114	55040	9208.90		9209.10	0.20
Consumer 115	539999	968.50		968.60	0.10

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 116	7156415	9035.40		9035.50	0.10
Consumer 117	3403416	14193.90		14194.30	0.40
Consumer 118	127489	5444.40		5444.60	0.20
Consumer 119	3955814	10688.70		10688.90	0.20
Consumer 120	500475	4104.30		4104.50	0.20
Consumer 121	4080822	5327.40		5327.60	0.20
Consumer 122	4117284	17034.30		17034.40	0.10
Consumer 123	7361506	19054.00		19054.20	0.20
Consumer 124	4082985	5326.00		5326.20	0.20
Consumer 125	1801833975	3207.10		3207.30	0.20
Consumer 126	4113214	6294.20		6294.30	0.10
Consumer 127	4112190	7456.00		7456.20	0.20
Consumer 128	1006343	2716.60		2716.80	0.20
Consumer 129	6827851	3739.40		3739.60	0.20
Consumer 130	4622089	5824.10		5824.20	0.10
Consumer 131	121210	2425.60		2425.80	0.20
Consumer 132	11421335	2538.00		2538.10	0.10
Consumer 133	6749546	785.30		785.30	0.20
Consumer 134	873258	22934.10		22934.30	0.20
Consumer 135	692548	6550.80		6550.90	0.10
Consumer 136	7155617	3018.10		3018.30	0.20
Consumer 137	573025	3118.50		3118.70	0.20
Consumer 138	4257647	7804.70		7804.80	0.10
Consumer 139	237720	7564.70		7564.90	0.20
Consumer 140	395939	4478.10		4478.20	0.10
Consumer 141	395813	3397.90		3398.00	0.10
Consumer 142	3002213	4110.80		4111.00	0.20
Consumer 143	7173430	190.30		190.50	0.20
Consumer 144	7173429	146.60		146.70	0.10
Consumer 145	725309	10544.00		10544.20	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 146	4258224	14787.80		14788.00	0.20
Consumer 147	7301353	11406.40		11406.50	0.10
Consumer 148	7137742	11164.80		11164.90	0.10
Consumer 149	893102	6135.00		6135.10	0.10
Consumer 150	2675738	3187.80		3187.90	0.10
Consumer 151	3284931	3375.80		3376.00	0.20
Consumer 152	3340785	17548.50		17548.60	0.10
Consumer 153	1288342	9101.90		9102.10	0.20
Consumer 154	6361934	2476.20		2476.40	0.20
Consumer 155	24286	759.10		759.20	0.10
Consumer 156	792530	1075.60		1075.80	0.20
Total					29.10

DT NO.	1 st Read	2 nd Read	Difference	Consumption	MF	DT Capacity (kVA)	Loss
TNB37762	189.1	189.22	0.12	9.6	80	500	8.65%

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	1228824	4498.30		4498.40	0.10
Consumer 2	1228846	7093.20		7093.30	0.10
Consumer 3	660140	216.80		217.10	0.30
Consumer 4	137629	71091.80		71092.10	0.30
Consumer 5	6320078		Street light - meter damage		2.00
Consumer 6	70075		meter damage		0.20
Consumer 7	3609828		meter damage		0.20
Consumer 8	7810746		meter damage		0.20
Consumer 9	\$4679\$18	22404.60	Theft	22405.00	1.00
Consumer 10	TEB32834	3482.80		3483.20	0.40
Consumer 11	877220		meter damage		1.00
Consumer 12	713878	7029.60		7029.90	0.30
Consumer 13			closed		0.00
Consumer 14	3302992	18630.20		18630.50	0.30
Consumer 15	11300135	10742.84		10744.21	1.37
Consumer 16	228075	7136.60		7136.80	0.20
Consumer 17	373295	10486.10		10486.30	0.20
Consumer 18	1288342	9101.90		9102.20	0.30
Consumer 19			closed		0.00
Consumer 20			closed		0.00

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 21	792536	10715.60		10715.90	0.30
Total					8.77

DT NO.	1 st Read	2 nd Read	Difference	Consumption	MF	DT Capacity (kVA)	Losses
372148	8841.43	8844.04	2.61	104.48	40	100	17.82%

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	40141045	3925.50		3925.70	0.20
Consumer 2	7429918	8696.40		8696.50	0.10
Consumer 3	737683	3531.90		3532.10	0.20
Consumer 4	7429217	8722.50		8722.60	0.10
Consumer 5	7428790	6127.40		6127.60	0.20
Consumer 6	248433	1264.40		1264.50	0.10
Consumer 7	4109914	5524.80		5524.90	0.10
Consumer 8	4104350	13374.50		13374.60	0.10
Consumer 9	287676	3658.70		3658.90	0.20
Consumer 10	41995	8610.90		8611.00	0.10
Consumer 11	4109902	6485.80		6485.90	0.10
Consumer 12	419960	8453.00		8453.10	0.10
Consumer 13	893156	8545.80		8545.90	0.10
Consumer 14	4501533	3857.30		3857.50	0.20
Consumer 15	306811	3383.60		3383.70	0.10
Consumer 16	3369565	3065.50		3065.60	0.10
Consumer 17	4109986	9126.00		9126.10	0.10
Consumer 18	671058	239.70		239.80	0.10
Consumer 19	7313958	20307.80		20308.40	0.60
Consumer 20	630678	16230.60		16230.80	0.20
Consumer 21	9164636	84769.26		84770.34	1.08
Consumer 22	1970986	77942.17		77944.22	2.05
Consumer 23	630562	8774.00		8774.40	0.40
Consumer 24	4082989	3172.40		3172.70	0.30
Consumer 25	327533	78.40		78.50	0.10
Consumer 26	1964803	45210.90		45211.42	0.52

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 27	537960	1546.50		1546.60	0.10
Consumer 28	537959	1101.20		1101.30	0.10
Consumer 29	4393519	13301.40		13301.60	0.20
Consumer 30	390102	2788.00		2788.10	0.10
Consumer 31	6960906	1596.10		1596.20	0.10
Consumer 32	1932288	320566.40		320583.70	17.30
Consumer 33	595747	5963.80		5963.90	0.10
Consumer 34	4297831	509.20		509.30	0.10
Consumer 35	568628	542.40		542.60	0.20
Consumer 36	677373	259.70		259.80	0.10
Consumer 37	40235924	1949.30		1949.40	0.10
Consumer 38	537954	580.40		580.50	0.10
Consumer 39	346824	2144.10		2144.20	0.10
Consumer 40	2104575	152.60		152.80	0.20
Consumer 41	7282329	68.90		69.10	0.20
Consumer 42	476009	9743.60		9743.70	0.10
Consumer 43	276679	7291.30		7291.40	0.10
Consumer 44	9244720	9131.80		9132.00	0.20
Consumer 45	3950833	3067.60		3067.80	0.20
Consumer 46	339440	5414.20		5414.30	0.10
Consumer 47	7273702	107.90		108.00	0.10
Consumer 48	4243601	3368.70		3368.90	0.20
Consumer 49	1932211	577753.00		577792.50	39.50
Consumer 50	1003463	31695.30		31695.90	0.60
Consumer 51	4229273	1852.50		1852.60	0.10
Consumer 52	677369	121.30		121.40	0.10
Consumer 53	514845	3254.70		3254.90	0.20
Consumer 54	341604	3142.90		3143.10	0.20
Consumer 55	6749080	649.20		649.30	0.10
Consumer 56	6490655	2487.10		2487.30	0.20

Consumer name	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 57	722323	72.20		72.30	0.10
Consumer 58	644733	101.90		102.10	0.20
Consumer 59	6827991	3386.60		3386.70	0.10
Consumer 60	21045598	317.80		317.90	0.10
Consumer 61	1964710	160000.23		160016.84	16.61
Consumer 62	548505	264.10		264.20	0.10
Total					85.86

DT NO.	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
TNB38548	1025.7	1026.1	0.4	40	16	100	24.31%

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	450138	10598.60		10598.80	0.20
Consumer 2	7068984	13930.70		13930.90	0.20
Consumer 3	closed	3531.90		3532.10	0.20
Consumer 4	closed	8722.50		8722.60	0.10
Consumer 5	794971	22871.50		22871.90	0.40
Consumer 6	closed	1264.40		1264.50	0.10
Consumer 7	closed	5524.80		5524.90	0.10
Consumer 8	6310083	60052.00		60052.30	0.30
Consumer 9	1429779	4851.90		4852.10	0.20
Consumer 10	not allowed				3.00
Consumer 11	723047	16720.20		16720.60	0.40
Consumer 12	3427032	14586.60		14586.80	0.20
Consumer 13	766176	16694.20		16694.40	0.20
Consumer 14	1417679	6801.70		6801.90	0.20
Consumer 15	822211	4681.30		4681.40	0.10
Consumer 16	210042	7017.20		7017.30	0.10
Consumer 17	1613183	4804.20		4804.30	0.10
Consumer 18	271529	12202.30		12203.50	1.20
Consumer 19	7159844	7198.80		7198.90	0.10
Consumer 20	25755	39136.50		39136.60	0.10
Consumer 21	70006	4339.60		4339.70	0.10
Consumer 22	12201339	1103.79		1104.10	0.31
Consumer 23	600688	1391.80		1391.90	0.10
Consumer 24	3461203	8390.90		8391.00	0.10

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 25	270745	4668.00		4668.20	0.20
Consumer 26	1288959	9667.90		9668.00	0.10
Consumer 27	961355	88821.80		88821.90	0.10
Consumer 28	6312171	57008.30		57008.50	0.20
Consumer 29	258151	679.10		679.30	0.20
Consumer 30	454396	33648.20		33648.50	0.30
Consumer 31	207510	44304.20		44304.50	0.30
Consumer 32	1237437	1779.50		1779.70	0.20
Consumer 33	1035481	2133.30		2133.50	0.20
Consumer 34	TN30060	430.50		430.50	0.00
Consumer 35	142968	818.30		818.40	0.10
Consumer 36	closed				0.00
Consumer 37	closed				0.00
Consumer 38	closed				0.00
Consumer 39	closed				0.00
Consumer 40	3406234	6598.10		6598.20	0.10
Consumer 41	7070632	18256.70		18256.90	0.20
Consumer 42	7069072	23038.10		23038.30	0.20
Consumer 43	7069675	2844.80		2845.00	0.20
Consumer 44	3130934	11953.90		11954.10	0.20
Consumer 45	closed				0.00
Consumer 46	closed				0.00
Consumer 47	closed				0.00
Consumer 48	1230386	7408.90		7409.10	0.20
Consumer 49	103197	2667.80		2668.00	0.20
Consumer 50	closed				0.00
Consumer 51	258253	8379.10		8379.30	0.20
Consumer 52	423575	1405.00		1405.10	0.10
Consumer 53	3965241	16202.60		16202.80	0.20

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 54	454396	33648.20		33648.30	0.10
Consumer 55	207510	44304.30		44304.40	0.10
Consumer 56	1237437	1771.50		1771.60	0.10
Consumer 57	1035481	2133.30		2133.30	0.00
Total					12.11

DT NO.	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
TNB37765	853.62	854.1	0.48	40	19.2	100	21.88%

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	624477	562.80		563.30	0.50
Consumer 2	331026		damaged		0.10
Consumer 3	closed				0.00
Consumer 4	7162968	12154.30		12154.40	0.10
Consumer 5	336750	3241.60		3241.70	0.10
Consumer 6	155262	5616.20		5616.30	0.10
Consumer 7	258323	4514.10		4514.20	0.10
Consumer 8	4114716	8587.10		8587.20	0.10
Consumer 9	867402	5223.70		5223.80	0.10
Consumer 10	447703	1167.30		1167.40	0.10
Consumer 11	4003736	2618.30		2618.40	0.10
Consumer 12	148877	6837.40	damaged	6837.40	0.10
Consumer 13	565480	8147.10		8147.20	0.10
Consumer 14	2106311	4908.10		4908.20	0.10
Consumer 15	214283	2783.40		2783.50	0.10
Consumer 16	126328	9069.00		9069.10	0.10
Consumer 17	2697909	38981.70		38981.90	0.20
Consumer 18	171264	1779.50		1779.60	0.10
Consumer 19	40000927	3477.80		3477.90	0.10
Consumer 20	2196006	5310.80		5310.90	0.10
Consumer 21	10854	27467.60		27467.70	0.10
Consumer 22	715573	7382.80		7382.90	0.10
Consumer 23	714963	16767.70		16767.90	0.20
Consumer 24	12202009	3913.36		3916.62	3.26
Consumer 25	2927211	13466.50		13466.60	0.10

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 26	340373	6074.80		6074.90	0.10
Consumer 27	7069879	10505.50		10505.60	0.10
Consumer 28	322892	2146.70		2146.80	0.10
Consumer 29	4300688	10855.50		10855.60	0.10
Consumer 30	329656	7838.90		7839.10	0.20
Consumer 31	155612	6744.40		6744.50	0.10
Consumer 32	6316670	15846.50		15846.60	0.10
Consumer 33	1932204	43215.07		43215.21	0.14
Consumer 34	2062742	5805.30		5805.40	0.10
Consumer 35	146865	9043.20		9043.30	0.10
Consumer 36	1713727	5718.80		5718.90	0.10
Consumer 37	724659	4604.60		4604.70	0.10
Consumer 38	888617	29509.50		29509.70	0.20
Consumer 39	7435403	5802.20		5802.30	0.10
Consumer 40	3405611076	46381.20		46381.30	0.10
Consumer 41	137643		damaged		0.10
Consumer 42	830199	44577.40		44577.50	0.10
Consumer 43	423785	2703.40		2703.50	0.10
Consumer 44	86527	19362.30		19362.40	0.10
Consumer 45	222974	145.60		145.70	0.10
Consumer 46	1902377	6739.20		6739.30	0.10
Consumer 47	6398736	10909.60		10909.80	0.20
Consumer 48	998164	1757.50		1757.60	0.10
Consumer 49	108674	2178.10		2178.20	0.10
Consumer 50	1275428	41149.90		41150.10	0.20
Consumer 51	225281	28881.70		28881.80	0.10
Consumer 52	864166	8167.00		8167.10	0.10
Consumer 53	CLR770	111.20		111.30	0.10
Consumer 54	4141648	12770.60		12770.70	0.10
Consumer 55	949931	23116.50		23116.60	0.10

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 56	888470	14886.70		14886.80	0.10
Consumer 57	230839	21199.90		21200.00	0.10
Consumer 58	334587	23232.00		23232.10	0.10
Consumer 59	334583	25715.00		25715.10	0.10
Consumer 60	334584	2797.50		2797.60	0.10
Consumer 61	334586	24522.00		24522.10	0.10
Consumer 62	334582	1477.90		1478.00	0.10
Consumer 63	334588	862.80		862.90	0.10
Consumer 64	334590	2761.80		2761.90	0.10
Consumer 65	332028	1752.30		1752.40	0.10
Consumer 66	334585	118.80		118.90	0.10
Consumer 67	334589	3075.90		3076.00	0.10
Consumer 68	332025	1922.30		1922.40	0.10
Consumer 69	335860	4336.60		4336.80	0.20
Consumer 70	6489427	3018.30		3018.40	0.10
Consumer 71	892209	56390.60		56390.70	0.10
Consumer 72	369884	16621.50		16621.60	0.10
Consumer 73	2156356	6354.60		6354.70	0.10
Consumer 74	712713	5625.70		5625.80	0.10
Consumer 75	2308386	17099.10		17099.30	0.20
Consumer 76	7381022	509.70		509.80	0.10
Consumer 77	557782	55411.90		55412.00	0.10
Consumer 78	318648	990.20		990.30	0.10
Consumer 79	320680		damaged		0.10
Consumer 80	318637	1657.70		1657.80	0.10
Consumer 81	3004579	7204.30		7204.40	0.10
Consumer 82	320674	1511.80		1511.90	0.10
Consumer 83	320673	2672.80		2672.90	0.10
Consumer 84	320684	2043.20		2043.30	0.10
Consumer 85	318642	1855.70		1855.80	0.10

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 86	623934	789.10		789.20	0.10
Consumer 87	2281059	8899.30		8899.40	0.10
Consumer 88	6398662	20135.50		20135.60	0.10
Consumer 89	6489759	1364.80		1364.90	0.10
Consumer 90	371792	877.90		878.00	0.10
Consumer 91	3456053	20391.30		20391.40	0.10
Consumer 92	2487050	11568.50		11568.60	0.10
Consumer 93	723796	202.10		202.20	0.10
Consumer 94	766591	4.30		4.40	0.10
Consumer 95	626959	7010.60		7010.70	0.10
Consumer 96	766542	18.20		18.30	0.10
Consumer 97	264898	3904.00		3904.10	0.10
Consumer 98	7054690	21880.60		21880.70	0.10
Consumer 99	371803	337.60		337.70	0.10
Consumer 100	1274990	15320.00		15320.10	0.10
Consumer 101	872645	9475.80		9475.90	0.10
Consumer 102	162626	2217.60		2217.70	0.10
Consumer 103	4824482	1672.60		1672.70	0.10
Consumer 104	1274350	11021.40		11021.50	0.10
Consumer 105	218919	5403.10		5403.20	0.10
Consumer 106	1361282	2782.50		2782.60	0.10
	Total				15.00

DT NO.	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
TNB38752	1700.11	1700.35	0.24	20.00	4.88	63.00	28.28%

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	420303	5769.40		5769.50	0.10
Consumer 2	3470179	1868.30		1868.40	0.10
Consumer 3	271083	8099.60		8099.70	0.10
Consumer 4	164377	12572.90		12573.00	0.10
Consumer 5	21544		Damaged		0.10
Consumer 6	7132415	10364.00		10364.10	0.10
Consumer 7	closed		Damaged		0.10
Consumer 8	4054702	6028.20		6028.30	0.10
Consumer 9	4252370	4058.50		4058.60	0.10
Consumer 10	320998	4281.80		4281.90	0.10
Consumer 11	40068553	127.90		128.00	0.10
Consumer 12	161817	1769.00		1769.10	0.10
Consumer 13	TNO435051	1674.10		1674.10	0.10
Consumer 14	4137967	12545.40		12545.50	0.10
Consumer 15	679488		Damaged		0.10
Consumer 16	306310	2517.00		2517.10	0.10
Consumer 17	306307	4742.50		4742.60	0.10
Consumer 18	1398893	12110.00		12110.20	0.20
Consumer 19	927752	12064.80		12064.90	0.10
Consumer 20	279200	9183.80		9183.90	0.10
Consumer 21	4204166	5651.30		5651.40	0.10
Consumer 22	125457	12125.80		12125.90	0.10
Consumer 23	893940	1368.90		1369.00	0.10
Consumer 24	TNO435054		Damaged		0.10
Consumer 25	TNO435042		Damaged		0.10
Consumer 26	4078710	17099.10		17099.20	0.10

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 27	4077464	18085.30		18085.40	0.10
Consumer 28	7407971	7844.50		7844.60	0.10
Consumer 29	4214148	995.40		995.50	0.10
Consumer 30	40068947	4433.20		4433.30	0.10
Consumer 31	TNO436626		Damaged		0.10
Consumer 32	6462475	223.70		223.80	0.10
Consumer 33	TNO435047	1402.80		1402.90	0.10
Consumer 34	771655	1361.30		1361.40	0.10
Total					3.50

DT NO.	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Losses
TNB38443	7988.32	7988.463	0.143	40	5.72	100	14.34%

Consumer	Meter No.	Ist read	Remarks	2nd read	Consumption (kWh)
Consumer 1	306700	2624.90		2625.20	0.30
Consumer 2	311710998	6382.40		6382.60	0.20
Consumer 3	4243499	675.20		675.60	0.40
Consumer 4	326007	6684.90		6685.20	0.30
Consumer 5	40468589	2160.70		2160.90	0.20
Consumer 6	40468645	4398.30		4398.40	0.10
Consumer 7	3002298	7087.70		7087.80	0.10
Consumer 8	7173643	581.00		581.20	0.20
Consumer 9	24902	462.50		462.60	0.10
Consumer 10	236666	2522.80		2522.90	0.10
Consumer 11	271639	3586.40		3586.60	0.20
Consumer 12	12317535	797.93	Damage	797.93	0.10
Consumer 13	6463528	1830.40		1830.70	0.30
Consumer 14	40068948	5516.50		5516.80	0.30
Consumer 15	6323630	2664.40		2664.50	0.10
Consumer 16	7174413	314.50		314.70	0.20
Consumer 17	4094969	12768.60		12768.90	0.30
Consumer 18	139398	10880.50		10880.80	0.30
Consumer 19	3357752	15829.40		15829.70	0.30
Consumer 20	3958350	11624.80		11624.90	0.10
Consumer 21	40141070	4274.10		4274.20	0.10
Consumer 22	73202	308.60	Damage	308.60	0.10
Consumer 23	538681	748.70	Damage	748.70	0.10
Consumer 24	TNB11924	1115.30		1115.60	0.30
Consumer 25	18018144	6347.60		6347.70	0.10
Total					4.90

Commercial DTs

DT NO.	1st Read	2nd Read	Difference	Consumption	MF	DT Capacity (kVA)	Losses
TNB3855	1022.15	1022.51	0.36	14.4	40	250	21.53%

Consumer	Meter No.	Ist read	Remarks	2nd read	Difference	Consumption (kWh)
Consumer 1	4,679,234	25278.00		25287.90	9.90	9.90
Consumer 2	1850968	9163.70		9163.90	0.20	0.20
Consumer 3	3206601	57871.40		57871.60	0.20	0.20
Consumer 4	9159560	82132.00		82132.40	0.40	0.40
Consumer 5	74123	20429.10		20429.50	0.40	0.40
Consumer 6	14447	4015.60		4015.70	0.10	0.10
Consumer 7	3010277	5524.80		5524.90	0.10	0.10
Total						11.30

Industrial DTs

DT NO.	1st Read	2nd Read	Difference	MF	Consumption	DT Capacity (kVA)	Loss
371807	7825.121	7826.4	1.279	40	51.16	250	1.56%

Consumer	Meter No.	1st Read	Remarks	2nd read	Consumption (kWh)
Consumer 1	66992	10061.60		10061.70	0.10
Consumer 2	4196453	6682.70		6683.70	1.00
Consumer 3	545721	6576.60		6576.80	0.20
Consumer 4	1970989	13246.12		closed	
Consumer 5	1964637	29789.79		29789.96	0.17
Consumer 6	129532	12357.60		12357.90	0.30
Consumer 7	210067	103869.20		103872.30	3.10
Consumer 8	TNB21163	9794.00		9797.80	3.80
Consumer 9	1945082	437855.00		437893.60	38.60
Consumer 10	12317258	211.85		213.02	1.17
Consumer 11	1123072	19009.30		closed	
Consumer 12	160637	10052.30		10053.80	1.50
Consumer 13	1379493	7720.80		7720.90	0.10
Consumer 14	5297321	25677.45		25677.77	0.32
Total					50.36

4. Annexure V: Computation of component wise commercial loss

4.1 Vellore

Computation of commercial loss due to defective meters extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per department records (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Defective Meter billing	7488.00	6833.00	5435.00	9.59%	7.30%	139.15	152.49	13.34

S/C No.	Name	Consumption as per field study	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
1295	Consumer 1	1.20	164.57	120.00	27.08%
154	Consumer 2	3.50	480.00	470.00	2.08%
1050	Consumer 3	1.20	164.57	100.00	39.24%
1307	Consumer 4	2.00	274.29	260.00	5.49%
1137	Consumer 5	1.40	192.00	180.00	6.67%
1179	Consumer 6	2.10	288.00	280.00	2.86%
515	Consumer 7	1.50	205.71	205.00	0.35%
830	Consumer 8	3.00	411.43	400.00	2.86%
148	Consumer 9	1.20	164.57	145.00	13.50%
168	Consumer 10	0.40	54.86	45.00	21.90%

S/C No.	Name	Consumption as per field study	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
1221	Consumer 11	2.00	274.29	270.00	1.59%
1365	Consumer 12	1.20	164.57	165.00	-0.26%
1375	Consumer 13	1.20	164.57	156.00	5.49%
1220	Consumer 14	2.50	342.86	305.00	12.41%
1297	Consumer 15	1.20	164.57	153.00	7.56%
563	Consumer 16	3.00	411.43	390.00	5.49%
751	Consumer 17	1.40	192.00	190.00	1.05%
1406	Consumer 18	2.60	356.57	356.00	0.16%
575	Consumer 19	2.00	274.29	256.00	7.14%
1266	Consumer 20	1.60	219.43	215.00	2.06%
1457	Consumer 21	2.10	288.00	280.00	2.86%
545	Consumer 22	0.50	68.57	60.00	14.29%
1499	Consumer 23	1.30	178.29	163.00	9.38%
1485	Consumer 24	1.20	164.57	140.00	17.55%
1225	Consumer 25	1.20	164.57	140.00	17.55%
1424	Consumer 26	1.50	205.71	196.00	4.96%
766	Consumer 27	1.80	246.86	238.00	3.72%
696	Consumer 28	1.20	164.57	137.00	20.13%
894	Consumer 29	1.50	205.71	140.00	46.94%
1469	Consumer 30	1.50	205.71	167.00	23.18%
1024	Consumer 31	3.00	411.43	371.00	10.90%
364	Consumer 32	1.60	219.43	140.00	56.73%
	Total		7488.00	6833.00	9.59%

Computation of commercial loss due to provisional billing extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per department records (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Provisional billing	13170	12270	900	6.83%	3.72%	69.20	74.28	5.07

Consumer	Meter no.	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
Consumer 1	459713	360	350	10
Consumer 2	2859529	390	350	40
Consumer 3	40390082	390	350	40
Consumer 4	10262667	390	350	40
Consumer 5	385026	390	350	40
Consumer 6	217884	420	400	20
Consumer 7	2469739	390	350	40
Consumer 8	829210	390	350	40
Consumer 9	327450	420	400	20
Consumer 10	615650	390	350	40
Consumer 11	561735	390	350	40
Consumer 12	198912	360	350	10
Consumer 13	198914	360	350	10
Consumer 14	492029	360	350	10
Consumer 15	466790	390	350	40
Consumer 16	2915412	360	350	10
Consumer 17	326678	360	350	10
Consumer 18	40032065	390	350	40
Consumer 19	2273537	360	350	10
Consumer 20	917520	390	350	40
Consumer 21	915826	360	350	10
Consumer 22	915491	360	350	10

Consumer	Meter no.	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
Consumer 23	585458	360	350	10
Consumer 24	120784	360	350	10
Consumer 25	366998	330	300	30
Consumer 26	178089	390	350	40
Consumer 27	4043374	270	240	30
Consumer 28	169644	360	350	10
Consumer 29	94457	360	350	10
Consumer 30	0668694	270	240	30
Consumer 31	0634211	270	240	30
Consumer 32	647500	300	300	0
Consumer 33	927996	330	300	30
Consumer 34	588901	480	450	30
Consumer 35	244461	330	300	30
Consumer 36	1570822	390	350	40
Total		13170	12270	900

4.2 Erode

Computation of commercial loss due to defective meters extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Defective Meter billing	864.00	760.00	104	12.03%	1%	14.44	16.41	1.97

Consumer	S/C No.	Meter no.	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
Consumer 1	1250	420901	144.00	120.00	20.00%
Consumer 2	SC1273	449574	144.00	120.00	20.00%
Consumer 3	115	12567	144.00	140.00	2.86%
Consumer 4	106	831472	144.00	140.00	2.86%
Consumer 5	908	2803893	144.00	120.00	20.00%
Consumer 6	261	489526	144.00	120.00	20.00%
Total			864.00	760.00	12.03%

Computation of commercial loss due to provisional billing extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Provisional billing	4752.00	4260.00	492.00	10.35%	3%	43.01	47.97	4.96

Consumer No	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
Consumer 1	26441	180.00	150.00	30.00
Consumer 2	304136	180.00	150.00	30.00
Consumer 3	664078	216.00	200.00	16.00
Consumer 4	127414	144.00	140.00	4.00
Consumer 6	135770	216.00	200.00	16.00
Consumer 7	135770	216.00	200.00	16.00
Consumer 9	135770	216.00	200.00	16.00
Consumer 10	13244565	180.00	150.00	30.00
Consumer 11	1324881	144.00	140.00	4.00
Consumer 12	1324460	144.00	140.00	4.00
Consumer 13	1323894	180.00	150.00	30.00
Consumer 14	325146	108.00	110.00	-2.00
Consumer 15	60006736	144.00	140.00	4.00
Consumer 16	388525	216.00	200.00	16.00
Consumer 17	1401166	144.00	140.00	4.00
Consumer 18	514363	180.00	150.00	30.00
Consumer 19	438945	180.00	150.00	30.00
Consumer 21	48743	180.00	150.00	30.00
Consumer 22	7200	180.00	150.00	30.00
Consumer 23	94286	180.00	150.00	30.00
Consumer 24	73705	216.00	200.00	16.00
Consumer 25	280303	216.00	200.00	16.00
Consumer 26	280298	216.00	200.00	16.00
Consumer 27	67827	144.00	140.00	4.00

Consumer No	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
Consumer 28	280919	180.00	150.00	30.00
Consumer 29	672817	180.00	150.00	30.00
Consumer 30	627961	72.00	60.00	12.00
Total		4752.00	4260.00	492.00

4.3 Tuticorin

Computation of commercial loss due to defective meters extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Defective Meter billing	1950.00	1780.00	170.00	8.72%	2%	20.85	22.84	1.99

Consumer No	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
KS 122	864337	360	300	60
kb492		360	340	20
kb405		300	300	0
RWX1007	6495826	270	240	30
RWX1022	416996	300	300	0
A478		360	300	60
Total		1950	1780	170

Computation of commercial loss due to provisional billing extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Provisional billing	4890.00	4320.00	570.00	11.66%	3.00%	31.16	35.28	4.11

Consumer No	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
KS 422	178493	90	90	0.00
KS 421	256198	120	100	20.00
KS 423	4598320	90	90	0.00
KS 83	732987	60	40	20.00
KS 84	2461967	90	90	0.00
KS 197	398728	270	240	30.00
KS 79	4033014	270	240	30.00
KS 86	548530	120	100	20.00
KS 87	40453976	60	40	20.00
KS 55	40450041	180	140	40.00
ks113	384780	150	150	0.00
ks314	102682	180	150	30.00
ks203	153445	120	110	10.00
ks349	761630	150	150	0.00
ks111	421196	180	150	30.00
ks269	18579	210	200	10.00
ks223	237238	210	200	10.00

Consumer No	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
ks224	218312	180	150	30.00
ks218	3627405	180	150	30.00
ks299	594173	150	150	0.00
RWP8	3630915	180	150	30.00
RWP7	596801	300	240	60.00
RWP6	15246	210	200	10.00
RWP4	544333	240	200	40.00
RWP2	140045	210	200	10.00
TP527	517897	60	60	0.00
TP364	137647	60	60	0.00
TP316	826972	60	60	0.00
TP503	271531	120	100	20.00
TP344	249426	60	60	0.00
TP369	271907	60	0	60.00
TP368	235343	120	110	10.00
TP561	233720	150	150	0.00
Total		4890	4320	570

4.4 Madurai

Computation of commercial loss due to defective meters extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Defective Meter billing	7040.00	6180.00	860.00	12.22%	4%	33.09	37.70	4.61

Consumer	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
Consumer 1	877220	1.00	400.00	350.00
Consumer 2	6320078	2.00	800.00	750.00
Consumer 3	70075	0.20	80.00	60.00
Consumer 4	3609828	0.20	80.00	60.00
Consumer 5	7810746	0.20	80.00	60.00
Consumer 6	877220	1.00	400.00	350.00
Consumer 7	331026	1.00	400.00	350.00
Consumer 8	148877	1.00	400.00	350.00
Consumer 9	137643	1.00	400.00	350.00
Consumer 10	320680	1.00	400.00	350.00
Consumer 11	21544	1.00	400.00	350.00
Consumer 12	closed	1.00	400.00	350.00
Consumer 13	679488	1.00	400.00	350.00
Consumer 14	TNO435054	1.00	400.00	350.00
Consumer 15	TNO435042	1.00	400.00	350.00
Consumer 16	TNO436626	1.00	400.00	350.00
Consumer 17	12317535	1.00	400.00	350.00
Consumer 18	73202	1.00	400.00	350.00

Consumer	Meter No.	2 months consumption as per field study(kWh)	2 months consumption as per the DISCOM (kWh)	Difference (kWh)
Consumer 19	538681	1.00	400.00	350.00
Total			7040.00	6180.00

Computation of commercial loss due to provisional billing extrapolating the same on the circle

Particulars	2 months consumption as per field study(kWh)	2 months consumption as per department records (kWh)	Difference (kWh) (2-3)	% of commercial loss	% of defective meter billing	Billing in terms of total energy sales (MU)	Billing to the consumer, if the meters are not defective (MU)	Commercial loss (MU)
1	2	3	4	5	6	7	8=7*(100%+5)	9=(8-7)
Provisional billing	3984.00	3560.00	424.00	10.64%	3.72%	69.20	76.56	7.36

Name	Meter No.	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
Consumer 1	547005	144.00	120.00	24.00
Consumer 2	547370	216.00	200.00	16.00
Consumer 3	VE67187	168.00	140.00	28.00
Consumer 4	149894	96.00	80.00	16.00
Consumer 5	4043374	216.00	200.00	16.00
Consumer 6	668694	216.00	200.00	16.00
Consumer 7	634211	216.00	200.00	16.00
Consumer 8	40419618	216.00	200.00	16.00
Consumer 9	520548	120.00	100.00	20.00
Consumer 10	40416628	216.00	200.00	16.00
Consumer 11	891469	216.00	200.00	16.00
Consumer 12	461695	168.00	150.00	18.00
Consumer 13	853653	120.00	100.00	20.00
Consumer 14	322900	216.00	200.00	16.00
Consumer 15	949072	192.00	150.00	42.00

Name	Meter No.	Two months consumption as per field study	2 months billing as per the department	Difference in consumption as per field study vis-à-vis billed by the department (%)
Consumer 16	74977	192.00	150.00	42.00
Consumer 17	500985	216.00	200.00	16.00
Consumer 18	718328	216.00	200.00	16.00
Consumer 19	89151	96.00	80.00	16.00
Consumer 20	699588	216.00	200.00	16.00
Consumer 21	392489	120.00	100.00	20.00
Consumer 22	129669	168.00	150.00	18.00
Consumer 23	195839	24.00	40.00	-16.00
Total		3984.00	3560.00	424.00

5. Annexure VI: Findings from the agriculture survey

5.1 Vellore

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
1	Consumer 1	5.00	4252.20	7.50	6378.30
2	Consumer 2	3.00	2551.32	5.00	4252.20
3	Consumer 3	5.00	4252.20	5.00	4252.20
4	Consumer 4	3.00	2551.32	3.00	2551.32
5	Consumer 5	3.00	2551.32	3.00	2551.32
6	Consumer 6	3.00	2551.32	3.00	2551.32
7	Consumer 7	3.00	2551.32	3.00	2551.32
8	Consumer 8	5.00	4252.20	7.50	6378.30
9	Consumer 9	5.00	4252.20	7.50	6378.30
10	Consumer 10	5.00	4252.20	5.00	4252.20
11	Consumer 11	5.00	4252.20	5.00	4252.20
12	Consumer 12	5.00	4252.20	5.00	4252.20
13	Consumer 13	3.00	2551.32	5.00	4252.20
14	Consumer 14	3.00	2551.32	3.00	2551.32
15	Consumer 15	3.00	2551.32	3.00	2551.32
16	Consumer 16	3.00	2551.32	3.00	2551.32
17	Consumer 17	5.00	4252.20	7.50	6378.30
18	Consumer 18	5.00	4252.20	7.50	6378.30
19	Consumer 19	3.00	2551.32	3.00	2551.32
20	Consumer 20	3.00	2551.32	3.00	2551.32

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
21	Consumer 21	5.00	4252.20	7.50	6378.30
22	Consumer 22	3.00	2551.32	3.00	2551.32
23	Consumer 23	3.00	2551.32	5.00	4252.20
24	Consumer 24	5.00	4252.20	5.00	4252.20
25	Consumer 25	5.00	4252.20	5.00	4252.20
26	Consumer 26	3.00	2551.32	5.00	4252.20
27	Consumer 27	3.00	2551.32	5.00	4252.20
28	Consumer 28	3.00	2551.32	3.00	2551.32
29	Consumer 29	3.00	2551.32	3.00	2551.32
30	Consumer 30	5.00	4252.20	7.50	6378.30
31	Consumer 31	3.00	2551.32	3.00	2551.32
32	Consumer 32	5.00	4252.20	5.00	4252.20
33	Consumer 33	5.00	4252.20	5.00	4252.20
34	Consumer 34	3.00	2551.32	3.00	2551.32
35	Consumer 35	3.00	2551.32	3.00	2551.32
36	Consumer 36	5.00	4252.20	7.50	6378.30
37	Consumer 37	3.00	2551.32	3.00	2551.32
38	Consumer 38	3.00	2551.32	5.00	4252.20
39	Consumer 39	5.00	4252.20	7.50	6378.30
40	Consumer 40	5.00	4252.20	7.50	6378.30
41	Consumer 41	3.00	2551.32	5.00	4252.20
42	Consumer 42	3.00	2551.32	5.00	4252.20
43	Consumer 43	3.00	2551.32	5.00	4252.20

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
44	Consumer 44	3.00	2551.32	3.00	2551.32
45	Consumer 45	3.00	2551.32	3.00	2551.32
46	Consumer 46	3.00	2551.32	3.00	2551.32
47	Consumer 47	3.00	2551.32	3.00	2551.32
48	Consumer 48	3.00	2551.32	3.00	2551.32
49	Consumer 49	3.00	2551.32	3.00	2551.32
50	Consumer 50	3.00	2551.32	3.00	2551.32
51	Consumer 51	3.00	2551.32	3.00	2551.32
52	Consumer 52	3.00	2551.32	3.00	2551.32
53	Consumer 53	3.00	2551.32	5.00	4252.20
54	Consumer 54	3.00	2551.32	3.00	2551.32
55	Consumer 55	3.00	2551.32	5.00	4252.20
56	Consumer 56	3.00	2551.32	3.00	2551.32
57	Consumer 57	3.00	2551.32	5.00	4252.20
58	Consumer 58	3.00	2551.32	5.00	4252.20
59	Consumer 59	3.00	2551.32	3.00	2551.32
60	Consumer 60	3.00	2551.32	5.00	4252.20
61	Consumer 61	3.00	2551.32	3.00	2551.32
62	Consumer 62	3.00	2551.32	5.00	4252.20
63	Consumer 63	3.00	2551.32	5.00	4252.20
64	Consumer 64	3.00	2551.32	5.00	4252.20
65	Consumer 65	3.00	2551.32	3.00	2551.32
66	Consumer 66	3.00	2551.32	3.00	2551.32

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
67	Consumer 67	3.00	2551.32	3.00	2551.32
68	Consumer 68	3.00	2551.32	3.00	2551.32
69	Consumer 69	3.00	2551.32	3.00	2551.32
70	Consumer 70	3.00	2551.32	5.00	4252.20
71	Consumer 71	3.00	2551.32	3.00	2551.32
72	Consumer 72	3.00	2551.32	3.00	2551.32
73	Consumer 73	3.00	2551.32	3.00	2551.32
74	Consumer 74	3.00	2551.32	5.00	4252.20
75	Consumer 75	3.00	2551.32	3.00	2551.32
76	Consumer 76	3.00	2551.32	3.00	2551.32
77	Consumer 77	3.00	2551.32	3.00	2551.32
78	Consumer 78	3.00	2551.32	3.00	2551.32
79	Consumer 79	3.00	2551.32	3.00	2551.32
80	Consumer 80	3.00	2551.32	3.00	2551.32
81	Consumer 81	3.00	2551.32	3.00	2551.32
82	Consumer 82	3.00	2551.32	3.00	2551.32
83	Consumer 83	3.00	2551.32	3.00	2551.32
84	Consumer 84	3.00	2551.32	3.00	2551.32
85	Consumer 85	3.00	2551.32	3.00	2551.32
86	Consumer 86	3.00	2551.32	3.00	2551.32
	Total	294.00	250029.36	357.00	303607.08

5.2 Erode

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
1	Consumer 1	7.50	4615.88	10.00	8168.70
2	Consumer 2	10.00	6154.50	12.00	9802.44
3	Consumer 3	5.00	3077.25	7.50	6126.53
4	Consumer 4	5.00	3077.25	7.50	6126.53
5	Consumer 5	5.00	3077.25	7.50	6126.53
6	Consumer 6	7.50	4615.88	10.00	8168.70
7	Consumer 7	5.00	3077.25	5.00	4084.35
8	Consumer 8	5.00	3077.25	7.50	6126.53
9	Consumer 9	5.00	3077.25	7.50	6126.53
10	Consumer 10	5.00	3077.25	5.00	4084.35
11	Consumer 11	10.00	6154.50	12.00	9802.44
12	Consumer 12	7.50	4615.88	10.00	8168.70
13	Consumer 13	7.50	4615.88	10.00	8168.70
14	Consumer 14	7.50	4615.88	7.50	6126.53
15	Consumer 15	7.50	4615.88	10.00	8168.70
16	Consumer 16	7.50	4615.88	10.00	8168.70
17	Consumer 17	5.00	3077.25	5.00	4084.35
18	Consumer 18	5.00	3077.25	5.00	4084.35
19	Consumer 19	5.00	3077.25	7.50	6126.53
20	Consumer 20	7.50	4615.88	10.00	8168.70
21	Consumer 21	5.00	3077.25	7.50	6126.53
22	Consumer 22	10.00	6154.50	10.00	8168.70
23	Consumer 23	5.00	3077.25	7.50	6126.53
24	Consumer 24	5.00	3077.25	7.50	6126.53
25	Consumer 25	5.00	3077.25	5.00	4084.35
26	Consumer 26	7.50	4615.88	10.00	8168.70
27	Consumer 27	5.00	3077.25	7.50	6126.53
28	Consumer 28	5.00	3077.25	7.50	6126.53
29	Consumer 29	5.00	3077.25	7.50	6126.53
30	Consumer 30	5.00	3077.25	5.00	4084.35
31	Consumer 31	5.00	3077.25	5.00	4084.35
32	Consumer 32	7.50	4615.88	7.50	6126.53
33	Consumer 33	7.50	4615.88	10.00	8168.70
34	Consumer 34	5.00	3077.25	5.00	4084.35
35	Consumer 35	5.00	3077.25	7.50	6126.53

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
36	Consumer 36	5.00	3077.25	7.50	6126.53
37	Consumer 37	5.00	3077.25	7.50	6126.53
38	Consumer 38	5.00	3077.25	5.00	4084.35
39	Consumer 39	5.00	3077.25	7.50	6126.53
40	Consumer 40	5.00	3077.25	5.00	4084.35
41	Consumer 41	5.00	3077.25	5.00	4084.35
43	Consumer 42	5.00	3077.25	5.00	4084.35
44	Consumer 43	5.00	3077.25	5.00	4084.35
45	Consumer 44	10.00	6154.50	12.00	9802.44
46	Consumer 45	10.00	6154.50	10.00	8168.70
47	Consumer 46	7.50	4615.88	7.50	6126.53
48	Consumer 47	7.50	4615.88	7.50	6126.53
49	Consumer 48	7.50	4615.88	10.00	8168.70
50	Consumer 49	7.50	4615.88	7.50	6126.53
51	Consumer 50	5.00	3077.25	5.00	4084.35
52	Consumer 51	7.50	4615.88	7.50	6126.53
53	Consumer 52	7.50	4615.88	7.50	6126.53
54	Consumer 53	7.50	4615.88	7.50	6126.53
55	Consumer 54	7.50	4615.88	7.50	6126.53
56	Consumer 55	7.50	4615.88	10.00	8168.70
57	Consumer 56	5.00	3077.25	5.00	4084.35
58	Consumer 57	5.00	3077.25	5.00	4084.35
59	Consumer 58	7.50	4615.88	10.00	8168.70
60	Consumer 59	5.00	3077.25	5.00	4084.35
61	Consumer 60	5.00	3077.25	7.50	6126.53
62	Consumer 61	7.50	4615.88	7.50	6126.53
63	Consumer 62	5.00	3077.25	5.00	4084.35
64	Consumer 63	5.00	3077.25	5.00	4084.35
65	Consumer 64	3.00	1846.35	5.00	4084.35
66	Consumer 65	10.00	6154.50	10.00	8168.70
67	Consumer 66	7.50	4615.88	10.00	8168.70
68	Consumer 67	10.00	6154.50	10.00	8168.70
69	Consumer 68	10.00	6154.50	10.00	8168.70
70	Consumer 69	7.50	4615.88	7.50	6126.53
71	Consumer 70	5.00	3077.25	7.50	6126.53
72	Consumer 71	10.00	6154.50	10.00	8168.70

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
73	Consumer 72	7.50	4615.88	10.00	8168.70
74	Consumer 73	5.00	3077.25	7.50	6126.53
75	Consumer 74	10.00	6154.50	12.00	9802.44
76	Consumer 75	7.50	4615.88	10.00	8168.70
77	Consumer 76	5.00	3077.25	5.00	4084.35
78	Consumer 77	5.00	3077.25	5.00	4084.35
79	Consumer 78	7.50	4615.88	7.50	6126.53
80	Consumer 79	5.00	3077.25	5.00	4084.35
81	Consumer 80	5.00	3077.25	5.00	4084.35
82	Consumer 81	5.00	3077.25	5.00	4084.35
83	Consumer 82	7.50	4615.88	7.50	6126.53
84	Consumer 83	10.00	6154.50	10.00	8168.70
85	Consumer 84	7.50	4615.88	7.50	6126.53
86	Consumer 85	7.50	4615.88	7.50	6126.53
87	Consumer 86	7.50	4615.88	10.00	8168.70
88	Consumer 87	7.50	4615.88	10.00	8168.70
89	Consumer 88	7.50	4615.88	10.00	8168.70
90	Consumer 89	5.00	3077.25	7.50	6126.53
91	Consumer 90	7.50	4615.88	10.00	8168.70
92	Consumer 91	5.00	3077.25	7.50	6126.53
93	Consumer 92	7.50	4615.88	7.50	6126.53
94	Consumer 93	5.00	3077.25	5.00	4084.35
95	Consumer 94	7.50	4615.88	7.50	6126.53
96	Consumer 95	10.00	6154.50	10.00	8168.70
97	Consumer 96	7.50	4615.88	10.00	8168.70
98	Consumer 97	7.50	4615.88	10.00	8168.70
99	Consumer 98	7.50	4615.88	7.50	6126.53
100	Consumer 99	7.50	4615.88	7.50	6126.53
Total		653.00	401888.85	768	627356.16

5.3 Tuticorin

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
1	Consumer 1	3.00	1913.49	3.00	1678.50
2	Consumer 2	3.00	1913.49	5.00	2797.50
3	Consumer 3	3.00	1913.49	3.00	1678.50
4	Consumer 4	7.50	4783.73	7.50	4196.25
5	Consumer 5	5.00	3189.15	12.50	6993.75
6	Consumer 6	3.00	1913.49	3.00	1678.50
7	Consumer 7	5.00	3189.15	7.50	4196.25
8	Consumer 8	3.00	1913.49	3.00	1678.50
9	Consumer 9	5.00	3189.15	7.50	4196.25
10	Consumer 10	3.00	1913.49	3.00	1678.50
11	Consumer 11	5.00	3189.15	10.00	5595.00
12	Consumer 12	5.00	3189.15	5.00	2797.50
13	Consumer 13	3.00	1913.49	5.00	2797.50
14	Consumer 14	3.00	1913.49	3.00	1678.50
15	Consumer 15	5.00	3189.15	7.50	4196.25
16	Consumer 16	3.00	1913.49	5.00	2797.50
17	Consumer 17	3.00	1913.49	3.00	1678.50
18	Consumer 18	5.00	3189.15	7.50	4196.25
19	Consumer 19	3.00	1913.49	3.00	1678.50
20	Consumer 20	5.00	3189.15	7.50	4196.25
21	Consumer 21	5.00	3189.15	5.00	2797.50
22	Consumer 22	5.00	3189.15	7.50	4196.25
23	Consumer 23	5.00	3189.15	7.50	4196.25
24	Consumer 24	5.00	3189.15	5.00	2797.50
25	Consumer 25	5.00	3189.15	7.50	4196.25
26	Consumer 26	3.00	1913.49	5.00	2797.50
27	Consumer 27	5.00	3189.15	7.50	4196.25
28	Consumer 28	5.00	3189.15	7.50	4196.25

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
29	Consumer 29	3.00	1913.49	5.00	2797.50
30	Consumer 30	5.00	3189.15	7.50	4196.25
31	Consumer 31	5.00	3189.15	7.50	4196.25
32	Consumer 32	7.50	4783.73	10.00	5595.00
33	Consumer 33	7.50	4783.73	7.50	4196.25
34	Consumer 34	5.00	3189.15	7.50	4196.25
35	Consumer 35	5.00	3189.15	7.50	4196.25
36	Consumer 36	5.00	3189.15	5.00	2797.50
37	Consumer 37	5.00	3189.15	7.50	4196.25
38	Consumer 38	5.00	3189.15	7.50	4196.25
39	Consumer 39	5.00	3189.15	7.50	4196.25
40	Consumer 40	5.00	3189.15	5.00	2797.50
41	Consumer 41	5.00	3189.15	7.50	4196.25
42	Consumer 42	5.00	3189.15	5.00	2797.50
43	Consumer 43	5.00	3189.15	7.50	4196.25
44	Consumer 44	3.00	1913.49	3.00	1678.50
45	Consumer 45	5.00	3189.15	7.50	4196.25
46	Consumer 46	5.00	3189.15	7.50	4196.25
47	Consumer 47	10.00	6378.30	12.00	6714.00
48	Consumer 48	5.00	3189.15	7.50	4196.25
49	Consumer 49	5.00	3189.15	7.50	4196.25
50	Consumer 50	5.00	3189.15	7.50	4196.25
51	Consumer 51	5.00	3189.15	5.00	2797.50
52	Consumer 52	5.00	3189.15	7.50	4196.25
53	Consumer 53	5.00	3189.15	5.00	2797.50
54	Consumer 54	5.00	3189.15	7.50	4196.25
55	Consumer 55	5.00	3189.15	7.50	4196.25
56	Consumer 56	5.00	3189.15	7.50	4196.25
57	Consumer 57	7.50	4783.73	7.50	4196.25
58	Consumer 58	5.00	3189.15	7.50	4196.25

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sectioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
59	Consumer 59	5.00	3189.15	5.00	2797.50
60	Consumer 60	5.00	3189.15	7.50	4196.25
61	Consumer 61	3.00	1913.49	3.00	1678.50
62	Consumer 62	3.00	1913.49	5.00	2797.50
63	Consumer 63	5.00	3189.15	7.50	4196.25
64	Consumer 64	5.00	3189.15	7.50	4196.25
65	Consumer 65	5.00	3189.15	10.00	5595.00
66	Consumer 66	7.50	4783.73	10.00	5595.00
67	Consumer 67	3.00	1913.49	5.00	2797.50
68	Consumer 68	3.00	1913.49	5.00	2797.50
69	Consumer 69	5.00	3189.15	7.50	4196.25
70	Consumer 70	5.00	3189.15	7.50	4196.25
71	Consumer 71	7.50	4783.73	10.00	5595.00
72	Consumer 72	3.00	1913.49	5.00	2797.50
73	Consumer 73	5.00	3189.15	10.00	5595.00
74	Consumer 74	5.00	3189.15	7.50	4196.25
75	Consumer 75	3.00	1913.49	5.00	2797.50
76	Consumer 76	5.00	3189.15	7.50	4196.25
	Total	360.00	229618.80	502.00	280869.00

5.4 Madurai

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sanctioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
1	Consumer 1	5.00	3278.93	10.00	6378.3
2	Consumer 2	5.00	3278.93	10.00	6378.3
3	Consumer 3	5.00	3278.93	10.00	6378.3
4	Consumer 4	7.50	4918.39	10.00	6378.3
5	Consumer 5	7.50	4918.39	12.00	7654.0
6	Consumer 6	5.00	3278.93	10.00	6378.3
7	Consumer 7	5.00	3278.93	12.00	7654.0
8	Consumer 8	7.50	4918.39	10.00	6378.3
9	Consumer 9	7.50	4918.39	10.00	6378.3
10	Consumer 10	7.50	4918.39	10.00	6378.3
11	Consumer 11	5.00	3278.93	10.00	6378.3
12	Consumer 12	5.00	3278.93	10.00	6378.3
13	Consumer 13	7.50	4918.39	10.00	6378.3
14	Consumer 14	7.50	4918.39	10.00	6378.3
15	Consumer 15	5.00	3278.93	10.00	6378.3
16	Consumer 16	7.50	4918.39	10.00	6378.3
17	Consumer 17	7.50	4918.39	10.00	6378.3
18	Consumer 18	5.00	3278.93	10.00	6378.3
20	Consumer 19	5.00	3278.93	10.00	6378.3
21	Consumer 20	5.00	3278.93	12.50	7972.9
22	Consumer 21	5.00	3278.93	12.50	7972.9
23	Consumer 22	5.00	3278.93	15.00	9567.5
25	Consumer 23	5.00	3278.93	10.00	6378.3
26	Consumer 24	5.00	3278.93	10.00	6378.3
27	Consumer 25	5.00	3278.93	10.00	6378.3
28	Consumer 26	7.50	4918.39	10.00	6378.3
29	Consumer 27	7.50	4918.39	10.00	6378.3
30	Consumer 28	7.50	4918.39	12.50	7972.9
31	Consumer 29	7.50	4918.39	7.50	4783.7
32	Consumer 30	5.00	3278.93	15.00	9567.5
33	Consumer 31	5.00	3278.93	10.00	6378.3

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sanctioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
34	Consumer 32	5.00	3278.93	10.00	6378.3
35	Consumer 33	5.00	3278.93	7.50	4783.7
36	Consumer 34	5.00	3278.93	10.00	6378.3
37	Consumer 35	5.00	3278.93	12.50	7972.9
38	Consumer 36	5.00	3278.93	10.00	6378.3
39	Consumer 37	7.50	4918.39	10.00	6378.3
40	Consumer 38	7.50	4918.39	7.50	4783.7
41	Consumer 39	7.50	4918.39	12.50	7972.9
42	Consumer 40	7.50	4918.39	10.00	6378.3
43	Consumer 41	5.00	3278.93	12.50	7972.9
44	Consumer 42	5.00	3278.93	10.00	6378.3
45	Consumer 43	7.50	4918.39	12.50	7972.9
46	Consumer 44	5.00	3278.93	10.00	6378.3
47	Consumer 45	7.50	4918.39	12.50	7972.9
48	Consumer 46	5.00	3278.93	10.00	6378.3
49	Consumer 47	5.00	3278.93	10.00	6378.3
50	Consumer 48	5.00	3278.93	12.00	7654.0
51	Consumer 49	5.00	3278.93	10.00	6378.3
52	Consumer 50	5.00	3278.93	7.50	4783.7
53	Consumer 51	5.00	3278.93	10.00	6378.3
54	Consumer 52	5.00	3278.93	10.00	6378.3
55	Consumer 53	5.00	3278.93	10.00	6378.3
57	Consumer 54	5.00	3278.93	10.00	6378.3
58	Consumer 55	5.00	3278.93	12.50	7972.9
59	Consumer 56	5.00	3278.93	15.00	9567.5
60	Consumer 57	5.00	3278.93	15.00	9567.5
62	Consumer 58	5.00	3278.93	12.50	7972.9
63	Consumer 59	5.00	3278.93	15.00	9567.5
66	Consumer 60	5.00	3278.93	10.00	6378.3
67	Consumer 61	5.00	3278.93	10.00	6378.3
68	Consumer 62	5.00	3278.93	10.00	6378.3
69	Consumer 63	5.00	3278.93	10.00	6378.3
70	Consumer 64	5.00	3278.93	7.50	4783.7
71	Consumer 65	5.00	3278.93	10.00	6378.3
72	Consumer 66	5.00	3278.93	10.00	6378.3

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sanctioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
73	Consumer 67	5.00	3278.93	12.5	7972.9
74	Consumer 68	5.00	3278.93	10	6378.3
75	Consumer 69	5.00	3278.93	12.5	7972.9
76	Consumer 70	5.00	3278.93	7.5	4783.7
77	Consumer 71	5.00	3278.93	15	9567.5
78	Consumer 72	5.00	3278.93	10	6378.3
79	Consumer 73	5.00	3278.93	10	6378.3
80	Consumer 74	5.00	3278.93	8	5102.6
81	Consumer 75	5.00	3278.93	10	6378.3
82	Consumer 76	5.00	3278.93	12.5	7972.9
83	Consumer 77	5.00	3278.93	10	6378.3
84	Consumer 78	5.00	3278.93	10	6378.3
85	Consumer 79	5.00	3278.93	7.5	4783.7
86	Consumer 80	5.00	3278.93	12.5	7972.9
87	Consumer 81	5.00	3278.93	10	6378.3
88	Consumer 82	5.00	3278.93	12.5	7972.9
89	Consumer 83	5.00	3278.93	10	6378.3
90	Consumer 84	5.00	3278.93	12.5	7972.9
91	Consumer 85	5.00	3278.93	10	6378.3
92	Consumer 86	5.00	3278.93	12.5	7972.9
93	Consumer 87	5.00	3278.93	10	6378.3
94	Consumer 88	3.00	1967.36	10	6378.3
95	Consumer 89	5.00	3278.93	12.5	7972.9
96	Consumer 90	5.00	3278.93	10	6378.3
97	Consumer 91	5.00	3278.93	7.5	4783.7
98	Consumer 92	5.00	3278.93	10	6378.3
99	Consumer 93	7.50	4918.39	10	6378.3
100	Consumer 94	5.00	3278.93	10	6378.3
102	Consumer 95	5.00	3278.93	10	6378.3
103	Consumer 96	5.00	3278.93	12.5	7972.9
104	Consumer 97	7.50	4918.39	15	9567.5
105	Consumer 98	7.50	4918.39	15	9567.5
106	Consumer 99	7.50	4918.39	15	9567.5
107	Consumer 100	7.50	4918.39	12.5	7972.9
108	Consumer 101	7.50	4918.39	15	9567.5

Sl. No.	Consumer name	Sanctioned Load (HP)	Yearly consumption as per sanctioned load (kWh)	Actual Load (HP)	Yearly consumption as per actual load (kWh)
111	Consumer 102	7.50	4918.39	10	6378.3
112	Consumer 103	7.50	4918.39	10	6378.3
113	Consumer 104	5.00	3278.93	10	6378.3
	Total	585.50	383962.12	1124.00	716920.92