Monitoring report form
(Version 04.0)

MONITORING REPORT[1] – Batch 1	
Title of the Programme of Activities	CFL lighting scheme – "Bachat Lamp Yojana"
Reference number of the Programme of Activities	PoA 3223
Version number of the delinked monitoring report (Batch 1 MR)	02.1
Completion date of the delinked monitoring report (Batch 1 MR)	10/12/2014
Registration date of the Programme of Activities	29/04/2010
Monitoring period number and duration of this monitoring period	Second Monitoring Period Duration: 01/01/2013 to 31/10/2013 (both days inclusive)
Coordinating / Managing Entity	Bureau of Energy Efficiency
Project participant(s)	1) Bureau of Energy Efficiency 2) C- Quest Capital Malaysia Limited
Host Party(ies)	India
Sectoral scope and selected methodology(ies), and where applicable, applied standardized baseline(s)	Sectoral Scope 3 : Energy demand; Applied Methodology: AMS-II.J. , Version 03
Estimated amount of GHG emission reductions or net anthropogenic GHG removals by sinks for this monitoring period in the registered PoA-DD	565,538 tCO_2e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved in this monitoring period	337,340 tCO_2e
Actual GHG emission reductions or net anthropogenic GHG removals by sinks achieved during the period up to 31 December 2012(if applicable)	N/A
Actual GHG emission reductions or net anthropogenic GHG removals by sinks	337,340 tCO_2e

[1] This monitoring report comprises all the CPAs implemented by C- Quest Capital Malaysia Limited (CQC) and is named "Monitoring Report – Batch 1". The monitoring report is prepared and submitted as per para 239 of CDM project standard, Version 05 and subsequent amendments as proposed in para 50(a) of EB 81 meeting report.

achieved during the period from 1 January 2013 onwards (if applicable).	
Number of CPA(s) included as on last date of this monitoring period	50 (till 31/10/2013)
Number of CPA(s) covered under this monitoring report	21 (17 implemented and 4 unimplemented till 31/10/2013)

SECTION A. Description of project activity

A.1. Purpose and general description of project activity

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The purpose of the Bachat Lamp Yojana (BLY) project activity is to replace the conventional incandescent lamps (ICLs) by compact fluorescent lamps (CFLs) in the residential grid connected households. Under the BLY scheme, up to four, long-life quality CFLs[2] were distributed to grid-connected residential households in exchange of one ICL and INR 15 for one CFL. The reduction in total power demand through the energy saving achieved has resulted a reduction of greenhouse gases (GHG) emissions that would otherwise being emitted during production of the equivalent amount of power in grid connected mostly fossil fuel based power plants.

In CFLs, the electrical current from the ballast flows through the gas, causing it to emit ultraviolet radiations. The phosphor coating converts the ultraviolet radiation emitted to visible light spectrum. CFLs are much more energy efficient than baseline ICLs. The efficiency of ballast-integrated CFL typically ranges from 51 to 56 lumen/ Watt, which is 4 to 5 times higher than an equivalent ICL. Consequently, CFLs consume only 1/4th to 1/5th of the energy used by baseline ICLs to provide the same level of light output.

The 11W, 14W, 18W and 20W CFLs were distributed to households in exchange of equal number of normal luminous flux 60W and 100W ICLs, respectively. These CFLs have the equivalent or higher lumen to the replaced ICL (620lm and 1240lm, respectively) and a rated lifetime of 10,000 hours. These are also high power factor CFLs and they can withstand wide voltage fluctuations. Table 3 below provides the rated normal lumen output for the ICL as per IS 418:2004, as used in this project.

Table 3: Technical Specifications of CFLs used in Project

Baseline ICL Replaced (Watt)	Rated Normal Lumen Output (IS418:2004)	CFL range (Watt)
60	620 or more	11/14
100	1240 or more	18/20

The distribution of CFLs and replacement of previously used ICLs in households in the CPA area was using one or more of the following methods:

- direct installation at each household; and/or
- ICL collection and CFL distribution through dedicated distribution points as advertised by the CPA owner in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

The implementation chronology is presented in section B.1 of this monitoring report.

The implementation of the CPAs (under this PoA) covering this monitoring period has resulted in achieving 337,340 tonnes of CO_2 equivalent of greenhouse gas emission reductions.

[2] In India IS 15111 standard specifies a minimum 6000 hours rated life time. Long life quality CFLs in BLY context thus meet IS 15111 requirements and have an average rated life of 6000 hours and above.

A.2. Location of project activity

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The political/geographical boundary of India is the PoA boundary.

The country latitude of 22° 00' N and longitude of 77° 00' E. (referred from http://www.mapsofworld.com/lat_long/india-lat-long.html).

The geographical location of the individual CPAs included under this PoA is listed in Annexure 1.

The unique geographic location of the applied measure (CFLs) in household is determined using the household consumer number provided by utility and/or the household physical address.

A.3. Parties and project participant(s)

Party involved ((host) indicates a host Party)	Private and/or public entity(ies) project participants (as applicable)	Indicate if the Party involved wishes to be considered as project participant (Yes/No)
India (host)	Bureau of Energy Efficiency (Public entity)	No
Netherlands	C- Quest Capital Malaysia Limited (Private Entity)	No

A.4. Reference of applied methodology and standardized baseline

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Applied Methodologies –
AMS-II.J. "Demand-side activities for efficient lighting technologies" (Version 3.0)

AMS-I.D. "Grid connected renewable electricity generation" (Applicable versions are listed in Annexure 11)

Applied Tool-
"Tool to calculate the emission factor for an electricity system" (Applicable versions are listed in Annexure 11)

A.5. Crediting period of project activity

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Type: Fixed Crediting Period for each CPA under the PoA.

PoA Life time: 20/11/2007 to 19/11/2035 (28 years)

Start Date: The CPA(s) specific crediting period start date is listed in Annexure 2.

Length: For every CPA the length of crediting period is 7.83 years.

PoA monitoring period duration: 01/01/2013 to 31/10/2013. The CPA(s) specific monitoring period is listed under Annexure 2.

A.6. Contact information of responsible persons/ entities

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Name: Mr. Tridip Goswami
Designation: Head of Compliance, CQC
Email: TGoswami@cquestcapital.com

Phone: +91 8041329048

Name: Mr. Vineet Kumar Garg
Designation: Compliance Specialist
Email: VGarg@cquestcapital.com

Contact persons belong to the entity "C-Quest Capital Malaysia Limited", which is Project participant.

SECTION B. Implementation of project activity

B.1. Description of implemented registered project activity

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Under this PoA, three different entities viz. C- Quest Capital Malaysia Limited (CQC), Energy Management Centre, Department of Power, Government of Kerala (EMC), and HPL Electric & Power Pvt. Limited (HPL) have included fifty (50) CPAs as of end date of the present monitoring period. Out of fifty CPAs, twenty nine (29) CPAs have been implemented by the implementer Energy Management Centre, Kerala & HPL Electric & Power Pvt. Limited and are not part of this monitoring report. This monitoring report comprises only the 21 CPAs those are included and/or implemented by C- Quest Capital Malaysia Limited (CQC). The monitoring report is prepared and submitted as per para 239 of CDM project standard, Version 05 and subsequent amendments as proposed in para 50(a) of EB 81 meeting report, which allows parties under a PoA to submit two separate monitoring reports for the same monitoring period. Any CPA included in this monitoring report will not be part of another monitoring report comprising twenty nine CPAs implemented by Energy Management Centre, Kerala and HPL Electric & Power Pvt. Limited. In the published monitoring report 30 CPAs were included, but during the course of verification CME decided to include only 21 CPAs under Batch 1 of the monitoring report, this is in compliance with the para 298 (c) (ii) of the project standard version 08.0. Out of 21 CPAs included, 17 CPAs have been implemented by the implementer till the end of this monitoring period. The pending four CPAs (3323-0030, 3223-33, 3223-40 and 3223-0042) could not be implemented further due to weakening of the carbon markets, which leads to drying up of investments and thereby resulting in the inability of investor (CQC) to take up further pending four CPAs.

The information of 21 CPAs distributed in different states of India is mentioned below in the table:

CPAs	State	CME	DISCOM	Implementer
3223-0001 3223-0043 3223-0044 3223-0045 3223-0046 3223-0047 3223-0048 3223-0049 3223-0050	Andhra Pradesh	Bureau of Energy Efficiency (BEE)	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	C- Quest Capital Malaysia Limited (CQC)
3223-0029 3223-0030 3223-0031 3223-0032 3223-0033	Delhi		NDPL (North Delhi Power Limited)	C- Quest Capital Malaysia Limited (CQC)
3223-0036 3223-0037 3223-0038 3223-0039 3223-0040 3223-0041 3223-0042	Punjab		PSPCL (Punjab State Power Corporation Limited)	C- Quest Capital Malaysia Limited (CQC)

Individual project activity involved installation of self-ballasted CFLs to replace existing ICLs used in the household. The electronic ballast integrated in the CFL is a non-removable part. The table below shows the

lumen output and rated lifetime of the CFLs installed in the individual project activity against the replaced ICLs. The project CFLs meet or exceed the rated normal lumen output of the replaced ICL.

	ICL (baseline)	CFL (project)	ICL (baseline)	CFL (project)
Wattage (W)	60	11/14	100	18/20
Lumen output (lm)	620*	620**	1,240*	1,240**
Rated Lifetime (hours)	1,000	10,000	1,000	10,000

*Rated normal Lumen output for 60 W and 100 W of ICLs as per IS 418:2004.

** Rated normal Lumen output for 14 W and 20 W CFLs as per IS 15111:2002 (Part 2)

The project CFLs are in compliance with Indian Standard IS 15111:2002, which is the national standard for self-ballasted compact CFLs. The specifications of the project CFLs are as below:

a) Self-ballasted type

b) Rated lifetime of 10,000 hours

c) Embossed or laser printed with project logo for clear unique identification

d) BC/B22 base

e) Power factor of greater than 0.85

f) Lumen output of 620 or more for 11 and 14 W CFL and Lumen output of 1240 or more for 18 and 20 W CFL

The implementation of the project activity involves the distribution of up to four (4) long life quality CFLs per household to the grid connected residential households of the CPA area. One CFL is distributed in exchange of one ICL and INR 15. The CPA specific implementation chronology is presented in Annexure 3.

The DISCOM (Distribution company) maintains a database of domestic users identifiable on the basis of a unique connection number and/or address used for billing purposes. The distribution activities were carried out by first accessing this consumer database of the grid connected residential consumers from the CPA area.

The potential recipient households were educated to install the CFL in high-usage areas, such as outsides, common areas, living room area and kitchen to maximize the energy savings. The distribution of CFLs and replacement of previously used ICLs in households in the CPA area was done using one or more of the following methods:

- Direct installation at each household; and/or
- Dedicated distribution points as advertised by the CPA investor in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

However, for the 21 CPAs included in this monitoring report, the distribution of CFLs was done through dedicated distribution points as advertised by CPA implementer and respective DISOCMs.

After the completion of CFL installation stage, the collected ICLs were stored in separate boxes according to the wattage and clearly labelled as per their contents. These ICL boxes were transferred to centrally designated ICL storage facilities. Further arrangement was made with ICL destruction agency to collect ICLs from these centrally designated storage facilities (collection points) for the destruction of ICLs in safe manner.

CPA implementers have hired various destruction agencies like Indian Pollution Control Association (IPCA), Eco Birdd Recycling and Global E-waste Management & Services (GEMS) for destruction of ICLs collected. The copies of the agreements are shared with the verifying DOE for verification. The various dates of ICL destruction activities and the quantity of ICLs destructed can be referred from Annexure 12 of this monitoring report. The “Certificate of Destruction” released by these agencies mentioning the quantities of ICLs collected and destroyed on various dates are also shared with the verifying DOE.

B.2. Post registration changes

B.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

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B.2.2. Corrections

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B.2.3. Permanent changes from registered monitoring plan, applied methodology or applied standardized baseline

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B.2.4. Changes to project design of registered project activity

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B.2.5. Changes to start date of crediting period

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B.2.6. Types of changes specific to afforestation or reforestation project activity

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SECTION C. Description of monitoring system

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The overall monitoring system under all the SSC-CPAs can be summarised in the figure 2 & 3. These two figures outline the key elements of the hierarchy and data monitoring plan for a SSC-CPA, highlighting responsible entities and their tasks, interaction channels among them, and key monitoring parameters.

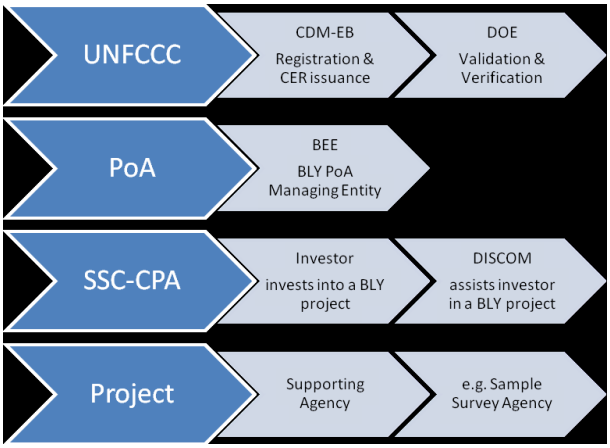

Figure 2: Institutional layers in developing and implementing the BLY scheme

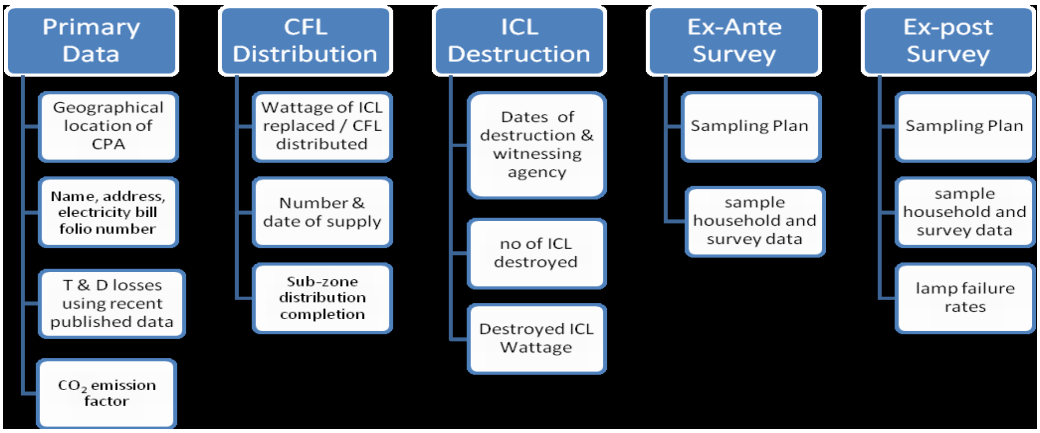

Figure 3: SSC-CPA Database components as per BLY scheme

As per applied methodology AMS–II.J., the monitoring for the SSC-CPA have been carried out at the following levels:

1. CFL distribution
2. Ex-post Monitoring Survey
3. Baseline ICL destruction
4. CFL Destruction

1. CFL Distribution

The CFLs were distributed by the SSC-CPA owner with support from DISCOM, using one or more of the following methods:

- Direct installation at each household; and/or
- Distribution through dedicated distribution points as advertised by the SSC-CPA owner in the local media e.g. local DISCOM offices, retail outlets, resident association offices, schools etc.

2. Ex-post Monitoring Survey

Random Selection of households

For any proposed SSC-CPA area, the database listing all residential households eligible under the SSC-CPA were randomly selected under the monitoring survey. The sampling is as per following criteria:

Sampling Criteria

1. The survey covered the SSC-CPA area, covering the residential sector only,
2. Random sample group were determined using statistical tools as representing the households falling under the SSC-CPA area. Survey sample size determined to have at-least 90% confidence level with 10 % maximum margin of error[3].

Ex-post Monitoring Survey

In addition to the survey requirements as stated in Annexure 4 of the individual SSC-CPA DD, the following steps were carried out by the third party monitoring survey agency

1. Visited identified households and assess the following for each household:
    a. whether the installed CFLs carry BLY logo or not
    b. whether the installed CFLs are operating or not

The data was collected and collated in the form of a monitoring survey report for each SSC CPA.

[3] As per AMS-II.J.ver03 methodology

3. ICL Destruction

After the completion of CFL installation stage, the collected ICLs were stored in separate boxes according to the wattage and clearly labeled as per their contents. These ICL boxes were transferred to centrally designated ICL storage facilities. Further arrangement was made with ICL destruction agency to collect ICLs from these centrally designated storage facilities (collection points) for the destruction of ICLs in safe manner.

At the beginning of each monitoring interval y, each SSC-CPA verified whether the number of distributed CFLs was less than or equal to the number of returned and destroyed ICLs in the SSC-CPA area.

Following the Random ICL Inspection, all ICLs collected were transported from the collection point to a disposal facility which is qualified and authorized to destroy ICLs (ICL Destruction Facility). Upon arrival at the ICL Destruction Facility, the destruction agency has ensured that there has been no change in the total number of ICLs from that recorded at the Collection Point. After the completion of ICL destruction, waste management company issued a "Certificate of Destruction".

4. CFL Destruction

Fused CFLs was replaced as part of a warranty program for the project, and these replacement CFLs installed in households prior to the monitoring survey was counted as operating. There was no replacement as part of the survey process. The replaced and fused CFLs were recorded in the project database.

Fused CFLs from the households have been collected and the mercury will be handled according to the Central Pollution Control Board (CPCB) Guidelines. All collected CFLs are being stored at designated locations until they are transferred to the CFL treatment facilities operated by disposal agencies for proper disposal of mercury inside of the CFLs. In absence of any existing guideline from CPCB of mercury disposal, the CFLs are kept in store only and have not been disposed yet and the same will be disposed of as per the country's guideline of CFL disposal once the guideline comes into place.

The overall supervision is maintained by the BEE as PoA Coordinating and Managing Entity (CME), whereas on-ground implementation takes place by the CPA implementer(s) in association with DISCOM. This is as per the tri-partite agreement in-between BEE, CPA-implementer(s) and the DISCOM operating in the CPA area. The broad overview of monitoring responsibilities envisaged under the CPA is tabulated below.

		Responsibility		
Step	**Description**	**BEE***	**DISCOM**	**SSC-CPA Implementer**
1	Determination of the SSC-CPA area		√	√
2	Establishment of the SSC-CPA implementation plan		√	√
3	Selection of households to be included in the monitoring survey		√	√
4	CFL distribution to the households		√	√
5	Establishment of the SSC-CPA database	√		√
6	Monitoring surveys		√	√
6	Verification of the number of 'destroyed ICLs' and 'distributed CFLs'	√	√	√
7	Reports for estimation of emission reductions	√		√

* Supervisory responsibility.

Household data/CFL distribution data base :

- Project database: A list of households participating in each CPA including name, address, electricity bill folio number, number and wattage of ICL exchanged and CFL distributed, date of distribution and completion of distribution.

- Double counting prevention: Double counting can occur if a registered CDM project activity or a CPA of another PoA is sought to be registered under the BLY PoA. To prevent such instances, the BEE had adopted a two-stage check:

- At time of implementer(s) empanelment, SSC-CPA implementer credentials are verified

- At time of CPA eligibility check, BEE seeks confirmation in SSC-CPA and also checks any-double counting using DISCOM, UNFCCC data.

To prevent double counting the CFLs utilized under the BLY scheme shall, in addition to the standard lamp specifications, was marked for clear unique identification for the BLY project. The logo used was

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ICL Destruction data base

The baseline ICLs collected at the time of the CFLs distribution in the CPA area were stored safely in appropriate boxes. The ICL is considered destroyed if it is rendered non-functional. The destruction method(s) followed were:

- Crushing
- Separating ICL shell and cap

The ICLs collected from the households were stored in separate boxes according to the bulb's wattage and labeled clearly of their content. The ICL boxes were then transferred to the waste management company for further destruction. Certificate of destruction was issued upon the destruction of ICLs. The records of the ICL destruction duly verified by the responsible witness are submitted to the CME. These records are maintained by CME under the BLY database.

SECTION D. Data and parameters

D.1. Data and parameters fixed ex ante or at renewal of crediting period

Data/Parameter:	$EF_{CO2,ELEC,y}$
Unit:	tCO_2/MWh
Description:	CO_2 emission factor for displacement of electricity in the respective Grid (viz. NEWNE and Southern) serving the household consumers that participate in the SSC-CPA project area during the monitoring interval y, calculated according to the latest approved version of AMS-I.D (tCO_2/MWh)
Source of data:	The User Guide of CDM Baseline CO_2 emission database by Central Electricity Authority (CEA), India (versions 4.0, 5.0 and 6.0), as stated in respective included CPA-DD.
Value(s) applied:	<table><tr><th>SSC-CPA UNFCCC Ref No</th><th>Value applied</th></tr><tr><td>3223-0001</td><td>0.856</td></tr><tr><td>3223-0029 3223-0031 3223-0032 3223-0036 3223-0037 3223-0038 3223-0039 3223-0041</td><td>0.903</td></tr><tr><td>3223-0043 3223-0044 3223-0045 3223-0046 3223-0047 3223-0048 3223-0049 3223-0050</td><td>0.865</td></tr></table> Please refer Annexure 11 for different ex-ante values used for individual CPAs.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	--

Data/Parameter:	O_i
Unit:	Hours / day
Description:	Average daily operating hours of the baseline ICLs of the group of "*i*",
Source of data:	AMS IIJ default value
Value(s) applied:	3.5 hours per 24 hours period
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	The SSC-CPA has used fixed 3.5 hours per 24 hrs period.

Data/Parameter:	X_i
Unit:	Hours / year
Description:	Operating hours per year for CFL type *i*
Source of data:	Calculated value
Value(s) applied:	1,277.5 hours per 365 day year; 1,281 hours for leap year
Purpose of data:	Emission reduction calculation
Additional comment:	The SSC-CPA has used fixed 3.5 hours per 24 hrs period. Hence for the yearly value, the estimate is fixed.

Data/Parameter:	NTG
Unit:	--
Description:	Net-to-gross adjustment factor
Source of data:	Default AMS-II.J. value
Value(s) applied:	0.95
Purpose of data:	Emission reduction calculation
Additional comment:	--

Data/Parameter:	L_i
Unit:	Hours
Description:	rated average operating hours for CFL type *i*
Source of data:	Life test reports of CFLs
Value(s) applied:	

SSC-CPA UNFCCC Ref No		**Value applied (hours)**
CQC	3223-0001 3223-0029 3223-0031 3223-0032 3223-0036 3223-0037 3223-0038 3223-0039 3223-0041 3223-0043 3223-0044 3223-0045 3223-0046 3223-0047 3223-0048 3223-0049 3223-0050	10,000

Purpose of data:	Emission reduction calculation
Additional comment:	Determined as per the independent life-tests of the CFLs as per national standard

Data/Parameter:	High PF CFL life test report and test curves
Unit:	--
Description:	Life test reports of CFLs
Source of data:	Obtained from accredited manufacturer or laboratory
Value(s) applied:	**SSC-CPA UNFCCC Ref No** / **High PF CFL life test reports** CQC: 3223-0001, 3223-0029, 3223-0031, 3223-0032, 3223-0036, 3223-0037, 3223-0038, 3223-0039, 3223-0041, 3223-0043, 3223-0044, 3223-0045, 3223-0046, 3223-0047, 3223-0048, 3223-0049, 3223-0050 — Yes
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	-

D.2. Data and parameters monitored

Data/Parameter:	$Q_{PJ,i}$
Unit:	Number
Description:	Number of CFLs of the group of "*i*" CFLs (11W, 14W, 18W & 20W CFLs) in operation during the first 12 months of distribution
Measured/ Calculated/ Default:	Calculated from survey data
Source of data:	SSC-CPA database
Value(s) of monitored parameter:	<table><tr><td>No of grid connected household consumers numbers in project area</td><td>Annexure 4</td></tr><tr><td>Actual number of CFLs distributed per household consumer number (max is four)</td><td>Annexure 4</td></tr><tr><td>$Q_{PJ,i}$</td><td>Annexure 4</td></tr></table>
Monitoring equipment:	-
Measuring/Reading/ Recording frequency:	Once in the crediting period (within 1 year from end date of distribution of CFLs)
Calculation method (if applicable):	The Qpj value for each type of CFL is calculated from the results of Qpj survey, as follows: • Obtain the ratio of the number lamps of type i with BLY logo found installed & operating in the sample households and the number of lamps of type i claimed to be distributed in the sample households • Multiply the ratio obtained by the total number of lamps of type i claimed to be distributed in the CPA area • The claimed number of lamps is capped by the number of ICLs destroyed.
QA/QC procedures:	• Monitoring survey was conducted by qualified and experience third party agency • Monitoring survey conducted in accordance with the requirement of methodology so that the estimate of $Q_{PJ,i}$ obtained is unbiased and reliable.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	-

Data/Parameter:	$LFR_{i,y}$
Unit:	%
Description:	Lamp Failure Rate for CFL type *i* in year *y* (fraction)
Measured/ Calculated/ Default:	Calculated based on survey results
Source of data:	Ex-post monitoring survey
Value(s) of monitored parameter:	$LFR_{i,y}$ = Refer Annexure 5 LFR applied in the ER calculation is the *ex ante* LFR which is calculated using the formula provided in methodology.[4] For year 1, LFR applied is 6.39%, for year 2 it is 12.81% and for year 3 it is 19.18%. The *ex post* LFR observed from the monitoring survey is lower than calculated *ex ante* LFR. Therefore it is concluded that the project CFLs are operating in accordance with the *ex ante* linear failure rate. To obtain a conservative estimate of emission reductions achieved, *ex-ante* LFR is applied in the calculation.
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	*ex post* monitoring surveys conducted at least once in every 3 years
Calculation method (if applicable):	Ex post $LFR_{i,y}$ is determined by dividing the number of fused CFLs found from the ex post monitoring survey by the number of CFLs distributed, which is the CFL sample size of the survey. The survey is done on random sampling approach. The detailed calculation is shown in CER spreadsheet and also the monitoring survey report prepared by third party for individual CPA. Copy of the same is submitted to verifying DOE.
QA/QC procedures:	Each SSC-CPA determined the representative sample size with minimum 90% confidence interval and 10% maximum error margin. The actual number of households to be surveyed was arrived at by dividing the number of sample CFL with the average number of CFLs distributed per household. To be conservative the minimum number of households surveyed was kept as hundred. The SSC-CPA implementer(s) has chosen a sample size higher than the one calculated in individual CPA-DD.
Purpose of data:	Emission reduction calculation
Additional comment:	CPA implementers have chosen the option 1, i.e. once in every 3 years to conduct the monitoring survey to calculate the LFR. The data of the survey was reported to the CME (BEE).

[4] According to the clarification number SSC 670, after the first *ex post* monitoring survey and for the period before the subsequent *ex post* monitoring surveys undertaken the LFR value estimated *ex ante* shall be used without having to consider any *ex post* adjustment for the monitoring period..

Data/Parameter:	*Lamp distribution data*
Unit:	--
Description:	The start and completion date of CFL distribution, Utility consumer number of CFL recipient households under the SSC-CPA entered into the SSC-CPA database.
Measured/ Calculated/ Default:	Measured (and recorded in CPA database)
Source of data:	SSC-CPA Database
Value(s) of monitored parameter:	Distribution of CFLs-Start date: Refer Annexure 3 Distribution of CFLs- Completion date: Refer Annexure 3
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once in the crediting period
Calculation method (if applicable):	-
QA/QC procedures:	Standardized database form was used to maintain these data. Upon submission of the documented data, the same was verified independently by the CME (BEE) and has given approval to individual SSC – CPA. The approval letters for each CPAs are submitted to DOE.
Purpose of data:	Emission reduction calculation
Additional comment:	-

Data/Parameter:	N
Unit:	--
Description:	Sample size of Monitoring Survey
Measured/ Calculated/ Default:	Calculated
Source of data:	Calculated value as per statistical analysis provided in PoA-DD and CPA-DD Annexure 4
Value(s) of monitored parameter:	Number of households: Refer Annexure 5
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once at the time of each survey.
Calculation method (if applicable):	Calculated as mentioned in the Annexure 4 of respective CPA-DDs.
QA/QC procedures:	Each SSC-CPA determined the representative sample size with minimum 90% confidence interval and 10% maximum error margin. The actual number of households to be surveyed was arrived at by dividing the number of sample CFL with the average number of CFLs distributed per household. To be conservative the minimum number of households surveyed was kept as hundred. The SSC-CPA implementer(s) has chosen a sample size higher than the one calculated in individual CPA-DD.
Purpose of data:	Emission reduction calculation (Only the emission reduction formula is provided in the methodology)
Additional comment:	Also refer “N” parameter table under section B.6.1 of respective CPA –DDs.

Data/Parameter:	$P_{i, BL}$
Unit:	W
Description	Rated power of the baseline ICLs of the group of "*i*"
Measured/ Calculated/ Default:	Calculated
Source of data:	Weighted average calculated using rated power of the baseline ICLs as recorded in SSC-CPA database
Value(s) of monitored parameter:	The SSC-CPA specific applicable values may be referred at Annexure 10
Monitoring equipment:	-
Measuring/ Reading/ Recording frequency:	Once in the crediting period
Calculation method (if applicable):	Weighted average
QA/QC procedures:	Number and type of ICLs collected in boxes is used to verify the numbers recorded in the ledger and database. This was also cross referred to the CFLs distributed as per project database
Purpose of data:	Emission reduction calculation
Additional comment:	Data was reported to BEE for record. The baseline ICL's rated power was also verified during ICL destruction.

Data/Parameter:	$P_{i,PJ}$
Unit:	W
Description:	Rated power of the CFLs of the group of "*i*" lighting devices (Watts)
Measured/Calculated /Default:	Calculated
Source of data:	Weighted average calculated using rated power of the CFLs as recorded in SSC-CPA database
Value(s) of monitored parameter:	Values may be referred at Annexure 10
Monitoring equipment:	--
Measuring/Reading/ Recording frequency:	Once in the crediting period
Calculation method (if applicable):	Weighted average
QA/QC procedures:	The record of CFLs purchased and delivered in respective CPAs were used to verify the number recorded in the ledger and database. This was also cross referred to the ICLs collected.
Purpose of data:	Emission reduction calculation
Additional comment:	-

Data/Parameter:	$N_{Destroyed}$
Unit:	Number
Description:	Number of ICLs collected and destroyed
Measured/ Calculated /Default:	Measured (recorded)
Source of data:	SSC-CPA database
Value(s) of monitored parameter:	Refer Annexure 6 for the CPAs in which destruction of ICLs have been carried out.
Monitoring equipment:	--
Measuring/Reading/ Recording frequency:	Once in the crediting period
Calculation method (if applicable):	--
QA/QC procedures:	During CFL distribution activity: • Only 60 W and 100 W of working ICLs were accepted for bulb exchange during the CFL distribution activity. • The marking of the wattage of ICLs were checked before data recording in the ledger book. After completion of CFL distribution activity: • ICLs collected were stored in separate boxes according to the wattage and clearly labeled of their contents. • Destruction of ICLs was organized by qualified independent service provider (ISP) and total number of ICLs destroyed to be verified by the ISP. • All the ICLs were destroyed after the handing over to ISP. This has effectively limited the undesired secondary market effects and free riders activity. The ISP has provided destruction certificates for the same which are submitted to verifying DOE.
Purpose of data:	Emission reduction calculation.
Additional comment:	--

Data/Parameter:	TD_y
Unit:	%
Description:	Average annual technical grid losses
Measured/Calculated /Default:	--
Source of data:	Published DISCOM data by an official governmental body.
Value(s) of monitored parameter:	Refer Annexure 7
Monitoring equipment:	-
Measuring/Reading/ Recording frequency:	Yearly
Calculation method (if applicable):	-
QA/QC procedures:	Project participant first collected T&D loss values specific to individual electricity distribution companies within the project area, using the T&D loss values confirmed by the electricity regulatory commission in recent tariff order documents published by electricity regulatory commissions that oversee these distribution companies.
Purpose of data:	Emission reduction calculation
Additional comment:	-

D.3. Implementation of sampling plan

>>
Under this PoA sampling is required for determining the number of CFLs placed in service and operating (*ex-post $Q_{PJ,i}$ survey*) and CFL failure rate (*ex-post monitoring surveys for $LFR_{i,y}$*).

All the 17 CPAs under this monitoring period carried out first ex post monitoring survey integrating "$Q_{PJ,i}$" survey and the "$LFR_{i,y}$" survey.

Sampling Criteria adopted

3. Participating households under the CPA area
4. Random sample group determined using statistical tools as representing the households falling under the CPA area. Survey sample size was determined to have at-least 90% confidence interval and 10 % maximum margin of error[5].

The distributed CFLs in the CPA project area surveyed as per the applied methodology AMS-II.J. for the following two(2) monitoring parameters:

1) "$Q_{PJ,i}$" (number of CFLs with BLY logo, installed and operating), where the Q_{PJ} number is fixed for the entire crediting period;

Sampling Design –
The sampling is carried out as per the sampling plan design described in the Annexure 4 of the included SSC-CPA-DD. The survey records are maintained under the BLY database. The monitoring surveys were carried out by third parties. The survey procedures were established and implemented to ensure that the field data collection is performed properly and any potential intentional errors or unintentional errors are minimized and documented.

Considering that from a BLY scheme point of view, each of the households holds an equal probability of being identified from a DISCOMs active residential household customer base, hence simple random sampling was used.

To ensure random selection, random number generators were applied. Each household was allotted a unique CPA serial number starting at 1 and up to the total number of households in CPA area. Using random number generators, the serial number were randomly chosen. The random number thus obtained is correlated with the utility provided residential customer code.

Data Collection –
The following activities were done before collecting the data from households as per the section E.7.2 of registered PoA –DD

- Detailed instructions were given to the survey agency/surveyor(s) on data collection procedures and determination of household sample size.
- Standardized data forms were developed and were used for the data collection during Survey(s).

Accordingly, an appropriate statistically robust sample size for conducting the monitoring survey has been used (Refer Annexure 5 for summary of data collected during survey).

Data Analysis -
The data collected though the standard forms through the surveys was compiled and collated. CPA Baseline, Survey Baseline and Survey findings were determined after conducting survey as follows:

CPA Baseline: From the CPA household database for all the CPA households, the total number of CFLs distributed with BLY logo was taken for each wattage type 'i'.

Survey Baseline: From the CPA household database for the selected sample of households, the total number of CFLs distributed with BLY logo was taken for each wattage type 'i'.

[5] As per AMS II.J ver. 03 methodology

Survey Findings: From the survey findings for the selected sample of households, the total number of BLY logo CFLs installed and operating was found for each wattage type 'i'.

The Q_{PJ} value for each type of CFL type 'i'is calculated as presented in $Q_{PJ,i}$ table of section D.2

= Ratio of (Survey Findings/Survey Baseline) x CPA Baseline, for each wattage type.

To be conservative, the calculated $Q_{pj,i}$ is compared with the number of ICLs destroyed and minimum of the two is taken as the final $Q_{pj,i}$ value. The claimed number of lamps is capped by the number of ICLs destroyed.

The calculated Q_{PJ} values are presented in Annexure 4.

Confidence/ Precision -
The applied methodology AMS-II.J ver. 03 requires a minimum 90% confidence interval and the 10% maximum error margin. Annexure 4 of respective CPA-DDs has been followed to achieve this level of precision.

2) "$LFR_{i,y}$" (lamp failure rate of type i) in the CPA area.

Sampling Design –
The CPA follows the sampling approach described in the Annexure 4 of the respective CPA -DDs.

The surveyor appointed by the CPA implementer has

- Randomly selected a sample of households from CPA household database. The number of households included in the sample was equal to or more than the calculated values mentioned in Annexure 4 of the included CPA-DDs.
- For the identified households the survey identified the number of CFLs for each type of wattage 'i' with BLY logo which are installed and not operating
- CFLs replaced as a part of regular maintenance or warranty program was counted as operating.

However during the survey no CFLs were replaced to count those as operating.

Data Collection –
The following activities were done before collecting the data from households as per the section E.7.2 of registered PoA -DD

- Detailed instructions were given to the survey agency/surveyor(s) on data collection procedures and determination of household sample size.
- Standardized data forms were developed and were used for the data collection during Survey(s).

Accordingly, an appropriate statistically robust sample size for conducting the monitoring survey has been used (Refer Annexure 5 for summary of data collected during survey).

Data Analysis –
The data collected though the standard forms through the surveys was compiled and collated centrally.

Survey Baseline and Survey findings were determined after conducting survey as follows:

Survey Baseline: From the CPA household database for the selected sample of households, the total number of CFLs distributed with BLY logo was taken for each wattage type.

Survey Findings: From the survey findings for the selected sample of households, the total number of BLY logo CFLs installed and operating was found for each wattage type.

The Lamp Failure Rate is calculated as

= 1- (Survey Findings/ Survey Baseline), for each wattage type i.

The value of the $LFR_{i,y}$ considered for the calculation of the emission reductions is higher of the value obtained from:

a) The life test curve submitted by CFL manufacturer/ accredited laboratory for the CFLs distributed in the CPA area
b) The ex-post monitoring survey results.

The calculated LFR values are presented in Annexure 5.

The subsequent linear failure rate curve reconstructed for the remaining crediting period based on the slope determined from step (a) and (b) above. This reconstructed curve shall be valid for credit issuance for either 3 years or 30% of the elapsed rated life of the lamp, selected as the minimum frequency of the ex-post monitoring survey in the section B.5.2 of the included CPA-DDs.

Confidence / Precision -
The applied methodology AMS-II.J ver. 03 requires a minimum 90% confidence interval and the 10% maximum error margin. Annexure 4 of respective CPA-DDs has been followed to achieve this level of precision.

SECTION E. Calculation of emission reductions or GHG removals by sinks

All the CPA-DDs make use of equations listed under section E.6.2 of PoA-DD, where the emission reductions due to the project activity are calculated as under.

Emissions Reduction (ER_y)

Emission reduction (ER_y) is net electricity savings ($NES_{,y}$) times an emission factor ($EF_{CO2,ELEC,y}$)

$$ER_y = NES_{,y} \times EF_{CO2,ELEC,y} \quad \textbf{(1)}$$

Where:

ER_y	Emission reductions in year y (tCO_2e)
NES_y	Net electricity saved in year *y* (kWh)
$EF_{CO2,ELEC,y}$	Grid Emission factor (GEF) in year *y*,(t_{CO2e}/MWh); The calculated GEF value is fixed ex-ante in the SSC-CPA.

Net Energy Savings (NES_y)

The net energy saved is derived using the equation (2) below:

$$NES_{,y} = \sum_i Q_{PJ,i} * (1\text{-}LFR_{i,y}) * ES_i * [1 / (1 - TD_y)] * NTG \quad \textbf{(2)}$$

Where:

$$ES_i = (P_{i,BL} - P_{i,PJ}) * O_i * 365 / 1000 \quad \textbf{(3)}$$

Where:

NES_y	Net electricity saved in year *y* (kWh)
$Q_{PJ,i}$	Number (quantity) of CFLs of wattage "i" distributed or installed under the project activity. In total for all "i", this value shall be equal to or less than the documented number of all baseline ICLs destroyed. Once all of the project CFLs are distributed or installed, $Q_{PJ,i}$ is a constant value independent from *y*. Under the PoA, $Q_{PJ,i}$ obtained from the *ex post* $Q_{PJ,}$ survey, which is to take place within the first 12 months of CFL distribution.
i	Counter for lighting device type e.g. 40W incandescent bulb, 14 W CFL

n	Number of types of lighting devices
ESi	Estimated annual electricity savings for equipment of type *i,* for the relevant technology viz. ICL or CFL(kWh)
$LFR_{i,y}$	Lamp Failure Rate for CFL equipment type *i* in year *y* (fraction). Under the PoA, this is calculated ex-ante using the equation (4) below and adjusted ex-post based on monitoring survey results.
TD_y	Average annual technical grid losses (transmission and distribution) during year *y* for the grid serving the locations where CFLs are installed, expressed as a fraction. Under the PoA, each CPA determined the TD_y from the most recent average annual audited data published either by the DISCOM or an official governmental body e.g. by the Central Electricity Authority (CEA) of India, Electricity Regulatory Commission(s). A default value of 10% shall be used for average annual technical grid losses, if no recent data are available or the data cannot be regarded accurate and reliable.
NTG	Under the PoA, the default value of 0.95 is applied.
$P_{i,BL}$	Rated power of the baseline lighting devices (ICLs) of the group of type *i* lighting devices (Watts)
$P_{i,PJ}$	Rated power of the project lighting devices (CFLs) of the group of "i" lighting devices(Watts)
O_i	Under the PoA, the value of 3.5 hours per 24 hrs period is applied in all SSC-CPAs.

To calculate the emission reductions from a CPA area, the equations under the CPA-DD section B.5.2 are applied as per project values. This is illustrated below for the data values of the **SSC-CPA UNFCCC ref no 3223-0001**. For emission reduction values of individual CPAs, refer Annexure 8

$Q_{pj,i}$ Calculation

The $Q_{pj,i}$ value is obtained from the findings of the $Q_{pj,i}$ survey as follows:

Parameter Description	60W	100 W
Number of ICLs collected and destroyed; $Q_{BL,i}$	140,515	290,732

Parameter Description	11W	18 W
Number of CFLs distributed or installed as per database	140,515	290,732
Percentage of CFLs found in service and operating under 1st ex-post monitoring survey (%)	97.24%	96.61%
Number of CFLs in service and operating under 1st monitoring survey; $Q_{PJ,i}$	136,635	280,875

The values for all CPAs are presented in Annexure 4.

Lamp Failure Rate Calculation

The LFR value is calculated from the findings of the ex-post monitoring survey as follows:

Counter for year	2	3
Rated average life for CFLs; L_i	10000	
% of CFLs operating at the rated lifetime; R_i	50	
Number of operating hours of CFL; X_i	1,277.5	1,277.5

Now

For Y=2

1,277.5 + 1,281.0 <10000

And

For Y=3

2*1,277.5 + 1,281.0 <10000

thus

$LFR_{i,2}$= **(1,277.5 + 1,281.0) * (100 - 50) / (100 * 10000)**[6]
= 12.79%

and

$LFR_{i,3}$= **(2*1,277.5 + 1,281.0) * (100 - 50) / (100 * 10000)**
= 19.18%

The values for all CPAs are presented in Annexure 5.

Estimated Annual Energy Savings

$ES_i = (P_{i,BL} - P_{i,PJ}) * O_i * 365 / 1000$

Weighted average of rated power of the baseline lighting devices (ICLs); $P_{i, BL}$	***86.97***
Weighted average of rated power of the project lighting devices (CFLs); $P_{i,PJ}$	***17.07***
Average daily operating hours of ICLs replaced by CFLs; O_i	***3.5***

Thus estimated electricity savings,

for first 281 days in this monitoring period, i.e. y=2 (01/01/2013 to 08/10/2013)
ES_2 **= (86.97 – 17.07) * 3.5 *281/1000**

= 68.75 kWh

for next 23 days in this monitoring period, i.e. y=3 (09/10/2013 to 31/10/2013)
ES_3 **= (86.97 – 17.07) * 3.5 *23/1000**

= 05.63 kWh

The values for all CPAs are presented in Annexure 7.

Net Energy Savings

$NES_y = \sum_i Q_{PJ,i} * (1-LFR_{i,y}) * ES_i * [1 / (1 - TD_y)] * NTG$

Counter for year	2	3
Number of CFLs in service and operating under 1st ex-	417,511	417,511

[6] As per AMS II.J Ver. 03, If y*Xi < Li; LFRi,y = y * Xi * (100-Ri)/(100*Li), but as year 2 is coming as a leap year, hence for that year operating hours comes to 366*3.5= 1,281.

post monitoring survey; $Q_{PJ,i}$		
Average annual technical grid losses during year y; TD_y (%)	15.88%	15.63%
Net-to-gross adjustment factor; NTG	0.95	0.95
LFRi	12.79%	19.18%

Thus net energy savings

NES_2= 417,511*(1-12.79%)*68.75*(1/(1-15.88%))*0.95/1000 = 28,268 MWh

NES_3= 417,511*(1-19.18%)*5.63*(1/(1-15.63%))*0.95/1000 = 2,138 MWh

NES = 28,268 **+** 2,138 **= 30,406 MWh**

The values for all CPAs are presented in Annexure 7.

Emission Reductions

$$ER_y = NES_{,y} \times EF_{CO2,ELEC,y}$$

$EF_{CO2,ELEC,y}$ **=** 0.8560 tCO_2/MWh

ER_y = 30,406 * 0.8560
= 26,027 tCO_{2e}

The values for all CPAs are presented in Annexure 8.

The implementation of this PoA resulted in greenhouse gas emission reduction of 337,340 tonnes of CO2 equivalent during the current monitoring interval.

E.1. Calculation of baseline emissions or baseline net GHG removals by sinks

>> Not Applicable

E.2. Calculation of project emissions or actual net GHG removals by sinks

>> Not Applicable

E.3. Calculation of leakage

>> Not Applicable

E.4. Summary of calculation of emission reductions or net anthropogenic GHG removals by sinks

Item	Baseline emissions or baseline net GHG removals by sinks (t CO_2e)	Project emissions or actual net GHG removals by sinks (t CO_2e)	Leakage (t CO_2e)	Emission reductions or net anthropogenic GHG removals by sinks (t CO_2e)
Total	-	-	-	337,340

The values for all SSC-CPAs are presented in Annexure 8.

E.5. Comparison of actual emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Item	Values estimated in ex-ante calculation of registered PDD	Actual values achieved during this monitoring period
Emission reductions or GHG removals by sinks (t CO_2e)	565,538	337,340

`**>>** Refer Annexure 8

E.6. Remarks on difference from estimated value in registered PDD

>>
Actual Value is less than the estimated value. In Annexure 9 the same has been explained.

E.7. Actual emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Item	Actual values achieved up to 31 December 2012	Actual values achieved from 1 January 2013 onwards
Emission reductions or GHG removals by sinks (t CO_2e)	-	337,340

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Appendix 1. Contact information of project participants and responsible persons/ entities

Project participant and/or responsible person/ entity	☒ Project participant ☐ Responsible person/ entity for completing the CDM-MR-FORM
Organization name	C-Quest Capital Malaysia Limited
Street/P.O. Box	Brighton Place, Lot U0215, Jalan Bahasa,
Building	Equity Trust Business Centre
City	
State/Region	Labuan F.T.
Postcode	87011
Country	Malaysia
Telephone	+6 087 428328
Fax	+6 087 417242
E-mail	cqc-operations@cquestcapital.com
Website	www.cquestcapital.com
Contact person	Mr. Kenneth Newcombe
Title	Director
Salutation	Mr.
Last name	Newcombe
Middle name	
First name	Kenneth
Department	
Mobile	
Direct fax	
Direct tel.	
Personal e-mail	

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Annexure 1 - Geographical location of the SSC-CPAs included under the BLY-PoA (refer MR Section A.2)

(Note: Abbreviations used under State column PB- Punjab; AP-Andhra Pradesh; DL-Delhi;)

CME -Unique Identification No.	UNFCCC Ref. No.	State	DISCOM	Circle	District	Division	latitude	Longitude
							in degree	in degree
001-CQC-AP	3223-0001	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Ranga Reddy North	Ranga Reddy	Habsiguda	21.125498	81.914063
029-CQC-DL	3223-0029	DL	NDPL (North Delhi Power Limited)	North West, North	Shalimar Bagh, Model Town	Shalimar Bagh, Model Town	28.7127	77.1623
030-CQC-DL	3223-0030	DL	NDPL (North Delhi Power Limited)	North	KESHAV PURAM, CIVIL LINES AND SHAKTI NAGAR	-	-	-
041-CQC-DL	3223-0031	DL	NDPL (North Delhi Power Limited)	North, North West	Pitampura, Rohini	-	28.6896	77.1312
042-CQC-DL	3223-0032	DL	NDPL (North Delhi Power Limited)	North, Northwest	Mangol Puri, Moti Nagar	-	28.6602	77.1384
043-CQC-DL	3223-0033	DL	NDPL (North Delhi Power Limited)	North West	Bawana,Badli and Narela	-	-	-
036-CQC-PB	3223-0036	PB	PSPCL (Punjab State Power Corporation Limited)	Amritsar city, Amritsar Sub Urban	Amritsar	Industrial, City Center, Hakima Gate, Civil Line, East, West	31.634	74.8723
037-CQC-PB	3223-0037	PB	PSPCL (Punjab State Power Corporation Limited)	Kapurthala, Jalandhar	Kapurthala and Jalandhar	Kartapur, Model Town, East, West	31.3071	75.5782
038-CQC-PB	3223-0038	PB	PSPCL (Punjab State Power Corporation Limited)	Tarn Taran, Amritsar Sub Urban	Tarn Taran , Amritsar	Rayya, City Tarn Taran, Sub Urban, Jindal Guru,Ajnala	31.45	74.9253
039-CQC-PB	3223-0039	PB	PSPCL (Punjab State Power Corporation Limited)	Tarn Taran and Kapurthala	Tarn Taran and Kapurthala	Sub Tarn Taran, Patti, Bhikiwind,City Kapurthala, Sub Urban Kapurthala	31.2817	74.8574
040-CQC_PB	3223-0040	PB	PSPCL (Punjab State Power Corporation Limited)	Kapurthala and Jalandhar	Kapurthala and Jalandhar	City Nakodar, Sub Urban Nakodar , Phagwara Cantt.	-	-

044-CQC-PB	3223-0041	PB	PSPCL (Punjab State Power Corporation Limited)	Mohali and Ropar	Mohali & Ropar	Mohali, Zirakpur,Lalru, Kharar	30.7488	76.6413
045-CQC-PB	3223-0042	PB	PSPCL (Punjab State Power Corporation Limited)	Ferozpur, Mukhtsar	Ferozpur	City Ferozpur, Sub-urban Ferozpur, Jalalabaad, Zira and Fazilka	-	-
031-CQC-AP	3223-0043	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Ranga Reddy North	Ranga Reddy	Gachibowli	17.4359	78.3417
032-CQC-AP	3223-0044	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Ranga Reddy North	Ranga Reddy	Kukatpally	17.4833	78.4166
033-CQC-AP	3223-0045	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Ranga Reddy North	Ranga Reddy	Medchal	17.6283	78.5746
049-CQC-AP	3223-0046	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Hyderabad South Circle	Hyderabad	Asmangadh and Charminar	17.3614	78.4744
050-CQC-AP	3223-0047	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Hyderabad Central and Hyderabad North	Hyderabad	Azamabad and Green Lands	17.4342	78.4546
051-CQC-AP	3223-0048	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	Hyderabad North	Hyderabad	Bowenpally and Paradise	17.4654	78.478
052-CQC-AP	3223-0049	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	RangaReddy South and RangaReddy East	Ranga Reddy	Champapet and Saroornagar	17.3447	78.5183
053-CQC-AP	3223-0050	AP	APCPDCL (Central Power Distribution Company of Andhra Pradesh Limited)	RangaReddy South	Ranga Reddy	Vikarabad and Rajendra nagar	17.3325	77.9047

Annexure 2 – Crediting and Monitoring period of SSC-CPA(s) under BLY PoA (refer MR Section A.5, B.2.5)

UNFCCC Ref. No.	End date of CFL distribution	Length of Crediting Period of individual CPAs	Start date of Crediting period as per CPA Webpage	Monitoring Period start date	Monitoring period end date	Monitoring Interval	Monitoring Period Length	End date for Y=1(/2)**	Start date for Y2(/3)***	Effective Days in each counter of year	
	dd/mm/yyyy	years		**dd/mm/yyyy**	**dd/mm/yyyy**	**in days**	**in years**	in days	in days	y=1/2	y=2/3
3223-0001	09/10/2011	7.83	29/05/2011	01/01/2013	31/10/2013	304	0.83	08/10/2013	09/10/2013	281	23
3223-0029	10/04/2012	7.83	10/04/2012	01/01/2013	31/10/2013	304	0.83	09/04/2013	10/04/2013	99	205
3223-0030	*	*	*	*	*	*	*	*	*	*	*
3223-0031	03/07/2012	7.83	07/07/2012	01/01/2013	31/10/2013	304	0.83	02/07/2013	03/07/2013	183	121
3223-0032	06/01/2012	7.83	06/01/2012	01/01/2013	31/10/2013	304	0.83	05/01/2013	06/01/2013	5	299
3223-0033	*	*	*	*	*	*	*	*	*	*	*
3223-0036	03/03/2012	7.83	03/03/2012	01/01/2013	31/10/2013	304	0.83	02/03/2013	03/03/2013	61	243
3223-0037	04/05/2012	7.83	04/05/2012	01/01/2013	31/10/2013	304	0.83	03/05/2013	04/05/2013	123	181
3223-0038	27/10/2012	7.83	27/10/2012	01/01/2013	31/10/2013	304	0.83	26/10/2013	27/10/2013	299	5
3223-0039	22/11/2012	7.83	22/11/2012	01/01/2013	31/10/2013	304	0.83	31/10/2013	-	304	0
3223-0040	*	*	*	*	*	*	*	*	*	*	*
3223-0041	14/08/2012	7.83	14/08/2012	01/01/2013	31/10/2013	304	0.83	13/08/2013	14/08/2013	225	79
3223-0042	*	*	*	*	*	*	*	*	*	*	*
3223-0043	25/07/2012	7.83	25/07/2012	01/01/2013	31/10/2013	304	0.83	24/07/2013	25/07/2013	205	99
3223-0044	20/04/2012	7.83	20/04/2012	01/01/2013	31/10/2013	304	0.83	19/04/2013	20/04/2013	109	195
3223-0045	09/10/2012	7.83	09/10/2012	01/01/2013	31/10/2013	304	0.83	08/10/2013	09/10/2013	281	23
3223-0046	17/05/2013	7.83	29/03/2012	01/01/2013	31/10/2013	304	0.83	31/10/2013	-	168	0
3223-0047	09/03/2013	7.83	29/03/2012	01/01/2013	31/10/2013	304	0.83	31/10/2013	-	237	0
3223-0048	23/12/2012	7.83	23/12/2012	01/01/2013	31/10/2013	304	0.83	31/10/2013	-	304	0
3223-0049	18/05/2013	7.83	29/03/2012	01/01/2013	31/10/2013	304	0.83	31/10/2013	-	167	0
3223-0050	07/08/2012	7.83	08/08/2012	01/01/2013	31/10/2013	304	0.83	06/08/2013	07/08/2013	218	86

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.
** For the CPAs implemented after 01/01/2012, year 1 is applicable and CPAs implemented before 01/01/2012, year 2 is applicable
*** For the CPAs implemented after 01/01/2012, year 2 is applicable and CPAs implemented before 01/01/2012, year 3 is applicable

Annexure 3: Chronology of SSC CPA implementation (refer MR section B.1)

CME -Unique Identification No.	UNFCCC Ref No	Start date of CFL distribution	End date of CFL distribution	Date of destruction of ICLs	Start Date of Monitoring survey	End Date of Monitoring Survey
		dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy
001-CQC-AP	3223-0001	11/05/2011	09/10/2011	21/10/2011	23/12/2011	06/01/2012
029-CQC-DL	3223-0029	16/01/2012	10/04/2012	03/06/2012	07/11/2012	05/12/2012
030-CQC-DL	3223-0030	*	*	*	*	*
041-CQC-DL	3223-0031	21/05/2012	03/07/2012	13/07/2012	20/11/2012	25/11/2012
042-CQC-DL	3223-0032	19/10/2011	06/01/2012	25/01/2012	26/11/2012	30/11/2012
043-CQC-DL	3223-0033	*	*	*	*	*
036-CQC-PB	3223-0036	05/12/2011	03/03/2012	19/03/2012	12/10/2012	16/10/2012
037-CQC-PB	3223-0037	20/02/2012	04/05/2012	23/05/2012	18/10/2012	22/10/2012
038-CQC-PB	3223-0038	25/08/2012	27/10/2012	27/11/2012	14/02/2013	23/02/2013
039-CQC-PB	3223-0039	08/09/2012	22/11/2012	27/11/2012	25/02/2013	06/03/2013
040-CQC_PB	3223-0040	*	*	*	*	*
044-CQC-PB	3223-0041	25/06/2012	14/08/2012	22/10/2012	26/10/2012	30/10/2012
045-CQC-PB	3223-0042	*	*	*	*	*
031-CQC-AP	3223-0043	26/05/2012	25/07/2012	31/07/2012	08/12/2012	13/12/2012
032-CQC-AP	3223-0044	26/02/2012	20/04/2012	25/04/2012	21/09/2012	26/09/2012
033-CQC-AP	3223-0045	11/08/2012	09/10/2012	17/10/2012	24/12/2012	29/12/2012
049-CQC-AP	3223-0046	17/02/2013	17/05/2013	21/05/2013	21/10/2013	26/10/2013
050-CQC-AP	3223-0047	21/01/2013	09/03/2013	12/03/2013	29/10/2013	04/11/2013
051-CQC-AP	3223-0048	09/11/2012	23/12/2012	27/12/2012	13/06/2013	19/06/2013
052-CQC-AP	3223-0049	17/02/2013	18/05/2013	21/05/2013	28/10/2013	02/11/2013
053-CQC-AP	3223-0050	04/06/2012	07/08/2012	24/08/2012	16/12/2012	22/12/2012

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 4: $Q_{pj,i}$ Survey Sample size and calculations (refer MR section D.2)

CME -Unique Identification No.	UNFCCC Ref. No.	Number of grid connected Households participating under the CPA	Average number of CFLs distributed per household	Sample size of monitoirng survey (N)	No. of CFLs of type "i" claimed to be distributed in sample households		No. of CFLs with BLY logo of type "i" found installed and operating in the sample households		Number of CFLs in service and operating under 1st monitoring survey (QPJ,i)		
					11/14W	18/20W	11/14W	18/20W	11/14W	18/20W	Total
001-CQC-AP	3223-0001	162,999	2.65	1,800	1,485	3,038	1,444	2,935	136,635	280,875	417,511
029-CQC-DL	3223-0029	87,221	2.97	1,246	1,361	2,102	1,293	1,989	62,988	182,406	245,394
030-CQC-DL	3223-0030	*	*	*	*	*	*	*	*	*	*
041-CQC-DL	3223-0031	28,791	3.89	1,246	870	3,909	840	3,760	21,959	85,875	107,834
042-CQC-DL	3223-0032	118,889	3.50	1,246	2,055	2,737	1,982	2,638	156,168	244,774	400,942
043-CQC-DL	3223-0033	*	*	*	*	*	*	*	*	*	*
036-CQC-PB	3223-0036	99,961	3.22	1,404	1,138	3,552	1,101	3,434	79,117	231,969	311,086
037-CQC-PB	3223-0037	84,795	2.98	1,404	922	2,992	914	2,972	54,900	195,661	250,561
038-CQC-PB	3223-0038	105,254	3.28	1,404	817	4,102	783	4,022	60,091	276,678	336,768
039-CQC-PB	3223-0039	113,754	3.37	1,404	1,215	3,224	1,194	3,190	78,980	299,926	378,906
040-CQC_PB	3223-0040	*	*	*	*	*	*	*	*	*	*
044-CQC-PB	3223-0041	90,231	3.72	1,404	1,852	3,502	1,821	3,465	89,526	241,968	331,494
045-CQC-PB	3223-0042	*	*	*	*	*	*	*	*	*	*
031-CQC-AP	3223-0043	55,571	3.39	1,741	1,803	4,064	1,757	3,908	51,506	130,191	181,697
032-CQC-AP	3223-0044	76,883	2.84	1,741	1,250	3,526	1,241	3,508	64,186	152,594	216,780
033-CQC-AP	3223-0045	101,305	3.05	1,741	1,631	3,648	1,599	3,572	78,654	223,634	302,288
049-CQC-AP	3223-0046	109,322	3.50	1,741	833	5,033	819	4,982	40,325	338,279	378,604
050-CQC-AP	3223-0047	81,088	3.47	1,741	1,644	4,170	1,626	4,137	67,669	211,661	279,330
051-CQC-AP	3223-0048	103,499	3.12	1,741	1,325	3,924	1,309	3,876	79,635	239,604	319,238
052-CQC-AP	3223-0049	118,031	3.45	1,741	2,780	3,658	2,753	3,604	113,874	287,420	401,295
053-CQC-AP	3223-0050	79,505	3.35	1,741	1,460	4,692	1,401	4,536	54,260	203,131	257,391

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 5: 1st Ex-post Monitoring Survey and Lamp Failure Rate (LFR) calculations (refer MR section D.2)

CME - Unique Identification No.	UNFCCC Ref. No.	Sample size of monitoring survey (N)	No. of CFLs of type "i" claimed to be distributed in sample households		No. of CFLs with BLY logo of type "i" found installed and operating in the sample households		Ex-Post Lamp Failure Rate for CFL of type "i" in year 1 calculated from 1st survey findings (LFRi,1)		Ex-ante Lamp Failure Rate for CFL of type "i" in year 1 calculated from AMSIIJ (LFRi,1)		Maximum of Ex-ante or Ex-post Lamp Failure Rate for CFL of type "i" (LFRi)	
			11/14W	18/20W	11/14W	18/20W	$LFR_{11/14,1}$	$LFR_{18/20,1}$	$LFR_{11/14,1}$	$LFR_{18/20,1}$	$LFR_{i,1(/2)}$	$LFR_{i,2(/3)}$
001-CQC-AP	3223-0001	1,800	1,485	3,038	1,444	2,935	2.76%	3.39%	6.39%	6.39%	12.79%	19.18%
029-CQC-DL	3223-0029	1,246	1,361	2,102	1,293	1,989	5.00%	5.38%	6.39%	6.39%	6.39%	12.78%
030-CQC-DL	3223-0030	*	*	*	*	*	*	*	*	*	*	*
041-CQC-DL	3223-0031	1,246	870	3,909	840	3,760	3.45%	3.81%	6.39%	6.39%	6.39%	12.78%
042-CQC-DL	3223-0032	1,246	2,055	2,737	1,982	2,638	3.55%	3.62%	6.39%	6.39%	6.39%	12.78%
043-CQC-DL	3223-0033	*	*	*	*	*	*	*	*	*	*	*
036-CQC-PB	3223-0036	1,404	1,138	3,552	1,101	3,434	3.25%	3.32%	6.39%	6.39%	6.39%	12.78%
037-CQC-PB	3223-0037	1,404	922	2,992	914	2,972	0.87%	0.67%	6.39%	6.39%	6.39%	12.78%
038-CQC-PB	3223-0038	1,404	817	4,102	783	4,022	4.16%	1.95%	6.39%	6.39%	6.39%	12.78%
039-CQC-PB	3223-0039	1,404	1,215	3,224	1,194	3,190	1.73%	1.05%	6.39%	6.39%	6.39%	-
040-CQC_PB	3223-0040	*	*	*	*	*	*	*	*	*	*	*
044-CQC-PB	3223-0041	1,404	1,852	3,502	1,821	3,465	1.67%	1.06%	6.39%	6.39%	6.39%	12.78%
045-CQC-PB	3223-0042	*	*	*	*	*	*	*	*	*	*	*
031-CQC-AP	3223-0043	1,741	1,803	4,064	1,757	3,908	2.55%	3.84%	6.39%	6.39%	6.39%	12.78%
032-CQC-AP	3223-0044	1,741	1,250	3,526	1,241	3,508	0.72%	0.51%	6.39%	6.39%	6.39%	12.78%
033-CQC-AP	3223-0045	1,741	1,631	3,648	1,599	3,572	1.96%	2.08%	6.39%	6.39%	6.39%	12.78%
049-CQC-AP	3223-0046	1,741	833	5,033	819	4,982	1.68%	1.01%	6.39%	6.39%	6.39%	-
050-CQC-AP	3223-0047	1,741	1,644	4,170	1,626	4,137	1.09%	0.79%	6.39%	6.39%	6.39%	-
051-CQC-AP	3223-0048	1,741	1,325	3,924	1,309	3,876	1.21%	1.22%	6.39%	6.39%	6.39%	-
052-CQC-AP	3223-0049	1,741	2,780	3,658	2,753	3,604	0.97%	1.48%	6.39%	6.39%	6.39%	-
053-CQC-AP	3223-0050	1,741	1,460	4,692	1,401	4,536	4.04%	3.32%	6.39%	6.39%	6.39%	12.78%

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 6: ICL Destruction data (refer MR section D.2)

CME -Unique Identification No.	UNFCCC Ref. No.	No of ICLs collected & destroyed of each wattage type "i" ($N_{Destroyed}$)		Actual CFL distributed for each wattage type "i" (11W, 14W, 18W & 20W)		Percentage of CFLs found in service and operating under 1st ex post monitoring survey (%)		Number of CFLs in service and operating under 1st monitoring survey (QPJ,i)		
		$N_{Destroyed,60}$	$N_{Destroyed,100}$	11/14W	18/20W	11/14W	18/20W	11/14W	18/20W	Total
001-CQC-AP	3223-0001	140,515	290,732	140,515	290,732	97.24%	96.61%	136,635	280,875	417,511
029-CQC-DL	3223-0029	67,185	194,306	66,301	192,769	95.00%	94.62%	62,988	182,406	245,394
030-CQC-DL	3223-0030	*	*	*	*	*	*	*	*	*
041-CQC-DL	3223-0031	22,751	89,256	22,743	89,278	96.55%	96.19%	21,959	85,875	107,834
042-CQC-DL	3223-0032	161,881	253,945	161,920	253,960	96.45%	96.38%	156,168	244,774	400,942
043-CQC-DL	3223-0033	*	*	*	*	*	*	*	*	*
036-CQC-PB	3223-0036	81,825	240,487	81,776	239,940	96.75%	96.68%	79,117	231,969	311,086
037-CQC-PB	3223-0037	55,381	197,000	55,381	196,978	99.13%	99.33%	54,900	195,661	250,561
038-CQC-PB	3223-0038	62,700	282,181	62,700	282,181	95.84%	98.05%	60,091	276,678	336,768
039-CQC-PB	3223-0039	80,369	303,123	80,369	303,123	98.27%	98.95%	78,980	299,926	378,906
040-CQC_PB	3223-0040	*	*	*	*	*	*	*	*	*
044-CQC-PB	3223-0041	91,055	244,558	91,050	244,552	98.33%	98.94%	89,526	241,968	331,494
045-CQC-PB	3223-0042	*	*	*	*	*	*	*	*	*
031-CQC-AP	3223-0043	52,854	135,388	52,854	135,388	97.45%	96.16%	51,506	130,191	181,697
032-CQC-AP	3223-0044	64,651	153,377	64,651	153,377	99.28%	99.49%	64,186	152,594	216,780
033-CQC-AP	3223-0045	80,228	228,392	80,228	228,392	98.04%	97.92%	78,654	223,634	302,288
049-CQC-AP	3223-0046	41,014	341,742	41,014	341,742	98.32%	98.99%	40,325	338,279	378,604
050-CQC-AP	3223-0047	68,418	213,349	68,418	213,349	98.91%	99.21%	67,669	211,661	279,330
051-CQC-AP	3223-0048	80,608	242,571	80,608	242,571	98.79%	98.78%	79,635	239,604	319,238
052-CQC-AP	3223-0049	114,991	291,727	114,991	291,727	99.03%	98.52%	113,874	287,420	401,295
053-CQC-AP	3223-0050	56,759	212,064	56,545	210,117	95.96%	96.68%	54,260	203,131	257,391

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 7: Net Energy Savings Calculations (refer MR section D.2)

CME - Unique Identification No.	UNFCCC Ref. No.	End date of CFL distribution	Monitoring Period start date	Monitoring period end date	Monitoring Interval	Monitoring Period Length	Effective Days in each counter of year		Transmission & Distribution losses (in %)		Energy Saving by project CFL in each year (in KWh)		Net Energy Saved by Project CFLi (in MWh)		
		dd/mm/yyyy	dd/mm/yyyy	dd/mm/yyyy	in days	in years	For Y=1(/2)	For Y=2(/3)	For 2012-13	For 2013-14	$ES_{1(/2)}$	$ES_{2(/3)}$	$NES_{1(/2)}$	$NES_{2(/3)}$	NES
001-CQC-AP	3223-0001	09/10/2011	01/01/2013	31/10/2013	304	0.83	281	23	15.88%	15.63%	68.75	5.63	28,268	2,138	30,406
029-CQC-DL	3223-0029	10/04/2012	01/01/2013	31/10/2013	304	0.83	25	53	17.41%	17.37%	25.48	52.75	6,731	12,982	19,713
030-CQC-DL	3223-0030	*	*	*	*	*	*	*	*	*	*	*	*	*	*
041-CQC-DL	3223-0031	03/07/2012	01/01/2013	31/10/2013	304	0.83	48	32	17.41%	17.37%	48.23	31.89	5,600	3,448	9,048
042-CQC-DL	3223-0032	06/01/2012	01/01/2013	31/10/2013	304	0.83	1	70	17.41%	17.37%	1.19	71.09	513	28,584	29,097
043-CQC-DL	3223-0033	*	*	*	*	*	*	*	*	*	*	*	*	*	*
036-CQC-PB	3223-0036	03/03/2012	01/01/2013	31/10/2013	304	0.83	16	63	18.00%	17.00%	15.72	62.62	5,303	19,447	24,750
037-CQC-PB	3223-0037	04/05/2012	01/01/2013	31/10/2013	304	0.83	32	47	18.00%	17.00%	32.18	47.36	8,746	11,847	20,593
038-CQC-PB	3223-0038	27/10/2012	01/01/2013	31/10/2013	304	0.83	80	1	18.00%	17.00%	79.53	1.33	29,049	447	29,496
039-CQC-PB	3223-0039	22/11/2012	01/01/2013	31/10/2013	304	0.83	80	0	18.00%	17.00%	79.89	0.00	32,830	0	32,830
040-CQC_PB	3223-0040	*	*	*	*	*	*	*	*	*	*	*	*	*	*
044-CQC-PB	3223-0041	14/08/2012	01/01/2013	31/10/2013	304	0.83	58	20	18.00%	17.00%	57.52	20.20	20,681	6,684	27,365
045-CQC-PB	3223-0042	*	*	*	*	*	*	*	*	*	*	*	*	*	*
031-CQC-AP	3223-0043	25/07/2012	01/01/2013	31/10/2013	304	0.83	52	25	15.88%	15.63%	52.19	25.20	10,025	4,497	14,522
032-CQC-AP	3223-0044	20/04/2012	01/01/2013	31/10/2013	304	0.83	28	49	15.88%	15.63%	27.55	49.29	6,314	10,494	16,807
033-CQC-AP	3223-0045	09/10/2012	01/01/2013	31/10/2013	304	0.83	72	6	15.88%	15.63%	72.21	5.91	23,077	1,755	24,832
049-CQC-AP	3223-0046	17/05/2013	01/01/2013	31/10/2013	304	0.83	46	0	15.88%	15.63%	46.14	0.00	18,467	0	18,467
050-CQC-AP	3223-0047	09/03/2013	01/01/2013	31/10/2013	304	0.83	61	0	15.88%	15.63%	61.37	0.00	18,124	0	18,124
051-CQC-AP	3223-0048	23/12/2012	01/01/2013	31/10/2013	304	0.83	78	0	15.88%	15.63%	78.49	0.00	26,490	0	26,490
052-CQC-AP	3223-0049	18/05/2013	01/01/2013	31/10/2013	304	0.83	42	0	15.88%	15.63%	42.48	0.00	18,020	0	18,020
053-CQC-AP	3223-0050	07/08/2012	01/01/2013	31/10/2013	304	0.83	57	23	15.88%	15.63%	57.25	22.58	15,578	5,709	21,288

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 8: Emission Reduction Calculations (refer MR section D.2)

CME -Unique Identification No.	UNFCCC Ref. No.	Emission Factor (tCO_2/MWH)	Energy Saving by project CFL in each year (in KWh)		Net Energy Saved by Project CFL (in MWh)			Actual Emission Reduction (tCO_2e)
		$EF_{CO2,ELEC,y}$	$ES_{1(/2)}$	$ES_{2(/3)}$	$NES_{1(/2)}$	$NES_{2(/3)}$	NES	ERy
001-CQC-AP	3223-0001	0.856	68.75	5.63	28,268	2,138	30,406	26,027
029-CQC-DL	3223-0029	0.903	25.48	52.75	6,731	12,982	19,713	17,800
030-CQC-DL	3223-0030	*	*	*	*	*	*	*
041-CQC-DL	3223-0031	0.903	48.23	31.89	5,600	3,448	9,048	8,169
042-CQC-DL	3223-0032	0.903	1.19	71.09	513	28,584	29,097	26,274
043-CQC-DL	3223-0033	*	*	*	*	*	*	*
036-CQC-PB	3223-0036	0.903	15.72	62.62	5,303	19,447	24,750	22,348
037-CQC-PB	3223-0037	0.903	32.18	47.36	8,746	11,847	20,593	18,594
038-CQC-PB	3223-0038	0.903	79.53	1.33	29,049	447	29,496	26,634
039-CQC-PB	3223-0039	0.903	79.89	0.00	32,830	0	32,830	29,645
040-CQC_PB	3223-0040	*	*	*	*	*	*	*
044-CQC-PB	3223-0041	0.903	57.52	20.20	20,681	6,684	27,365	24,709
045-CQC-PB	3223-0042	*	*	*	*	*	*	*
031-CQC-AP	3223-0043	0.865	52.19	25.20	10,025	4,497	14,522	12,561
032-CQC-AP	3223-0044	0.865	27.55	49.29	6,314	10,494	16,807	14,537
033-CQC-AP	3223-0045	0.865	72.21	5.91	23,077	1,755	24,832	21,478
049-CQC-AP	3223-0046	0.865	46.14	0.00	18,467	0	18,467	15,973
050-CQC-AP	3223-0047	0.865	61.37	0.00	18,124	0	18,124	15,677
051-CQC-AP	3223-0048	0.865	78.49	0.00	26,490	0	26,490	22,914
052-CQC-AP	3223-0049	0.865	42.48	0.00	18,020	0	18,020	15,587
053-CQC-AP	3223-0050	0.865	57.25	22.58	15,578	5,709	21,288	18,413

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 9: Comparison Actual Emission reductions and estimated value in included SSC-CPA (refer MR section E)

CME -Unique Identification No.	UNFCCC Ref. No.	Actual Emission Reduction (tCO2e)	Projected Emission Reduction as per CPA-DD	Remarks on difference between estimated and actual emission reductions
		ERy	ERCPA	
001-CQC-AP	3223-0001	26,027	35,076	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
029-CQC-DL	3223-0029	17,800	34,480	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
030-CQC-DL	3223-0030	*	*	*
041-CQC-DL	3223-0031	8,169	32,346	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
042-CQC-DL	3223-0032	26,274	35,885	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
043-CQC-DL	3223-0033	*	*	*
036-CQC-PB	3223-0036	22,348	36,744	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
037-CQC-PB	3223-0037	18,594	34,272	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
038-CQC-PB	3223-0038	26,634	41,561	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
039-CQC-PB	3223-0039	29,645	34,270	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
040-CQC_PB	3223-0040	*	*	*
044-CQC-PB	3223-0041	24,709	35,778	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
045-CQC-PB	3223-0042	*	*	*

031-CQC-AP	3223-0043	12,561	28,396	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
032-CQC-AP	3223-0044	14,537	32,485	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
033-CQC-AP	3223-0045	21,478	41,722	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
049-CQC-AP	3223-0046	15,973	20,428	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
050-CQC-AP	3223-0047	15,677	25,780	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
051-CQC-AP	3223-0048	22,914	39,139	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
052-CQC-AP	3223-0049	15,587	23,474	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion
053-CQC-AP	3223-0050	18,413	33,704	The difference is due to the less number of CFLs distributed as compared to what was assumed during CPA inclusion

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 10: Rated power of the baseline ICLs of the group of "*i*" and Rated power of the CFLs of the group of "*i*" lighting devices

UNFCCC Ref. No.	Equivalent wattage of CFLs distributed against each type "i" (60W, 100W) of baseline ICLs				Actual CFL distributed for each wattage type "i" (11W, 14W, 18W & 20W)		Weighted average of rated power of the baseline lighting devices (ICLs); $P_{i,BL}$	Weighted average of rated power of the project lighting devices (CFLs); $P_{i,PJ}$
	ICL	CFL	ICL	CFL	11W	18/20W	$P_{i,BL}$	$P_{i,PJ}$
3223-0001	60	11	100	20	140,515	290,732	86.97	17.07
3223-0029	60	11	100	18	66,301	192,769	89.72	16.20
3223-0030	*	*	*	*	*	*	*	*
3223-0031	60	11	100	18	22,743	89,278	91.88	16.58
3223-0032	60	11	100	20	161,920	253,960	84.43	16.50
3223-0033	*	*	*	*	*	*	*	*
3223-0036	60	11	100	18	81,776	239,940	89.85	16.22
3223-0037	60	11	100	18	55,381	196,978	91.22	16.46
3223-0038	60	11	100	18	62,700	282,181	92.73	16.73
3223-0039	60	11	100	18	80,369	303,123	91.62	16.53
3223-0040	*	*	*	*	*	*	*	*
3223-0041	60	11	100	18	91,050	244,552	89.15	16.10
3223-0042	*	*	*	*	*	*	*	*
3223-0043	60	11	100	18	52,854	135,388	88.77	16.03
3223-0044	60	11	100	18	64,651	153,377	88.14	15.92
3223-0045	60	11	100	18	80,228	228,392	89.60	16.18
3223-0046	60	11	100	18	41,014	341,742	95.71	17.25
3223-0047	60	11	100	18	68,418	213,349	90.29	16.30
3223-0048	60	11	100	18	80,608	242,571	90.02	16.25
3223-0049	60	11	100	18	114,991	291,727	88.69	16.02
3223-0050	60	11	100	18	56,545	210,117	91.55	16.52

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 11: $EF_{CO2,ELEC,y}$ Values used for individual CPAs: Source CDM baseline CO_2 emission database by Central Electricity Authority (CEA)

CPA Implementer	CME -Unique Identification No.	UNFCCC Ref. No.	State	Applicable version Methodology AMS I.D	Applicable version of "Tool to calculate the emission factor for an electricity system"	Regional Grid applicable to CPA area (NEWNE / Southern)	Version of CO2 baseline database of CEA	Emission Factor (tCO2/MWH)
								$EF_{CO2,ELEC,y}$
CQC	001-CQC-AP	3223-0001	AP	14	1.1	Southern	Version 4	0.856
CQC	029-CQC-DL	3223-0029	DL	16	2.1	NEWNE	Version 6	0.903
CQC	030-CQC-DL	3223-0030	*	16	2.1	*	*	*
CQC	041-CQC-DL	3223-0031	DL	16	2.1	NEWNE	Version 6	0.903
CQC	042-CQC-DL	3223-0032	DL	16	2.1	NEWNE	Version 6	0.903
CQC	043-CQC-DL	3223-0033	*	16	2.1	*	*	*
CQC	036-CQC-PB	3223-0036	PB	16	2.1	NEWNE	Version 6	0.903
CQC	037-CQC-PB	3223-0037	PB	16	2.1	NEWNE	Version 6	0.903
CQC	038-CQC-PB	3223-0038	PB	16	2.1	NEWNE	Version 6	0.903
CQC	039-CQC-PB	3223-0039	PB	16	2.1	NEWNE	Version 6	0.903
CQC	040-CQC_PB	3223-0040	*	16	2.1	*	*	*
CQC	044-CQC-PB	3223-0041	PB	16	2.1	NEWNE	Version 6	0.903
CQC	045-CQC-PB	3223-0042	*	16	2.1	*	*	*
CQC	031-CQC-AP	3223-0043	AP	16	2.2.1	Southern	Version 6	0.865
CQC	032-CQC-AP	3223-0044	AP	16	2.2.1	Southern	Version 6	0.865
CQC	033-CQC-AP	3223-0045	AP	16	2.2.1	Southern	Version 6	0.865
CQC	049-CQC-AP	3223-0046	AP	17	2.2.1	Southern	Version 6	0.865
CQC	050-CQC-AP	3223-0047	AP	17	2.2.1	Southern	Version 6	0.865
CQC	051-CQC-AP	3223-0048	AP	17	2.2.1	Southern	Version 6	0.865
CQC	052-CQC-AP	3223-0049	AP	17	2.2.1	Southern	Version 6	0.865
CQC	053-CQC-AP	3223-0050	AP	17	2.2.1	Southern	Version 6	0.865

* The cells are left blank as the respective CPAs are not implemented during this monitoring period.

Annexure 12: ICL destruction information

Implementer	CME -Unique Identification No.	UNFCCC Ref. No.	Date of destruction of ICLs	ICL Destruction Ageny	No of ICLs collected & destroyed of each wattage type "i" ($N_{Destroyed}$)	
					$N_{Destroyed,60}$	$N_{Destroyed,100}$
CQC	001-CQC-AP	3223-0001	21/10/2011	GEMS	140,515	290,732
CQC	029-CQC-DL	3223-0029	03/06/2012	IPCA	67,185	194,306
CQC	030-CQC-DL	3223-0030	*	*	*	*
CQC	041-CQC-DL	3223-0031	13/07/2012	IPCA	22,751	89,256
CQC	042-CQC-DL	3223-0032	25/01/2012	IPCA	161,881	253,945
CQC	043-CQC-DL	3223-0033	*	*	*	*
CQC	036-CQC-PB	3223-0036	19/03/2012	IPCA	81,825	240,487
CQC	037-CQC-PB	3223-0037	23/05/2012	IPCA	55,381	197,000
CQC	038-CQC-PB	3223-0038	27/11/2012	IPCA	62,700	282,181
CQC	039-CQC-PB	3223-0039	27/11/2012	IPCA	80,369	303,123
CQC	040-CQC_PB	3223-0040	*	*	*	*
CQC	044-CQC-PB	3223-0041	22/10/2012	IPCA	91,055	244,558
CQC	045-CQC-PB	3223-0042	*	*	*	*
CQC	031-CQC-AP	3223-0043	31/07/2012	GEMS	52,854	135,388
CQC	032-CQC-AP	3223-0044	25/04/2012	GEMS	64,651	153,377
CQC	033-CQC-AP	3223-0045	17/10/2012	GEMS	80,228	228,392
CQC	049-CQC-AP	3223-0046	21/05/2013	GEMS	41,014	341,742
CQC	050-CQC-AP	3223-0047	12/03/2013	GEMS	68,418	213,349
CQC	051-CQC-AP	3223-0048	27/12/2012	GEMS	80,608	242,571
CQC	052-CQC-AP	3223-0049	21/05/2013	GEMS	114,991	291,727
CQC	053-CQC-AP	3223-0050	24/08/2012	GEMS	56,759	212,064
***The cells are left blank as the respective CPAs are not implemented during this monitoring period.**						

Document information

Version	*Date*	*Description*
04.0	25 June 2014	Revisions to: • Include the Attachment: Instructions for filling out the monitoring report form (these instructions supersede the "Guideline: Completing the monitoring report form" (Version 04.0)); • Include provisions related to standardized baselines; • Add contact information on a responsible person(s)/ entity(ies) for completing the CDM-MR-FORM in A.6 and Appendix 1; • Change the reference number from *F-CDM-MR* to *CDM-MR-FORM*; • Editorial improvement.
03.2	5 November 2013	Editorial revision to correct table in page 1.
03.1	2 January 2013	Editorial revision to correct table in section E.5.
03.0	3 December 2012	Revision required to introduce a provision on reporting actual emission reductions or net anthropogenic GHG removals by sinks for the period up to 31 December 2012 and the period from 1 January 2013 onwards (EB70, Annex 11).
02.0	13 March 2012	Revision required to ensure consistency with the "Guidelines for completing the monitoring report form" (EB 66, Annex 20).
01	28 May 2010	EB 54, Annex 34. Initial adoption.

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