Reference: Request for registration of the proposed Programme of Activities titled "Manufacture and Distribution of CFLs in India" - Ref No. 6694
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Bureau Veritas Certification has performed the validation of the proposed Programme of Activity (Ref. No. 6694) titled “Manufacture and Distribution of CFLs in India”. Subsequently, Bureau Veritas Certification has requested for registration, which was acknowledged by CDM team, UNFCCC secretariat through email dated 13/07/2012. The registration request submission was concluded to be complete on 22/08/2012. The information and reporting check was scheduled to complete by 14/09/2012. Subsequently, we have received an information mail stating the incomplete request for registration of above said PoA. Bureau Veritas Certification would like to put forward its clarifications on the incompleteness issues as below:

Incompleteness issue 1

Scope: The PP/DOE are requested to describe in detail the monitoring plan as per EB 48 Annex 60 paragraph 10 (a).
Issue: The PP is requested to provide clarity on how it shall monitor and identify the CFLs that are distributed free and included in the CPAs.

Project participant’s response: The free distributed CFL included in CPA can be identified based on the unique identification number given to each CFL as specified in the PoA DD pg no 9, Section A.4.2.2 (*Eligibility criteria as per “Standard For Demonstration Of Additionality, Development Of Eligibility Criteria And Application Of Multiple Methodologies For Programme Of Activities”, Annex-3 of EB 65*). Rest of the CFLs, which are not distributed free of cost under the proposed PoA, will not have any such unique identification on them. Thus, the CFLs distributed free under the PoA can be identified and monitored using unique identification number on each of the CFLs.

Validation team’s response: As explained above by the PP, the validation team confirmed that in the same premises i.e. households, offices, shops and industries included in the CPAs the identification of project CFL i.e. freely distributed CFLs can be done by means of unique identification provided on the CFL for the project CFLs. The identification of project CFLs is as explained and validated in Section 3.6.4 Eligibility Criteria for CPA to be included in PoA.

The PP also explained that in a house/shop/user's end there might be a combination of CFLs of the same CME. This can be 'free' distributed and/or 'sold' CFLs. However, they can be monitored by identifying by means of unique identification number provided on 'free' distributed CFL. The 'sold' CFL would not have such unique identification at all. The unique identification of project equipment is explained in 'eligibility criteria' of the PoA and CPA validation report. For the 'sold' CFLs, Scenario 2 or Scenario 3 as explained in the additionality section of PoA DD and PoA Validation Report is applicable. There is no separate monitoring required for 'sold' CFLs as scenario 2 and 3 considers 100% sale of CFLs. Even with this, the project is additional.

<u>Incompleteness issue 2</u>

Scope: The DOE is requested to include description of the process taken to validate the accuracy and completeness of the project description in VR as per VVM v1.2 paragraph 64(a).

Issue: The DOE is requested to provide more information on whether the households, offices, shops and industries included in the CPAs will receive only free CFLs from the CME, or a combination of free lamps and lamps that are sold to them, by the same CME.

Project participant's response: The CFLs distributed free of cost by the project participant in the households, offices, shops and industries can be identified by unique identification number given to each CFL as specified in the PoA DD pg no 9, Section A.4.2.2 (*Eligibility criteria as per "Standard For Demonstration Of Additionality, Development Of Eligibility Criteria And Application Of Multiple Methodologies For Programme Of Activities", Annex-3 of EB 65*). The other CFLs which are sold by the project participant would not have unique identification number as that on the 'free distributed CFLs included in CPA". The proposed PoA only includes the CFLs, which are distributed free of cost. The CFLs that may be received by the households, offices, shops and industries from CME in sale basis will not be considered under proposed PoA. Thus, the house hold/shop/office/ commercial connections may have both 'project' and non-project' CFLS, but project CFLs can be identified by means of unique identification.

Validation team's response: As explained above by the PP; the households, offices, shops and industries included in the CPAs will not only receive only free CFLs from the CME, but a combination of free lamps and lamps that are sold to them, by the CME. The "free" and "sold" CFLs can be identified by means of unique identification number provided on the free CFLs as described in Section A.4.2.2 of PoA DD (*Eligibility criteria as per "Standard For Demonstration Of Additionality, Development Of Eligibility Criteria And Application Of Multiple Methodologies For Programme Of Activities", Annex-3 of EB 65).* The sold CFLs would not

have such unique identification mark on the CFL. Hence, identification of the freely distributed CFLs included in CPA and CFLs sold by CME and not included in CPA could be done accurately without any misstatement. Cross verification of "free" distributed CFLs can be made available by CME and can be verified by the DOE as validated in Section 3.6.4 Eligibility Criteria for CPA to be included in PoA" criteria "m".

As explained in the Validation Report of the PoA, if the CME is selling the CFLs manufactured from the same manufacturing plant, Scenario 2 and Scenario 3 of "Section 3.7.3 Additionality" is applicable. It may be noted here that even by applying either of the Scenario 2 and Scenario 3 it is found that the PoA is additional. Also, the CME will not claim any emission reduction on the CFLs which are sold outside of the PoA.

Incompleteness issue 3

Scope: The DOE is requested to state if the baseline methodology is correctly applied to calculate project/baseline emissions, leakage and emission reductions as per VVM v1.2 paragraph 92(d).

Issue: AMS II.C v.13 requires that if the energy displaced is electricity, the emission baseline be determined using one of the two options, as provided in paragraph 6. The PoA has applied option 1, in addition, it includes baseline emissions from consumption of propane, diesel generator sets and emissions occurring due to power consumption in the manufacturing process of incandescent lamps. Likewise, project emissions from propane consumption, diesel and power consumption during manufacturing of CFLs, have been included. The DOE is requested to clarify how it validated the inclusion of baseline and project emission sources that are not included in the methodology, and why the DOE did not consider the inclusion as a deviation from the methodology.

Project participant's response: As per the methodology, the energy efficiency measures can be applied to lamps, ballasts, refrigerators, motors, fans, air conditioners, pumping Systems etc. at many sites. As per the revised emission reduction calculations, the project emissions due to consumption of power and propane for CFL manufacturing are now removed from the baseline emissions and project emissions. The actual baseline emissions and project emissions occurring at user's end due to use of IL and CFL respectively are only considered in accordance with the applied baseline methodology.

It may be noted that during the course of validation, the validation team raised a corrective action request (CAR-13) as the project participant did not initially include emissions due to use of electricity for manufacturing ILs and CFLs and use of propane in baseline and project scenario. The project participant explained that methodology does not consider emissions from such sources. Instead, the PP has considered the

baseline and project emissions on account of project equipments only i.e. CFLs in line with methodology. However, in line with CAR-13 raised by validation team, the PP has, in order to check the emissions due to such sources, calculated CO_2 emissions due to these sources, which are less than 1% (approximately 0.77% of total emission reduction as per equation (1) and (5) of the methodology in case of first CPA). Hence, this can be neglected. This has been explained in revised emission reduction sheet..

Validation team's response: During course of validation, the validation team raised Corrective Action Request (CAR-13) towards consideration of baseline and project emissions due to manufacturing activities. In response to the CAR-13, the project participant included the baseline and project emissions from consumption of propane, diesel generator sets and emissions occurring due to power consumption in the manufacturing processes. The validation team validated the baseline and project emissions as described in Section 3.6.5 of the POA Validation Report, version 02 and Section 3.9 of the CPA Validation Report, version 02[1]. This was carried out following Para 92 and 93 of the VVM, version 01.2. This validation included review of third party documents approved by nationalized bank and personal interviews of the third parties.

However, the validation team would like to draw attention that the emission reduction in the proposed PoA is mainly due to the "use of CFLs" at the end users in lieu of the "Incandescent lamps" that would have been used in the baseline scenario. Hence, emission reduction is targeted at the user end by use of project equipments i.e. CFLs. The validation team also referred applied methodology AMS II C, version 13, applicability condition 3 which states "This methodology credits emission reductions only due to the reduction in electricity consumption from use of more efficient equipment/appliances". Having reviewed this, the validation team accepts that the use of other fossil fuels was inadvertently included in the PoA DD and CPA DD (though conservative) and their validation reports, which are now removed and revised documents are submitted. The validation team however, also confirmed that by inclusion of other GHG sources, which were considered earlier, contribute to only about 0.77% of the emission reductions in first real case CPA, which is less than 1% of the total emission reduction, hence, not material. As per the requirement of VVM Para 77, *"The validation report shall contain information regarding greenhouse gas emissions occurring within the proposed CDM project activity boundary as a result of the implementation of the proposed CDM project activity which are expected to contribute more than 1% of the overall expected average annual emissions reductions, which are not addressed by the applied methodology.* The same is now clearly described in the Section 3.6.5 and 3.9 of revised PoA Validation Report and revised

[1] These validation reports were submitted along with Request for Registration in July 2012. The revised validation reports, version 03 are being submitted for kind consideration along with these responses.

CPA Validation Report. Hence, the validation team reaffirms that the inclusion of other sources are not required, and emission reduction is considered only in line with the approved methodology, hence, no deviation to the methodology is sought/required.

<u>Incompleteness issue 4</u>

Scope: The DOE is requested to include information on how it has validated the input values to the financial calculations as per VVM v 1.2 paragraph 114 (a).

Issue: The DOE is requested to provide further information on how it validated the application of an escalation to the cost components in the IRR calculation of manufacturing CFL, e.g. 5% for salaries and wages and 20% for repairs and maintenance, while no escalation was considered for the same cost components in the IRR analysis for manufacturing ILs.

Project participant's response: The revised IRR calculation sheet is corrected to reflect the escalation in salaries and wages (5%) and Repairs and Maintenance (20%) in both the baseline and project scenario with sources included therein. With these, the IRR value in case of baseline and project scenario is 40.57% and 23.97% respectively. The PP has also revised sensitivity analysis. The revised financial analysis still shows that the project is additional.

Validation team's response: The validation team found that by not including the escalation on salaries and wedges, the financial calculations were conservative. However, in order to have "correct" financial calculations, which are comparable with baseline scenario, the PP has now included the escalation in salaries and wages (5%) and Repairs and Maintenance (20%) in both baseline and project scenario with the source as Ms. B. Nagabhushan's pre-feasibility report. The validation team accepts that the same were erroneously left out and not considered in the IRR calculations, which is now corrected. The detailed validation of these parameters in baseline scenario has been described in revised POA Validation Report, version 03. The validation team finds that even with this inclusion, all the CPAs which will be part of proposed PoA will not be the most economically and financially viable alternative to the project participant.