CDM-EB65-A04-STAN

# Standard

# Clean development mechanism validation and verification standard

Version 03.0



**United Nations** Framework Convention on Climate Change

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## 1. Introduction

#### 1.1. Background

- 1. The Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (hereinafter referred to as the CMP), at its first session, established the basis of the regulatory framework for the clean development mechanism (hereinafter referred to as the CDM) to implement Article 12 of the Kyoto Protocol through the following:
  - (a) Annex to decision 3/CMP.1: Modalities and procedures for a clean development mechanism;
  - (b) Annexes to decision 4/CMP.1, including annex II: Simplified modalities and procedures for small-scale clean development mechanism project activities;
  - (c) Annex to decision 5/CMP.1: Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism;
  - Annex to decision 6/CMP.1: Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism;
  - (e) Decision 7/CMP.1.
- 2. The CMP revised some of the provisions in these decisions through new decisions in subsequent sessions.
- 3. Pursuant to its mandate from the CMP to operationalize the CDM, the Executive Board of the clean development mechanism (hereinafter referred to as the Board) has adopted various standards (including methodologies and tools), procedures, guidelines, clarifications and forms and revised them with a view to improving the CDM process.
- 4. At its fifty-ninth meeting, the Board adopted the "CDM management plan 2011", whose objective 3(b) is: "Clarification, consolidation and enhancement of the consistencies of all the existing regulatory decisions of the board that relate to validation and verification of project activities." One deliverable under this objective is to "develop a validation and verification and verification and verification and compared the existing regulatory decisions of the board that relate to validation and verification of project activities."

#### 1.2. Objectives

- 5. The objectives of the "Clean development mechanism validation and verification standard" (hereinafter referred to as this Standard) are to:
  - (a) Enhance consistency and clarity of minimum requirements for all types of CDM validation and verification activities;
  - (b) Improve the quality and consistency in the preparation, execution, and the reporting of validation and verification activities;
  - (c) Enhance the overall efficiency and integrity in the CDM.

## 2. Scope and applicability

#### 2.1. General

6. This Standard is applicable to designated operational entities (DOEs) that are under contractual arrangements with project participants or coordinating/managing entities to validate and/or verify any CDM project activities or programme of activities (PoA) based on CDM methodologies previously approved by the Board.

#### 2.2. Application

- 7. Principles in chapter 5 and requirements in chapters 6, 7 and 9 apply to any type of CDM project activities and as applicable, to CDM PoAs. In addition, requirements in chapters 8 and 10 specifically apply to small-scale (SSC) project activities, large-scale afforestation/reforestation (A/R) project activities, small-scale A/R project activities and PoAs.
- 8. The document information section at the end of this Standard lists all documents that are superseded by this Standard, the "Clean development project standard" and the "Clean development mechanism project cycle procedure".

## 3. Normative references

- 9. The following referenced documents are indispensable for the application of this Standard:
  - (a) "Clean development mechanism Accreditation standard for operational entities";
  - (b) "Clean development mechanism project cycle procedure" (hereinafter referred to as the Project cycle procedure);
  - (c) "Clean development mechanism project standard" (hereinafter referred to as the Project standard);
  - (d) "Glossary of CDM terms".

## 4. Terms and definitions

- 10. In addition to the definitions contained in the Glossary of CDM terms, the following terms apply in this Standard:
  - (a) Shall" is used to indicate requirements to be followed;
  - (b) "Should" is used to indicate that among several possibilities, one course of action is recommended as particularly suitable;
  - (c) "May" is used to indicate what is permitted..

## 5. Principles for validation and verification

11. The following principles<sup>1</sup> guide the preparation, execution, and reporting of validation and verification activities.

#### 5.1. Independence

12. Remain independent of the activity being validated or verified, and free from bias and conflict of interest. Maintain objectivity throughout the validation or verification to ensure that the findings and conclusions will be based on objective evidence generated during the validation or verification.

#### 5.2. Ethical conduct

13. Demonstrate ethical conduct through trust, integrity, confidentiality and discretion throughout the validation or verification process.

#### 5.3. Fair presentation

14. Reflect truthfully and accurately validation or verification activities, findings, conclusions and reports. Report significant obstacles encountered during the validation or verification process, as well as unresolved, diverging opinions among validators or verifiers, the responsible party (e.g. the secretariat/the Board) and the client (e.g. project participants).

#### 5.4. Due professional care

15. Exercise due professional care and judgment in accordance with the importance of the task performed and the confidence placed by clients and intended users. Have the necessary skills and competences to undertake the validation or verification.

## 6. General validation and verification requirements

- 16. The DOE shall select a competent team to perform the validation and verification of the project activity.
- 17. In carrying out its validation and verification work, the DOE shall:
  - (a) Follow this Standard and integrate its provisions into the DOE's own quality management systems;
  - (b) Apply the most recent decisions and guidance provided by the Board;
  - (c) Determine whether each project activity meets all applicable CDM requirements, including those specified in the Project standard, relevant methodologies, tools and guidelines;

<sup>&</sup>lt;sup>1</sup> This text is taken from ISO 14064-3:2006 - Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions and is reproduced with the permission of the International Organization for Standardization, ISO. This Standard can be obtained from any ISO member from the website of the ISO Central Secretariat at the following address: <u>www.iso.org</u>. Copyright remains with ISO.

- (d) Assess the accuracy, conservativeness, relevance, completeness, consistency, and transparency of the information provided by project participants;<sup>2</sup>
- (e) Determine whether information provided by the project participants is reliable and credible;<sup>3</sup>
- (f) Apply consistent validation/verification criteria:
  - (i) To the requirements of the applicable approved methodology throughout the crediting period(s);
  - (ii) Among project activities with similar characteristics such as a similar application of the approved methodology, use of technology, time period or region;
  - (iii) To expert judgments, over time and among projects.
- (g) Base its findings and conclusions on objective evidence and conduct all validation and verification activities in accordance with CDM rules and procedures;
- (h) Not omit evidence that is likely to alter the validation and verification opinion;
- (i) Present information in the validation and verification reports in a factual, neutral and coherent manner and document all assumptions, provide references to background material, and identify changes made to documentation;
- (j) Safeguard the confidentiality of all information obtained or created during validation or verification.

#### 6.1. Sampling

#### 6.1.1. Application of sampling to validation and verification work

18. Where the DOE applies sampling as a part of its validation and verification activities, the DOE shall sample in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities".

### 7. General validation requirements

#### 7.1. Objectives of CDM validation

19. The DOE shall conduct a thorough and independent assessment of proposed project activities against the applicable CDM requirements.

<sup>&</sup>lt;sup>2</sup> Principles for each can be found in the Project Standard.

<sup>&</sup>lt;sup>3</sup> Information is credible if it is authentic and is able to inspire belief or trust, and the willingness of persons to accept the quality of evidence. Information is reliable if the quality of evidence is accurate and credible and able to yield the same results on a repeated basis.

#### 7.2. Validation approach

- 20. In carrying out its validation work, the DOE shall:
  - Determine whether the proposed project activity complies with the requirements of paragraph 37 of the CDM M&Ps, the applicability conditions of the selected methodology and guidance issued by the Board;
  - (b) Assess the claims and assumptions made in the project design document (PDD). The evidence used in this assessment shall not be limited to that provided by the project participants.

#### 7.3. Means of validation

- 21. The DOE shall assess the information provided by the project participants.
- 22. In assessing information, the DOE shall apply the means of validation specified throughout this Standard and where appropriate standard auditing techniques, including, but not limited to:
  - (a) Document review, involving:
    - (i) A review of data and information;
    - (ii) Cross checks between information provided in the PDD and information from sources other than those used, if available, the DOE's sectoral or local expertise and, if necessary, independent background investigations.
  - (b) Follow-up actions (e.g. on-site visit and telephone or email interviews), including:
    - (i) Interviews with relevant stakeholders in the host country, personnel with knowledge of the project design and implementation;
    - (ii) Cross checks between information provided by interviewed personnel (i.e. by checking sources or other interviews) to ensure that no relevant information has been omitted.
  - (c) Reference to available information relating to projects or technologies similar to the proposed project activity under validation;
  - (d) Review, based on the approved methodology being applied, of the appropriateness of formulae and accuracy of calculations.
- 23. Where no specific means of validation is specified, the DOE shall apply the standard auditing techniques described in paragraph 22 above.

#### 7.3.1. Corrective action requests, clarification requests, and forward action requests

24. During the validation of a project activity, if the DOE identifies issues that require further elaboration, research or expansion in order to determine whether the project activity meets the CDM requirements, and can achieve credible emission reductions, the DOE shall ensure that these issues are accurately identified, formulated, discussed and concluded in the validation report.

- 25. The DOE shall raise a corrective action request (CAR) if one of the following situations occurs:
  - The project participants have made mistakes that will influence the ability of the project activity to achieve real, measurable, verifiable and additional emission reductions;
  - (b) The applicable CDM requirements have not been met;
  - (c) There is a risk that emission reductions cannot be monitored or calculated.
- 26. The DOE shall raise a clarification request (CL) if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.
- 27. The DOE shall raise a forward action request (FAR) during validation to identify issues related to project implementation that require review during the first verification of the project activity. The DOE shall not raise a FAR that relates to the CDM requirements for registration.
- 28. The DOE shall resolve or "close out" CARs and CLs only if the project participants modify the project design, rectify the PDD or provide additional explanations or evidence that satisfy the DOE's concerns. If this is not done, the DOE shall not recommend the project activity for registration to the Board.
- 29. The DOE shall report on all CARs, CLs and FARs in its validation report. This reporting shall explain the issues raised, the responses provided by the project participants, the means of validation of such responses and references to any resulting changes in the PDD or supporting annexes.

#### 7.4. General reporting requirements

- 30. The DOE shall report the results of its assessment in a validation report.
- 31. The validation report shall include a positive validation opinion only if the proposed project activity complies with the applicable CDM requirements.
- 32. The DOE shall submit this validation report, along with the supporting documents, to the Board as part of the request for registration of a project activity as a proposed project activity.
- 33. If the validation report includes a negative validation opinion, the DOE shall provide the project participants with the report and inform the Board of the outcome.

#### 7.5. Global stakeholder consultation

- 34. The DOE shall acknowledge receipt of and take into account all comments on the PDD of the proposed project activity submitted in accordance with the Project cycle procedure.
- 35. The DOE shall take into account all the comments received during the validation of the proposed project activity.
- 36. If comments indicate that the proposed project activity does not comply with the CDM requirements and are not substantiated, then the DOE shall request further clarification

from the entity providing the comment. However, the DOE is not required to enter into a dialogue with Parties, stakeholders or NGOs, that comment on the CDM requirements. If no additional information or substantiation is provided in response to a request for clarification, the DOE shall proceed to assess the comments as originally provided.

#### 7.5.1. Reporting requirement

37. The DOE shall report the details of the actions taken to take due account of the comments received during the validation process.

#### 7.6. Approval

#### 7.6.1. Validation requirement

38. The DOE shall determine whether the designated national authority (DNA) of each Party indicated as being involved in the proposed CDM project activity in the PDD has provided a written letter of approval.

#### 7.6.2. Means of validation

- 39. The DOE shall determine whether each letter confirms that:
  - (a) The Party is a Party to the Kyoto Protocol;
  - (b) Participation is voluntary;
  - (c) In the case of the host Party, the proposed project activity contributes to the sustainable development of the country;
  - (d) It refers to the precise proposed project activity title in the PDD being submitted for registration.
- 40. The DOE shall determine whether the letter(s) of approval is unconditional with respect to 39 (a) to (d) above.
- 41. The DOE shall determine whether the letter(s) of approval has been issued by the respective Party's DNA and is valid for the proposed project activity under validation.<sup>4</sup>
- 42. If the DOE doubts the authenticity of the letter of approval, the DOE shall verify with the DNA that the letter of approval is authentic.

#### 7.6.3. Reporting requirements

- 43. The DOE shall, for each Party involved:
  - (a) Indicate whether a letter of approval has been received, referencing the letter itself and any supporting documentation;
  - (b) Indicate whether the DOE received this letter from the project participants or directly from the DNA;

<sup>&</sup>lt;sup>4</sup> A list of DNAs is available on the UNFCCC CDM website.

- (c) Indicate the means of validation employed to assess the authenticity if paragraph 42 above applies;
- (d) Include a statement as to whether the letters are in accordance with paragraphs 39–42 above.
- 44. If a letter of approval refers to a specific version of the validation report and the DOE therefore is unable to submit this precise version of the validation report, the DOE shall select one of the following options:
  - (a) Insert a statement in the validation report to indicate that the final letter of approval has not been received and that a request for registration will not be submitted until it has been received; or
  - (b) Update the validation report to reflect the receipt of the letter of approval. If this option is selected, the validation report major number shall remain unchanged and the minor number shall be increased. The DOE shall confirm in the validation report that this is the only change that has been made to the version referred to in the letter of approval.

#### 7.7. Authorization

#### 7.7.1. Validation requirement

45. The DOE shall determine whether each project participant has been authorized by at least one Party involved in a letter of approval.

#### 7.7.2. Means of validation

- 46. The DOE shall confirm that the project participants are listed in tabular form in the PDD and that this information is consistent with the information provided in the section that contains the contact information for project participants.
- 47. The DOE shall confirm that no entities other than those authorized as project participants are included in these sections of the PDD.
- 48. The DOE shall confirm that the approval of participation has been issued from the relevant DNA and if in doubt shall verify with the DNA that the approval of participation is valid for the proposed CDM project participants.

#### 7.7.3. Reporting requirements

- 49. The validation report shall, for each project participant:
  - (a) Indicate whether the participation has been authorized by a Party to the Kyoto Protocol;
  - (b) Describe the means of validation employed to support the conclusions.

#### 7.8. Contribution to sustainable development

#### 7.8.1. Validation requirement

50. The DOE shall confirm that the DNA has considered whether the proposed CDM project activity assists the host Party in achieving sustainable development.

#### 7.8.2. Means of validation

51. The DOE shall determine whether the letter of approval by the DNA of the host Party confirms the contribution of the proposed CDM project activity to the sustainable development of the host Party.

#### 7.8.3. Reporting requirements

52. The DOE shall state whether the host Party's DNA has confirmed the contribution of the project to the sustainable development of the host Party. This may be reported together with the DOE's assessment of the validity of the host Party's approval.

#### 7.9. Modalities of communications

#### 7.9.1. General

#### 7.9.1.1. Validation requirement

53. The DOE shall validate the corporate identity of all project participants and focal points included in the Modalities of Communication (MoC) statement, as well as the personal identities, including specimen signatures and employment status, of their authorized signatories.

#### 7.9.1.2. Means of validation

- 54. The DOE shall validate paragraph 53 above through:
  - (a) Directly checking evidence for corporate, personal identity and other relevant documentation;
  - (b) Notarized documentation; or
  - (c) Written confirmation from the project participant or the coordinating/managing entity that submits to it the MoC statement that all corporate and personal details, including specimen signatures, are valid and accurate.
- 55. When the DOE validates identity by applying paragraph 54 (c) above, the DOE shall ensure that the MoC statement is received from a project participant with whom the DOE has a contractual relationship. For CDM PoAs, the DOE shall ensure that the MoC statement is received from the coordinating/managing entity.
- 56. When the DOE validates identity by applying paragraph 54 (c) above, the DOE shall ensure that the official who submits the MoC statement to the DOE and the official who signed the written confirmation (if a different person) is/are duly authorized to do so on behalf of the respective project participant or coordinating/managing entity.

57. If the DOE is unable to validate the requirements by applying paragraph 54 (a), (b) or (c) above then the DOE may perform further validation activities in order to confirm that the corporate and personal details, employment status and specimen signatures included in the MoC statement are valid and accurate and comply with the requirements of this section.

#### 7.9.1.3. Reporting requirements

58. The DOE shall confirm in writing that it has performed due diligence on the MoC statement in accordance with the requirements established in this standard.

#### 7.9.2. Modalities of communication statement

#### 7.9.2.1. Validation requirement

59. The DOE shall validate that the MoC statement has been correctly completed and duly authorized.

#### 7.9.2.2. Means of validation

- 60. The DOE shall check that:
  - (a) The latest version of the form "Modalities of Communication statement" (F-CDM-MOC) has been used;
  - (b) The information required as per the F-CDM-MOC, including its annex 1, is correctly completed;
  - (c) The project participant's authorized signatories signing the F-CDM-MOC correspond to the project participant's authorized signatories included in F-CDM-MOC, annex 1.

#### 7.9.2.3. Reporting requirements

61. The DOE shall confirm in writing that the MoC statement complies with all relevant forms and requirements.

#### 7.10. Project design document

#### 7.10.1. Validation requirement

62. The DOE shall determine whether the PDD was completed using the latest version of the PDD form appropriate to the type of project activity.<sup>5</sup>

#### 7.10.2. Reporting requirements

63. The DOE shall provide a statement regarding the compliance of the PDD with relevant forms and guidance.

<sup>&</sup>lt;sup>5</sup> CDM-PDD, CDM-SSC-PDD, CDM-AR-PDD, CDM-SSC-AR-PDD, CDM-PoA-DD, CDM-CPA-DD.

#### 7.11. Description of project activity

#### 7.11.1. Validation requirement

64. The DOE shall determine whether the description of the proposed project activity in the PDD is accurate, complete, and provides an understanding of the proposed CDM project activity.

#### 7.11.2. Means of validation

- 65. Unless other means are specified in the methodology, the DOE shall conduct a physical site inspection for the following proposed project activities in existing facilities or utilizing existing equipments:
  - (a) Large-scale projects;
  - (b) Non-bundled small-scale projects with emission reductions exceeding 15,000 tonnes per year;
  - (c) Bundled small-scale projects, each with emission reductions not exceeding 15,000 tonnes per year; in such cases the number of physical site visits may, however, be based on sampling, if the sampling size is justified through statistical analysis.
- 66. For other individual proposed small-scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, the DOE should conduct a physical site visit as appropriate. For proposed CDM project activities for which the DOE does not undertake a physical site inspection this shall be justified. The DOE may apply a sampling approach in accordance with the "Standard for sampling and surveys for CDM project activities".
- 67. For all other proposed CDM project activities not referred to in paragraphs 65–66, the DOE shall undertake the validation of project description by reviewing available designs and feasibility studies and should conduct comparison analysis with equivalent projects, as appropriate.
- 68. If the proposed CDM project activity involves the alteration of an existing installation or process, the DOE shall ensure that the project description states the differences resulting from the project activity compared to the pre-project situation.

#### 7.11.3. Reporting requirements

- 69. The DOE shall:
  - (a) Describe the process undertaken to validate the accuracy and completeness of the project description;
  - (b) Provide an opinion on the accuracy and completeness of the project description;
  - (c) Provide a justification if it has not conducted a site visit.

#### 7.12. Application of the selected baseline and monitoring methodology

#### 7.12.1. General requirements

- 70. The DOE shall determine whether the baseline and monitoring methodologies selected by the project participants are the valid versions of those approved by the Board.
- 71. The DOE shall apply specific guidance and/or clarifications provided by the Board with respect to the approved methodology and any applicable tools.
- 72. The DOE shall determine whether the selected methodology applies to the project activity and was correctly applied with respect to the following:
  - (a) Project boundary;
  - (b) Baseline identification;
  - (c) Algorithms and/or formulae used to determine emission reductions;
  - (d) Additionality;
  - (e) Monitoring methodology.

## 7.12.2. Applicability of the selected baseline and monitoring methodology to the project activity

#### 7.12.2.1. Validation requirement

73. The DOE shall validate that the selected baseline and monitoring methodology is applicable to the project activity and that the selected version is valid at the time of submission of the proposed project activity for registration.

#### 7.12.2.2. Means of validation

- 74. The DOE shall determine whether the methodology is correctly quoted and applied by comparing it with the actual text of the applicable version of the methodology.<sup>6</sup>
- 75. If the PDD of a proposed project activity is based on a previous version of a methodology and was published for global stakeholder consultation but was not submitted for registration within the grace period, the DOE shall request the project participants to provide a revised PDD in accordance with the Project cycle procedure.
- 76. The DOE shall determine whether the project activity meets each of the applicability conditions of the approved methodology or any tool or other methodology component referred to therein. This shall be done by validating the documentation referred to in the PDD and by verifying that the documentation content is correctly quoted and interpreted in the PDD. If the DOE, based on local and sectoral knowledge, is aware that comparable information is available from credible sources other than that used in the PDD, then the DOE shall cross-check the PDD against other sources to confirm that the project activity meets the applicability conditions of the methodology.

<sup>&</sup>lt;sup>6</sup> A selected approved methodology applies to the project activity if the applicability conditions of the methodology are met.

#### 7.12.2.3. Reporting requirements

77. For each applicability condition listed in the approved methodology selected, the DOE shall describe the steps taken to assess the relevant information contained in the PDD against these criteria. The DOE shall provide a validation opinion regarding the applicability of the selected methodology to the proposed CDM project activity.

#### 7.12.3. Deviation from an approved methodology

- 78. If project participants requested a deviation before the publication of the PDD when applying an approved methodology to a proposed project activity, or if a DOE finds at validation that project participants deviated from an approved methodology and the DOE considers that the deviation was due to a project-specific issue implying that a revision of the methodology would not be required to address the issue, it may seek guidance on the acceptability of the deviation from the Board prior to requesting registration of the proposed project activity.<sup>7</sup>
- 79. The DOE shall submit to the Board an assessment of the case including demonstration that the deviation does not require revision of an approved methodology, and shall include a description of the impact of the deviation on the emission reductions from the project activity.
- 80. Alternatively, if the DOE considers that a revision of the methodology would be required to address the project situation then the DOE shall request the project participants to submit a request for revision in accordance with the Project cycle procedure.

#### 7.12.4. Clarification on the applicability of an approved methodology

81. If the DOE cannot make a determination regarding the applicability of the selected methodology to the proposed project activity, then the DOE shall request clarification of

<sup>&</sup>lt;sup>7</sup> Examples of project-specific issues may include, but are not limited to, the following:

<sup>1.</sup> The methodology requires measurements using instrumentation of certain specifications or using a certain method. The project proponents of the proposed project activity identify a difficulty in acquiring the specified instrumentation or difficulty in implementing the measurement method; however, they can achieve comparable accuracy of measured parameters using an alternative instrumentation or measurement method;

<sup>2.</sup> A proposed project activity does not have access to the data sources specified by the methodology for a certain parameter; a different source of data can be accessed by the project activity to estimate the parameter with equal reliability and accuracy;

<sup>3.</sup> A minor deviation is sought for a project-specific situation, which is well-justified and conservative. For example: a methodology requires limiting production in the project scenario between +/- 5% of rated capacity, if the historical baseline is to be applied. Due to government restrictions, the project proponents never operated the plant at its rated capacity but at a capacity which is much below its rated capacity (20% below the rated capacity). A deviation can be presented specifying conservative approaches to calculate emission reduction in such a project-specific case;

<sup>4.</sup> A conservative estimation technique or default factor suggested addressing uncertainties related to project-specific situations, which are not addressed in the methodology. For example, a well-justified conservative uncertainty factor proposed to be used in equations of baseline emissions to address uncertainties in the real-life situation during the crediting period.

the methodology. The DOE shall conduct an assessment to ensure that the request is not submitted with the intention of revising an approved methodology to expand its applicability.

#### 7.12.5. Project boundary

#### 7.12.5.1. Validation requirement

82. The DOE shall determine whether all main GHG emission sources, the physical delineation of the proposed project activity and other relevant project and baseline emission sources covered in the methodology are included within the project boundary for the purpose of calculating project and baseline emissions for the proposed project activity.

#### 7.12.5.2. Means of validation

- 83. The DOE shall confirm the project boundary based on documented evidence and shall corroborate it by a site visit where required.
- 84. If the methodology allows project participants to choose whether a source or gas is to be included within the project boundary, the DOE shall determine whether the project participants have justified that choice. The DOE shall determine whether the justification provided is reasonable, based on an assessment of supporting documented evidence provided by the project participants and corroborated by observations if required.
- 85. For the project activities that have both A/R and non-A/R components, in order to avoid double counting of emission sources, the DOE shall confirm that the emissions associated with the A/R activity will be accounted for and documented by the A/R project activity.

#### 7.12.5.3. Reporting requirements

- 86. The DOE shall describe how the validation of the project boundary has been performed, by detailing the documentation assessed (e.g. a commissioning report) and by describing its observations during any site visit undertaken (i.e. observations of the physical site or equipment used in the process).
- 87. The DOE shall state whether the identified boundary and the selected sources and gases are justified for the project activity. Should the DOE identify emission sources that will be affected by the implementation of the proposed project activity and which are expected to contribute more than 1% of the overall expected average annual emissions reductions, and are not addressed by the selected approved methodology, the DOE shall request clarification of, revision to, or deviation from the methodology, as appropriate.

#### 7.12.6. Baseline scenario identification and description

#### 7.12.6.1. Validation requirement

88. The DOE shall determine whether the baseline identified for the proposed project activity is the scenario that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the proposed project activity.

#### 7.12.6.2. Means of validation

- 89. The DOE shall determine whether any procedure contained in the methodology to identify the most reasonable baseline scenario has been correctly applied. If the selected methodology requires the use of tools (such as the "Tool for the demonstration and assessment of additionality" and the "Combined tool to identify the baseline scenario and demonstrate additionality") to establish the baseline scenario, the DOE shall consult the methodology on the application of these tools. In such cases, the specific guidance in the methodology shall supersede the corresponding requirements of the tool.
- 90. If the methodology requires several alternative scenarios to be considered in the identification of the most plausible baseline scenario, the DOE shall, based on financial expertise and local and sectoral knowledge, determine whether all scenarios that are considered by the project participants and any scenarios that are supplementary to those required by the methodology, are realistic and credible in the context of the proposed project activity and that no alternative scenario has been excluded.
- 91. The DOE shall determine whether the most plausible baseline scenario identified is reasonable by validating the assumptions, calculations and rationales used in the PDD. It shall determine whether documents and sources referred to in the PDD are correctly quoted and interpreted. The DOE shall cross-check the information provided in the PDD with other verifiable and credible sources, such as local expert opinion, if available.
- 92. The DOE shall determine whether the PDD provides a description of the identified baseline scenario, including a description of the technology that would be employed and/or the activities that would take place in the absence of the proposed project activity.
- 93. The DOE shall determine whether, drawing on its knowledge of the sector and/or advice from local experts, that all applicable CDM requirements have been taken into account in the identification of the baseline scenario for the proposed project activity, as well as relevant national and/or sectoral policies and circumstances, such as sectoral reform initiatives, local fuel availability, power sector expansion plans, and the economic situation in the project sector. Two (2) types of national and/or sectoral policies have to be taken into account:
  - (a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels, otherwise known as policies that increase GHG emissions, and are called type E+. For this type of national and/or sectoral policies or regulations, only those that have been implemented before adoption of the Kyoto Protocol by the COP (decision 1/CP.3, 11 December 1997) shall be taken into account when identifying a baseline scenario. If such national and/or sectoral policies were implemented since the adoption of the Kyoto Protocol, the baseline scenario shall refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place;
  - (b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes), otherwise known as policies that decrease GHG emissions, are called type E-. For this type of national and/or sectoral policies or regulations, those that have been implemented since the

adoption by the COP of the CDM M&P (decision 17/CP.7, 11 November 2001) need not be taken into account in identifying a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).

#### 7.12.6.3. Reporting requirements

- 94. The DOE shall describe the steps taken to assess the requirements and provide an opinion as to whether:
  - (a) All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
  - (b) All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
  - (c) Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence and can be deemed reasonable;
  - (d) Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD;
  - (e) The approved baseline methodology has been correctly applied to identify the most plausible baseline scenario and the identified baseline scenario reasonably represents what would occur in the absence of the proposed project activity.
- 95. The DOE shall describe other steps taken and sources of information used to crosscheck the information contained in the PDD.

#### 7.12.7. Algorithms and/or formulae used to determine emission reductions

#### 7.12.7.1. Validation requirement

96. The DOE shall determine whether the steps taken and the equations and parameters applied in the PDD to calculate project emissions, baseline emissions, leakage and emission reductions comply with the requirements of the selected methodology including applicable tool(s).

#### 7.12.7.2. Means of validation

- 97. Where the methodology allows for selection between options for equations or parameters, the DOE shall determine whether adequate justification has been provided (based on the choice of the baseline scenario, context of the proposed project activity and other evidence provided) and that the correct equations and parameters have been used, in accordance with the methodology selected<sup>8</sup> including applicable tool(s).
- 98. The DOE shall verify the justification given in the PDD for the choice of data and parameters used in the equations. If data and parameters will not be monitored throughout the crediting period of the proposed project activity but have already been

<sup>&</sup>lt;sup>8</sup> For project activities that have both A/R and non-A/R components, in order to avoid double counting of emission sources, the emissions associated with A/R activity shall be accounted for and clearly documented by the A/R CDM project activity (see EB 25 report paragraphs 38 and 48).

determined and will remain fixed throughout the crediting period, the DOE shall determine whether all data sources and assumptions are appropriate and calculations are correct as applicable to the proposed project activity, and will result in an accurate or otherwise conservative estimate of the emission reductions. If data and parameters will be monitored or estimated on implementation and hence become available only after validation of the project activity, the DOE shall determine whether the estimates provided in the PDD for these data and parameters are reasonable.

#### 7.12.7.3. Reporting requirements

- 99. The DOE shall describe the steps taken to assess the requirements and provide an opinion as to whether:
  - (a) All assumptions and data used by the project participants are listed in the PDD, including their references and sources;
  - (b) All documentation used by project participants as the basis for assumptions and source of data is correctly quoted and interpreted in the PDD;
  - (c) All values used in the PDD are considered reasonable in the context of the proposed project activity;
  - (d) The baseline methodology and corresponding tool(s) have been applied correctly to calculate project emissions, baseline emissions, leakage and emission reductions;
  - (e) All estimates of the baseline emissions can be replicated using the data and parameter values provided in the PDD.
- 100. The DOE shall describe how it has verified the data and parameters used in the equations, including references to any other data sources used.

#### 7.12.8. Additionality of a project activity

#### 7.12.8.1. Validation requirement

101. The DOE shall determine whether the proposed project activity is additional as demonstrated in the PDD.<sup>9</sup>

#### 7.12.8.2. Means of validation

102. The DOE shall assess and verify the reliability and credibility of all data, rationales, assumptions, justifications and documentation provided by project participants to support

<sup>&</sup>lt;sup>9</sup> In accordance with decision 3/CMP.1, annex, paragraph 43, "A CDM project activity is additional if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity." Note that for A/R CDM project activities, "An afforestation or reforestation project activity under the CDM is additional if the actual net greenhouse gas removals by sinks are increased above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the registered CDM afforestation or reforestation project activity" (see decision 5/CMP.1, annex, paragraph 18). While specific elements of the assessment of additionality are discussed in further detail below, not all elements discussed below will be applicable to all proposed CDM project activities.

the demonstration of additionality. This requires the DOE to critically assess the evidence presented, using local knowledge and sectoral and financial expertise.

103. If required by the applicable approved methodology, the DOE shall consider tools and guidelines provided by the Board to demonstrate the additionality of proposed project activities. The DOE shall also consider specific complementary or alternative requirements included in the methodology for demonstrating the additionality of the proposed project activity.

#### 7.12.8.3. Reporting requirements

104. The DOE shall describe all steps taken, and sources of information used to cross-check the information contained in the PDD. The DOE shall describe how it has determined that the evidence assessed is credible, where appropriate.

#### 7.12.9. Assessment of prior consideration of the clean development mechanism

#### 7.12.9.1. Validation requirement

105. The DOE shall determine whether CDM benefits were considered necessary in the decision to undertake the project as a proposed project activity if the starting date of the proposed project activity is prior to the start of validation, which is the date of publication of the PDD for global stakeholder consultation.

#### 7.12.9.2. Means of validation

- 106. The DOE shall determine whether the start date of the project activity, reported in the PDD, is the earliest date at which either the implementation or construction or real action of a project activity begins.<sup>10</sup> For project activities that require construction, retrofit or other modifications, the date of commissioning cannot be considered the project activity start date. The DOE shall determine whether it is a project activity with a start date:
  - (a) On or after 2 August 2008; or
  - (b) Before 2 August 2008.
- 107. For a project activity with a start date on or after 2 August 2008, for which a PDD has not been published for global stakeholder consultation or a new methodology has not been proposed to the Board before the project activity start date, the DOE shall confirm by referring to the list of prior consideration notifications from the UNFCCC website and communication between the project proponent, the secretariat and the host Party DNA regarding the commencement of a new project activity.<sup>11</sup> If such notification has not been provided by the project participants within 180 days of the project activity start date, the DOE shall determine that the CDM was not seriously considered in the decision to implement the project activity.
- 108. For a project activity with a start date before 2 August 2008, for which the start date is prior to the date of publication of the PDD for global stakeholder consultation, the DOE

<sup>&</sup>lt;sup>10</sup> See the "Glossary of CDM terms" for additional information related to the start dates of other types of CDM project activities and PoAs.

<sup>&</sup>lt;sup>11</sup> See EB 48, annex 62, "Prior consideration of the CDM form".

shall assess the project participant's prior consideration of the CDM. Specifically, the DOE shall assess whether the project participants:

- (a) Had an awareness of the CDM prior to the project activity start date, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project. Evidence to support this could include, inter alia, minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participants, to undertake the project as a proposed project activity;
- (b) Demonstrated that real and continuing actions were taken to secure CDM status for the project in parallel with its implementation. Evidence to support this could include one or more of the following: contracts with consultants for CDM/PDD/methodology services, draft versions of PDDs and underlying documents such as letters of authorization, and if available, letter of intent, emission reduction purchase agreements (ERPA) term sheets, ERPAs or other documentation related to the potential sale of the certified emission reductions (CERs) (including correspondence with multilateral financial institutions or carbon funds), evidence of agreements or negotiations with a DOE for validation services, submission of a new methodology or requests for clarification or revision of existing methodologies to the Board, publication in a newspaper, interviews with the DNA, and earlier correspondence on the project with the DNA or the secretariat.
- 109. Assessment of real and continuing actions shall be conducted by the DOE and should focus on real documented evidence as indicated in paragraph 108(b) above, including an assessment by the DOE of the authenticity of the evidence. The DOE shall assess letters, e-mail exchanges and other documented communications submitted by the project participants to substantiate the above information, and these shall be considered as evidence only after the DOE has assessed the reliability and authenticity of such communications, inter alia through cross-checking (e.g. interviews).
- 110. In validating proposed project activities where:
  - (a) There is less than two years of a gap between the documented evidence, the DOE shall conclude that continuing and real actions were taken to secure CDM status for the project activity;
  - (b) The gap between documented evidence is greater than two years and less than three years, the DOE may determine that continuing and real actions were taken to secure CDM status for the project activity and shall justify any positive or negative validation opinion based on the context of the evidence and information assessed;
  - (c) The gap between documented evidence is greater than three years, the DOE shall conclude that continuing and real actions were not taken to secure CDM status for the project activity.
- 111. If evidence to support the serious prior consideration of the CDM as indicated above is not available, the DOE shall determine that the CDM was not considered in the decision to implement the project activity.

#### 7.12.9.3. Reporting requirements

#### 112. The validation report shall:

- (a) Describe the validation of the project activity start date provided in the PDD;
- (b) Describe the evidence for prior consideration of the CDM (if necessary) that was assessed and the process of cross-checking the evidence, including the real and continuing action;
- (c) Provide a validation opinion regarding whether the proposed project activity complies with the applicable requirements related to the prior consideration of the CDM.

#### 7.12.10. Identification of alternatives

#### 7.12.10.1. Validation requirement

113. Where the baseline scenario is not prescribed in the approved methodology, the DOE shall assess the list of identified credible alternatives to the project activity in the PDD selected to determine the most realistic baseline scenario.

#### 7.12.10.2. Means of validation

- 114. The DOE shall assess the list of alternatives given in the PDD and to determine whether:
  - (a) The list of alternatives includes as one of the options that the project activity is undertaken without being registered as a proposed project activity;
  - (b) The list contains all plausible alternatives that the DOE, on the basis of its local and sectoral knowledge, considers to be viable means of supplying the comparable outputs or services that are to be supplied by the proposed project activity;
  - (c) The alternatives comply with all applicable and enforced legislation.
- 115. Where the baseline scenario is prescribed in the approved methodology, no further analysis is required.

#### 7.12.10.3. Reporting requirements

116. The DOE shall describe whether it considers the listed alternatives to be credible and complete.

#### 7.12.11. Investment analysis

#### 7.12.11.1. Validation requirement

- 117. If investment analysis has been used to demonstrate the additionality of the proposed project activity, the DOE shall determine whether the proposed project activity would not be:
  - (a) The most economically or financially attractive alternative; or
  - (b) Economically or financially feasible without the revenue from the sale of CERs.

#### 7.12.11.2. Means of validation

- 118. The DOE shall apply the latest version of the "Guidelines on the assessment of investment analysis" as provided by the Board and with other relevant provisions.
- 119. The DOE shall determine whether the project activity is not the most economically or financially attractive alternative, or that it is not economically or financially feasible without CDM:<sup>12</sup>
  - (a) The proposed project activity would produce no financial or economic benefits other than CDM-related income. The DOE shall determine whether the documented costs associated with the proposed project activity and the alternatives identified demonstrate that there is at least one alternative which is less costly than the proposed project activity;
  - (b) The proposed project activity is less economically or financially attractive than at least one other credible and realistic alternative;
  - (c) The financial returns of the proposed project activity would be insufficient to justify the required investment.
- 120. To verify the accuracy of financial calculations carried out for any investment analysis, the DOE shall:
  - (a) Determine the suitability of the financial indicator selected by the project participants and conduct a thorough assessment of all parameters and assumptions used in calculating such financial indicators, and determine the accuracy and suitability of these parameters using available evidence and applying its expertise in relevant accounting practices;
  - (b) Cross-check the parameters against third-party or publicly available sources, such as invoices or price indices;
  - (c) Review, as appropriate, feasibility reports, public announcements and annual financial reports related to the proposed project activity and the project participants;
  - (d) Assess the correctness of computations carried out and documented by the project participants; and
  - (e) Assess, where applicable, the sensitivity analysis by the project participants to determine under what conditions variations in the result would occur, and the likelihood of these conditions.
- 121. To confirm the suitability of any benchmark applied in the investment analysis, the DOE shall:
  - (a) Determine whether the type of benchmark applied is suitable for the type of financial indicator presented;

<sup>&</sup>lt;sup>12</sup> It should be noted the latest version of the "Guidelines on the assessment of investment analysis", and the requirements of specific methodologies may preclude the use of one of these options in certain scenarios.

- (b) Ensure that any risk premiums applied in determining the benchmark reflect the risks associated with the project type or activity;
- (c) Determine whether it is reasonable to assume that no investment would be made at a rate of return lower than the benchmark.
- 122. Where project participants rely on values from Feasibility Study Reports (FSR) that are approved by national authorities for proposed project activities, the DOE shall determine whether:
  - (a) The FSR is the basis for the decision to proceed with the investment in the project, i.e. that the period of time between the finalization of the FSR and the investment decision is sufficiently short that it is unlikely in the context of the underlying project activity that the input values would have materially changed;
  - (b) The values used in the PDD and associated annexes are fully consistent with the FSR, and where inconsistencies occur the DOE shall assess the appropriateness of the values;
  - (c) The input values from the FSR are valid and applicable at the time of investment decision. The DOE shall confirm this on the basis of its specific local and sectoral expertise and by cross-checking or other appropriate means.

#### 7.12.11.3. Reporting requirements

- 123. The DOE shall:
  - (a) Describe in detail how the parameters used in any financial calculations, including those taken from the FSR, if applicable, have been validated;
  - (b) Describe how the suitability of any benchmark applied has been assessed;
  - (c) Confirm whether the underlying assumptions are appropriate and the financial calculations are correct.

#### 7.12.12. Barrier analysis

#### 7.12.12.1. Validation requirement

- 124. If barrier analysis<sup>13</sup> was used to demonstrate the additionality of the proposed project activity, the DOE shall determine whether the proposed project activity faces barriers that:
  - (a) Prevent the implementation of this type of proposed project activity;<sup>14</sup>
  - (b) Do not prevent the implementation of at least one of the alternatives.

<sup>&</sup>lt;sup>13</sup> Barriers are issues in project implementation that could prevent a potential investor from pursuing the implementation of the proposed project activity. The identified barriers are only sufficient grounds for demonstration of additionality if they would prevent potential project proponents from carrying out the proposed project activity undertaken without being registered as a CDM project activity.

<sup>&</sup>lt;sup>14</sup> See the latest "Guidelines for objective demonstration and assessment of barriers".

#### 7.12.12.2. Means of validation

- 125. The DOE shall determine whether issues that have a direct impact<sup>15</sup> on the financial returns of the project activity are not considered barriers and shall be assessed by investment analysis. This does not refer to either:
  - (a) Risk related barriers, for example risk of technical failure, that could have negative effects on financial performance; or
  - (b) Barriers related to the unavailability of sources of finance for the project activity.
- 126. The DOE shall apply a two-step process to assessing the barrier analysis performed, as follows:
  - (a) Determine whether the barriers are real: The DOE shall assess the available evidence and/or conduct interviews with relevant individuals (including members of industry associations, government officials or local experts if necessary) to determine whether the barriers listed in the PDD exist. The DOE shall determine whether the existence of barriers is substantiated by independent sources of data such as relevant national legislation, surveys of local conditions and national or international statistics. If the existence of a barrier is substantiated only by the opinions of the project participants, the DOE shall not consider this barrier to be adequately substantiated. If the DOE considers, on the basis of its sectoral or local expertise, that a barrier is not real or is not supported by sufficient evidence, it shall raise a CAR to have reference to this barrier removed from the project documentation;
  - (b) Determine whether the barriers prevent the implementation of the project activity but not the implementation of at least one of the possible alternatives: Since not all barriers present an insurmountable hurdle to a project activity being implemented, the DOE shall apply its local and sectoral expertise to judge whether a barrier or set of barriers would prevent the implementation of the proposed project activity and would not equally prevent implementation of at least one of the possible alternatives, in particular the identified baseline scenario.

#### 7.12.12.3. Reporting requirements

- 127. The DOE shall:
  - (a) Provide an assessment of each barrier listed in the PDD, which describes how it has undertaken validation of the barrier;
  - (b) Provide an overall determination of the credibility of the barrier analysis performed.

<sup>&</sup>lt;sup>15</sup> Defined in this context as those issues whose impacts can be expressed in monetary terms with reasonable certainty.

#### 7.12.13. Common practice analysis

#### 7.12.13.1. Validation requirement

128. For proposed large-scale project activities, unless the proposed project type is first-of-itskind as determined in accordance with the relevant guidelines, the DOE shall assess whether the project participants have conducted a common practice analysis.<sup>16</sup>

#### 7.12.13.2. Means of validation

- 129. The DOE shall use official sources and its local and sectoral expertise to:
  - (a) Assess whether the geographical scope (e.g. the defined region) of the common practice analysis is appropriate for the assessment of common practice related to the project activity's technology or industry type. For certain technologies, the relevant region for assessment will be local and for others it may be transnational/global. If a region other than the entire host country is chosen, the DOE shall assess the explanation of why this region is more appropriate;
  - (b) Determine to what extent similar and operational projects (e.g. using similar technology or practice), other than project activities,<sup>17</sup> have been undertaken in the defined region;
  - (c) Assess, if similar and operational projects, other than project activities, are already "widely observed and commonly carried out" in the defined region, whether there are essential distinctions between the proposed project activity and the other similar activities.

#### 7.12.13.3. Reporting requirements

- 130. The DOE shall:
  - Describe how the geographical scope of the common practice analysis has been validated, considering the technology or industry type to which the project activity belongs;
  - (b) Describe how it has undertaken an assessment of the existence of similar projects;
  - (c) Describe how it has assessed the essential distinctions between the proposed project activity and any similar projects that are widely observed and commonly carried out;
  - (d) Confirm whether the proposed project activity is not common practice.

<sup>&</sup>lt;sup>16</sup> This is a test to complement the investment analysis (step 2 of the additionality tool) or barrier analysis (step 3 of the additionality tool) to confirm that the project activity is not widely observed and commonly carried out in the region.

<sup>&</sup>lt;sup>17</sup> Registered CDM project activities and CDM project activities that have been published on the UNFCCC website for global stakeholder consultation as part of the validation processes.

#### 7.12.14. Monitoring plan

#### 7.12.14.1. Validation requirement

131. The DOE shall determine whether the description of the monitoring plan included in the PDD is based on the approved monitoring methodology including applicable tool(s).

#### 7.12.14.2. Means of validation

- 132. The DOE shall apply a two-step process to meet the above requirement:
  - (a) To assess compliance of the monitoring plan with the approved methodology and the applicable tool(s), the DOE shall:
    - (i) Identify the list of parameters required by the selected approved methodology including applicable tool(s) by means of document review;
    - (ii) Confirm that the description of the monitoring plan contains all necessary parameters, that they are described and that the means of monitoring described in the plan complies with the requirements of the methodology including applicable tool(s).
  - (b) To assess the implementation of the plan the DOE shall, by means of review of the documented procedures, interviews with relevant personnel, project plans and any physical inspection of the proposed project activity site, assess whether:
    - (i) The monitoring arrangements described in the monitoring plan are feasible within the project design;
    - (ii) The means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are sufficient to ensure that the emission reductions achieved by/resulting from the proposed project activity can be reported ex post and verified.

#### 7.12.14.3. Reporting requirements

- 133. The DOE shall:
  - (a) State its opinion on the compliance of the described monitoring plan with the requirements of the methodology including applicable tool(s);
  - (b) Describe the steps undertaken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the project design;
  - (c) State its opinion on the project participants' ability to implement the described monitoring plan.

#### 7.13. Environmental impacts

#### 7.13.1. Validation requirement

134. The DOE shall determine whether the project participants conducted an analysis of the environmental impacts of the proposed project activity, including transboundary impacts,

and whether those impacts are considered significant by the project participants or the host Party.

135. The DOE shall also determine whether the project participants conducted an environmental impact assessment, if required to do so by the host Party, in accordance with the host Party's procedures.

#### 7.13.2. Means of validation

136. The DOE shall assess the above requirements by means of a document review and/or using local official sources and expertise.

#### 7.13.3. Reporting requirements

137. The DOE shall indicate whether the project participants have undertaken an analysis of environmental impacts and, if required by the host Party, an environmental impact assessment in accordance with procedures as required by the host Party.

#### 7.14. Local stakeholder consultation

#### 7.14.1. Validation requirement

138. The DOE shall determine whether the project participants have completed a local stakeholder consultation process and that due steps were taken to engage stakeholders and solicit comments for the proposed project activity.

#### 7.14.2. Means of validation

- 139. The DOE shall, by means of document review and interviews with local stakeholders as appropriate, determine whether:
  - (a) Comments have been invited from local stakeholders that are relevant for the proposed project activity;
  - (b) The summary of the comments received as provided in the PDD is complete;
  - (c) The project participants have taken due account of all comments received and have described this process in the PDD.

#### 7.14.3. Reporting requirements

- 140. The DOE shall:
  - (a) Describe the steps taken to assess the adequacy of the local stakeholder consultation;
  - (b) Provide an opinion on the adequacy of the local stakeholder consultation.

#### 7.15. Validation status and outcomes, opinion, and report

#### 7.15.1. Validation status and outcomes

- 141. For each proposed project activity the DOE shall provide an update of the status of its validation activity, unless the project activity has been submitted for registration 180 days subsequent to the end of the period for the submission of public comments.
- 142. This status update shall indicate one of the following conditions:
  - (a) The validation contract has been terminated in which case a reason for this termination shall be provided to the Board and secretariat on a confidential basis; or
  - (b) A negative validation opinion has been issued; or
  - (c) The DOE has raised one or more corrective action requests or clarification requests, to which no response has been received – in which case the DOE shall provide a summary of the issues raised and update or reconfirm the status of its validation activities at three (3) month intervals thereafter; or
  - (d) The DOE has finalized a positive validation opinion with the exception of the receipt of a valid letter of approval from one or more Parties involved in which case the DOE shall indicate which Party/Parties involved; or
  - (e) Validation activities are ongoing and no corrective action or clarification requests have yet been sent to the project participants; in which case the DOE shall provide an explanation for the length of time taken and update or reconfirm the status of its validation activities on three (3) month intervals thereafter.

#### 7.15.2. Validation opinion

- 143. The DOE shall include a statement of the likelihood of the project activity achieving the anticipated emission reductions stated in the CDM-PDD.
- 144. The DOE shall inform the project participants of the validation outcome. Notification to the project participants shall include:
  - (a) A confirmation of validation and date of submission of the validation report to the Board; or
  - (b) An explanation of reasons for non-acceptance if the project activity, as documented, is determined not to fulfil the requirements for validation.
- 145. The DOE shall provide either:
  - (a) A positive validation opinion in its validation report that is submitted as a request for registration; or
  - (b) A negative validation opinion in its validation report explaining the reason for its opinion if the DOE determines that the proposed project activity does not fulfil the applicable CDM requirements.

- 146. The DOE shall include the following in its opinion:
  - (a) A summary of the validation methodology and process used and the validation criteria applied;
  - (b) A description of project components or issues not covered by the validation process;
  - (c) A summary of the validation conclusions;
  - (d) A statement on the validation of the expected emission reductions;
  - (e) A statement as to whether the proposed project activity meets the stated criteria.

#### 7.15.3. Validation report

- 147. The DOE shall include the final validation opinion in the validation report. In its validation report, the DOE shall:
  - (a) State its conclusions regarding the proposed project activity's conformity with applicable CDM requirements;
  - (b) Give an overview of the validation activities carried out in order to arrive at the final validation conclusions and opinion;
  - (c) Include the results of the dialogue between the DOE and the project participants, as well as any adjustments made to the project design following stakeholder consultation. It shall reflect the responses to CARs and CLs, and discussions on and revisions to project documentation.
- 148. In its validation report, the DOE shall provide the following:
  - (a) A summary of the validation process and its conclusions;
  - (b) All its applied approaches, "findings and conclusions, especially on baseline selection, additionality, emission factors and monitoring";
  - (c) Information on the global stakeholder consultation carried out by the DOE prior to submitting the project for validation, including dates and how comments received have been taken into consideration by the DOE;
  - (d) A list of interviewees and documents reviewed;
  - (e) Details of the validation team, technical experts, internal technical reviewers involved, together with their roles in the validation activity and details of who conducted the on-site visit;
  - (f) Information on quality control within the team and in the validation process;
  - (g) Appointment certificates or curricula vitae of the DOE's validation team members, technical experts and internal technical reviewers for the project activity.

## 8. Specific validation requirements

149. For certain specific validation activities such as SSC, A/R, and PoA, the DOE shall comply with the general validation requirements described in the sections above as well as those that follow, including the simplified modalities and procedures for small-scale project activities, the modalities and procedures for afforestation and reforestation project activities, <sup>18</sup> and Standards for PoA.

#### 8.1. Small-scale project activities

#### 8.1.1. Project activity eligibility

#### 8.1.1.1. Validation requirement

150. The DOE shall determine whether the proposed project activity meets the small-scale eligibility requirements.<sup>19</sup>

#### 8.1.1.2. Means of validation

- 151. For a project activity that is within the small-scale project activity threshold but applies a large-scale approved methodology, the DOE shall determine whether this project activity follows the modalities and procedures for large-scale project activities.
- 152. The DOE shall determine whether:
  - (a) The project activity qualifies within the thresholds of the three possible types of small-scale project activities. It may include more than one component; for example, a type III methane recovery component activity and a type I electricity component activity;<sup>20</sup>
  - (b) The project activity conforms to one or more of the approved small-scale methodologies applied in conjunction with the general guidelines to SSC CDM methodologies;<sup>21</sup>
  - (c) The proposed small-scale project activity is not a debundled component of a large-scale project<sup>22</sup> activity.

#### 8.1.1.3. Reporting requirements

153. The DOE shall indicate whether the project activity meets the eligibility criteria for small-scale project activities.

<sup>&</sup>lt;sup>18</sup> See decision 5/CMP.1, annex.

<sup>&</sup>lt;sup>19</sup> See the simplified modalities and procedures for small-scale CDM project activities presented under decision 4/CMP.1, annex II.

<sup>&</sup>lt;sup>20</sup> See EB 28 report, paragraphs 56 and 57, for guidance on size limits for the components.

<sup>&</sup>lt;sup>21</sup> See EB 54 report, paragraph 37 and the latest "General guidelines to SSC methodologies" for further clarification.

<sup>&</sup>lt;sup>22</sup> See Appendix C of the simplified modalities and procedures for small-scale CDM project activities and the "Guidelines on assessment of de-bundling for SSC project activities".

#### 8.1.2. Debundling

#### 8.1.2.1. Validation requirement

154. The DOE shall determine whether the proposed small-scale project activity is not a debundled component of a large-scale project activity in accordance with the "Guidelines on assessment of debundling for SSC project activities"<sup>23</sup>.

#### 8.1.2.2. Means of validation

- 155. The DOE shall determine the proposed small-scale project activity to be a debundled component of a large-scale project activity if there is a registered small-scale project activity or an application to register another small-scale project activity.
- 156. The DOE shall, where appropriate, take into account specific debundling requirements for Type I project activities and small-scale transport project activities.

#### 8.1.2.3. Reporting requirements

157. The DOE shall report its conclusion and specific details on how it assessed whether the project activities are not a debundled component of a large scale activity.

#### 8.1.3. Additionality

#### 8.1.3.1. Validation requirement

158. The DOE shall determine whether the proposed SSC project activity is additional in accordance with CDM requirements applicable for small-scale project activities.

#### 8.1.3.2. Means of validation

- 159. The DOE shall refer to the specific requirements on demonstration of additionality for small-scale project activities<sup>24</sup> and the "Non-binding best practice examples to demonstrate additionality for SSC project activities".
- 160. In the case of Type I project activities up to 5 MW that employ renewable energy as their primary technology, Type II energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year, and Type III project activities that aim to achieve emissions reductions at a scale of no more than 20 kt CO<sub>2</sub>e per year, the DOE shall assess the relevant criteria to establish the automatic additionality for these projects.<sup>25</sup>

<sup>&</sup>lt;sup>23</sup> If the proposed small-scale project activity is deemed to be a debundled component but the total size of such an activity combined with the previous registered small-scale project activity does not exceed the limits for small-scale project activities then the project activity can qualify to use simplified modalities and procedures for small-scale project activities.

<sup>&</sup>lt;sup>24</sup> See Attachment A to Appendix B of 4/CMP.1, annex II.

<sup>&</sup>lt;sup>25</sup> See the latest "Guidelines for demonstrating additionality of microscale project activities".

### 8.1.3.3. Reporting requirements

161. The DOE shall describe all steps taken, and sources of information used to cross-check the information contained in the PDD.

### 8.2. Afforestation or reforestation project activities

- 162. The DOE shall determine whether specific requirements as defined in the modalities and procedures for A/R project activities have been followed, including:
  - (a) Project boundary for A/R project activities;
  - (b) Selection of carbon pools;
  - (c) Eligibility of land;
  - (d) Approach proposed to address non-permanence;
  - (e) Timing of management activities, including harvesting cycles, and verifications;
  - (f) Socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems.

#### 8.2.1. Project boundary

#### 8.2.1.1. Validation requirement

163. The DOE shall confirm whether the PDD contains a description of the project boundary that delineates discrete areas of land planned for the proposed afforestation or reforestation CDM project activity under the control of the project participants.<sup>26</sup>

#### 8.2.1.2. Means of validation

- 164. The DOE shall, through document review and/or interviews, determine whether the project participants for all areas of land planned for A/R project activity:
  - (a) Have already established the control over afforestation or reforestation activities; or
  - (b) Has the control over afforestation or reforestation
- 165. The DOE shall confirm that the control has included at minimum the exclusive right, defined in a way acceptable under the legal system of the host Party, to perform the A/R activity with the aim of achieving net anthropogenic GHG removals by sinks. If the total number of documents to be reviewed and persons/entities to be interviewed is not less than 10, then the DOE may apply a sampling approach.

# 8.2.1.3. Reporting requirements

166. The DOE shall describe the documentation assessed and/or oral statements delivered by persons interviewed (if any) and determine their acceptability under the legal system

<sup>&</sup>lt;sup>26</sup> The proposed A/R CDM project activity may contain more than one discrete area of land.

of the host Party. If the DOE has applied a sampling approach, it shall also describe how many sites have been assessed and how these sites were selected.

#### 8.2.2. Selection of carbon pools

#### 8.2.2.1. Validation requirement

167. The DOE shall determine whether the carbon pools to be considered in the proposed A/R project activity were selected in accordance with the requirements of the selected methodology.

#### 8.2.2.2. Means of validation

168. The DOE shall confirm that information has been provided to justify the exclusion of certain carbon pools if the methodology allows for such an option. In doing so, the DOE shall confirm that all documents referred to in the PDD are correctly quoted and interpreted. If relevant, the DOE shall cross-check the information provided in the PDD with other available information from public sources or local experts.

#### 8.2.2.3. Reporting requirements

169. If the methodology allows for the option to exclude certain pools and this option is selected by project participants, the DOE shall provide a statement as to whether the selection of carbon pools complies with the selected methodology, and whether the exclusion is justified.

#### 8.2.3. Eligibility of land

#### 8.2.3.1. Validation requirement

170. The DOE shall confirm that the land within the planned project boundary is eligible for a proposed A/R project activity.

#### 8.2.3.2. Means of validation

171. The DOE shall validate the above requirement based on a review of information that reliably discriminates between forest and non-forest land according to the particular thresholds adopted by the host Party (exemplary sources are listed in the above-mentioned procedures) and a site visit.

#### 8.2.3.3. Reporting requirements

172. The DOE shall describe how the validation of the eligibility of the land has been performed, by detailing the data sources assessed and by describing its observations during the site visit. The DOE shall provide a statement as to whether the entire land within the project boundary is eligible for a proposed A/R project activity.

#### 8.2.4. Addressing non-permanence

### 8.2.4.1. Validation requirement

173. The DOE shall confirm that the project participants specified the approach selected to address non-permanence.

#### 8.2.4.2. Means of validation

174. The DOE shall review the PDD to ensure an approach to address non-permanence is selected according to the relevant provisions of the modalities and procedures for afforestation and reforestation project activities.

#### 8.2.4.3. Reporting requirements

175. The DOE shall confirm whether the approach selected by the project participants to address non-permanence has been specified in the PDD.

#### 8.2.5. Timing of management activities, including harvesting cycles, and verifications

#### 8.2.5.1. Validation requirement

176. The DOE shall determine whether the PDD describes the planned management activities, including harvesting cycles, and verifications such that a systematic coincidence of verification and peaks in carbon stocks would be avoided.

## 8.2.5.2. Means of validation

177. The DOE shall review the forest management plan and the monitoring plan for the proposed A/R project activity to confirm that a systematic coincidence of verification and peaks in carbon stocks is avoided.

#### 8.2.5.3. Reporting requirements

178. The DOE shall describe how the project participants have ensured that a systematic coincidence of verification and peaks in carbon stocks would be avoided.

#### 8.2.6. Socio-economic and environmental impacts

#### 8.2.6.1. Validation requirement

179. The DOE shall validate the documentation received from the project participants on its analysis of the socio-economic and environmental impacts, including impacts on biodiversity and natural ecosystems, and impacts outside the project boundary of the proposed afforestation or reforestation project activity under the CDM.

#### 8.2.6.2. Means of validation

- 180. The DOE shall confirm the above requirement by means of a document review and/or using local official sources and expertise.
- 181. If the above-mentioned analysis leads to the conclusion that a negative impact that may be considered significant by the project participants or the host Party has been detected, then the DOE shall determine whether a socio-economic impact assessment and/or an environmental impact assessment has been undertaken in accordance with relevant host Party regulations, and the outcome of such impact assessment is summarized in the PDD.

#### 8.2.6.3. Reporting requirements

- 182. The DOE shall confirm whether the project participants have undertaken an analysis of the socio-economic and environmental impacts and, if required by the host Party, a socio-economic impact assessment and/or an environmental impact assessment in accordance with relevant host Party regulations.
- 183. The DOE shall also note whether the outcome of such impact assessment has been summarized in the PDD and whether a description of the planned monitoring and remedial measures to address the negative impacts has been included in the PDD.

### 8.3. Small-scale afforestation or reforestation project activities

- 184. The DOE shall determine whether:
  - (a) The project activity complies with the thresholds for the small-scale A/R project activities;<sup>27</sup>
  - (b) The project activity complies with one of the types of small-scale A/R project activities defined in appendix B of the annex to decision 6/CMP.1 and qualifies to apply one of the approved simplified baseline and monitoring methodologies for small-scale afforestation and reforestation project activities;
  - (c) The proposed project activity is not a debundled component of a large-scale A/R project activity, in accordance with the rules defined in appendix C of the annex to decision 6/CMP.1;
  - (d) The proposed project activity has been developed or implemented by low-income communities and individuals as confirmed by the host Party.<sup>28</sup>

### 8.4. Programme of activities/Component project activities

185. The Board has provided guidance and procedures for registering a programme of activities (PoA) as a single project activity. In validating a PoA and any component project activities (CPAs) proposed to be included in the PoA, the DOE shall, in general, apply the means of validation and reporting requirements described in this Standard. However, there are a number of requirements unique to PoAs for which additional instructions are provided below; the precise extent of validation required in each of these areas will need to be determined by the DOE based on the type of PoA being validated.

### 8.4.1. Coordinating/managing entity and participants in a PoA

186. The DOE shall assess the management system described in the PoA design document (CDM-PoA-DD) in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

<sup>&</sup>lt;sup>27</sup> See decision 5/CMP.1, annex paragraph 1(i).

<sup>&</sup>lt;sup>28</sup> See decision 5/CMP.1, annex paragraph 1(i).

#### 8.4.2. CPA design document

- 187. The DOE shall assess any proposed CPA that a coordinating/managing entity wishes to include in the PoA, to determine whether it complies with the eligibility criteria specified in the CDM-PoA-DD. The means of validation to determine compliance with this requirement will be specific to the PoA.
- 188. The DOE should consider a desk review of the documentation sufficient to determine compliance in certain instances and also consider follow-up interviews and/or site visits necessary for other types of PoA.

#### 8.4.3. Description of a PoA/CPAs

189. The DOE shall assess the CDM-PoA-DD and the PoA-specific CDM-CPA-DD that is submitted by the coordinating/managing entity and shall confirm the framework developed for the implementation of the PoA, and defining a CPA under the PoA.

#### 8.4.4. Application of multiple methodologies

190. The DOE shall assess the application of multiple methodologies in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

#### 8.4.5. Boundary for the PoA in terms of geographical area

- 191. The DOE shall assess the boundary of the PoA within which all CPAs included in the PoA will be implemented.
- 192. The DOE shall determine whether, in establishing the boundary of the PoA, the project participants have taken into consideration all applicable national and/or sectoral policies and regulations within that chosen boundary.

#### 8.4.6. Start date of a CPA

193. The DOE shall confirm that the start date of any CPA is on or after the start date of the PoA.

#### 8.4.7. Prior consideration of the CDM

194. The DOE shall assess prior consideration of the CDM for the PoA applying the provisions of paragraph 107 above mutatis mutandis.

#### 8.4.8. Demonstration of additionality of the PoA as a whole

195. The DOE shall assess the additionality of a PoA in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

#### 8.4.9. Eligibility criteria for inclusion of a CPA in the PoA

196. The DOE shall assess the eligibility criteria for inclusion of a CPA in the PoA in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

#### 8.4.10. Crediting period of a PoA/CPA

197. The DOE shall determine whether the length of a PoA does not exceed 28 years (60 years for A/R).

#### 8.4.11. Monitoring plan for a PoA/CPA

198. The DOE shall determine whether the monitoring plan for a CPA is in accordance with the approved monitoring methodology, including applicable tool(s).

#### 8.4.12. Environmental analysis of a PoA

- 199. The DOE shall determine whether an analysis of the environmental impacts of the PoA was undertaken as per the requirements of the CDM modalities and procedures.
- 200. If the analysis was not undertaken for the PoA but conducted at the CPA level, the DOE shall determine whether the analysis of the environmental impacts was conducted as described in the CDM-PoA-DD and the CDM-CPA-DD.

#### 8.4.13. Local stakeholder consultation

- 201. The DOE shall determine whether the local stakeholder consultation process was carried out for the whole PoA or at the CPA level. If comments by local stakeholders were invited with regard to the whole PoA, the DOE shall determine how these comments were invited; whether the summary of the comments received is complete and how due account was taken of all comments received.
- 202. If the local stakeholder consultation is conducted at the CPA level, the DOE shall determine whether it is in accordance with the level of consultation specified by the coordinating/managing entity and whether the local stakeholder comments were taken into account and described in the CDM-PoA-DD and the CDM-CPA-DD.

#### 8.4.14. Determination of occurrences of debundling under a PoA<sup>29</sup>

203. The DOE shall ascertain that the proposed small-scale CPA of a PoA is not a debundled component of a large-scale project activity in accordance with the "Guidelines on assessment of debundling for SSC project activities".

#### 8.4.15. Inclusion or renewal of a crediting period of a CPA under a registered PoA

204. The DOE shall assess the CPA and the specific CDM-CPA-DD against the latest version of the PoA to determine whether the CPA meets the requirements of the PoA.

<sup>&</sup>lt;sup>29</sup> If each of the independent subsystems/measures (e.g. biogas digester, solar home system) included in the CPA of a PoA is no larger than 1% of the small-scale thresholds defined by the methodology applied, i.e. 150 kW installed capacity or 0.6 GWh annual energy savings or 0.6 ktCO2e annual emission reductions, then that CPA of PoA is exempted from the de-bundling check, i.e. is considered as not being a debundled component of a large-scale activity.

# 9. Verification requirements

# 9.1. Objective of CDM verification

205. The DOE shall conduct a thorough, independent assessment of the registered project activities.

## 9.2. General verification approach

- 206. In carrying out its verification work, the DOE shall determine whether the project activity complies with the requirements of paragraph 62 of the CDM modalities and procedures.
- 207. The DOE shall ensure that only verification activities undertaken after the publication of the monitoring report on the UNFCCC CDM website shall be used as a basis for the DOE to conclude their verification and submit a request for issuance of CERs to the Board.<sup>30</sup>
- 208. The DOE shall make publicly available the monitoring report received from the project participants in accordance with the Project cycle procedure. Unless the Board has agreed to grant an exception, a DOE shall not perform verification functions on a project activity for which it has performed the function of validation/registration.<sup>31</sup>
- 209. The DOE shall assess both quantitative and qualitative information on emission reductions provided in the project documentation.<sup>32</sup>
- 210. The DOE shall assess and determine whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the CDM criteria and relevant guidance provided by the Board. This assessment shall involve a review of relevant documentation as well as an on-site visit(s).
- 211. The DOE shall assess whether the data collection system meets the requirements of the monitoring plan as per the applied methodology including applicable tool(s).
- 212. In addition to the monitoring documentation the DOE shall review:
  - (a) The registered PDD and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PDD, and the corresponding validation opinion;
  - (b) The validation report;
  - (c) Previous verification reports, if any;
  - (d) The applied monitoring methodology;
  - (e) The monitoring report to verify that it is as per the standardized format;<sup>33</sup>

<sup>&</sup>lt;sup>30</sup> See EB 60 report, paragraph 101.

<sup>&</sup>lt;sup>31</sup> For small-scale CDM project activities, the same DOE may undertake validation, and verification and certification.

<sup>&</sup>lt;sup>32</sup> Quantitative information comprises the reported numbers in the monitoring report. Qualitative information comprises information on internal management controls, calculation procedures, procedures for transfer of data, frequency of the monitoring reports, and review and internal audit of calculations.

- Any other information and references relevant to the project activity's emission reductions (e.g. IPCC reports, data on electricity generation in the national grid or laboratory analysis and national regulations);
- 213. In addition to reviewing the monitoring documentation, the DOE shall determine whether the project participants have addressed the FARs identified during validation or previous verification(s).

### 9.2.1. Quality of evidence

- 214. When verifying the reported emission reductions, the DOE shall confirm that there is an audit trail that contains the evidence and records that validate or invalidate the stated figures. It shall include the source documents that form the basis for assumptions and other information underlying the GHG data.
- 215. When assessing the audit trail, the DOE shall:
  - (a) Address whether there is sufficient evidence available, both in terms of frequency (time period between evidence) and coverage (in covering the full monitoring period);
  - (b) Address the source and nature of the evidence (external or internal, oral or documented);
  - (c) Cross-check the monitoring report against other sources such as comparable information, where available, from sources other than those used in the monitoring report to determine whether the stated figures are correct.
- 216. The DOE shall only certify emission reductions that are based on verifiable evidence.

### 9.3. Means of verification

- 217. The DOE shall apply standard auditing techniques to assess the quality of the information, including but not limited to:
  - (a) Desk review, involving:
    - (i) A review of the data and information presented to verify their completeness;
    - A review of the monitoring plan and monitoring methodology, including applicable tools, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
    - (iii) An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

<sup>&</sup>lt;sup>33</sup> See EB 54 report, annex 34, where the CDM Executive Board has provided a standardized format for the monitoring report to improve consistency in reporting of the implementation and monitoring of the project activity by project participants.

- (b) On-site assessment, involving:
  - (i) An assessment of the implementation and operation of the registered project activity as per the registered PDD or any approved revised PDD;
  - (ii) A review of information flows for generating, aggregating and reporting the monitoring parameters;
  - (iii) Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the PDD;
  - (iv) A cross check between information provided in the monitoring report and data from other sources such as plant logbooks, inventories, purchase records or similar data sources;
  - A check of the monitoring equipment including calibration performance and observations of monitoring practices against the requirements of the PDD and the selected methodology and corresponding tool(s), where applicable;
  - (vi) A review of calculations and assumptions made in determining the GHG data and emission reductions;
  - (vii) An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.
- 218. Where no specific means of verification is specified, the DOE should apply the standard auditing techniques described in paragraph 217 above.

#### 9.3.1. Clarification requests, corrective action requests and forward action requests

- 219. The DOE shall identify, discuss and conclude in the verification report issues related to the monitoring, implementation and operations of the registered project activity that could impair the capacity of the registered project activity to achieve emission reductions or influence the monitoring and reporting of emission reductions.
- 220. The DOE shall raise a CAR if one of the following situations occur:
  - (a) Non-compliance with the monitoring plan or methodology are found in monitoring and reporting and has not been sufficiently documented by the project participants, or if the evidence provided to prove conformity is insufficient;
  - (b) Modifications to the implementation, operation and monitoring of the registered project activity has not been sufficiently documented by the project participants;
  - (c) Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions;
  - (d) Issues identified in a FAR during validation to be verified during verification or previous verification(s) have not been resolved by the project participants.
- 221. The DOE shall raise a CL if information is insufficient or not clear enough to determine whether the applicable CDM requirements have been met.

- 222. All CARs and CLs raised by the DOE during verification shall be resolved prior to submitting a request for issuance.
- 223. The DOE shall raise a FAR during verification for actions if the monitoring and reporting require attention and/or adjustment for the next verification period.
- 224. The DOE shall report on all CARs, CLs and FARs in its verification report. This reporting shall be undertaken in a transparent manner that allows the reader to understand the issue raised, the responses provided by the project participants, the means of verification of such responses and references to any resulting changes in the monitoring report or supporting annexes.

### 9.4. Verification of compliance

- 225. Based on the applicable requirements of paragraph 62 of the CDM modalities and procedures, the DOE shall:
  - (a) Determine whether the project activity has been implemented and operated as per the registered PDD or any approved revised PDD, and that all physical features (technology, project equipment, and monitoring and metering equipment) of the project are in place;
  - (b) Determine whether the monitoring report and other supporting documents provided are complete in accordance with the latest applicable version of the completeness checklist for requests for issuance of CERs, verifiable, and in accordance with applicable CDM requirements;
  - (c) Determine whether actual monitoring systems and procedures comply with the monitoring systems and procedures described in the monitoring plan or any revised approved monitoring plan, and the approved methodology including applicable tool(s);
  - (d) Evaluate the data recorded and stored as per the monitoring methodology including applicable tool(s).

# 9.4.1. Compliance of the project implementation with the registered project design document

### 9.4.1.1. Verification requirement

- 226. The DOE shall identify any concerns related to the conformity of the actual project activity and its operation with the registered project design document and determine whether:<sup>34</sup>
  - (a) The implementation and operation of the project activity has been conducted in accordance with the description contained in the registered PDD; or
  - (b) Any deviation or the proposed or actual changes in the implementation or operation of the project activity comply with the requirements of the Project Standard.

<sup>&</sup>lt;sup>34</sup> See decision 3/CMP.1, annex, paragraph 62(g).

#### 9.4.1.2. Means of verification

227. The DOE shall, by means of an on-site visit, assess that all physical features of the project activity in the registered PDD are in place and that the project participants have operated the project activity as per the registered PDD or any approved revised PDD. If an on-site visit is not conducted, the DOE shall justify the rationale of the decision.

#### 9.4.1.3. Reporting requirements

- 228. For each monitoring period, the DOE shall report:
  - (a) The implementation status of the project. For project activities that consist of more than one site, the DOE shall describe the status of implementation and starting date of operation for each site. For project activities with phased implementation, the DOE shall state the progress of the proposed project activity achieved in each phase under verification. If the phased implementation is delayed, the DOE shall describe the reasons and present the expected implementation dates;
  - (b) The actual operation of the project activity;
  - (c) Information (data and variables) provided in the monitoring report that is different from that stated in the registered PDD or any approved revised PDD, and has caused an increase in estimates of the emission reductions in the current monitoring period or is highly likely to increase the estimates of emission reductions in the future monitoring periods;<sup>35</sup>

# 9.4.2. Compliance of the monitoring plan with the monitoring methodology including applicable tool(s)

#### 9.4.2.1. Verification requirement

229. The DOE shall determine whether the monitoring plan of the project activity is in accordance with the applied methodology including applicable tool(s).

#### 9.4.2.2. Means of verification

- 230. The DOE shall determine whether the project implementation is in accordance with the provisions of the registered PDD and/or an approved revised PDD.
- 231. For monitoring aspects that are not specified in the methodology, particularly in the case of small-scale methodologies (e.g. additional monitoring parameters, monitoring frequency and calibration frequency), the DOE should bring to the attention of the Board issues which may enhance the level of accuracy and completeness of the monitoring plan.

<sup>&</sup>lt;sup>35</sup> Discrepancies may include higher water availability than expected in the PDD, which may increase the electricity output from a hydropower plant, or a higher plant load factor owing to higher bagasse availability during the crushing season, which increases the production of steam and electricity.

#### 9.4.2.3. Reporting requirements

232. The DOE shall provide a statement whether the monitoring plan is in accordance with the approved methodology applied by the registered CDM project activity or an approved revised PDD.

#### 9.4.3. Compliance of monitoring activities with the registered monitoring plan

#### 9.4.3.1. Verification requirement

233. The DOE shall determine whether the monitoring of parameters related to the GHG emissions reductions in the project activity has been implemented in accordance with the monitoring plan contained in the registered PDD<sup>36</sup> or any accepted revised monitoring plan.

#### 9.4.3.2. Means of verification

234. The DOE shall determine whether:

- (a) The monitoring plan has been properly implemented and followed by the project participants;
- (b) All parameters stated in the monitoring plan and relevant Board decisions<sup>37</sup> have been monitored and updated as applicable, including:
  - (i) Project emission parameters;
  - (ii) Baseline emission parameters;
  - (iii) Leakage parameters;
  - (iv) Management and operational system: the responsibilities and authorities for monitoring and reporting are in accordance with the responsibilities and authorities stated in the monitoring plan.
- (c) The equipment used for monitoring is in accordance with section 9.4.4 below and is controlled and calibrated in accordance with the monitoring plan, the applied methodology, the Board guidance, local/national standards, or as per the manufacturer's specification;
- (d) Monitoring results are consistently recorded as per approved frequency;
- (e) Quality assurance and quality control procedures have been applied in accordance with the monitoring plan or the revised monitoring plan.

<sup>&</sup>lt;sup>36</sup> In accordance with decision 3/CMP.1, annex, paragraph 56: "Project participants shall implement the monitoring plan contained in the registered project design document".

<sup>&</sup>lt;sup>37</sup> For example, a decision at the thirty-fifth meeting of the CDM Executive Board provides clarification for the project activities that apply the approved methodology AM0001. This asks the DOE to check the value of "w" based on the past one year period during verification, which was not clearly stated in the approved methodology.

#### 9.4.3.3. Reporting requirement

- 235. The DOE shall state whether monitoring has been carried out in accordance with the monitoring plan contained in the registered PDD, approved revised PDD or the accepted revised monitoring plan.
- 236. The DOE shall list each parameter required by the monitoring plan and state how it verified the information flow (from data generation, aggregation, to recording, calculation and reporting) for these parameters including the values in the monitoring reports.

# 9.4.4. Compliance with the calibration frequency requirements for measuring instruments

#### 9.4.4.1. Verification requirement

237. The DOE shall determine whether the calibration of those measuring equipments that have an impact on the claimed emission reductions is conducted by the project participants at a frequency specified in the applied monitoring methodology and/or the monitoring plan.

#### 9.4.4.2. Means of verification

- 238. If, during verification of a certain monitoring period, the DOE identifies that the calibration has been delayed and the calibration has been implemented after the monitoring period in consideration (i.e. the results of delayed calibration are available), the DOE may conclude its verification, provided the following conservative approach is adopted in the calculation of emission reductions:
  - (a) Applying the maximum permissible error<sup>38</sup> of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration, if the results of the delayed calibration do not show any errors in the measuring equipment, or if the error is smaller than the maximum permissible error; or
  - (b) Applying the error identified in the delayed calibration test, if the error is beyond the maximum permissible error of the measuring equipment.
- 239. The DOE shall confirm that the error has been applied:
  - (a) In a conservative manner, such that the adjusted measured values of the delayed calibration shall result in fewer claimed emission reductions;
  - (b) For all measured values taken during the period between the scheduled date of calibration and the actual date of calibration.
- 240. In cases where the results of the delayed calibration are not available, or the calibration has not been conducted at the time of verification, the DOE, prior to finalizing verification, shall request the project participants to conduct the required calibration and shall determine whether the project participants have calculated the emission reductions conservatively using the approach mentioned in paragraph 238 above.

<sup>&</sup>lt;sup>38</sup> The maximum permissible errors of all the measuring instruments are specified by the respective manufacturers as part of their technical specifications.

- 241. In cases where the DOE determines that it is not possible for the project participants to conduct the calibration at a frequency specified by either the applied methodology, guidance provided by the Board, and/or the registered monitoring plan due to reasons beyond the control of project participants,<sup>39</sup> the DOE, shall follow the requirements for post registration changes in section 9.5 of this Standard.
- 242. In cases where neither the monitoring methodology nor the monitoring plan specify any requirements for calibration frequency for measuring equipments, the DOE shall determine whether the equipments are calibrated either in accordance with the specifications of the local/national standards, or as per the manufacturer's specification. If neither local/national standards nor the manufacturer's specification are available, international standards may be used. Refer to appendix 1 for an illustrative example to apply the above requirements.

#### 9.4.4.3. Reporting requirements

243. The DOE shall report whether the calibration is conducted at the frequency as specified by the methodology, monitoring plan of the registered PDD or the approved revised monitoring plan.

#### 9.4.5. Assessment of data and calculation of emission reductions

#### 9.4.5.1. Verification requirement

244. The DOE shall assess the data and calculations of GHG emission reductions achieved by/resulting from the project activity by the application of the selected approved methodology.

#### 9.4.5.2. Means of verification

- 245. The DOE shall determine whether:
  - (a) A complete set of data for the specified monitoring period is available. If only partial data are available because activity levels or non-activity parameters have not been monitored in accordance with the registered monitoring plan, the DOE shall either raise a CAR for the project participants to comply with the requirements of appendix 1 of the Project standard or submit a request for deviation prior to submitting the request for issuance, if appropriate;
  - (b) Information provided in the monitoring report has been cross-checked with other sources such as plant logbooks, inventories, purchase records, laboratory analysis;
  - (c) Calculations of baseline emissions, and project activity emissions and leakage, as appropriate, have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document;
  - (d) Any assumptions used in emission calculations have been justified;

<sup>&</sup>lt;sup>39</sup> For example, due to the contractual terms between the project participant and purchasing/selling entities.

(e) Appropriate emission factors,<sup>40</sup> IPCC default values and other reference values have been correctly applied.

#### 9.4.5.3. Reporting requirement

- 246. The verification report shall contain:
  - (a) An indication of whether data were not available because activity levels or nonactivity parameters were not monitored in accordance with the registered monitoring plan as well as any actions taken by the DOE to ensure that the most conservative assumption theoretically possible has been made;
  - (b) A description of how the DOE cross-checked reported data;
  - (c) A confirmation that appropriate methods and formulae for calculating baseline emissions, project emissions and leakage have been followed; and
  - (d) An opinion as to whether assumptions, emission factors and default values that were applied in the calculations have been justified.

#### 9.5. Post registration changes

- 247. The DOE contracted by project participants to validate the post-registration changes shall be accredited to the validation function for the specific CDM sectoral scope.
- 248. The DOE shall determine whether the changes do not require prior approval by the Board in accordance with appendix 1 of Project standard.
- 249. Where the changes are identified by or submitted to the DOE contracted to conduct the verification, the DOE shall determine whether the changes are solely of a type(s) listed in appendix 1 of the Project standard and:
  - (a) In such cases, the DOE shall submit the changes as part of the request for issuance in accordance with the Project cycle procedure;
  - (b) In all other cases, the DOE shall submit the changes via the request for approval of post registration changes process of the Project cycle procedure.
- 250. Where the changes are submitted to a DOE prior to the commencement of verification, the DOE shall submit the changes via the request for approval of post registration changes process of the Project Cycle Procedure.

<sup>&</sup>lt;sup>40</sup> The Board emphasized that in order to ensure an accurate determination of the ex post grid emission factor during the issuance stage, the project participants should endeavour to use the data vintage for year (y) in which the project generation occurs and report it in the monitoring report submitted to the DOE for verification. If, at the time of the submission of the monitoring report to the DOE, the data vintage from year (y) is not available and data from year (y-1) or (y-2) is being used, the DOE shall, during verification, assess whether more recent data has become publicly available and shall, if appropriate, raise a Corrective Action Request to project participants to incorporate the more recent data into the calculation of grid emission factor.

# 9.5.1. Temporary deviations from the registered monitoring plan and/or monitoring methodology

#### 9.5.1.1. Verification requirement

251. The DOE shall determine whether there are deviations from the registered monitoring plan and/or methodology.

#### 9.5.1.2. Means of verification

- 252. If the DOE identifies that the project participants have deviated from the registered monitoring plan and/or methodology, and where the provisions of appendix 1 of the Project standard do not apply, the DOE shall seek prior approval from the Board with respect to the acceptability of the deviations in accordance with the Project cycle procedure.
- 253. The DOE shall determine whether the deviation is likely to lead to a reduction in the accuracy of the calculation of emission reductions. In cases where the DOE considers that the deviation will lead to a reduction in the accuracy of the calculation of emission reductions, the DOE shall request the project participants to apply conservative assumptions or discount factors to the calculations to the extent required to ensure that emission reductions will not be over-estimated as a result of the deviation.
- 254. For cases where a deviation from the monitoring plan may be applicable to the monitoring period under verification, and part of the subsequent monitoring period, the DOE shall verify the exact period to which the deviation applies.

#### 9.5.1.3. Reporting requirements

- 255. Where the deviation is identified during verification, the DOE shall indicate in the verification report how the monitoring report reflects the application of the approved guidance from the Board regarding the deviation from the provisions of the registered monitoring plan and/or methodology.
- 256. Where the deviation is identified prior to verification, the DOE shall state its opinion on whether the deviation reflects the application of the approved guidance from the Board regarding the deviation from the provisions of the registered monitoring plan and/or methodology and as per the applicable provisions of the Project Standard.

#### 9.5.2. Corrections

#### 9.5.2.1. Verification requirement

257. The DOE shall verify that any corrections to project information or parameters fixed at validation, as described in the registered PDD, made by project participants in a revised PDD comply with the requirements of the Project standard.

#### 9.5.2.2. Means of verification

- 258. If the DOE identifies that the project participants have made corrections to project information or parameters determined at validation, the DOE shall determine whether:
  - (a) The corrected information is an accurate reflection of actual project information; and/or
  - (b) The corrected parameters are in accordance with the applied methodology and/or selected monitoring plan.

#### 9.5.2.3. Reporting requirements

259. The DOE shall describe how the corrected information accurately reflects the actual project information and/or how the corrected parameters reflect the application of the applied methodology and/or monitoring plan.

#### 9.5.3. Changes to the start date of the crediting period

#### 9.5.3.1. Verification requirement

260. If the project participants wish to change the start date of the crediting period in accordance with section 12.8 of the Project standard, the DOE shall determine whether the proposed changes result in a less conservative baseline.

#### 9.5.3.2. Reporting requirements

261. The DOE shall indicate if the requirements in the Project standard have been met and shall submit a request for post registration changes in accordance with the Project cycle procedure.

# 9.5.4. Permanent changes from the registered monitoring plan or monitoring methodology

#### 9.5.4.1. Verification requirement

262. The DOE shall verify whether there are permanent changes from the registered monitoring plan and/or methodology.

#### 9.5.4.2. Means of verification

- 263. The DOE shall determine whether the changes to the monitoring plan contained in the registered PDD proposed by the project participants are in compliance with the applied methodology and do not reduce the level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.
- 264. In cases where the proposed changes refer to a later version of the applied methodology in the registered PDD, the DOE shall determine whether the application of any later version of the applied methodology and tools does not impact the conservativeness of the monitoring and verification process, including the related emission reduction calculations.
- 265. If the DOE identifies that the project participants are unable to implement the monitoring plan contained in the registered PDD and it will not be possible to monitor the registered

CDM project activity in accordance with a monitoring plan that would comply with the applied methodology and any applicable tools or the relevant provisions of appendix 1 of the Project standard, the DOE shall request guidance from the Board concerning the acceptability of the permanent changes in accordance with the section on post registration changes in the Project cycle procedure.

266. The DOE shall determine whether the permanent changes are likely to lead to a reduction in the accuracy of the calculation of emission reductions. In cases where the DOE considers that the permanent changes will lead to a reduction in the accuracy of the calculation of emission reductions, the DOE shall request the project participants to apply conservative assumptions or discount factors to the calculations to the extent required to ensure that emission reductions will not be over-estimated as a result of the permanent change.

### 9.5.4.3. Reporting requirements

- 267. Where permanent changes are identified during verification, the DOE shall indicate in the verification report how the revised PDD reflects the application of the approved guidance from the Board regarding the permanent changes from the provisions of the registered monitoring plan and/or methodology.
- 268. Where permanent changes are identified prior to verification, the DOE shall state its opinion on whether the permanent changes reflect the application of the approved guidance from the Board regarding the deviation from the provisions of the registered monitoring plan and/or methodology.

### 9.5.5. Changes to the project design of a registered project activity

### 9.5.5.1. Verification requirement

269. The DOE shall determine whether there are proposed or actual changes to the project design of a registered CDM project activity.

### 9.5.5.2. Means of verification

- 270. If the DOE identifies that the project design in the implementation or operation of the project activity does not conform with the description contained in the registered PDD or the relevant provisions of appendix 1 of the Project standard, the DOE shall request guidance from the Board concerning the acceptability of the proposed or actual changes in accordance with the section on post registration changes in the Project cycle procedure.
- 271. In case of actual changes, the DOE shall, by means of an on-site visit and review of the submitted revised PDD by the project participants, which describes the nature and extent of the actual changes, determine whether this description accurately reflects the implementation, operation and monitoring of the modified project activity.
- 272. The DOE shall conduct an on-site inspection to assess the impacts of the actual changes on the compliance of the monitoring plan, the applied monitoring methodology and tools and/or the level of accuracy of the monitoring activity.
- 273. The DOE shall, by means of reviewing the revised PDD against applicable additionality and methodological requirements, determine whether the proposed or actual changes

would adversely affect the conclusions of the validation report of the registered PDD with regard to:

- (a) Additionality of the project activity;
- (b) Scale of the project activity;
- (c) Applicability and application of approved baseline methodology under which the project activity has been registered; or
- (d) The compliance of the monitoring plan with the applied monitoring methodology.
- 274. If the proposed or actual changes affect the additionality of the project activity then the DOE shall confirm that:
  - In the case of investment analysis, project participants have only modified the key parameters in the original spreadsheet calculations affected by the proposed or actual changes to the project activity;
  - (b) In the case where only barriers have been claimed to demonstrate additionality, project participants have demonstrated that the barriers are still valid under the new circumstances.
- 275. In cases where the proposed or actual changes impact the implementation of the project activity and where the original methodology would no longer be applicable, and where the project participant applies a later version of the methodology or another methodology that is applicable to the project activity, the DOE shall confirm that the applied methodology and tools do not impact the conservativeness of the monitoring and verification process and the related emission reduction calculations.
- 276. The DOE shall assess whether the revised PDD complies with the applied monitoring methodology and tools or any later version of the methodology or the requirements of another methodology that is applicable to the project activity.

#### 9.5.5.3. Reporting requirements

- 277. Where the proposed or actual changes are identified during verification, the DOE shall indicate its opinion in the verification report on how the revised PDD reflects the application of the approved guidance from the Board regarding the proposed or actual changes from the provisions of the registered monitoring plan and/or methodology and as per the applicable provisions of the Project Standard.
- 278. Where the permanent changes are identified prior to verification, the DOE shall state its opinion on whether the permanent changes reflect the application of the approved guidance from the Board regarding the deviation from the provisions of the registered monitoring plan and/or methodology and as per the applicable provisions of the Project Standard.
- 279. The DOE shall provide an opinion containing:
  - (a) A description of the proposed or actual changes as compared to the description in the registered PDD;

- (b) An assessment on when the changes occurred, reasons for these changes taking place, whether the changes would have been known prior to registration of the project activity, and how the changes would impact the overall operation/ability of the project activity to deliver emission reductions as stated in the PDD;
- (c) An assessment regarding whether the changes would adversely affect the conclusions of the validation report of the registered PDD with regard to:
  - (i) Additionality of the project activity;
  - (ii) Scale of the project activity;
  - (iii) Applicability and application of approved baseline methodology under which the project activity has been registered or the later version of the applied methodology;
  - (iv) The compliance of the monitoring plan with applied monitoring methodology; or
  - (v) The level of accuracy of the monitoring compared with the requirements contained in the registered monitoring plan.
- 280. In validating the revised PDD containing the proposed and actual changes, and in preparing the validation opinion, the DOE shall include information on how:
  - (a) The proposed revisions ensure that the level of accuracy and completeness<sup>41</sup> in the monitoring and verification process is not reduced as a result of the revision. The DOE shall, using objective evidence, assess the accuracy and completeness of each proposed revision to the monitoring plan, including the frequency of measurements, the quality of monitoring equipment (e.g. calibration requirements, and the quality assurance and quality control procedures);
  - (b) The proposed revisions are in accordance with the monitoring methodology. In cases where the proposed revision refers to a later version of the applied methodology, the DOE shall confirm that this application does not compromise the conservativeness in the monitoring and verification process and of the emission reduction calculations;
  - (c) The findings of previous verification reports, if any, have been taken into account.
- 281. If the DOE determines that the proposed or actual changes to the project activity comply with the requirements established in the Project Standard, the DOE shall submit the documents to the Board following the Project cycle procedure for post registration changes.
- 282. If the DOE determines that the proposed or actual changes to the project activity do not comply with the requirements established in the Project Standard, the DOE shall issue a negative validation opinion or should request guidance from the Board.

<sup>&</sup>lt;sup>41</sup> Completeness refers to inclusion of all relevant information for assessment of GHG emissions reductions and the information supporting the methods applied as required. For example, if the DOE identifies an on-site generator for emergency use which was not included in the monitoring plan during the verification process, the monitoring of fuel consumption of this generator should be included in the monitoring plan via this procedure.

## 9.6. Verification report and certification report

#### 9.6.1. Verification report

- 283. The verification report shall give an overview of the verification process used by the DOE in order to arrive at its verification conclusions. All verification findings shall be identified and justified.
- 284. The DOE shall report the following:
  - (a) A summary of the verification process and the scope of verification;
  - (b) Details of the verification team, technical experts, internal reviewers involved, together with their roles in the verification activity and details of who conducted the on-site visit;
  - (c) Findings of the desk review and site visit;
  - (d) All of the DOE's findings and conclusions as to whether:
    - (i) The project activity has been implemented and operated in accordance with the registered PDD or any approved revised PDD;
    - (ii) The monitoring plan complies with the monitoring methodology and the actual monitoring complies with the monitoring plan, including compliance with any guidance provided by the Board regarding deviations from the provisions of a registered plan and/or methodology;
    - (iii) The data and calculation of GHG emission reductions have been assessed to correctly support the emission reductions being claimed.
  - (e) A list of each parameter specified by the monitoring plan and a statement on how the values in the monitoring report have been verified;
  - (f) A statement that identifies any changes to the registered PDD, and their date of approval by the Board;
  - (g) An assessment and close-out of any CARs, CLs or FARs issued to the project participants;
  - (h) An assessment of remaining issues from the previous verification period, if appropriate;
  - (i) A conclusion on the verified amount of emission reductions achieved.
- 285. The DOE shall describe all documentation supporting verification and shall make it available on request.

#### 9.6.2. Certification Report

286. The DOE shall, based on its verification report, certify in writing that, during the specified time period, the project activity achieved the verified amount of reductions in

anthropogenic emissions by sources of greenhouse gases that would not have occurred in the absence of the project activity.<sup>42</sup>

287. The DOE shall inform the project participants, Parties involved and the Board of its certification decision in writing immediately upon completion of the certification process and shall make the certification report publicly available in accordance with the Project cycle procedure.

# **10.** Specific verification requirements

# 10.1. Afforestation or reforestation project activities

- 288. At the first verification, the DOE, in accordance with paragraph 34(d) of the CDM modalities and procedures for afforestation and reforestation project activities shall confirm those areas of land for which the control over A/R project activity has been established by the project participants since validation.
- 289. As a part of the first verification report, the DOE shall confirm that the boundary of the A/R project activity geographically delineates exclusively the afforestation or reforestation project activity under the control of the project participants.

### **10.2. Programme of activities**

- 290. If, subsequent to the registration of the programme of activities (PoA), a new coordinating/managing entity is added then the DOE that is undertaking the next inclusion of a CPA shall submit:
  - (a) New letter(s) of authorization from each respective host Party stating the change in coordinating/managing entity;
  - (b) A confirmation from the new coordinating/managing entity that the PoA will be developed and implemented with the same set framework as originally described in the CDM-PoA-DD; and
  - (c) A validation opinion regarding the compliance of the new coordinating/managing entity.

### 10.2.1. Post-registration change to boundary of programme of activities

- 291. The DOE shall determine whether the boundary of the PoA is amended post-registration to expand the geographic coverage or to include an additional host Party provided:
  - (a) The existing registered PoA design document (CDM-PoA-DD) is revised to reflect the changes, in particular the eligibility criteria for inclusion of CPAs;
  - (b) The baseline established in the CDM-PoA-DD is applicable to the extended PoA boundary; and

<sup>&</sup>lt;sup>42</sup> In accordance with paragraph 64 of the CDM modalities and procedures, the certification report constitutes a request to the Executive Board for issuance of CERs equal to the verified amount of reductions of anthropogenic emissions by sources of greenhouse gases.

(c) The DNA of the new host Party issues a letter of approval for the PoA and a letter of authorization for the coordinating/managing entity where the amended PoA boundary includes additional host Parties.

#### 10.2.2. Request for issuance of certified emission reductions for a PoA

- 292. A DOE that has not performed validation activities for a PoA (validation of the PoA, inclusion of CPAs, renewal of the PoA, or renewal of crediting period of CPAs)<sup>43</sup> shall:
  - (a) Identify those CPAs that it shall consider for verification in accordance with the method/procedure to be used for verification of the amount of reductions of anthropogenic emissions by sources or removals by sinks of greenhouse gases achieved by the CPAs under the PoA and determined in the PoA-DD;
  - (b) Take into account the possible existence of CPAs complying with different versions of the PoA and the need to account for this in its sampling approach, to ensure that a statistically sound sample of CPAs from each version of the PoA are being verified;
  - (c) Make the monitoring report publicly available immediately in accordance with the Project cycle procedure;
  - (d) Systematically verify and certify the correct implementation and operation of the record-keeping system.
- 293. The DOE conducting the verification shall include in its verification report a description of how it applied the methods/procedures for the purpose of verification stipulated in the registered CDM-PoA-DD. The DOE shall include in its verification report a description/justification of the site visits undertaken.
- 294. A DOE shall request issuance of CERs for a PoA in accordance with the Project cycle procedure. The request shall relate to all CPAs included in the PoA during the specified monitoring period. The monitoring periods shall be consecutive. A request for issuance shall relate to the certified emission reductions verified as per the above.
- 295. A DOE shall not request issuance of CERs for a PoA within 90 days of the previous request for issuance.

## 10.2.3. Review of erroneous inclusion of a CPA<sup>44</sup>

296. The DOE shall confirm that a CPA that has been excluded shall not be re-included again in that or any other PoA, or qualify as a project activity.

<sup>&</sup>lt;sup>43</sup> The same DOE that has performed validation activities for a PoA (validation\_of the PoA, inclusion of CPAs, renewal of the PoA or renewal of crediting period of CPAs) may also undertake the verification if this has been approved in advance by the Board.

<sup>&</sup>lt;sup>44</sup> Erroneous inclusion of a CPA into a PoA registered as a single CDM project activity (PoA) means that the CPA does not meet the eligibility criteria for inclusion as specified in the CDM-PoA-DD.

# 11. Renewal of crediting period

# 11.1. General requirements

### 11.1.1. Validation requirement

297. When contracted by project participants to validate an existing project activity for a second or further renewal of crediting period, the DOE shall determine whether the project participants have updated sections of the PDD relating to the baseline, estimated emission reductions and the monitoring plan using the most recent version of baseline and monitoring methodology applicable for the project activity.

### 11.1.2. Means of validation

- 298. The DOE shall determine whether the project participants have updated the PDD in accordance with section 12.9 of the Project standard.
- 299. The DOE shall assess the validity of the original baseline or its update through an assessment of the following issues:
  - (a) The impact of new relevant national and/or sectoral policies and circumstances on the baseline taking into account relevant guidance from the Board with regard to renewal of the crediting period at the time of requesting renewal of crediting period;
  - (b) The correctness of the application of an approved baseline methodology for the determination of the continued validity of the baseline or its update, and the estimation of emission reductions for the applicable crediting period.
- 300. The DOE shall check that the names of the project participants included in the request for renewal of crediting period are consistent with the names of the registered project participants for the project activity or the PoA.

### 11.1.3. Reporting requirement

301. The DOE shall report on the renewal of the crediting period on how it has reassessed the validity of the original baseline and whether the emission reductions are in line with the latest applicable methodology.

# 11.2. Renewal of a crediting period of CPAs under a registered PoA

302. The DOE shall assess the information in the CDM-CPA-DD against the latest version of the PoA and documentation requirements and, if consistency is confirmed, shall renew the crediting period of the existing CPA in accordance with the Project cycle procedure.

# Appendix 1. Calibration

- 1. The following provides an illustrative example for applying the provisions in paragraph 238 (a) and (b).
- 2. An electricity energy meter with a maximum permissible error (±5%), which may be used for measuring the electricity export for baseline emissions and electricity import for project emission calculations, is required to be calibrated every year. If the calibration is delayed and instead of after one year it is conducted after one and a half years, and the result of the delayed calibration is available at the time of verification, to account for the delayed calibration the measured values shall be corrected as demonstrated in the following Table 1 and Table 2 for situations stipulated in paragraph 238 (a) and (b).

| Measured value | Parameter          | Error identified<br>during delayed<br>calibration | Corrected Values  |
|----------------|--------------------|---|---|
| 100 MWh        | Electricity Export | ±2%   | 100 (1-Max .<br>permissible<br>error%/100) = 95<br>MWh  |
| 100 MWh        | Electricity Import | ±2%   | 100 (1+Max .<br>permissible<br>error%/100) = 105<br>MWh |

#### Table 1.

#### Table 2.

| Measured value | Parameter          | Error identified<br>during delayed<br>calibration | Corrected Values               |
|----------------|--------------------|---|--------------------------------|
| 100 MWh        | Electricity Export | ±7%   | 100 (1-error%/100)<br>= 93 MWh |
| 100 MWh        | Electricity Import | ±7%   | 100 (1+error%/100)<br>=107 MWh |

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### **Document information**

| Version | Date             | Description   |
|---------|------------------|---|
| 03.0    | 23 November 2012 | EB 70, Annex 3  |
|         |                  | Revision to reflect revised requirements for PoAs.  |
| 02.0    | 25 November 2011 | EB 65, Annex 4  |
|         |                  | The document title has changed. This document, along with the<br>"Clean development mechanism project standard" and the "Clean development mechanism project cycle procedure", supersedes and<br>replaces the following documents on the date when these three<br>documents above enter into force: |
|         |                  | Clean development mechanism validation and verification manual (version 01.2)   |
|         |                  | <ul> <li>Procedures for requesting post-registration changes to the start<br/>date of the crediting period (version 02.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for modalities of communication between project<br/>participants and the Executive Board (version 01.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for registration of a programme of activities as a<br/>single CDM project activity and issuance of certified emission<br/>reductions for a programme of activities (version 04.1)</li> </ul>  |
|         |                  | <ul> <li>Procedures for processing and reporting on validation of CDM project activities (version 03.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for requests to the Executive Board for deviation<br/>from an approved methodology (version 01.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for approval of the application of multiple<br/>methodologies to a programme of activities (version 01.0)</li> </ul>  |
|         |                  | <ul> <li>Procedure for requests for registration of proposed CDM project<br/>activities (version 2.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for review of erroneous inclusion of a CPA<br/>(version 03.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for withdrawal of a request for registration<br/>(version 01.0)</li> </ul>  |
|         |                  | <ul> <li>Procedures for renewal of the crediting period of a registered<br/>CDM project activity (version 06.0)</li> </ul>  |
|         |                  | <ul> <li>Making the monitoring report available to the public in<br/>accordance with § 62 of the modalities and procedures for the<br/>CDM (version 01.0)</li> </ul>  |
|         |                  | <ul> <li>Procedure for requests for issuance of CERs (version 01.2)</li> </ul>  |
|         |                  | <ul> <li>Procedures for withdrawal of a request for issuance of certified<br/>emission reductions (version 01.0)</li> </ul>   |
|         |                  | <ul> <li>Procedures for notifying and requesting approval of changes<br/>from the project activity as described in the registered PDD<br/>(version 01.0)</li> </ul>   |
|         |                  | <ul> <li>Procedures for revising monitoring plans in accordance with<br/>paragraph 57 of the modalities and procedures for the CDM<br/>(version 02.0)</li> </ul>  |

| Version             | Date             | Description   |  |
|---------------------|------------------|---|--|
|                     |                  | <ul> <li>Procedures for requests for deviation prior to submitting reques<br/>for issuance (version 01.0)</li> </ul>  |  |
|                     |                  | <ul> <li>Guidelines on the demonstration and assessment of prio<br/>consideration of the CDM (version 04.0)</li> </ul>  |  |
|                     |                  | <ul> <li>Guidance related to monitoring requirements (EB23, paragraph 24)</li> </ul>  |  |
|                     |                  | <ul> <li>Guidance on application of the definition of the project boundar<br/>to A/R CDM project activities (version 01.0)</li> </ul>   |  |
|                     |                  | <ul> <li>Guidelines on assessment of different types of changes from<br/>the project activity as described in the registered PDI<br/>(version 01.0)</li> </ul>  |  |
|                     |                  | <ul> <li>Guidelines for assessing compliance with the calibration<br/>frequency requirements (version 01.0)</li> </ul>  |  |
|                     |                  | <ul> <li>Clarifications on the consideration of national and/or sectora<br/>policies and circumstances in baseline scenarios (version 02.0)</li> </ul>  |  |
|                     |                  | <ul> <li>Clarifications on the treatment of national and/or sectoral<br/>policies and regulations (paragraph 45 (e) of the CDM<br/>Modalities and Procedures) in determining a baseline scenario<br/>(version 01.0)</li> </ul>                  |  |
|                     |                  | <ul> <li>Clarification regarding the "Procedures for registration of<br/>programme of activities as a single CDM project activity and<br/>issuance of certified emission reductions for a programme of<br/>activities (version 01.0)</li> </ul> |  |
|                     |                  | <ul> <li>Additional clarifications to the validation requirements to be<br/>checked by a designated operational entity" (EB 11 annex 6)</li> </ul>  |  |
| 01.2                | 30 July 2010     | EB 55, Annex 1  |  |
|                     |                  | <ul> <li>Incorporation of applicable decisions of the Board from EB 51 to<br/>EB 54;</li> </ul>   |  |
|                     |                  | <ul> <li>Revision of references to the procedures, tools and guidance documents;</li> </ul>   |  |
|                     |                  | Editorial review.   |  |
| 01.1 4 December 200 | 4 December 2009  | EB 51, Annex 3  |  |
|                     |                  | <ul> <li>Incorporation of applicable decisions of the Board from EB 44 t<br/>EB 50;</li> </ul>  |  |
|                     |                  | <ul> <li>Revision of references to the procedures, tools and guidance documents;</li> </ul>   |  |
|                     |                  | Editorial review.   |  |
| 01.0                | 28 November 2008 | EB 44, Annex 3<br>Initial adoption.   |  |

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