




**Validation report form for post-registration changes for
CDM programme of activities
(Version 03.0)**

Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

Title and UNFCCC reference number of the programme of activities (PoA)	Senegal Rural Electrification Program UNFCCC ID: 10411 TN P-No. : 8003022523 – 20/102
Process track	<input checked="" type="checkbox"/> Prior approval <input type="checkbox"/> Issuance <input type="checkbox"/> Renewal of PoA period
Version number of the validation report	1
Completion date of the validation report	18/06/2021
Version number of PoA-DD applicable to this validation report	12.1
Type(s) of PoA PRCs	<input checked="" type="checkbox"/> Corrections <input type="checkbox"/> Inclusion of monitoring plan <input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other methodological regulatory documents ¹ <input type="checkbox"/> Changes to the programme design <input type="checkbox"/> Addition of CPA inclusion template <input type="checkbox"/> Change of coordinating/managing entity <input type="checkbox"/> Changes specific to afforestation and reforestation activities
Coordinating/managing entity (CME)	Agence Sénégalaise d'Électrification Rurale (ASER)
Host Parties	Senegal
Applied methodologies and standardized baselines	AMS-III.BL Version 01.0 Integrated methodology for electrification of communities AMS III.AR: Version 5.0 Substituting fossil fuel based lighting with LED/CFL lighting systems Applied standardized baseline: N.a.
Mandatory sectoral scopes	Sectoral scope for AMS-III.BL: 1 – Energy Industries (renewable- / non-renewable sources) Sectoral scope for AMS III.AR: 1 – Energy Industries (renewable- / non-renewable sources)
Conditional sectoral scopes, if applicable	none

¹ Other standards, methodologies, methodological tools and guidelines (to be) applied in accordance with the applied(selected) methodologies are collectively referred to as the other (applied) methodological regulatory documents).

Name and UNFCCC reference number of the DOE	TÜV NORD CERT GmbH; E-0022
Name, position and signature of the approver of the validation report	Final Approver Kunal Rami 

SECTION A. Executive summary

The International Bank for Reconstruction and Development (IBRD), a Project Participant to the PoA, has commissioned the TÜV NORD JI/CDM Certification Program to carry out the assessment of applied post registration changes of the CDM Programme of Activities (CDM-PoA):

“Senegal Rural Electrification Program”

with regard to the relevant requirements for CDM PoAs.

The policy/measure or stated goal of the programme of activities is to support the Senegalese Rural Electrification Agency (ASER)² in their strategy for increased rural electrification. To achieve national electrification goals ASER has, between 2000 and 2010, electrified more than 1,000 villages throughout the country, using the following technologies: grid extensions, Solar Home Systems, and isolated mini-grids connected to diesel generators. To further accelerate the rural electrification programme, ASER is developing a CDM Programme of Activity (PoA) under which individual projects could claim the carbon credit benefits. The voluntary PoA will provide a platform for overcoming institutional, financial and structural hurdles for the development of a variety of rural electrification technologies, including extension of the grid, renewable energy systems and hybrid systems at various scales and solar lanterns.

SECTION B. Validation team, technical reviewer and approver**B.1. Validation team member**

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Document review	On-site inspection	Interviews	Validation findings
1.	Team Leader	IR	Winter	Stefan	TÜV NORD CERT	X	x ³	X	X

B.2. Technical reviewer and approver of the validation report on PoA PRCs

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	EI	Lubanga	David	-
2.	Approver	IR	Rami	Kunal	TÜV NORD CERT

SECTION C. Means of validation**C.1. Document review**

The *assessment of post registration changes* consisted of the following steps:

- Appointment of team members and technical reviewers

² Agence Senegalaise d'Electrification Rurale

³ Remote audit via WebEx

- A desk review of the registered and revised PoA-DD/^{PoADD}/ submitted by the client and additional supporting documents
- On-Site assessment (if required)
- Background investigation and follow-up interviews with personnel of the project developer and its contractors,
- Resolution of corrective actions (CARs / CLs) (if any)
- Final reporting
- Technical review
- Final approval.

The registered as well as the revised PoA-DD and supporting background documents related to the project design and the post registration changes were reviewed.

As far as required the assessment team used additional documentation by third parties like host party legislation, technical reports referring to the project design or to the basic conditions and technical data.

A list all documents reviewed or referenced during this validation is presented in Annex 3.

C.2. On-site inspection

Duration of on-site inspection: 18/11/2020				
No.	Activity performed on-site	Site location	Date	Team member
1.	Introduction, scope of work	Remote via Webex	18/11/2020	Stefan Winter
2.	Explanation of PRC type and extent, background, supporting documents and related timeline			
3.	Closing of call and summary of issues identified.			

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Jason James	Smith	International Bank for Reconstruction and Development (IBRD)	18/11/2020	PRC type and extent, background, supporting documents and related timeline	Stefan Winter
2.	Javier	Freire Coloma	Consultant to the International Bank for Reconstruction and Development (IBRD)	18/11/2020		

C.4. Clarification requests, corrective action requests and forward action requests raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PoA-DD form	-	1	-
Corrections	1	1	-
Inclusion of monitoring plan	-	-	-
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other methodological regulatory documents	-	-	-
Changes to the programme design	-	-	-
Addition of CPA inclusion template	-	-	-

Change of coordinating/managing entity	-	-	-
Changes specific to afforestation and reforestation activities	-	-	-
Others (please specify)	-	-	-
Total	1	2	0

SECTION D. Validation findings

D.1. Compliance with the PoA-DD form

Means of validation	<p>The project participants used the latest version of the PoA-DD form for the revised PoA-DD. By means of checking the updated PoA-DD against the latest applicable and available PoA-DD template form the validation team confirms that the information transferred to the later version of the PoA-DD is materially the same as the information provided in the registered PoA-DD, besides the changes highlighted and assessed in this report.</p> <p>Further it has been checked whether the latest instructions for filling out the PoA-DD template have been followed. Every section has been checked against the respective guidance.</p> <p>The following sources of information have been used in this context:</p> <ul style="list-style-type: none">• /PoADD/• /PoADD-F/• /unfccc/	
Findings	<input checked="" type="checkbox"/>	The latest reporting template CDM-PoA-DD-FORM as listed on the UNFCCC website has been used for the PoA-DD.
	<input checked="" type="checkbox"/>	The latest instructions for filling out the PoA-DD have been followed. No adverse finding has been identified in the course of this validation.
	<input checked="" type="checkbox"/>	<p>The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:</p> <p>CAR 01</p>
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The updated PoA-DD in tracked-change and clean version is in line with the latest applicable PoA-DD form. The validation team can confirm that the information transferred to the later valid version 9.0 is materially the same as the one in the registered PoA-DD. The PoA DD is filled as per the guidelines.	

D.2. Corrections

Means of validation	Description of post registration change			
	Start Date: Please provide the start date of the change	17/05/2018	End Date: Please provide the end date of the change, if applicable	-
	Description: Please give a detailed description of the change(s)	Removal of references to consumption service levels S1 to S4 in relevant sections, including sections A.3, H.3 and I.6.1. Additional info on the classification description for ex-ante estimate calculations under section I.6.3 for generic CPA categories 1 to 3.		
	Assessment of post registration change – Corrections			
	Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.	Based on the new law and regulation in the host country Senegal, the PoA-DD has been revised to reflect the actual changes. Previously the energy suppliers based on previous regulations charged the customers based on their service level (SL1 to SL4) different specific electricity prices. The new law and regulation considers only one price and does not refer to any service levels but the customers are charged based on their actual consumption and connected		

		<p>load.</p> <p>As per description of the CME and checked from provided concessionaires e.g. "Avenant N°1 entre La Republic Senegal et Energie Rurale Africaine S.A (ERA)" it is stated under (H) of preamble that</p> <p>"due to the needs of the public electricity service, as well as the urgency attached to it, and in order to restore the equality of treatment of users before the service, the state of Senegal has decided to harmonize electricity tariffs throughout the national territory. To this end, the Concessionaire (Energie Rurale Africaine) will apply the Senelec tariff to all users. The shortfall and the costs resulting from the implementation of tariff harmonization will be compensated by the State.</p> <p>Under these conditions and in accordance with the provisions of article 47 of the contract, the parties have agreed to modify the said contract by this addendum in the terms below for the implementation of the tariff harmonization decision."</p> <p>Consequently, the Senelec tariff is applied across all the host country and hence the S1-S4 is not applicable any longer. This was finalized on 1 December 2019 however is applicable from start of the concession as stated above and any losses due to this harmonization is compensated by the host country government as also stated above. Hence, the change is applicable from the beginning of the PoA/start date of the PoA.</p> <p>This is further substantiated by provided weblink to article titled "Concessions d'électrification rurale : L'Etat étend le champ d'action de la Senelec" and dated Jeudi 27 Septembre 2018 / Thursday, 27 September 2018.</p> <p>Therefore, the PoA-DD has been updated to delete all relevant description w.r.t. the service level and replaced those by connected load in sections A.3, H.3 and I.6.1. For ex-ante estimation the service level principle is still applied as no further details are available to determine the ex-ante ERs.</p> <p>This is only related to the description of the PoA and required for the CME database but not required as per any rule or regulation of the applied methodologies. The ER calculation is still based on the consumption amount of Type I to Type IV consumers. This has not been changed.</p> <p>There, is no change w.r.t. the monitoring as well simply as at time of registration the monitoring plan has not been included. The CME opted to include the monitoring plan at a later stage.</p> <p>Based on the new regulation and law as well as of the provided documents and interview conducted it can be confirmed that the change has been correctly reflected in the PoA-DD, has no impact on the applied methodology or any regulation thereof and is therefore a change in description of editorial nature.</p>
	<p>Conservative-ness:</p> <p>Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.</p>	<p>Has no impact on the conservativeness or the ER calculation. The issue is impacting the database set-up and grouping of the customers within the regional energy suppliers. The final ER calculation is still based on the four different consumer types (type I-IV) as per related methodology. Further, the ex-ante estimation is not adjusted due to the reason that it is based on study and plan conducted at a time prior to the implementation of the new law and regulation and therefore still based on the service level categorization/grouping. Based on that there is no impact on the ER estimation and impact to</p>

		conservativeness. For ex-ante estimation the service level principle is still applied as no further details are available to determine the ex-ante ERs.
	Appendix of PoA-PS: Check if the changes fall under one of the scenarios of Appendix of the PS for PoA.	The related applied post registration change is included in appendix 2 of the PoA-PS and may therefore be suitable to be submitted under the issuance track. However, as the CME decided not to submit the PRC with the issuance track prior approval by the board is required as §227 of PoA-PS states that “unless otherwise stated in the respective provisions in sections 9.2 and 9.3 below, post-registration changes to a registered CDM PoA require approval by the Board”. Related section 9.3.1 / §229 of PoA-PS does not indicate that a Correction does not require prior approval: “229. If the coordinating/managing entity makes any corrections to the information or parameters fixed at registration of the CDM PoA or inclusion of a CPA as described in the registered PoA-DD or included CPA-DD, the coordinating/managing entity shall document these corrections in a revised PoA-DD or CPA-DD.”
Findings	<input checked="" type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: CL 01 and CAR 02
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	<input checked="" type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
		Based on the above stated the corrections to the registered PDD are in accordance with applicable validation requirements related to the corrections in the VVS for PoA.
		Revised PoA-DD
	Rev. of PoA-DD: Check whether the changes have been fully addressed in a revised PoA DD.	<input checked="" type="checkbox"/> The changes have correctly been reflected in the revised PoA DD. <input type="checkbox"/> A revision of the PoA DD is not required (in case of temp. changes). <input checked="" type="checkbox"/> The revised for PoA DD has been forwarded in (i) track-change and (ii) clean version.
		Prior Approval
	Prior approval: Assess whether the change requires prior approval of the board	<input checked="" type="checkbox"/> The post registration change requires prior approval <input type="checkbox"/> The post registration change does not require prior approval

D.3. Inclusion of monitoring plan

Means of validation	Description of post registration change			
	Start Date: Please provide the start date of the change	DD/MM/YYYY	End Date: Please provide the end date of the change, if applicable	DD/MM/YYYY
	Description: Please give a detailed description of the change(s)	This section is not applicable to the current applied PRC.		
	Assessment of post registration change – Inclusion of a MP			
	MM compliance: Please check in case of changes to the registered MP, whether they are in compliance with the MM.			
	Later version of			

	MM: Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected.		
	Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.		
	Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.		
	Appendix 2 of PoA-PS: Check if the changes fall under one of the scenarios of Appendix 2 of the PS for PoA.		
Findings	<input type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:	
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.	
	Based on the above stated the inclusion of a monitoring plan to the registered project activity is in accordance with applicable validation requirements related to the inclusion of a monitoring plan to a registered project activity in the VVS for PoA.		
	Revised PoA-DD		
	Rev. of PoA-DD: Check whether the changes have been fully addressed in a revised PoA DD.	<input type="checkbox"/>	The changes have correctly been reflected in the revised PoA DD.
		<input type="checkbox"/>	A revision of the PoA DD is not required (in case of temp. changes).
<input type="checkbox"/>		The revised for PoA DD has been forwarded in (i) track-change and (ii) clean version.	
Prior Approval			
Prior approval: Assess whether the change requires prior approval of the board	<input type="checkbox"/>	The post registration change requires prior approval	
	<input type="checkbox"/>	The post registration change does not require prior approval	

D.4. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from applied methodologies, standardized baselines, or other methodological regulatory documents

Means of validation	Type of	<input type="checkbox"/>	<i>Permanent Change(s) from Monitoring Plan</i>
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	change(s):	<input type="checkbox"/>	Permanent Change(s) from the applied methodologies	
		<input type="checkbox"/>	Permanent Change(s) from standardized baselines	
		<input type="checkbox"/>	Permanent Change(s) from other applied methodological regulatory documents or tools	
	Description of post registration change			
	Start Date: Please provide the start date of the change	DD/MM/YYYY		End Date: Please provide the end date of the change, if applicable
	Description: Please give a detailed description of the change(s)	This section is not applicable to the current applied PRC.		
	Assessment of post registration change – Permanent changes to the registered MP or deviation of monitoring from the MM			
	MM compliance: Please check in case of changes to the registered MP, whether they are in compliance with the MM.			
	Later version of MM: Please check in cases where compliance with a later version of the MM is demonstrated that the conservativeness of the monitoring and verification is not affected.			
	Accuracy: Please give a detailed assessment whether the deviation is likely to lead to a reduction in the accuracy of the ER calculation.			
Conservative-ness: Please give a detailed assessment whether conservative assumptions or discount factors have been applied to ensure that ER will not be overestimated.				
Appendix 2 PoA-PS: Check if the changes fall under one of the scenarios of appendix 2 of the PoA-PS.				
Findings	<input type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:		

Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.		
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		
	Based on the above stated the permanent changes from the registered monitoring plan, applied monitoring methodology and/or applied standardized baseline are in accordance with applicable validation requirements related to the permanent changes from the registered monitoring plan, monitoring methodology and/or standardized baseline in the VVS.			
	Revised PoA-DD			
	Rev. of PoA-DD: Check whether the changes have been fully addressed in a revised PoA DD.	<input type="checkbox"/>	The changes have correctly been reflected in the revised PoA-DD.	
		<input type="checkbox"/>	A revision of the PoA-DD is not required (in case of temp. changes).	
		<input type="checkbox"/>	The revised for PoA DD has been forwarded in (i) track-change and (ii) clean version.	
Prior Approval				
Prior approval: Assess whether the change requires prior approval of the board	<input type="checkbox"/>	The post registration change requires prior approval		
	<input type="checkbox"/>	The post registration change does not require prior approval		

D.5. Changes to the programme design

Means of validation	Type of change(s):	<input type="checkbox"/>	Changes to the programme design	
	Description of post registration change			
	Start Date: Please provide the start date of the change	DD/MM/YYYY	End Date: Please provide the end date of the change, if applicable	DD/MM/YYYY
	Description: Please give a detailed description of the change(s)	This section is not applicable to the current applied PRC.		
	Applicability and application of the Approved Baseline Methodology			
	Description: Please give a detailed description on how the changes affect the applicability and application of the approved Baseline Methodology. Check if the actual changes would adversely affect the conclusions during validation.			
	Additionality assessment			
	Description: Please give a detailed description re-assessment of additionality, Check whether the actual changes would adversely affect the conclusions during validation. If required please make use of the assessment tables in the annex.			
	Scale of the Project activity			

	Description: Please give a detailed regarding the effect of the changes on the scale of the PoA (i.e. LSC or SSC).		
	Appendix 2 PoA-PS: Check if the changes fall under one of the scenarios of appendix 2 of the PoA-PS.		
Findings	<input type="checkbox"/>	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:	
Conclusion	<input type="checkbox"/>	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.	
	<input type="checkbox"/>	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.	
	Based on the above stated the permanent changes from the registered monitoring plan, applied monitoring methodology and/or applied standardized baseline are in accordance with applicable validation requirements related to the permanent changes from the registered monitoring plan, monitoring methodology and/or standardized baseline in the VVS.		
	Revised PoA-DD		
	Rev. of PoA-DD: Check whether the changes have been fully addressed in a revised PoA DD.	<input type="checkbox"/>	The changes have correctly been reflected in the revised PoA-DD.
		<input type="checkbox"/>	The revised for PoA DD has been forwarded in (i) track-change and (ii) clean version.
Prior Approval			
Prior approval: Assess whether the change requires prior approval of the board	<input type="checkbox"/>	The post registration change requires prior approval	
	<input type="checkbox"/>	The post registration change does not require prior approval	

D.6. Addition of CPA inclusion template

Means of validation	This section is not applicable to the current applied PRC.
Findings	
Conclusion	

D.7. Change of coordinating/managing entity

Means of validation	This section is not applicable to the current applied PRC.
Findings	
Conclusion	

D.8. Changes specific to afforestation and reforestation activities

Means of validation	This section is not applicable to the current applied PRC.
Findings	
Conclusion	

SECTION E. Internal quality control

Before submission of the final assessment report a technical review is carried out. The technical reviewer is a competent GHG auditor being appointed for the scope this project falls under. The technical reviewer is not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the assessment opinion as prepared by the validation team leader may be confirmed or revised. Furthermore reporting improvements might be achieved.

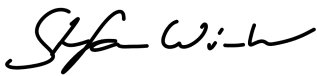
SECTION F. Validation opinion

The below listed changes have occurred after the registration of the PoA.

<i>Type of Change occurred</i>	<i>Total No. of changes</i>	<i>No. of changes which require prior approval</i>
<input type="checkbox"/> Temporary deviations from the MP	-	-
<input type="checkbox"/> Temporary deviations from the Methodology	-	-
<input type="checkbox"/> Temporary Deviation from applied Standardized Baseline	-	-
<input type="checkbox"/> Temporary Deviation from applied other regulatory documents	-	-
<input checked="" type="checkbox"/> Corrections that do not affect the PoA	1	1
<input type="checkbox"/> Change to the start date of the crediting period	-	-
<input type="checkbox"/> Permanent changes to the registered monitoring plan	-	-
<input type="checkbox"/> Permanent permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	-	-
<input type="checkbox"/> Design changes to the PoA	-	-
<input type="checkbox"/> Changes specific to A/R projects	-	-

None of the changes requires prior approval of the Board.

Essen, 18/06/2020




Stefan Winter
TÜV NORD JI/CDM CP
Assessment Team Leader

Appendix 1. Abbreviations

Abbreviations	Full texts
ASER	Agence Senegalaise d'Electrification Rurale / Senegalese Rural Electrification Agency
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CME	Coordinating/Managing Entity
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
CP	Certification Program
CPA	Component Project Activity
DD	Design Document
DNA	Designated National Authority
EB	CDM Executive Board
GHG	Greenhouse gas(es)
IBRD	International Bank for Reconstruction and Development as trustee of the Carbon Initiative for Development (Ci-Dev)
PA	Project activity
PDD	Project Design Document
PoA	Programme of Activities
PRC	Post Registration Changes
QC/QA	Quality control/Quality assurance
SENELEC	SOCIETE D'ELECTRICITE DU SENEGAL
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Mr. David Lubanga

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2021-10-20
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2021-10-20


Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand
13.2	Manure

251 - Rev. 7, Date: 2018-10-19

251_201-VA000-F20_2018-10-19_rw7.doc

201-VA000-F20 rev3 / 2012-10-25



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Mr. Kunal Rami

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2023-03-26
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2023-03-26


Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
6.1	Construction
7.1	Transport
13.1	Solid waste and wastewater

224 - Rev. 9, Date: 2020-12-03

224_201-VA000-F20_2020-12-03_rw9

201-VA000-F20 rev3 / 2012-10-25



Statement of Competence
Appointment and authorization according to the procedures
of the TÜV NORD JICDM Certification Program

Mr. Stefan Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2023-07-27
VCS / ISO 14064-2	Senior Assessor (Validation, Verification) Technical Reviewer	2023-07-27

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
4.1	Cement and lime production
4.2	Paper
5.2	Caprolactam, nitric and adipic acid
9.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-alloy production
10.1	Fugitive emissions from oil and gas
13.1	Solid waste and wastewater
13.2	Manure

163 - Rev. 7, Date: 2020-07-22

163_201-VA000-F20_2020-07-22_rw7

201-VA000-F20 rev3 / 2012-10-25

Appendix 3. Documents reviewed or referenced

No.	Author	Reference	Title	References to the document	Provider
1	UNFCCC	/AMS/	Applied small scale methodologies AMS-III.BL Version 01.0 Integrated methodology for electrification of communities AMS III.AR: Version 5.0 Substituting fossil fuel based lighting with LED/CFL lighting systems	https://cdm.unfccc.int/methodologies/index.html	Other
2	DOE	/CPM/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)		Other
3	IPCC	/IPCC/	1. 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2. 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book	www.ipcc-nggip.iges.or.jp	Other
4	UNFCCC	/KP/	Kyoto Protocol (1997)	http://unfccc.int/kyoto_protocol/items/2830.php	Other
5	UNFCCC	/MA/	Decision 3/CMP. 1 (Marrakesh – Accords)	http://cdm.unfccc.int/Reference/CO2PMOP/index.html	Other
6	UNFCCC	/PoADD-F/	CDM-PoA-DD-FORM Programme of activities design document form, Version 9.0	https://cdm.unfccc.int/Reference/PDs_Forms/index.html	Other
7	UNFCCC	/PoADD/	PoA Design Document entitled: “Senegal Rural Electrification Program” Registered version 10, dated 15/02/2018 Updated version 11, dated 15/09/2020 Updated version 12, dated 15/12/2020 Updated version 12.1, dated 07/05/2021	https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/OIDUGC95VYZLXE4HAJT7FM6SK1RNQP/view	Other
8	UNFCCC	/PS/	CDM project standard for programmes of activities (Version 2.0)	http://cdm.unfccc.int/Reference/Standards/index.html	Other
9	PP	/VAL/	Validation Report for CDM PoA entitled “Senegal Rural Electrification Program” version 6, dated 28/02/2018 by AENOR	https://cdm.unfccc.int/ProgrammeOfActivities/poa_db/OIDUGC95VYZLXE4HAJT7FM6SK1RNQP/view	Other
10	UNFCCC	/VVS/	CDM validation and verification standard for programmes of activities (Version 2.0)	http://cdm.unfccc.int/Reference/Standards/index.html	Other
11	UNFCCC	/SAMPLE/	“Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities” (Version 4.0) “Standard for Sampling and Surveys for CDM Project Activities and Programme Activities” (version 9.0)	https://cdm.unfccc.int/Reference/Guidelines/index.html http://cdm.unfccc.int/Reference/Standards/index.html	Other
12	UNFCCC	/TA/	<ul style="list-style-type: none"> Tool to calculate project or leakage CO2 emissions from fossil 	http://cdm.unfccc.int/Reference/tools	Other

No.	Author	Reference	Title	References to the document	Provider
			fuel combustion Version 3 • Tool to calculate the emission factor for an electricity system Version 5.0 • Tool: Demonstration of additionality of microscale activities, Version 08.0	/index.html	
13	UNFCCC	/GOT/	Glossary “CDM terms” (version 10.0)	https://cdm.unfccc.int/Reference/index.html	Other
14	Several	/CON/	Concession agreements: • Avenant 1 Contrat Conces ER_Comasel Louga • Avenant 1 Contrat Conces ER_Comasel Saint- Louis • Avenant 1 Contrat Conces ER_SCL • Avenant n°1 Contrat de Conces ER_ERA	-	PP
15	SENELEC	/sen/	Webpage of Senelec Senelec published tariffs for Senegal	Senelec http://www.senelec.sn/tarification/	-
16	DNA	/dna-se/	Webpage of DNA for Senegal	http://www.jo.gouv.sn/spip.php?article5278	-

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CL from this validation

CL ID	01	Section no.	-	Date: 18/11/2020
Description of CL				
Clarification w.r.t. the exact effective date of the PRC is requested along with related supporting evidence.				
Project participant response				Date: 12/01/2021
The PRC intends to modify some of the descriptions included in the PoA and CPAs, namely the references to specific electricity service levels to end users/consumers (S1 to S4). The PRC should apply from the start date of the PoA, as one of the concessionaires, SENELEC, does not use this classification under their concession areas.				
Documentation provided by project participant (1 st round)				
<input type="checkbox"/>	Changes in the PoA-DD	Section(s):	New version No.:	
<input type="checkbox"/>	Changes in the CPA-DD	Section(s):	New version No.:	
<input type="checkbox"/>	Changes in MR	Section(s):	New version No.:	
<input type="checkbox"/>	Changes in XLS	Worksheet(s):	New version No.:	
<input checked="" type="checkbox"/>	Other:	http://www.senelec.sn/tarification/		
DOE assessment				Date: 10/02/2021

OK. As per description of the CME and checked from provided concessionaires "Avenant N°1 entre La République Sénégal et Energie Rurale Africaine S.A (ERA)" it is stated under (H) of preamble that "due to the needs of the public electricity service, as well as the urgency attached to it, and in order to restore the equality of treatment of users before the service, the state of Senegal has decided to harmonize electricity tariffs throughout the national territory. To this end, the Concessionaire (Republic of Senegal) will apply the Senelec tariff to all users. The shortfall and the costs resulting from the implementation of tariff harmonization will be compensated by the State.

Under these conditions and in accordance with the provisions of article 47 of the contract, the parties have agreed to modify the said contract by this addendum in the terms below for the implementation of the tariff harmonization decision."

As per this the Senelec tariff is applied across all the host country and hence the S1-S4 not applicable any longer. This was finalized on 1 December 2019 however is applicable from start of the concession as stated above and any losses due to this harmonization is compensated by the host country government as also stated above. Hence, the change is applicable from the beginning of the PoA/start date of the PoA.

The tariff is as following as can be checked from <http://www.senelec.sn/tarification/>



Tarifs d'électricité hors taxes applicables à partir du 1^{er} Décembre 2019

CATÉGORIES TARIFAIRES	Prix de l'énergie et de la Redevance d'électrification rurale en FCFA/kWh			Prime Fixe Mensuelle en FCFA/kW
	1 ^{ère} Tranche	2 ^{ème} Tranche	3 ^{ème} Tranche	
Usage Domestique (UD)				
Domestique Petite Puissance (DPP)	91,17	112,5	124,62	
Domestique Moyenne Puissance (DMP)	96,72	113,38	123,92	
Usage Professionnel (UP)				
Professionnel Petite Puissance (PPP)	142,44	149,95	163,15	
Professionnel Moyenne Puissance (PMP)	143,49	150,88	164,86	
Prépaiement (WOYOFAL)				
Domestique Petite Puissance (DPP)	91,17	112,5	112,5	
Domestique Moyenne Puissance (DMP)	96,72	113,38	113,38	
Professionnel Petite Puissance (PPP)	142,44	149,95	149,95	
Professionnel Moyenne Puissance (PMP)	143,49	150,88	150,88	
Usage Grande Puissance	Heures Hors Pointe	Heures de Pointe		
Domestique Grande Puissance (DGP)	95,63	133,59		956,13
Professionnel Grande Puissance (PGP)	113,7	181,92		2 868,39
Eclairage Public		129,98		3 307,93

Fourniture d'électricité en Moyenne et Haute Tension

Fourniture d'électricité en Moyenne et Haute Tension			
Catégorie tarifaire	Prix de l'énergie en FCFA/kWh		Prime Fixe Mensuelle en FCFA/kW
	Heures Hors Pointe	Heures de Pointe	
Livraison en Moyenne Tension			
Tarif Courte Utilisation (TCU)	125,62	194,49	961,76
Tarif Général (TG)	90,41	144,65	4 093,60
Tarif Longue Utilisation (TLU)	74,27	118,85	9 880,54
Concessionnaires d'électrification rurale	96,83		
Livraison en Haute Tension			
Tarif Général	59,03	85,01	10 028,90
Tarif Secours	78.61	113.19	4 458.61

NOTA Heures de Pointe : de 19h à 23 heures
Heures hors Pointe : de 0h à 19 heures et de 23h à 24heures
Tarif Prime fixe : En FCFA/kW de Puissance Souscrite

Tranches de consommation pour les usagers basse tension (BT)

Option tarifaire	1 ^{ère} tranche	2 ^{ème} tranche	3 ^{ème} tranche
UD-PP	De 0 à 150 kWh	De 151 à 250 kWh	Plus de 250 kWh
UD-MP	De 0 à 50 kWh	De 51 à 300 kWh	Plus de 300 kWh
UP-PP	De 0 à 50 kWh	De 51 à 500 kWh	Plus de 500 kWh
UP-MP	De 0 à 100 kWh	De 101 à 500 kWh	Plus de 500 kWh

Société Anonyme au Capital de 175 236 340 000 Francs CFA
28, rue Vincens—BP 93 Dakar (Sénégal)—N°RC : SN-DK-84-B-30—NINEA : 00140012G3—Tél. : (221) 33 839 30 30 Fax : (221) 33 823 12 67 — www.senelec.sn

Conclusion

Tick the appropriate checkbox

- ☐ Additional action should be taken (finding remains open)
☒ The finding is closed

Table 2. CAR from this validation

CAR ID	01	Section no.	Appendix 7	Date:	18/11/2020
Description of CAR					

As per provided PoA-DD version 11 related section in Appendix 7 on summary of post registration changes is not filled. Related revision in line with instructions to fill PoA-DD is requested.

Project participant response **Date:** 12/01/2021

The PoA-DD document has been updated

Documentation provided by project participant (1st round)

<input checked="" type="checkbox"/> Changes in the PoA-DD	Section(s): Appendix 7	New version No.: 12.0
<input type="checkbox"/> Changes in the CPA-DD	Section(s):	New version No.:
<input type="checkbox"/> Changes in MR	Section(s):	New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		

DOE assessment **Date:** 10/02/2021

OK. Related summary of the applied changes have now been provided under Appendix 7 of the PoA-DD. However, the appendix refers to each generic CPA. Therefore please clarify if generic CPA category 4 is also affected by the change.

Project participant response **Date:** 07/05/2021

The PoA-DD document has been updated

Documentation provided by project participant (1st round)

<input checked="" type="checkbox"/> Changes in the PoA-DD	Section(s): Appendix 7	New version No.: 12.1
<input type="checkbox"/> Changes in the CPA-DD	Section(s):	New version No.:
<input type="checkbox"/> Changes in MR	Section(s):	New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:
<input type="checkbox"/> Other:		

DOE assessment **Date:** 17/06/2021

OK. PoA-DD not specifies that the changes are on generic CPA-DD category 1 to 3.

Conclusion <i>Tick the appropriate checkbox</i>	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed
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CAR ID 02 **Section no.** - **Date:** 18/11/2020

Description of CAR

Related supporting documents as following are requested to be provided:

1. The new regulations and law which is base for the applied change
2. Study/survey/plan conducted which was based for the initial ex-ante calculation during validation of the PoA.

Project participant response **Date:** 12/01/2021

The change requested refers to the removal of the service level classification S1-S4. These services levels were defined by ASER for its use in the contracts with private concessions under the 10 regional areas defined by ASER to divide the country for the private electrification concessions. As of 2018, six of these concessions were successfully auctioned to private consortiums, while the remaining four concessions were officially granted to SENELEC (Senegalese public utility) in late 2018.

Together with this process of granting the four concession to SENELEC, the Government of Senegal initiated a tariff harmonization process that will end by applying the SENELEC tariffs across all concessions.

Documentation provided by project participant (1st round)

<input type="checkbox"/> Changes in the PoA-DD	Section(s):	New version No.:
<input type="checkbox"/> Changes in the CPA-DD	Section(s):	New version No.:
<input type="checkbox"/> Changes in MR	Section(s):	New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s):	New version No.:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Other: | <ol style="list-style-type: none"> 1. https://www.dakaractu.com/Concessions-d-electrification-rurale-L-Etat-etend-le-champ-d-action-de-la-Senelec_a158234.html 2. Avenant 1 Contrat Conces ER_Comasel Louga 3. Avenant 1 Contrat Conces ER_Comasel Saint- Louis 4. Avenant 1 Contrat Conces ER_SCL 5. Avenant n°1 Contrat de Conces ER_ERA |
|--|--|

DOE assessment **Date:** 10/02/2021

OK. As per description of the CME and checked from provided concessionaires e.g. "Avenant N°1 entre La Republic Senegal et Energie Rurale Africane S.A (ERA)" it is stated under (H) of preamble that "due to the needs of the public electricity service, as well as the urgency attached to it, and in order to restore the equality of treatment of users before the service, the state of Senegal has decided to harmonize electricity tariffs throughout the national territory. To this end, the Concessionaire (Republic of Senegal) will apply the Senelec tariff to all users. The shortfall and the costs resulting from the implementation of tariff harmonization will be compensated by the State.

Under these conditions and in accordance with the provisions of article 47 of the contract, the parties have agreed to modify the said contract by this addendum in the terms below for the implementation of the tariff harmonization decision."

As per this the Senelec tariff is applied across all the host country and hence the S1-S4 not applicable any longer. This was finalized on 1 December 2019 however is applicable from start of the concession as stated above and any losses due to this harmonization is compensated by the host country government as also stated above. Hence, the change is applicable from the beginning of the PoA/start date of the PoA.

This is further substantiated by provided weblink to article titled "Concessions d'électrification rurale : L'Etat étend le champ d'action de la Senelec" and dated Jeudi 27 Septembre 2018 / Thursday, 27 September 2018.

However, sections I.6.3 of each generic CPA-DD category 1-3 still refers to service levels. Pls clarify.

Project participant response	Date: 07/05/2021
Correct, however these were used for ex-ante estimations. The classifications will not be used for calculation of the actual emission reductions achieved.	
Documentation provided by project participant (2nd round)	
<input checked="" type="checkbox"/> Changes in the PoA-DD	Section(s): - New version No.: 12.1
<input type="checkbox"/> Changes in the CPA-DD	Section(s): New version No.:
<input type="checkbox"/> Changes in MR	Section(s): New version No.:
<input type="checkbox"/> Changes in XLS	Worksheet(s): New version No.:
<input type="checkbox"/> Other:	
DOE assessment	Date: 17/06/2021
Ok. The related principle of service levels is only used to determine ex-ante GHG emission reductions as at that time no other information is available. This is also stated prior to the related tables in the generic CPA-DDs.	
Conclusion Tick the appropriate checkbox	<input type="checkbox"/> Additional action should be taken (finding remains open) <input checked="" type="checkbox"/> The finding is closed

Table 3. FAR from this validation

FAR ID	xx	Section no.		Date: DD/MM/YYYY
Description of FAR				
n.a.				
Project participant response				Date: DD/MM/YYYY
Documentation provided by project participant				
DOE assessment				
Date: DD/MM/YYYY				

- - - - -

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	31 May 2019	Revision to: <ul style="list-style-type: none">• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);• Make editorial improvements.
02.0	29 December 2017	Revision to align with the requirements of the “CDM validation and verification standard for programme of activities” (version 01.0).
01.0	5 June 2015	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Registration Keywords: post-registration change, programme of activities, validation report		