



**Verification and certification report form for
CDM project activities
(Version 02.1)**

BASIC INFORMATION

Title and UNFCCC reference number of the project activity	12 MW hydropower plant in Bhandardara in Maharashtra, India. UNFCCC ref. No- 0430
Version number of the verification and certification report	02.1
Completion date of the verification and certification report	09/05/2018
Monitoring period number and duration of this monitoring period	Monitoring Period: 02 (of the 3 rd Crediting Period) Period: 01/11/2016 to 31/12/2017 (both dates are included)
Version number of the monitoring report to which this report applies	02
Crediting period of the project activity corresponding to this monitoring period	3 rd crediting period (Renewal) Start date: 27/07/2015 Length: 7 years (27/07/2015 – 26/07/2022)
Project participants	<ul style="list-style-type: none"> ▪ Dodson–Lindblom Hydro Power Private Limited (DLHPPL) ▪ Statkraft Markets GmbH ▪ WeAct Pty Ltd.
Host Party	India
Applied methodologies and standardized baselines	Selected Methodology: AMS-I.D. - Grid connected renewable electricity generation, version 18; Dated: 27/11/2014 Selected standardized baseline: N/A
Mandatory sectoral scopes linked to the applied methodologies	Sectoral scope : 1- Energy industries (renewable - / non-renewable sources
Conditional sectoral scope(s) linked to the applied methodologies	NA
Estimated amount of GHG emission reductions or GHG removals for this monitoring duration in the registered PDD	40,896 tCO ₂ e
Certified amount of GHG emission reductions or GHG removals for this monitoring period	39,849 tCO ₂ e
Name and UNFCCC reference number of the DOE	 LGAI Technological Center, S.A.(Applus+ Certification) UNFCCC ref. No of the DOE - E-0032

Name, position and signature of the approver of the verification and certification report	<p>Name: Mr. Juan Sendín Caballero</p> <p>Position: Applus+ Certification BU Managing Director</p> <p>Signature:</p> 
--	---

SECTION A. Executive summary

>> LGAI Technological Center, S.A. (hereafter referred to as Applus+ Certification) has been contracted by Dodson–Lindblom Hydro Power Private Limited (DLHPPL) to perform the second periodical verification of “12 MW hydropower plant in Bhandardara in Maharashtra, India.” (UNFCCC Ref. No. 0430) applying the methodology AMS-I.D. Version: 18. The management of Ascent Hydro Projects Ltd is responsible for the preparation of the GHG emissions data and the reported GHG emission reductions.

A desk review and a site visit have been conducted to verify the data submitted in the monitoring report. Applus+ Certification confirms the following has been reviewed:

- (a) The registered PDD /1.6/, including the monitoring plan and the corresponding validation report;
- (b) Revised PDD renewal of crediting period/1.3/
- (c) Validation report for Revised PDD renewal of crediting period /1.4/
- (d) Monitoring report of previous monitoring period as well as corresponding verification report;
- (e) Monitoring report of this monitoring period;
- (f) The applied monitoring methodology;
- (g) Relevant decisions, clarifications and guidance from the CMP and the CDM Executive Board;
- (h) All information and references relevant to the project activity's resulting in emission reductions.

The project activity involves the generation of electricity by a 12 MW hydroelectric power project at the foot of a hill adjacent to the Bhandardara dam. The water released from the Bhandardara reservoir for irrigation purposes is utilized by the project activity to generate electricity. The generated electricity, after auxiliary consumption, is exported to state electricity grid of the Maharashtra State Electricity Transmission Company Ltd (MSETCL). The electricity generated by the Project is delivered to the grid through a 132 kV line.

This is a renewable energy generation project which can replace the electricity normally generated by a fossil fuel dominated grid connected to power plants. The project activity is located at Bhandardara village of Ahmadnagar district in Maharashtra, India. The Project activity was originally set up by GOMID and later handed over to DLHPPL on a lease, own, operate and transfer basis.

Applus+ Certification confirms that the project is implemented in accordance with the validated and revised PDD. The monitoring plan complies with the applied methodology AMS- I.D. Version: 18 and the monitoring have been carried out in accordance with the monitoring plan. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the project's GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information reviewed and evaluated Applus+ Certification confirms that the implementation of the project has resulted in 39,849 tCO₂e emission reductions during period 01/11/2016 to 31/12/2017.

SECTION B. Verification team, technical reviewer and approver**B.1. Verification 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			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader / Technical Expert	OR	Ahirwar	Vivek Kumar	GCEES	Y	Y	Y	Y
2.	Auditor in Training	OR	Soni	Ravi Kant	GCEES	Y	Y	Y	Y

B.2. Technical reviewer and approver of the verification and certification report

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	Shen	Simon	Applus+ Certification
3.	Approver	IR	Sendín	Juan	Applus+ Certification

SECTION C. Application of materiality**C.1. Consideration of materiality in planning the verification**

No.	Risk that could lead to material errors, omissions or misstatements	Assessment of the risk		Response to the risk in the verification plan and/or sampling plan
		Risk level	Justification	
1.	Manual adjustment of otherwise automatically recorded activity levels: This error may be due to manually recording of actual readings in-to original records.	Low	Monitoring Equipment e.g. Energy Meters have totalize which reduce the chance of error as initial readings and final readings can be cross –check in every records. For measurement of quantity of fuel (diesel); measurement carried out using scale and same time recorded in log book. The total quality can be cross-checked form purchase bill/3.4/. The plant data was verified by plant manager in regular interval, so low potential risk of errors, omissions or misstatements.	100 per cent of the data and information was checked from log book/3.8/, JMR/3.3/ record book/3.5/ and cross-checked from supplier bill/3.4/.
2.	Human error in the quantification of emissions. This error may be due to transfer of monitored data in-to Emission Reduction calculation sheet/4.1/ for calculation of actual emission reduction archived during monitoring period.	High	The monitoring data is transfer manually, so there is high potential risk of errors/errors, omissions or misstatements.	100 per cent of the data and information was checked from log book/3.8/, JMR/3.3/ record book/3.5/ and cross-checked from supplier bill/3.4/

C.2. Consideration of materiality in conducting the verification

>> The project activity is small- scale project and applicable threshold for materiality in accordance with CDM VVS for PAs Version 01.0 paragraph 329(d) is 5%. All the monthly/daily/hourly reported figures for all monitoring parameter were verified with respective log book/ data Sheets and were found to be consistent. Therefore, it can be stated that the verified value is free from any potential error / omission / misstatement. Therefore, there are no additional factors which might lead to introduction of error in emission reduction estimation.

SECTION D. Means of verification**D.1. Desk/document review**

>> The Monitoring Report version 01 dated 25/01/2018/1.1/ submitted by the PP was made publicly available on the UNFCCC website before the verification activities started. The published MR was assessed based on all the relevant documents. The aim of the assessment in the desk review was to:

- verify the completeness of the data and the information presented in the MR;
- Check the compliance of the MR with respect to the monitoring plan depicted in the registered PDD /1.6/& revised PDD/1.3/ and verify that the applied methodology was carried out. Particular attention to the frequency of measurements, the quality of the metering equipment including calibration requirements, and the quality assurance and quality control procedures was paid;
- Evaluate the data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions.

A complete list of documents reviewed or referenced is available in Appendix 3 of this report.

D.2. On-site inspection

Duration of on-site inspection: One day				
No.	Activity performed on-site	Site location	Date	Team member
1.	Confirm the implementation and operation of the project;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
2.	Review the data flow for generating, aggregating and reporting the monitoring parameters;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
3.	Confirm the correct implementation of procedures for operations and data collection;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
4.	Cross-check the information provided in the MR documentation with other sources;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
5.	Check the monitoring equipment against the requirements of the PDD and the approved methodology, including calibrations, maintenance, etc.;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
6.	Review the calculations and assumptions used to obtain the GHG data and ER;	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni
7.	Identify if the quality control and quality assurance procedures are in place to prevent or correct errors or omissions in the reported parameters.	DLHPPL, Bhandardara village, Ahmednagar district, Maharashtra	03/04/2018	Vivek Kumar Ahirwar and Ravi Kant Soni

D.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Jadav	R.V.	Senior Engineer, AHPL	03/04/2018	Project Activity Description, implementation and operation of the project	Vivek Kumar Ahirwar and Ravi Kant Soni
2.	Gurao	B.T.	Senior Engineer, AHPL	03/04/2018	Procurement Records &	Vivek Kumar Ahirwar and

					Consumption , Bill & Energy Bills/Records	Ravi Kant Soni
3.	Vaidya	N. R.	Shift Engineer, AHPL	03/04/2018	Monitoring Data & Records Monitoring Plan, equipment , calibrations, maintenance, data records, certificates etc.; Calculations and assumptions used to obtain the GHG data and ER	Vivek Kumar Ahirwar and Ravi Kant Soni

D.4. Sampling approach

>> Not Applicable, as all monitoring data as reported in MR and ER were verified and checked from actual records.

D.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
Compliance of the monitoring report with the monitoring report form	-	CAR #1	-
Compliance of the project implementation and operation with the registered PDD	-	-	-
Post-registration changes	-	-	-
Compliance of the registered monitoring plan with the methodologies including applicable tools and standardized baselines		-	
Compliance of monitoring activities with the registered monitoring plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	CL #1	CAR#2	-
Assessment of data and calculation of emission reductions or net removals	-	-	-
Assessment of reported sustainable development co-benefits	-	-	-
Global stakeholder consultation	-	-	-
Others (missing information)	-		
Total	1	2	-

SECTION E. Verification findings

E.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The Monitoring Report version 03/1.2/ is compliant with Monitoring Report form (Version 06.0) /2.4/ and guidance as provided by UNFCCC. Applus+ Certification considers that the attachment "Instructions for filling out the monitoring report form" at the end of template "Monitoring report form (Version 06.0)" /2.4/ has been followed. Relevant information was provided by the project participant in the applicable Monitoring Report sections.
Findings	CAR #1 was raised and resolved.
Conclusion	Applus+ Certification confirms that the monitoring report is in compliance with the relevant valid form and instructions therein as accordance to "Clean Development

Mechanism Validation and Verification Standard for Project Activity" (CDM- VVS for PA) v01.0 §§ 355-356.
--

E.2. Remaining forward action requests from validation and/or previous verifications

>> This is second periodic verification of the project. There are no pending issues from the validation or the previous verification/1.4/. This was verified and confirmed from the project documents on the UNFCCC project webpage /1.5/.

E.3. Compliance of the project implementation and operation with the registered project design document

Means of verification	<p>The project activity was fully implemented according to the description presented in the approved revised PDD /1.3/. The assessment team confirms, through the visual inspection that all physical features of the CDM project activity including data collecting systems and storage have been implemented in accordance with the approved revised PDD /1.3/.</p> <p>The implementation status of the project was verified and it was found that the project activity was already implemented, commissioned and is in continuous operation since its starting date of operation i.e. 27/07/2001.</p> <p>During the site visit/6.1/ /6.2/, the assessment team verified the technology used and the capacity of equipments implemented at the project site through physical inspection and it can be confirmed that there are no changes in the project design against the revised approved project design document.</p> <p>Geo co-ordinates of the project location is at latitude 19° 33' 15" N and longitude 73° 45' 0" E. Location of the project was verified through Google Maps (https://www.gps-coordinates.net/) and found consistent with the same mentioned in the approved revised PDD/1.3/ and MR/1.2/.</p> <p>The line diagram of the metering system of the project activity showing metering points is indicated in Section C of the MR/1.2/. The same is found to be consistent during site visit.</p> <p>During the site visit, the assessment team verified the technology used and the capacity of hydro plant implemented at the project site through physical inspection and it can be confirmed that there are no changes in the project design against the revised PDD/1.3/.</p> <p>Actual emission reductions achieved during the current monitoring period are 2.56% lesser than the same estimated in the revised CDM-PDD/1.3/ for comparable period. This is due to low plant load factor achieved during the current monitoring period (Kindly refer section E.8.6 of this report for further details).</p> <p>No events or situations that may impact the applicability of the methodology occurred during this monitoring period, which was confirmed by checking the operational/shut down details available at site office and interviewing the site personnel. The project was checked against the applicability criteria in the applied methodology AMS-I.D. Version 18 and it is confirmed that the methodology is applicable to the project activity. The data and variables provided in the Monitoring Report are the same as stated in the approved monitoring plan.</p>
Findings	No non-conformability was observed during assessment for implementation of project activity against the description presented in the approved revised PDD/1.3/. Therefore no finding was raised.
Conclusion	<p>Applus+ Certification confirms that the implementation of project activity is in compliance with the CDM requirement stipulated under CDM- VVS for PA v01.0 §§ 357-359.</p> <ol style="list-style-type: none"> The implementation and operation of the project activity has been conducted in accordance with the description contained in the registered and approved revised PDD/1.3/. By means of an on-site inspection the verification team is able to confirm that all physical features (technology, project equipment, and monitoring and metering equipment) of the registered CDM project activity are in place and that the project participants have operated the project activity as per the approved revised PDD/1.3/.

	<p>iii. No information with regard to data and variables was identified that may surpass the estimated quantity of ERs in the approved revised PDD/1.3/.</p> <p>iv. The emission reductions achieved during the current monitoring period are 39,849 tCO₂e within the estimated quantity (40,896 tCO₂e) in the registered PDD for the comparable period.</p>
--	--

E.4. Post-registration changes

E.4.1. Temporary deviations from the registered monitoring plan, applied methodologies or applied standardized baselines

>> There are no temporary deviations from the monitoring plan of registered PDD/1.6/ and revised PDD /1.3/ or applied methodology/2.3/ during the current monitoring period. It was verified and confirmed from the Monitoring Report/1.2/, approved PDD/1.3/ & registered PDD/1.6/, UNFCCC project webpage /1.5/ and on-site verification/6.1/ & /6.2/.

E.4.2. Corrections

>> There are no corrections during the current monitoring period.

E.4.3. Change to the start date of the crediting period of the project activity

>> There are no changes to the start date of crediting period identified during the current monitoring period. It was verified and confirmed from the UNFCCC project webpage /1.5/.

E.4.4. Inclusion of a monitoring plan

>> There is no inclusion of a monitoring plan identified during the current monitoring period.

E.4.5. Permanent changes from registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines or other applied standards or tools

>> There are no permanent changes from the monitoring plan/1.3/ or applied methodology/2.3/ during the current monitoring period. During 1st crediting period a revision in the monitoring plan was approved on 31/05/2011/1.6/.

E.4.6. Changes to the project design

>> There is no change to project design of the registered project activity identified during the current monitoring period. It was verified and confirmed from the Monitoring Report/1.2/, approved revised PDD/1.3/, UNFCCC project webpage /1.5/ and on-site verification/6.1/&/6.2/.

E.4.7. Changes specific to afforestation and reforestation project activities

>> Not Applicable.

E.5. Compliance of the registered monitoring plan with the methodology including applicable tools and standardized baselines

Means of verification	The review of applied methodology and monitoring plan establishes that the monitoring plan presented in the PDD is found to be consistent with the approved AMS-I.D. Version 18 – “Grid connected renewable electricity generation” /2.3/.
Findings	No non-conformability was observed during assessment for monitoring plan against applied monitoring methodology. Therefore, no finding was raised.
Conclusion	Applus+ Certification confirms that the monitoring plan is in accordance with the approved methodology /2.3/ and correctly applied by the registered CDM project activity and CDM-VVS for PA v01.0 §§ 360-362 have been met.

E.6. Compliance of monitoring activities with the registered monitoring plan**E.6.1. Data and parameters fixed ex ante or at renewal of crediting period**

Means of verification	The following three parameters are fixed ex-ante defined in registered PDD:			
	Data/parameter:	EF _{CO2,grid, y}	NCV _{diesel}	EF _{CO2_diesel}
	Unit	tCO ₂ /MWh	GJ/Ton	tCO ₂ e / GJ
	Description	Combined Margin CO2 Emission Factor of the NEWNE grid	Net calorific value of diesel	CO ₂ emission factor of diesel
	Source of data	Central Electricity Authority (CEA), CO2 baseline database for the Indian Power Sector, , Version 10 ,Dated 16 December 2014 (Combined Margin Emission Factor for Northern Regional Grid) published by Central Electric Authority (CEA), India, dated 15 December 2007 /6.3/	IPCC default values at the upper limit of uncertainty at a 95% confidence intervals as provided in Table 1.2 of Chapter 1 of Vol 2 (Energy) of the 2006 IPCC guidelines on National GHG inventories, indicates that the NCV of diesel oil is 43.3 TJ/Gg which is equivalent to 43.3 GJ/ton	IPCC default values
	Value(s) applied)	0.6890	43.3	0.0748
The reported value is been verified and considered appropriately in the MR/1.2/ and the ER calculation excel sheet/4.1/.				
Findings	No non-conformability was observed about data and parameters fixed ex ante in registered PDD. Therefore, no finding was raised.			
Conclusion	Value of parameter reported in the monitoring report /1.2/ and corresponding emission reduction calculations spreadsheet /4.1/ are consistent with the approved revised PDD/1.3/. The applied values are correct and justified.			

E.6.2. Data and parameters monitored**Parameter 1: Electricity Exported to the grid by the project activity, EG_y**

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring mechanism, including the data collection system, is effective and reliable. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the O&M personnel from the plant are conscious of the importance of the monitoring activities</p> <p>On-site verification of "Electricity Exported to the grid by the project activity" data has been done as follows</p>				
	<div>Monitoring Report, onsite checks</div> <div>Revised Monitoring Plan</div>	Requirement in the applicable methodology and relevant EB Documents	Requirement in the revised monitoring plan (Revised PDD monitoring Plan)	Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring)	DOE Conclusion

	& Approved Methodology			practice project site) at	
	Data/Parameter	$EG_{BL,y}$	EG_y	EG_y	This is in compliance with the applicable methodology and monitoring plan.
	Description	The electricity supplied by the project activity to the grid	Electricity Exported to the grid by the project activity	Electricity Exported to the grid by the project activity	The net power exported to the grid is equivalent to the amount of electricity supplied to the grid. Hence, this is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Measured	Measured	Measured and calculated based on measured parameters.	The meters installed at grid substation near to the project site directly measure the exported and imported electricity. EG_y (net electricity exported to the grid) is the simple difference of these two directly measured values. Hence this is in compliance with the applicable methodology and monitoring plan.
	Source of data	On site measurement	Joint Meter Readings (JMRs) taken and signed by authorized officials of MSEDCL	Joint Meter Readings (JMRs)/3.3/ taken and signed by authorized officials of MSEDCL	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.

	Monitoring equipment	Energy meter	Energy meter	Energy Meters: Readings are recorded by a main meter and check meter which measures and records the electricity exported to the grid by the project activity. The main and check meters are connected at the secondary (132 kV) side of the step-up transformer in the switchyard of the project activity.	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/Recording frequency	Monthly	Continuous monitoring, hourly measurement and at least monthly recording	Continuous monitoring, hourly measurement and at least monthly recording	This is in compliance with the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	$EG_y =$ (Electricity exported to the grid – Electricity imported from grid)	More specific information is provided. This parameter is calculated based on the measured parameter. This is in compliance with the applicable methodology and monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	Monthly joint meter reading of main and check meters are taken and signed by authorized officials of DLHPPL, MSEDCL, MSETCL and GOMWRD. The generally once every month. Records of this joint meter reading are maintained by DLHPPL, MSEDCL, MSETCL and GOMWRD. The Meters are checked for accuracy and calibration by the	The energy meters (main and check) are calibrated in regularly interval. There is no calibration delay observed during current monitoring period. The calibration frequency is found to be consistent with registered monitoring plan. The electricity export values recorded in form of Joint Meter Reading (JMR) /3.3/ each month from the	Methodology does not provide any specifications; this is as per actual practice. But, this is in line with the general CDM requirements.

			MSETCL as per the provisions in the power purchase agreement (PPA) prevailing at the time of respective accuracy check or calibration. As per the current PPA, the meters are checked for accuracy.	main meter were cross-verified with the corresponding invoices for that particular month raised by the Project Participant on MSEDCL for the sale of electricity.	
	Value (s) of Monitored parameter	Not Specified	Not Specified	Month wise data is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.	The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.
Findings	No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/. Therefore, no finding was raised.				
Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirement of CDM-VVS for v01.0 §§ 363-367 have been met.</p>				

Parameter 2: Electricity Imported: $E_{Import,y}$

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring mechanism, including the data collection system, is effective and reliable. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the O&M personnel from the plant are conscious of the importance of the monitoring activities</p> <p>On-site verification of "Electricity Imported from the grid by the project activity " data has been done as follows</p>
------------------------------	--

	Monitoring Report, onsite checks Revised Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the revised monitoring plan (Revised PDD monitoring Plan)	Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring practice at project site)	DOE Conclusion
	Data/Parameter	Not Specified	Eimport	Eimport	This is in compliance with the applicable methodology and monitoring plan.
	Description	Not Specified	Electricity Imported from the grid by the project activity	Electricity Imported from the grid by the project activity	Electricity imported by the project activity is measured by a separate import Meter installed near the switchyard. Hence, this is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Not Specified	Measured	Measured and calculated based on measured parameters.	This is in compliance with the applicable methodology and monitoring plan.
	Source of data	Not Specified	Monthly electricity bills raised by MSEDCL	Monthly electricity bills raised by MSEDCL/3.4/	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	Monitoring equipment	Not Specified	Energy meter	Energy Meters: Readings are recorded by a main meter and check meter which measures and records the electricity import from the grid by the project activity. A separate Import Meter installed near the switchyard at project activity site.	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/	Not Specified	Continuous monitoring,	Continuous monitoring,	This is in compliance with

	Recording frequency		monthly recording	monthly recording	the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Specified	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	Monthly electricity bills raised by MSEDCL. The meter is calibrated	Import meter is under the custody of MSEDCL, and DLHPPL has no access to meter and the calibration details pertaining to the same. Hence, calibration records are not maintained by DLHPPL for the import meter.	Methodology does not provide any specifications; this is as per actual practice. But, this is in line with the general CDM requirements.
	Value (s) of Monitored parameter	Not Specified	Not Specified	Month wise data is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.	The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.
Findings	No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/. Therefore, no finding was raised.				
Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirement of CDM-VVS for v01.0 §§ 363-367 have been met.</p>				

Parameter 3: Gross Electricity Generation; E_{Gen}

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring mechanism, including the data collection system, is effective and reliable. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the O&M personnel from the plant are conscious of the importance of the monitoring activities</p> <p>On-site verification of "Gross electricity generated by the project activity" data has been done as follows</p>				
	Monitoring Report, onsite checks Revised Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the revised monitoring plan (Revised PDD monitoring Plan)	Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring practice at project site)	DOE Conclusion
	Data/Parameter	Not Specified	E_{Gen}	E_{Gen}	This is in compliance with the applicable methodology and monitoring plan.
	Description	Not Specified	Gross Electricity generated by the project activity	Gross Electricity generated by the project activity	Gross Electricity Generation is measured at the Gross Generation Meter installed at the generator end within the control room of the plant. Hence, this is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Not Specified	Measured	Measured and calculated based on measured parameters.	Meter installed at the generator end within the control room of the plant at the project site for directly measure the generated electricity. Hence this is in compliance with the applicable methodology and monitoring plan.
	Source of data	Not Specified	Joint Meter Readings (JMRs) taken and signed by authorized officials of MSEDCL	The readings from this meter are recorded jointly in the presence of authorized officials of MSEDCL,	More specific information is provided. This is in compliance with the applicable methodology and

				DLHPPL, MSETCL and GOMWRD monthly. This reading also forms part of the JMR/3.3/.	monitoring plan.
	Monitoring equipment	Not Specified	Energy meter	Energy Meters: Readings are recorded by a meter which measures and records the electricity generated by the project activity.	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/Recording frequency	Not Specified	Continuous monitoring, monthly recording	Continuous monitoring, monthly recording	This is in compliance with the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	The data are directly measured and monitored at the project site. The meters installed at the generator end shall be checked for accuracy for every six months and the calibration is done once in a year. If the accuracy of meter is found to be beyond permissible limit even after calibration then the meter shall be replaced with spare tested, calibrated meter. DLHPPL shall archive all the JMRs and the complete metering data at generation end on paper and all the data would be preserved for at least two years after end of the crediting period.	The energy meter is calibrated in regularly interval. There is no calibration delay observed during current monitoring period. The calibration frequency is found to be consistent with registered monitoring plan. The electricity generated values recorded also in form of Joint Meter Reading (JMR)/3.3/ each month.	Methodology does not provide any specifications; this is as per actual practice. But, this is in line with the general CDM requirements.
	Value (s) of	Not Specified	Not Specified	Month wise data	The information

	<p>Monitored parameter</p>			<p>is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.</p>	<p>flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.</p>
Findings	<p>No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/. Therefore, no finding was raised.</p>				
Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirement of CDM-VVS for v01.0 §§ 363-367 have been met.</p>				

Parameter 4: Auxiliary Consumption

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring mechanism, including the data collection system, is effective and reliable. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the O&M personnel from the plant are conscious of the importance of the monitoring activities</p> <p>On-site verification of "Unit consumed by the project activity" data has been done as follows</p>				
	<p>Monitoring Report, onsite checks</p>	<p>Requirement in the applicable methodology and relevant EB Documents</p>	<p>Requirement in the revised monitoring plan (Revised PDD monitoring Plan)</p>	<p>Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring practice at project site)</p>	<p>DOE Conclusion</p>
	<p>Revised Monitoring Plan & Approved Methodology</p>				
	<p>Data/Parameter</p>	<p>Not Specified</p>	<p>Auxiliary Consumption</p>	<p>Auxiliary Consumption</p>	<p>This is in compliance with the applicable methodology and</p>

					monitoring plan.
	Description	Not Specified	Unit consumed by the project activity	Unit consumed by the project activity	This is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Not Specified	Calculated	Calculated based on measured parameters.	This value is calculated as difference between a) gross generation and b) the export to the grid. This is in compliance with the applicable methodology and monitoring plan.
	Source of data	Not Specified	Joint Meter Readings (JMRs) taken and signed by authorized officials of MSEDCL	Joint Meter Readings (JMRs)/3.3/ taken and signed by authorized officials of MSEDCL	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	Monitoring equipment	Not Specified	Not Applicable as parameter calculated	Not Applicable as parameter calculated	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/ Recording frequency	Not Specified	Continuous monitoring, monthly recording	Continuous monitoring, monthly recording	This is in compliance with the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Specified	The data is calculated using the gross electricity generation (E_{Gen}) and electricity exported to the grid (E_{Gy}) as per the JMR.	The data is calculated using the gross electricity generation (E_{Gen}) and electricity exported to the grid (E_{Gy}) as per the JMR /3.3/.	More specific information is provided. This parameter is calculated based on the measured parameter. This is in compliance with the applicable methodology and monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	The data is calculated using the gross electricity generation (E_{Gen}) and electricity exported to the grid (E_{Gy}) as per the JMR. This data are also used in calculating electricity export in the event of simultaneous failure and/or	The data is calculated using the gross electricity generation (E_{Gen}) and electricity exported to the grid (E_{Gy}) as per the JMR /3.3/. This data are also used in calculating electricity export in the event of simultaneous failure and/or defect in	As per the monitoring plan in the approved revised PDD, the auxiliary consumption values shall be used for the calculation of electricity export in the event of simultaneous failure and/or defect in accuracy of both main and check meters. During

			defect in accuracy of both the main meter & check meter.	accuracy of both the main meter & check meter.	the current verification period, however, there were no such occurrences. Methodology does not provide any specifications; this is as per actual practice. But, this is in line with the general CDM requirements.
	Value (s) of Monitored parameter	Not Specified	Not Specified	Month wise data is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.	The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.
Findings	No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/. Therefore, no finding was raised.				
Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirement of CDM-VVS for v01.0 §§ 363-367 have been met.</p>				

Parameter 5: Diesel consumption, DC_y

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring plan includes the verification of GHG emission by diesel consumption in the project activity.</p> <p>On-site verification of "Diesel consumed by the standby DG set" has been done as follows:</p>
------------------------------	---

	Monitoring Report, onsite checks Revised Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the revised monitoring plan (Revised PDD monitoring Plan)	Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring practice at project site)	DOE Conclusion
	Data/Parameter	Amount of fossil fuel	DC _y	DC _y	This is in compliance with the applicable methodology and monitoring plan.
	Description	Amount of fossil fuel used shall be monitored	Diesel consumed by the standby DG set	Diesel consumed by the standby DG set	This is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Measured	Measured	Measured	This is in compliance with the applicable methodology and monitoring plan.
	Source of data	On site measurement	Daily records of levels in the diesel storage tanks as per the plant log book.	Log book issued by DLHPPL/3.6/	The consumption of diesel in the D.G. Set for the current verification period is verified from the daily records maintained in the Plant Log Book /3.6/ at the plant site. It was cross checked with the Store records for issuance of diesel for the D.G Set /3.5/. This is in compliance with the applicable methodology and monitoring plan.
	Monitoring equipment	Not specified	Quantity available in diesel tank	Quantity of diesel available in diesel tank, fed in log book	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/ Recording frequency	Not specified	Continuously and recorded monthly basis.	Continuously and recorded monthly basis.	This is in compliance with the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	This is in compliance with the applicable methodology and

					monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	Not required	No procedure implementation required	Methodology does not provide any specifications; This is in compliance with the applicable methodology and monitoring plan.
	Value (s) of Monitored parameter	Not Specified	Not Specified	Month wise data is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.	The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.
Findings	No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/. Therefore, no finding was raised.				
Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The project emissions calculated based on the amount of diesel consumed in standby DG set makes the emission reductions calculations conservative. The applicable parameters stated in the monitoring plan/1.3/ and the applied methodology/2.3/ have been sufficiently monitored.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirement of CDM-VVS for v01.0 §§ 363-367 have been met.</p>				

Parameter 6: Hourly Electricity Export: HEE_{main_meter}

Means of verification	<p>The monitoring of reductions in GHG emissions resulting from the registered project have been implemented in accordance with the monitoring plan contained in the revised approved PDD/1.3/. The monitoring mechanism, including the data collection system, is effective and reliable. During the site visit, personnel involved at various levels of operation of the project activity have been interviewed. It has been confirmed that the O&M personnel from the plant are conscious of the importance of the monitoring activities</p> <p>On-site verification of "Hourly electricity exported to the grid by the project activity as recorded at the main meter and check meter. This parameter is relevant to conditions/ circumstances</p>
------------------------------	--

(those days) where the dates of Joint Meter Readings (JMRs) pertaining to the project activity do not match the individual verification periods" data has been done as follows

	Monitoring Report, onsite checks Revised Monitoring Plan & Approved Methodology	Requirement in the applicable methodology and relevant EB Documents	Requirement in the revised monitoring plan (Revised PDD monitoring Plan)	Means of Verification (MR/1.2/ and ER calculation in excel sheet /4.1/ check and consistency with actual monitoring practice at project site)	DOE Conclusion
	Data/Parameter	Not specified	HEE _{main_meter}	HEE _{main_meter}	This is in compliance with the applicable methodology and monitoring plan.
	Description	Not specified	Hourly electricity exported to the grid by the project activity as recorded at the main meter and check meter. This parameter is relevant to conditions/ circumstances (those days) where the dates of Joint Meter Readings (JMRs) pertaining to the project activity do not match the individual verification periods.	Hourly electricity exported to the grid by the project activity as recorded at the main meter and check meter. This parameter is relevant to conditions/ circumstances (those days) where the dates of Joint Meter Readings (JMRs) /3.3/ pertaining to the project activity do not match the individual verification periods.	This is in compliance with the applicable methodology and monitoring plan.
	Measured/Calculated /Default	Not specified	This data is recorded on an hourly basis by DLHPPL based on data recorded at the main meter.	This data is recorded on an hourly basis by DLHPPL based on data recorded/3.8/ at the main meter.	This parameter is based on the hourly recording of the readings of main and check meter maintained in the plant log book /3.8/. These readings are referred to deduce an apportioning ratio, in the event of mismatch of the start or end dates of the verification period with the dates of the JMR. Hence this is in compliance with the applicable

					methodology and monitoring plan.
	Source of data	Not specified	Log Book Records for the main meter	Log Book/3.8/ Records for the main meter	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	Monitoring equipment	Not specified	Energy meter	Energy Meters: Readings are recorded by a main meter and check meter which measures and records the electricity exported to the grid by the project activity. The main and check meters are connected at the secondary (132 kV) side of the step-up transformer in the switchyard of the project activity.	This is in compliance with the applicable methodology and monitoring plan.
	Measuring/Reading/Recording frequency	Not specified	Continuous monitoring, hourly measurement and at least monthly recording. This parameter is relevant to conditions/ circumstances (those days) where the dates of Joint Meter Readings (JMRs) pertaining to the project activity do not match the individual verification periods.	Continuous monitoring, hourly measurement and at least monthly recording. This parameter is relevant to conditions/ circumstances (those days) where the dates of Joint Meter Readings (JMRs) pertaining to the project activity do not match the individual verification periods.	This is in compliance with the applicable methodology and monitoring plan.
	Calculation method (if applicable)	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	Not Applicable as this is a measured parameter	More specific information is provided. This is in compliance with the applicable methodology and monitoring plan.
	QA/QC procedures	Applied methodology does not provide any details.	For measuring the hourly energy exported to the grid, one main meter and one check meter are maintained.	The energy meters (main and check) are calibrated in regularly interval. There is no calibration delay	Methodology does not provide any specifications; this is as per actual practice. But, this is in line

			<p>The hourly meter reading of the main meter is the basis of emission reduction calculations, so long as the meter is found to be within prescribed limits of accuracy during the periodic check. Hourly meter reading of the check meters would be used for cross checking.</p> <p>The meters are checked for accuracy and calibration by the MSETCL as per the provisions in the power purchase agreement (PPA) prevailing at the time of respective accuracy check or calibration. As per the current PPA, the meters are checked for accuracy every six months and the calibration is done once in a year.</p>	<p>observed during current monitoring period. The calibration frequency is found to be consistent with registered monitoring plan. The electricity export values recorded in form of Joint Meter Reading (JMR) each month from the main meter were cross-verified with the corresponding invoices for that particular month raised by the Project Participant on MSEDCL for the sale of electricity.</p>	<p>with the general CDM requirements.</p>
	Value (s) of Monitored parameter	Not Specified	Not Specified	<p>Month wise data is represented in MR /1.2/ and ER sheet /4.1/. The values are found to be correct and consistent with raw data available at project site.</p>	<p>The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ and ER sheet /4.1/ have been correctly reported and confirmed by the assessment team.</p>
	<p>There is no such events fall under current verification when verification period dates and JMR dates in the project activity, do not coincide. Hence ,data is found consistent with JMRs and hence accepted.</p>				
Findings	<p>No non-conformability was observed during assessment for this monitoring parameter against applied monitoring methodology and monitoring plan which is described in the revised approved PDD/1.3/ . Therefore, no finding was raised.</p>				

Conclusion	<p>Applus+ Certification confirms that the actual monitoring activities observed on site are in compliance with the approved monitoring plan and the same is in line with the monitoring methodology /2.3/.</p> <p>The applicable parameter stated in the approved revised monitoring plan and the applied methodology/2.3/ have been sufficiently monitored. The responsibilities and authorities for monitoring and reporting are in accordance with what is stated in the revised approved PDD/1.3/. The information flow (data generation, aggregation, recording, calculation and reporting) for the parameters to be monitored including its values in the final version of the MR/1.2/ have been correctly reported and confirmed. Hence, the requirements of CDM-VVS for v01.0 §§ 363-367 have been met.</p>
-------------------	--

E.6.3. Implementation of sampling plan

Means of verification	No sampling plan is defined in the registered approved monitoring plan. All the data and information has been checked during verification assessment, thus no sampling plan has been applied in the Project.
Findings	Not Applicable
Conclusion	Not Applicable

E.7. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	All the monitoring parameters have been monitored and the monitoring results are consistently recorded as per the frequency mentioned under the approved revised monitoring plan. Accuracy of all equipment has been observed to be maintained within the specified limits.		
	The metering equipment for electricity measurement mainly consists of a main meter, a check energy meter and Gross Generation meter (bidirectional tri-vector type) which are used to monitor the quantity of electricity export and import by the project activity and gross generation by turbine generator. All the meters are 0.2s accuracy class. The calibration was done by qualified and authorised personnel by MSEDCL's Testing division at the site itself. The assessment team has checked the calibration certificates/5.1/ for accuracy and validity, so as to assure reliability and steadiness of monitoring results. The calibrations results have been verified as below.		
	Main and Check Meters:		
	Monitoring equipment	Energy Meter	
	Monitoring parameter	EG _y	
	Unique Identification Number/Sr. No.	14831461 (Main Meter)	14831477 (Check Meter)
	Make	Elester	Elester
	Accuracy Level	0.2s	0.2s
	Calibration frequency requirement	Annual	Annual
	Date of Calibration	03/06/2016 06/12/2016 19/06/2017 05/12/2017	03/06/2016 06/12/2016 19/06/2017 05/12/2017
	Validity of calibration	04/12/2018	04/12/2018
	Delays in calibration (if any)	No Delay	No Delay
Calibration Conducting Entity	State utility	State utility	
Accreditation Certificate for the calibration entity issuing authority relevant	NABL accredited	NABL accredited	

	Gross Electricity Generation Meter:	
	Monitoring equipment	Energy Meter
	Monitoring parameter	E _{Gen}
	Unique Identification Number/Sr. No.	73932341
	Make	Siemens Landis&Gyr Z.U
	Accuracy Level	0.2s
	Calibration requirement frequency	Annual
	Date of Calibration	08/06/2016 06/12/2016 20/06/2017 06/12/2017
	Validity of calibration	05/12/2018
	Delays in calibration (if any)	No Delay
	Calibration Conducting Entity	State utility
	Accreditation Certificate for the calibration entity issuing authority relevant	NABL accredited
	<p>During the current monitoring period; it is verified that the calibration of energy meters (main & check) and generation meter is carried out as per the frequency mentioned in the revised approved PDD/1.3/.The validity of calibration is one year as per the NABL certified Lab but PP has adopted & followed the six monthly accuracy check & yearly calibration validity period throughout the current monitoring period. It was verified based on review of calibration certificate that there was no delay of energy meters calibrations. All the energy meters were ultimately checked for accuracy in every six months and the calibration validity is once in a year.</p> <p>In light of the guidance as outlined under CDM-VVS for PA v01.0 §§ 368, the assessment team checked the calibration procedures. As per the monitoring plan outlined in the revised approved PDD /1.3/, the calibration interval is annual.</p>	
Findings	CL#1 and CAR#1 were raised and resolved.	
Conclusion	Applus+ Certification confirms that the calibration is conducted at the frequency following the relevant industry standard as specified by the methodology /2.3/ and the revised approved PDD monitoring plan /1.3/. Therefore, the requirements of CDM-VVS for PA v01.0 §§ 374 have been met.	

E.8. Assessment of data and calculation of emission reductions or net removals

E.8.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	<p>The verification team verified that</p> <ol style="list-style-type: none"> A complete set of data for the monitoring period was available for the monitoring period and the verification of each monitoring parameter is elaborated under Section E.6.2 of this report. The complete monitoring data is also presented in the corresponding ER sheet /4.1/ of final Monitoring Report /1.2/. The information provided in the monitoring report was cross checked with other sources, wherever appropriate and available, and such information is also included under Section E.6.2 of this report. The calculations of baseline emissions as presented in the corresponding ER sheet/4.1/ of final Monitoring Report/1.2/ were checked and found to be consistent with the formulae and methods described in the registered
------------------------------	---

	<p>monitoring plan and the applied methodology.</p> <ul style="list-style-type: none"> d) All assumptions used in the emission calculations were found appropriate and therefore justified e) Appropriate emission factors and other reference values have been correctly applied. This has also been elaborated under Section E.6.1 of this report. f) No standardized baseline was prescribed in the registered PDD/1.6/ or revised approved PDD/1.3/ and therefore it has not been applied. g) There is no pro-rate approach was applied in the current monitoring period as entire monitoring period falls into period that is after the end of first commitment period of Kyoto Protocol. <p>The baseline emissions are the product of net electricity supplied to the grid EG_y expressed in MWh of electricity produced by the renewable generating unit multiplied by the grid emission factor. Baseline emission factor is calculated as combined margin, consisting of a combination of operating margin (OM) and build margin (BM) factors.</p> $BE_y = EG_y * EF_{CO2,grid,y}$ <p>Where: BE_y: Baseline Emissions in year y; t CO₂ EG_y: Net electricity supplied to the grid by the project activity $EF_{CO2,grid,y}$ = Combined margin CO₂ emission factor (tCO₂/MWh)</p> <p>As per the approved revised PDD/1.3/, combined margin emission factor is 0.6890 tCO₂ /MWh. Hence the baseline emissions for the project activity for the current monitoring period are as follows.</p> $BE_y = 57,907.20 * 0.6890 = 39,898.06 \text{ tCO}_2\text{e} = 39,898 \text{ tCO}_2\text{e} \text{ (rounded down value)}$
Findings	No non-conformability was observed during assessment for this monitored parameter. Therefore, no finding was raised.
Conclusion	<p>Applus+ Certification confirms that the requirement outlined under CDM-VVS for v01.0 §§ 377 have been meet as:</p> <ul style="list-style-type: none"> • A complete set of data for the monitoring period is available. • Information on the baseline GHG emission calculation provided in the monitoring report /1.2/ has been cross-checked with other sources. • Calculations of baseline emissions have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document. • Appropriate emission factor of the power grid has been correctly applied.

E.8.2. Calculation of project GHG emissions or actual net anthropogenic GHG removals by sinks

Means of verification	<p>Project Emission due to Diesel consumption ($PE_{\text{Diesel},y}$):</p> <p>The project involved consumption of minor quantity of Diesel in standby DG Set.</p> <p>The formula used to calculate the project emissions due to diesel consumption is provided below:</p> $PE_{\text{Diesel}} = \sum DC_y \times \text{Density}_{\text{Diesel}} \times \text{NCV}_{\text{Diesel}} \times EF_{\text{CO2Diesel}}$ <p>Where, PE_{Diesel} = Project Emission due to use of Diesel consumed during this monitoring period in DG set DC_y = Diesel Consumption in Liters (L) $\text{Density}_{\text{Diesel}}$ = Density of Diesel (0.88Kg/Lit) $\text{NCV}_{\text{Diesel}}$ = Net Calorific Value of Diesel $EF_{\text{CO2Diesel}}$ = IPCC 2006 Emission factor for Diesel</p> <p>The values are:</p>
------------------------------	---

	$DC_y = 116 \text{ L}$ $Density_{Diesel} = 0.88 \text{ Kg/Lit}$ $Net \text{ Calorific Value of Diesel} = 43.3 \text{ GJ/tonne}$ $EF_{CO_2 Diesel} = 0.0748 \text{ tCO}_2 / \text{GJ}$ <p>Project emission due to Diesel for current monitoring period is calculated as $PE_{Diesel,y} = 0.331 \text{ t CO}_2\text{e}$</p> <p>Project Emission due to Electricity Imported ($PE_{Import,y}$) :</p> <p>The project activity also involved the import of electricity, which is considered in calculation of project emission as shown below:</p> $PE_{import,y} = E_{import,y} * EF_{westerngrid,CM,y}$ Where $PE_{import,y}$ – Project emission from import of electricity from the grid during the year y $E_{import,y}$ – Electricity imported from the grid by the project activity during the year y $EF_{Western \text{ grid, CM } y}$ – Baseline emission factor for the western regional grid (combined margin approach) whose value is fixed for crediting period at $0.6890 \text{ tCO}_2\text{e} / \text{MWh}$ $PE_{import,y} = 69.65 \text{ MWh} \times 0.6890 \text{ tCO}_2\text{e} = 47.99 \text{ tCO}_2\text{e}$ <p>Overall Project emission due to Diesel and import from grid for current monitoring period is calculated as</p> $PE_y = PE_{Import,y} + PE_{Diesel,y} = 47.99 \text{ tCO}_2\text{e} + 0.331 \text{ tCO}_2\text{e} = 49 \text{ tCO}_2\text{e}$ (Rounded up Value)
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.
Conclusion	<p>Applus+ Certification confirms that the requirement outlined under CDM-VVS for v01.0 §§ 377 have been met as:</p> <ul style="list-style-type: none"> • A complete set of data for the monitoring period is available. • Information on the project GHG emission calculation provided in the monitoring report /1.2/ has been cross-checked with other sources. • Calculations of project emissions have been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document. • Appropriate emission factor of the Diesel has been correctly applied.

E.8.3. Calculation of leakage GHG emissions

Means of verification	The approved revised PDD/1.3/ and applied monitoring methodology/2.3/ does not prescribe any leakage emissions to be considered. The onsite visit and project design also did not reveal any potential source to be considered in this regard.
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.
Conclusion	No leakage emissions were required to be calculated.

E.8.4. Summary calculation of GHG emission reductions or net anthropogenic GHG removals by sinks

Means of verification	As elaborated above, the entire emission reductions from the project activity were based on baseline emissions. The calculations presented in this regard in the final monitoring report/1.2/ and corresponding ER calculation sheet/4.1/ were found appropriate and complying with the provisions prescribed in the registered
------------------------------	---

	monitoring plan of approved revised PDD/1.3/ and applied methodology. The verification team confirms that an audit trail that contains the evidence and records that validated the stated figures were checked and found acceptable.
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.
Conclusion	Applus+ Certification confirms that the requirement outlined under CDM-VVS for PA v01.0 §§ 377 have been meet as: <ul style="list-style-type: none"> • A complete set of data for the monitoring period is available. • Information provided in the monitoring report /1.2/ has been cross-checked with other sources; • Calculations of baseline emissions, and project activity emissions and leakage, as appropriate, been carried out in accordance with the formulae and methods described in the monitoring plan and the applied methodology document. • There are no assumptions in emission reductions calculation. • Appropriate emission factor of the power grid has been correctly applied.

E.8.5. Comparison of actual GHG emission reductions or net anthropogenic GHG removals by sinks with estimates in registered PDD

Means of verification	As verified and evident from the final Monitoring Report /1.2/ and corresponding ER sheet /4.1/, the actual emission reductions achieved by the project activity in the current monitoring period were found less than the estimated quantity in the approved revised PDD/1.3/ for the comparable period. This is largely due to low plant load factor achieved during the current monitoring period.			
	Annual CERs estimated in the revised approved PDD (tCO ₂ e)	Estimated CERs for current monitoring period, tCO ₂ e	Actual CERs achieved in the current monitoring period, tCO ₂ e	Difference
	35,042	40,896	39,849	-2.56%
	Considering, there is no increase in ERs than the estimated amount; it was found acceptable.			
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.			
Conclusion	Applus+ Certification confirms that the requirement outlined under CDM-PS for PA v01.0 §§ 268 have been meet as: <ul style="list-style-type: none"> • A comparison of actual GHG emission reductions or net anthropogenic GHG removal of the project activity achieved during this monitoring period with the estimates in the approved revised PDD /1.3/ has been provided in the Monitoring Report /1.2/. • The verification team confirms that the calculation of the comparison is correct. 			

E.8.6. Remarks on difference from estimated value in registered PDD

Means of verification	The verification team has assessed the cause of any variation in the actual GHG emission reductions achieved during the current monitoring period. There is decrease of around 2.56% in the actual emission reductions achieved during the current monitoring period from that stated in the approved revised CDM-PDD. This is largely due to low plant load factor achieved during the current monitoring period. It is to be noted that PLF is completely governed by the availability of water from power plant which is beyond the control of PP.
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.
Conclusion	Applus+ Certification confirms that the requirement outlined under CDM-PS for PA v01.0 §§ 269 and CDM-VVS for PA v01.0 §§ 359 (d) have been meet as: <ul style="list-style-type: none"> • The verified emission reductions are lesser than the estimated value in the monitoring period. The project participants have explained the cause of any decrease in the actual GHG emission reductions achieved during the current monitoring period, and including all information (i.e. data and/or

	parameters) that is different from that stated in the approved revised PDD /1.3/. <ul style="list-style-type: none"> The variation is deemed to be reasonable.
--	--

E.8.7. Actual GHG emission reductions or net anthropogenic GHG removals by sinks during the first commitment period and the period from 1 January 2013 onwards

Means of verification	Based on the assessment done in section E.8.1 to E.8.6, the verification team is able to certify that the emission reductions from the CDM project activity 0430 "12 MW hydropower plant in Bhandardara in Maharashtra, India." in India during the period 01/11/2016 – 31/12/2017 (including both days) is 39,849 tCO ₂ e.
Findings	No non-conformability was observed during assessment for this section. Therefore, no finding was raised.
Conclusion	Applus+ Certification confirms that the requirement outlined under CDM-PS for PA v01.0 §§ 266 as the project participants has calculated GHG emission reductions.

E.9. Assessment of reported sustainable development co-benefits

Means of verification	Not applicable
Findings	Not applicable
Conclusion	Not applicable

E.10. Global stakeholder consultation

Means of verification	Not applicable
Findings	Not applicable
Conclusion	Not applicable

SECTION F. Internal quality control

>> As a final step of verification, the final documentation including the verification report has to undergo an internal quality control by the Technical Reviewer. Each report has to be finally approved either by the DOE's Technical Manager or the Deputy. In case one of these two persons is part of the assessment team, the approval can only be given by the person who is not a part of the assessment team. If the documents have been satisfactorily approved, the Request for Issuance is submitted to the CDM-EB along with the relevant documents.

SECTION G. Verification opinion

>> Applus+ Certification has been contracted by Dodson–Lindblom Hydro Power Private Limited (DLHPPL) to perform the verification of the emission reductions reported for the CDM project "12 MW hydropower plant in Bhandardara in Maharashtra, India." in the period 01/11/2016 – 31/12/2017.

Applus+ Certification concludes that the CDM Project "12 MW hydropower plant in Bhandardara in Maharashtra, India.", as described in the approved PDD /1.3/ (Version 9, 16/07/2016) and Monitoring Report /1.2/ (Version 02, 20/04/2018), meets all relevant requirements of the UNFCCC for CDM project activities including article 12 of the Kyoto Protocol, the modalities and procedures for CDM (Marrakesh Accords) and the subsequent decisions by the COP/MOP and CDM Executive Board. The verification is conducted in line with the (CDM-VVS for PA) Version 01.0 /2.1/ requirements. The Project is implemented according to selected monitoring methodology /2.3/ and the monitoring plan contained in the approved revised PDD /1.3/. The monitoring equipment was installed, calibrated and maintained in a proper manner. The monitoring system is in place and the Project is generating GHG emission reductions as a CDM project.

Applus+ Certification confirms that the project is implemented in accordance with the validated and approved revised Project Design Document/1.3/. The monitoring system is in place and the emission reductions are calculated without material misstatements. Our opinion relates to the projects GHG emissions and the resulting GHG emission reductions reported and related to the valid and registered project baseline and monitoring and its associated documents. Based on the information seen and evaluated we confirm that the implementation of the project has resulted in 39,849 tCO₂e emission reductions during the period 01/11/2016 – 31/12/2017 (both days included).

Applus+ Certification therefore issues the positive verification opinion expressed in the Certification statement in Section H.

SECTION H. Certification statement

>> Applus+ Certification has been engaged by Dodson–Lindblom Hydro Power Private Limited (DLHPPL) to perform the 2nd periodical verification of the '12 MW hydropower plant in Bhandardara in Maharashtra, India.' (UNFCCC Ref. No. 0430).

The management of Dodson–Lindblom Hydro Power Private Limited (DLHPPL) is responsible for the preparation of the GHG emissions data and the reported GHG emissions reductions on the basis set out within the project's Monitoring Plan in the approved revised PDD Version 9 /1.3/, completed on 16/07/2016 and the applied methodology AMS-I.D. Version: 18 /2.3/.

Our verification approach was based on the requirements as defined under the Kyoto Protocol, Marrakesh accord, as well as those defined by the CDM Executive Board. Our approach is risk-based, drawing on an understanding of the risks associated with reporting GHG emissions data and the controls in place to mitigate these. The verification can confirm that:

- the project is operated as planned and described in the project design document approved by the EB;
- the approved monitoring plan is as per the applied methodology;
- the monitoring in Monitoring Report is as per the PDD and the monitoring plan approved by the EB;
- the development and maintenance of records and reporting procedures are in accordance with the registered monitoring plan;
- the installed equipment being essential for generating emission reduction runs reliably and is calibrated appropriately;
- the monitoring system is in place and generates GHG emission reductions data;
- the GHG emission reductions are calculated without material misstatements.

In our opinion, the GHG emission reductions for '12 MW hydropower plant in Bhandardara in Maharashtra, India.' for the monitoring period 01/11/2016 to 31/12/2017 as reported in Monitoring Report, prepared on the basis of the project's Monitoring Plan are fairly stated.

Based on the information we have seen and evaluated, we confirm the following statement:

Reporting period:

From 01/11/2016 to 31/12/2017

Verified emissions in the above reporting period:

Leakage emissions	00,000 tCO ₂ equivalents
Project emissions	00,049 tCO ₂ equivalents
Baseline emissions	39,898 tCO ₂ equivalents
Emission reductions in this monitoring period (i.e. 01/11/2016 to 31/12/2017)	39,849 tCO ₂ equivalents
Emission reductions achieved during the period up to 31 December 2012	Nil
Emission reductions achieved during the period from 1 January 2013 onwards. (i.e. 01/11/2016 to 31/12/2017)	39,849 tCO ₂ equivalents

Appendix 1. Abbreviations

Abbreviations	Full texts
AMS	Approved Methodology Small-scale
BM	Build Margin
BVC	Bureau Veritas Certification
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CEA	Central Electricity Authority
CER	Certified Emission Reductions
CL	Clarification Request
CM	Combined Margin
CO ₂ e	Carbon Dioxide equivalent
CoP/MoP/CMP	Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol
DG	Diesel Generator
DLHPPL	Dodson – Lindblom Hydro Power Private Limited
DNA	Designated National Authority
DOE	Designated Operational Entity
EB	CDM Executive Board
EF	Emission Factor
ER	Emission Reductions
EVI	Emergent Ventures India Pvt. Ltd.
GCESS	Green Carbon Energy and Environment Services
GCV	Gross Calorific Value
GHG	Greenhouse Gas(es)
GOMWRD	Government of Maharashtra Water Resource Department
GPS	Global Positioning System
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organisation for Standardisation
JMR	Joint Meter Reading
KWh	Kilowatt hour
MEDA	Maharashtra Energy Development Agency
MERC	Maharashtra Electricity Regulatory Commission
MP	Monitoring Plan
MPCB	Maharashtra Pollution Control Board
MR	Monitoring Report
MSEB	Maharashtra state Electricity Board
MSEDCL	Maharashtra State Electricity Distribution Company Limited
MSETCL	Maharashtra State Electricity Transmission Company Limited
MW/MWh	Megawatt/ Megawatt hour
NCV	Net Calorific Value
OM	Operating Margin
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
PS	Project Standard
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers

According to the sectoral scope / technical area and experience in the sectoral or national business environment, Applus+ Certification has composed a project assessment team in accordance with the appointment rules in the internal Quality Management System of Applus+ Certification.

The composition of audit team shall be approved by the Applus+ Certification ensuring that the required skills are covered by the team.

The four qualification levels for team members that are assigned by formal appointment rules are as presented below:

- Lead Auditor (LA).
- Auditor (A) / Auditor in Training (AiT).
- Technical Expert (TE).
- Technical Reviewer (TR).

The sectoral scope / technical area knowledge linked to the applied methodology/ies shall be covered by the assessment team.

Name	Qualification	Coverage of scope	Coverage of technical Area	Financial aspect	Host country Experience	Attendance to the On-Site Assessment
Vivek Kumar Ahirwar	Lead Auditor (LA)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Vivek Kumar Ahirwar	Technical Expert (TE)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Ravi Kant Soni	Auditor in Training (AiT)	Yes (1)	Yes (1.2)	N/A	Yes	Yes
Simon Shen	Technical Reviewer (TR)	Yes (1)	Yes (1.2)	N/A	N/A	N/A

The curricula vitae of the DOE's team members are provided below:

Vivek Kumar Ahirwar is a BEE-Certified Energy Auditor by Govt of India with over eight years of relevant experience in energy efficiency, energy audit, thermal and electrical energy generation technology from renewable source and energy conservation in energy intensive industries, designated consumers and commercial buildings, implementation of energy conservation building codes, research, process and green building projects. He is a certified lead auditor for ISO 14001 EMS and 14064. He has experience under various categories of projects stating from renewable to waste to supercritical projects and WCD. He has successfully audited more than 100 GHG (CDM/VCS/GS) projects in different states across the India. He has done Master in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from Govt. Engineering college, Rewa, RGPV, India.

Ravi Kant Soni is a certified lead auditor for Lead Auditor ISO 14001:2004&Lead Auditor ISO 14064:2006 GHG Inventory and verification. He has more than 10 years of work experience across Climate Change, Environmental Management & Monitoring, Health & Safety Management, and Statutory Compliance. He was involved in more than 100 CDM validation and verifications activities and Gold Standard, VER projects as a team leader/technical reviewer / validator / verifier covering the sectoral scope 1 technical area 1.2. He has done Master in Technology (Energy Management) from a premier institute, School of Energy & Environmental Studies, DAVV, Indore (M.P.), India and Bachelor of Engineering (Mechanical Engineering) from M.I.T.S Gwalior Jiwaji University Gwalior, India.

Simon Shen (Master Degree in Thermal Energy Engineering, Bachelor Degree in Environmental Engineering) is a Lead Auditor appointed by Applus+ LGAI for the GHG project assessment. He is based in Shanghai. He has several years of work experience in environmental protection field. Before he joined Applus+ LGAI, he had been worked for TÜV SÜD as a GHG Validator/Verifier and ISO 9001/14001 Lead Auditor for 3.5 years

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
1.	Basic Documents (Monitoring Report, Project Design Documents, Previous Verification Reports)			
1.1	DLHPPL	MR, version 01 (Published)	Dated 25/01/2018	PP
1.2	DLHPPL	MR, version 02	Dated 20/04/2018	PP
1.3	DLHPPL	Revised approved PDD, version 9 (Renewal of 3 rd crediting period from 27/07/2015 – 26/07/2022)	Dated 16/07/2016	PP
1.4	Applus (LGAI)	Validation Report for Revised approved PDD version 09 (Renewal of 3 rd crediting period from 27/07/2015 – 26/07/2022)	Dated 24/07/2016	Other: UNFCCC
1.5	UNFCCC	CDM Project activity view page “12 MW hydropower plant in Bhandardara in Maharashtra, India” https://cdm.unfccc.int/Projects/DB/BVQI1155728784.01/view	30/09/2006	Other: UNFCCC
1.6	DLHPPL	Registered PDD, version 03	Dated 04/08/2006	PP
2.	References and requirements at UNFCCC/IPCC/etc.			
2.1	UNFCCC website	Clean Development Mechanism Validation and Verification Standard for Project Activity (CDM-VVS for PA), version 01.0 as per EB 93, Annex 5	Dated 03/03/2017	Other: UNFCCC
2.2	UNFCCC website	CDM Project Standard for Project Activity (CDM-PS for PA), version 01.0 as per EB 93, Annex 4	Dated 03/03/2017	Other: UNFCCC
2.3	UNFCCC website	AMS-I.D. (version 18.0.0): “Grid connected renewable electricity generation”	Dated 28/11/2014	Other: UNFCCC
2.4	UNFCCC website	Guidance to Complete “Monitoring Report Form (CDM-MR-FORM), Version 06.0” as accordance with the Attachment “Instructions for filling out the monitoring report form”	Dated 07/06/2017	Other: UNFCCC
2.5	UNFCCC website	Tool to calculate the emission factor for an electricity system, Version 04	04/10/2013	Other: UNFCCC
2.6	IPCC	IPCC Guidelines Vol. 2	Year 2006	Other: IPCC
3.	Project implementation information			
3.1	MSETCL	Commissioning Certificate for the project activity by MSETCL for synchronisation to grid as First JMR of project activity	Dated 27/07/2011	Other: MSETCL
3.2	MSEB	Power Purchase Agreements (PPA) for the project activity between DLHPPL and MSEB AND Irrigation department, Government of Maharashtra	Dated 21/01/1999	PP
3.3	DLHPP L	Monthly Joint Meter Reports (JMRs) issued by AHPL verified by MPPKVVCL	For the period 01/11/2016 - 31/12/2017	PP
3.4	DLHPP L	Power Supply bills towards MSETCL raised	For the period 01/11/2016 - 31/12/2017	PP
3.5	DLHPP L	Diesel consumption data maintained on monthly basis	For the period 01/11/2016 - 31/12/2017	PP
3.6	DLHPP L	Diesel consumption daily log book records	For the period 01/11/2016 - 31/12/2017	PP

3.7	DLHPP L	Machine Tripping Outage Details	For the period 01/11/2016 - 31/12/2017	PP
3.8	DLHPP L	Sample copy for Daily Energy & log Sheet	For the period 01/11/2016 - 31/12/2017	PP
4.	ER calculation and cross checking issue			
4.1	AHPL	Emission reduction calculation sheet , Version 01	Dated 25/01/2018	PP
5.	Calibration issues			
5.1	State utility	Calibration test certificates for Main and check, gross generation meter energy meters	For the period 01/11/2016 - 31/12/2017	PP
6.	Others			
6.1	Applus+ Certifica tion	Site Visit Attendance Sheet	Dated 03/04/2018	-
6.2	Applus+ Certifica tion	Site Visit Photograph	Dated 03/04/2018	-
6.3	CEA	Baseline Carbon Dioxide Emission Database ,Version 10.0, from the Central Electricity Authority (CEA), Ministry of Power, Government of India Website http://www.cea.nic.in/	Dated 16/12/2014	Other: CEA

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

Table 1. Remaining FAR from validation and/or previous verifications

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

Table 2. CL from this verification

CL ID	01	Section no.	D.2	Date : 18/04/2018
Description of CL				
Please submit the relevant evidence regarding calibration of monitoring equipment and invoice and bill details.				
Project participant response				Date : 20/04/2018
PP is hereby submitting the requisite set of documents i.e. meter calibration certificates & invoices for the period Nov 2016 to Dec 2017.				
Documentation provided by project participant				
Meter Calibration Certificate for the year 2016 & 2017 Invoices for the period Nov 2016 to Dec 2017				
DOE assessment				Date: 28/04/2018

The PP has submitted all the supporting documents for calibration and invoice, found to be satisfactory, hence accepted. CL #1 is closed.

Table 3. CAR from this verification

CAR ID	01	Section no.	First Page of the MR	Date : 18/04/2018
Description of CAR				
<ol style="list-style-type: none"> 1. The PP is requested to provide correct details on page no. 1 of the MR 2. Please confirm whether standardized baseline is applicable or not on page no 1 of the MR. 3. There is no detail provided about accuracy checked every six month. 4. The PP is requested to provide exact reference of the PDD in entire Monitoring report. 				
Project participant response				Date : 20/04/2018
<ol style="list-style-type: none"> 1. PP has revised the MR to provide the correct details on page #1. 2. PP has revised the MR to mention that "standardized baseline" is not applicable, on page #1 of the MR. 3. PP has revised the MR to provide the six-month accuracy check details covering the entire monitoring period, under Annex 1 of the MR. 4. PP has revised the MR to provide the exact reference of the PDD in entire Monitoring report. 				
Documentation provided by project participant				
Revised Monitoring report (Version 02, dated 20/04/2018)				
DOE assessment				Date: 28/04/2018
The PP has updated the information Page 1 of MR and PDD, found to be correct, hence accepted. CAR #1 is closed.				

CAR ID	02	Section no.	Annex 1 of MR	Date : 18/04/2018
Description of CAR				
<ol style="list-style-type: none"> 1. Six monthly accuracy check details are missing in Details of energy meter in Annex 1 of the MR. 2. Also the provided calibration details are not covered entire monitoring period, please clarify? 				
Project participant response				Date : 20/04/2018
<ol style="list-style-type: none"> 1. PP has revised the MR to provide the six-month accuracy check details covering the entire monitoring period under Annex 1 of the MR. 2. PP has revised Annex 1 of the MR to provide the details of energy meter covering the entire monitoring period in line with the monitoring requirement of the registered PDD version 09, dated 16/07/2016 				
Documentation provided by project participant				
Revised Monitoring report (Version 02, dated 20/04/2018)				
DOE assessment				Date: 28/04/2018
The PP has provided six-month accuracy check details in Annex-1 of the MR. These are found to be correct as per approved revised PDD version 09 dated 16/07/2016, hence accepted, therefore CAR#2 closed.				

Table 4. FAR from this verification

FAR ID	N/A	Section No.	N/A	Date:N/A
Description of FAR				
N/A				
Project participant response				Date:N/A
N/A				
Documentation provided by project participant				
N/A				
DOE assessment				Date:N/A
N/A				

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.1	11 January 2018	Editorial revision to correct the numbering of appendices in the instructions.
02.0	31 October 2017	Revision to align with the requirements of the “CDM validation and verification standard for project activities” (version 01.0).
01.0	23 March 2015	Initial publication.
Decision Class: Regulatory		
Document Type: Form		
Business Function: Issuance		
Keywords: project activities, verifying and certifying		