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# **Validation Report**

## **Prototype Carbon Fund The World Bank**

### **VALIDATION OF THE REVISED MONITORING PLAN OF THE REGISTERED CDM-PROJECT No. 0526: INDOCEMENT BLENDED CEMENT PROJECT**

**REPORT NO. 1099244-20-RM**

**April 10, 2008**

TÜV SÜD Industrie Service GmbH  
Carbon Management Service  
Westendstr. 199 - 80686 Munich – GERMANY

Report No.	Date of first issue	Revision No.	Date of this revision	Certificate No.
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<b>Subject:</b> Validation of a Revised Monitoring Plan			
<b>Accredited TÜV SÜD Unit:</b> TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany		<b>TÜV SÜD Contract Partner:</b> -	
<b>Client:</b> Prototype Carbon Fund – The World Bank 1818 H Street, NW Washington 20433 , District of Columbia USA		<b>Project Site(s):</b> Citeureup and Cirebon (West Java) and Tarjun (South Kalimantan), Indonesia	
<b>Project Title:</b> Indocement Blended Cement Project			
<b>Applied Methodology / Version:</b> ACM0005 ver. 3		<b>Scope(s):</b> 4	
<b>Registered PDD Version:</b> Registration Date: May 5, 2006 Starting Date of Crediting Period: January 1, 2005		<b>Revised Monitoring Plan:</b> Date of issuance: December 2007	
<b>Assessment Team Leader:</b> Ayse Frey		<b>Further Assessment Team Members:</b> Robert Mitterwallner	
<b>Summary of the Validation Opinion:</b> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The review of the revised monitoring plan and the subsequent follow-up interviews has provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the revised monitoring plan meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD will recommend the replacement of the monitoring plan of the registered PDD by the submitted revision.</li> <li><input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the replacement of the monitoring plan of registered PDD.</li> </ul>			

Table of Contents	Page
1 INTRODUCTION .....	3
1.1 Objective	3
1.2 Scope	3
2 METHODOLOGY .....	4
2.1 Appointment of the Assessment Team	4
2.2 Review of Documents	5
2.3 Follow-up Interviews	5
2.4 Internal Quality Control	5
3 FINDINGS .....	6
4 VALIDATION OPINION .....	7

## 1 INTRODUCTION

### 1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed revision of a monitoring plan against all defined criteria set for the registration under the Clean Development Mechanism (CDM). Validation is required in the context of proposed revisions of a registered CDM activity and will finally result in a conclusion by the executing DOE whether a revised monitoring plan is valid and should be submitted for replacing the previous version. The ultimate decision on the registration of a proposed revision rests at the CDM Executive Board.

The project activity discussed by this validation report is registered as CDM activity:

**No.: 0526**

**Title: Indocement Blended Cement Project**

### 1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. The core requirements on revised monitoring plans are given by annex 12 of the report of EB-31 as referred below:

*15. The request for revising monitoring plan is made in cases where:*

- a. the monitoring plan in the registered CDM project activity document is found not to be consistent with the approved monitoring methodology applied to the registered project activity; or*
- b. the proposed revision of the monitoring plan ensures that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revision;*

The validation is not meant to provide any consulting towards the client. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project design.

## 2 METHODOLOGY

The project assessment aims at being a risk based approach and is based on the methodology developed in the Validation and Verification Manual, an initiative of Designated and Applicant Entities, which aims to harmonize the approach and quality of all such assessments.

### 2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has composed a project team in accordance with the appointment rules of the TÜV SÜD certification body “climate and energy”. The composition of an assessment team has to be approved by the Certification Body ensuring that the required skills are covered by the team. The Certification Body TÜV SÜD operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The validation team was consisting of the following experts (the responsible Assessment Team Leader is written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
<b>Ayse Frey</b>	ATL	☑	☑	☑
Robert Mitterwallner	GHG-A	☑	☑	

**Dr. Ayse Frey** is a lead auditor and project manager for CDM/JI projects as well as an energy/waste expert at TÜV SÜD Industrie Service GmbH. In her position she is responsible for the implementation of validation, verification and certifications processes for greenhouse gas mitigation projects in the context of the Kyoto Protocol. After her studies in civil and environmental engineering, she completed a PhD in the field of water and waste policy. She has extensive experience with the CDM and JI flexible mechanisms as well as with management systems.

**Robert Mitterwallner** is a GHG-A with a background as auditor for environmental management systems (according to ISO 14001) and expert in environmental permit procedures. He is located at the headquarter of TÜV SÜD Industrie Service in Munich. He has received training in the JI determination as well as CDM validation process and applied successfully as GHG Auditor for several scopes.

## **2.2 Review of Documents**

The revised Monitoring Plan submitted by the client and additional background documents related to further monitoring aspects were reviewed as initial step of the validation process.

## **2.3 Follow-up Interviews**

Follow-up interviews were conducted with the project proponent and the CDM consultant via emails. Further interviews on-site were not deemed necessary as the on-site visits for the periodic verifications were deemed sufficient.

## **2.4 Internal Quality Control**

As final step of a validation the validation report has to undergo an internal quality control procedure by the Certification Body “climate and energy”, i.e. each report has to be approved either by the head of the certification body or his deputy. In case one of these two persons is part of the assessment team approval can only be given by the other one.

It rests at the decision of TÜV SÜD's Certification Body whether a revised monitoring plan will be submitted for approval by the EB or not.

### **3 FINDINGS**

During the Initial and First Periodic Verification, it was identified that the actual method of determination of electricity consumption deviated from the method described in the registered PDD. The actual method of determining electricity consumption is described in Annex 1.

To deal with this deviation, a Request for Deviation was submitted for the First Periodic Verification on 05 June 2007 (see Annex 2).

This Request for Deviation was accepted by the CDM EB (see Annex 3). In the EB response, the DOE was requested to submit a request for revision of monitoring plan prior to the next request for issuance.

The proposed Revised Monitoring Plan includes the same changes as the ones that were presented in Request for Deviation. Hence, a further analysis is not deemed necessary, as the Revised Monitoring Plan was described in detail and validated during the request for deviation. This step is seen as a formal step to revise the Monitoring Plan.

## 4 VALIDATION OPINION

TÜV SÜD has performed a validation of the revised Monitoring Plan of CDM Project:

**No.: 0526**

**Title: Indocement Blended Cement Project**

The review of the Revised Monitoring Plan and the subsequent follow-up interviews has provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the revised monitoring plan meets all relevant UNFCCC requirements for the CDM. Hence TÜV SÜD recommends the replacement of the monitoring plan of the registered PDD by the submitted revision.

Munich, 2008-04-10



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Certification Body "climate and energy"  
TÜV SÜD Industrie Service GmbH

Munich, 2008-04-10



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Assessment Team Leader





## **Annex 1: Measurement and Calculation of Electricity Consumption**

## Annex 1. Measurement and Calculation of Electricity Consumption

In Indocement Blended Cement Project, electricity is consumed for clinker production, grinding of blended cement and grinding of additives. The electricity supply in Citeureup plant is from both Grid and Self generated electricity, in Cirebon plant is from grid only, and in Tarjun plant is from self- generated electricity only. The explanation below provides description on how electricity consumed for clinker production, grinding of blended cement and grinding of additives are estimated.

### 1. Electricity consumption for clinker production

The electricity consumption parameters for clinker production included in this monitoring report are as follows:

- Grid electricity for clinker production, baseline ( $BELE_{grid\_CLNK}$ )
- Self generation of electricity for clinker production, baseline ( $BELE_{sg\_CLNK}$ )
- Grid electricity for clinker production, project(  $PELE_{gridCLNK,y}$ )
- Self generation of electricity for clinker production, project ( $PELE_{sg\_CLNK,y}$ )

Both electricity consumption method of calculation from grid and self-generated supply for clinker production for baseline and project are the same. The difference is that the baseline calculates electricity consumption for clinker production in the year 2004.

The electricity consumption for clinker production from grid is then calculated as follows:

$$PELE_{grid\_CLNK,y} = ELE\_CLNK., y * GEN\_grid\_ratio \quad (1)$$

And The electricity consumption for clinker production from self-generated electricity source is then calculated as follows:

$$PELE_{sg\_CLNK,y} = ELE\_CLNK., y - PELE_{gridCLNK, y} \quad (2)$$

Where:

$ELE\_CLNK,y$  = electricity consumption for clinker production, Mwh

$GEN\_grid\_ratio$  = the ratio of electricity supply between that of the grid and that of the total electricity supply

The electricity consumption for clinker production is calculated as follows:

$$ELE_{CLNK., y} = ELE_{raw\ mill, y} + ELE_{kiln, y} + ELE_{raw\ meal\ limestone, y} + ELE_{clay, y} + ELE_{laterite, y} + ELE_{coal, y} \quad (3)$$

Where:

$ELE_{CLNK., y}$	= electricity consumption for clinker production, Mwh
$ELE_{raw\ mill, y}$	= electricity consumption for raw mill, measured separately in each plant, with kwh meter. In each plant may have more than one Kwh meter to measure electricity consumption for raw mill section, Mwh
$ELE_{kiln, y}$	= electricity consumption for clinker burning in the kiln, measured separately in each plant, with kwh meter. In each plant may have more than one Kwh meter to measure electricity consumption for clinker burning at the kiln section, Mwh
$ELE_{raw\ meal\ limestone, y}$	= power consumption for raw meal limestone in Mining, Mwh
$ELE_{clay, y}$	= power consumption for clay(sandy clay) in Mining, Mwh
$ELE_{laterite, y}$	= power consumption for laterite in Mining (only for Tarjun), Mwh
$ELE_{coal, y}$	= power consumption for coal mill section, Mwh
$ELE_{raw\ meal\ limestone, y}$	= $Q_{raw\ meal\ LS, y} \times ELE_{spec\_total\_LS} / 1000$ , Mwh

Where:

$Q_{raw\ meal\ LS, y}$	=limestone consumed for raw meal in year y, ton
$ELE_{spec\_total\_LS}$	= specific electricity consumption for overall limestone
$ELE_{spec\_total\_LS}$	= $1000 * ELE_{total\_LS} / (Q_{ADD\ LS} + Q_{RAWMEAL\ LS, y})$ , kwh/t <sub>LS</sub>
$ELE_{total\_LS}$	= Electricity consumption for raw meal limestone and for-additive limestone, measured by kWh meter, Mwh
$Q_{ADD\ LS, y}$	= Quantity of additive limestone consumed in year y

To calculate the electricity consumption for clinker production from grid and electricity consumption from self generated, the ratio of electricity supply between that of the grid is calculated as follows:

$$GEN_{grid\_ratio} = \frac{GEN_{ele\ grid, y}}{\sum GEN_{i, y} + GEN_{ele\ grid, y}} \quad (4)$$

$$GEN_{sg\_ratio} = 1 - GEN_{grid\_ratio} \quad (5)$$

Where:

GEN ele grid, y = Electricity supply from the grid, measured by Kwh meter  
 $\Sigma$  GENi, y = Sum of Electricity self-generated from the source i, measured by Kwh meters

The following Table describes the monitoring parameters of electricity consumption for clinker production, only for additional parameters not listed in the monitoring reports.

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
8.a	Electricity for clinker production	Plant records	ELE_CLNK,y	Mwh	m,c	monthly	Calculated from electricity consumption from raw mill and from kiln,limestone raw meal, clay, laterite and coal
8.a.1	electricity consumption for raw mill	Plant records	ELE_raw mill, y	Mwh	m,c	monthly	<p>Calculated from each kWh meter measured and installed to measure the raw mill electricity consumption. Below is the measurement point code for each plant, P1 to P12 , except P5 since this plant is excluded in the project:</p> <p><b>Citereup:</b>  P1:  KWH METER R.M P-1  LIMESTONE W.F P-1  SANDY CLAY P-1  SAND P-1  PYRITE CINDER P-1</p> <p>P2 :  KWHMETER RAWMILL P2  LIMESTONE WF P2  SANDY CLAY P2  SAND P2  PYRITE CINDER P2</p> <p>P3 :  FEEDER DRUM DRYER P3  LIMESTONE P3  SAND P3</p> <p>P4 :  FEEDER RAW MILL P4  TR1+2-(BB5+BC12+BD7)</p> <p>P6 :  RAW MILL  IMPACT HAMMER MILL</p> <p>P7 :  RAW MILL</p>

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
							<p>P8 : RAW MILL LIMESTONE WF P8 SANDCLAY WF P8 SAND WF P8</p> <p>P11 : LSS1 LSS2 LM BLND TR LSS3 M.GRIND RM STRG LSS3 M.GRIND-RM STRG</p> <p><b>Cirebon:</b> P9 : RAW MILL GRINDING RAW MILL MOTOR</p> <p>P10 : RAW MTRL.TRANS.&amp;GRIN RAW MILL FAN LIMESTONE WF CLAY WF. SAND WF.</p> <p><b>Tarjun:</b> P12 : RAW MILL L'STONE RM#1 W.F. MIX MATL RM#1 W.F. S'STONE RM#1 W.F. IRON ORE RM#1 W.F.</p>
8.a.2	electricity consumption for clinker burning in the kiln	Plant records	ELE_kiln, y	MWh	mc	monthly	<p>Calculated from each kWh meter measured and installed to measure the kiln electricity consumption. Below is the measurement point code for each plant, P1 to P12 , except P5 since this plant is excluded in the project</p> <p><b>Citeuruep :</b> P1 : KWH METER BURNING P1 KWH METER KILN P1 KWH MTR EP COLER P1 R.COAL KL#1 RAW MEAL W.F P-1</p> <p>P2 : KWH METER BURNING P2 KWH METER KILN P2 KWH MTR EP COOLER P2 RAW MEAL W.F P2</p> <p>P3 : FEEDER BURNING CARBON FLY ASH SLUDGE PAPER WASTE FUEL PALM SHELL</p> <p>P4 : FEEDER BURNING P4</p> <p>P6 : HEAT EXCHANGER I&amp;II KILN &amp; COOLER</p> <p>P7 : K I L N</p>

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
							P8 : K I L N  P11 : LSS4 KILN FEED &KILN LSS5 CLINKERIZATION  <b>Cirebon :</b> P9 : KILN AND AQC HOMO AND SP  P10 : HOMOZNZING&KILN FEED KILN.AQC&CLINKR.TRNS BOTTOM ASH FEEDER COAL MILL  <b>Tarjun :</b> P12 : KILN KWH-METER WASTE OIL PALM SHELL
8.a.3	electricity consumption for limestone production	Mining records	ELE_total_LS, y	MWh	mc	Monthly	<b>Citeuruep :</b> P-4 CRS-1 / BA-4 P-3 CRUSHER-2 DP-101 P-3 CRUSHING SYSTEM P-4 CRS-2 / BA-4A P4 SYS.-D8 P-5 SYSTEM P-6A CRS-1/BA-4 P-6A CRS-2/BA-4A P-6B CRS-1/BA-5 P-6B CRS-2/BA-5A P-6 SYS.-D9 P-7 CRS/B1M.106 P-8 CRS/B1M.206 SYSTEM-D10 KWH CRS.P9 KWH CRS.P10 UNIT 3 PROK CONVEYOR DP2-6 DP102 CONBLOCK (QUARRY-A) MINING CONVEYOR  <b>Cirebon :</b> L T P 750 KVA MWB 103 MWB 109 LS CRUSHING TR FEEDER LS CRUSHER NO1 ROTOR LS CRUSHER NO2 ROTOR  <b>Tarjun :</b> Feeder 2P1-1S1-U#1 (Incoming 11 kV) in LSS-3 Feeder 3P2-1S1-U#A (331-BC2-M#1 250 kW) in LSS-3 Feeder 3P2-1S1-U#B (Trafo 3P2-1T1) in LSS-3 Feeder 3P2-1V1/1M1 ( Aux Trafo 3P2-1T1) in MCC LSS-3
8.a.4	electricity consumption for clay production	Mining records	ELE_clay, y	MWh	m,c	Monthly	<b>Citeuruep :</b> PHB-1

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
							PHB-2 PHB-3 PHB-4 PHB-5 PHB-6 PHB-7 PHB-8 PHB-9 PHB-10 PCL01 PCL02 PCL03 PCL04 PCL05 PCA01 PCA02 PCA03 PHB-12 HAMBALANG  <b>Cirebon :</b> 500 KVA MWB 202 ADD CRUSHER TR FEEDER ADDITIVE CRUSHER  <b>Tarjun :</b> Feeder 2P1-1S1-U#1 (Incoming 11 kV) in LSS-3 Feeder 3P2-1S1-U#A (331-BC2-M#1 250 kW) in LSS-3 Feeder 3P2-1S1-U#B (Trafo 3P2-1T1) in LSS-3 Feeder 3P2-1V1/1M1 (Aux Trafo 3P2-1T1) in MCC LSS-3
8.a.5	electricity consumption for laterite production	Mining records	ELE_laterite, y	MWh	m,c	Monthly	<b>Tarjun :</b> Feeder 2P1-1S1-U#1 (Incoming 11 kV) in LSS-3 Feeder 3P2-1S1-U#A (331-BC2-M#1 250 kW) in LSS-3 Feeder 3P2-1S1-U#B (Trafo 3P2-1T1) in LSS-3 Feeder 3P2-1V1/1M1 (Aux Trafo 3P2-1T1) in MCC LSS-3
8.a.6	electricity consumption for coal production	Plant records	ELE_coal, y	MWh	m,c	Monthly	<b>Citeureup :</b> Coal Mill P.1/4 - COAL DRYER 1-4 - P4 COAL MILL Coal Mill P.6/8 - COAL DRYER 6-8 - AUX COAL MILL 6-8 - KWH COAL DRYER - P6 COAL MILL - P7 COAL MILL - P8 COAL MILL Coal Mill P.11 - P11 COAL MILL  <b>Cirebon :</b> Coal Mill P.9 - COALMILL Coal Mill P.10

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
							- P10 COAL PWR Tarjun : - PLANT 12

## 2. Electricity consumption for Blended cement

The electricity consumption parameters for blended cement included in this monitoring report are as follows:

- Grid electricity for grinding BC, baseline ( $BE_{ele\_grid\_BC}$ )
- Self generation of electricity for grinding BC. Baseline ( $BELE_{sg\_BC}$ )
- Grid electricity for grinding BC, project ( $PE_{ele\_grid\_BC}$ )
- Self generation of electricity for grinding BC. Project ( $PELE_{sg\_BC}$ )

Both electricity consumption method of calculation from grid and self-generated supply for grinding blended cement for baseline and project are the same. The difference is that the baseline calculates electricity consumption for clinker production in the year 2004.

The electricity consumption for grinding blended cement from grid is then calculated as follows:

$$PE_{ele\_grid\_BC, y} = ELE_{BC, y} * GEN_{grid\_ratio} \quad (1)$$

And The electricity consumption for clinker production from self-generated electricity source is then estimated as follows:

$$PELE_{sg\_BC} = ELE_{BC, y} - PE_{ele\_grid\_BC, y} \quad (2)$$

Where,

$ELE_{BC, y}$  = electricity consumption for blended cement, measured for each plant by Kwh meter. In each plant may have more than one Kwh meter to measure electricity consumption for blended cement.

The following Table describes the monitoring parameters of electricity consumption for Blended Cement, only for additional parameters not listed in the monitoring reports.



ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
13.a	Electricity for grinding BC	Plant records	ELE_BC., y	Mwh	m,c	monthly	<p>Calculated from each kWh meter measured and installed to measure the electricity consumption for grinding blended cement . Below is the measurement point code for each plant, P1 to P12 , except P5 since this plant is excluded in the project:</p> <p><b>Citeureup :</b>  P1 :  KWH METER FM P1</p> <p>P2 :  KWH METER FM P2  CLINKER WF P2</p> <p>P3 :  FINISH MILL 3-A  FINISH MILL 3-B</p> <p>P4 :  CEMENT MILL 4A-1  CEMENT MILL 4A-2  CAF. 4A  DISTRIB. CE FMP4A  CEMENT MILL 4B-1  CEMENT MILL 4B-2  CAF.4B  DISTRIB.CE FM P4B</p> <p>P6 :  CEMENT MILL-I  CEMENT MILL-II</p> <p>P7 : CEMENT MILL</p> <p>P8 :  CEMENT MILL 8A  INDOSIN 8B  ROLLER PRESS 8B</p> <p>P11 :  LSS6A FINISH-CMT.STR  LSS6B F.GRIND-CMT ST</p> <p><b>Cirebon :</b>  P9 :  NO.1 CEMENT  NO.2 CEMENT</p> <p>P10 :  CEMENT GRINDING  CM.MILL MOTOR</p> <p><b>Tarjun :</b>  P12 :  FINISH MILL 1  CEMENT MILL 2</p>

### 3. Electricity consumption for grinding additives

The electricity consumption parameters for grinding additives included in this monitoring report are as follows:

- Grid electricity for grinding additives, baseline (BELE<sub>grid\_ADD</sub>)
- Self generation of electricity for grinding additives, Baseline (BELE<sub>sg\_ADD</sub>.)
- Grid electricity for grinding additives, project (PELE<sub>grid\_ADD</sub>)
- Self generation of electricity for grinding additives, Project (PELE<sub>sg\_ADD</sub>.)

Both electricity consumption method of calculation from grid and self-generated supply for grinding additives for baseline and project are the same. The difference is that the baseline calculates electricity consumption for clinker production in the year 2004.

In the mining, raw mill limestone and additive limestone is ground and the electricity supply goes into one kWh meter for both raw mill limestone and additive limestone. Therefore, the specific electricity consumption for overall limestone, both for raw mill and additives must be calculated:

$$ELE_{spec\_total\_LS} = 1000 * ELE_{total\_LS} / (Q_{ADD\ LS} + Q_{RAWMEAL\ LS}), \text{ kWh/t}_{LS}$$

Where:

$ELE_{spec\_total\_LS}$  = specific electricity consumption for overall limestone

$ELE_{total\_LS}$  = Electricity consumption for raw mill limestone and for ~~mining~~ additive limestone, measured by kWh meter, Mwh

$Q_{ADD\ LS}$  = Quantity of additive limestone, t

$Q_{RAWMEAL\ LS}$  = Quantity of raw meal limestone, t

The electricity consumptions for grinding additives limestone are then calculated as follows:



$$\begin{aligned} PELE_{grid\_ADD, y} &= Q_{ADD\ LS} / 1000 * ELE_{spec\_total\_LS} * GEN_{grid\_ratio}, \text{ Mwh, and} \\ PELE_{sg\_ADD, y} &= Q_{ADD\ LS} / 1000 * ELE_{spec\_total\_LS} * (1 - GEN_{grid\_ratio}), \text{ Mwh} \end{aligned}$$

The following Table describes the monitoring parameters of electricity consumption for grinding additives, only for additional parameters not listed in the monitoring reports.

ID number	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	Recording Frequency	Comment/Reference
15 a	Overall electricity for limestone	Plant records	ELE_total ADD, y	Mwh	m,c	monthly	<p>Calculated from each kWh meter measured and installed to measure the electricity consumption for grinding limestone t . Below is the measurement point code for each plant, P1 to P12 , except P5 since this plant is excluded in the project:</p> <p><b>Citeureup :</b>  P-4 CRS-1 / BA-4  P-3 CRUSHER-2  DP-101  P-3 CRUSHING SYSTEM  P-4 CRS-2 / BA-4A  P4 SYS.-D8  P-5 SYSTEM  P-6A CRS-1/BA-4  P-6A CRS-2/BA-4A  P-6B CRS-1/BA-5  P-6B CRS-2/BA-5A  P-6 SYS.-D9  P-7 CRS/B1M.106  P-8 CRS/B1M.206  SYSTEM-D10  KWH CRS.P9  KWH CRS.P10  UNIT 3  PROK CONVEYOR DP2-6  DP102  CONBLOCK (QUARRY-A)  MINING CONVEYOR</p> <p><b>Cirebon :</b>  L T P  750 KVA  MWB 103  MWB 109  LS CRUSHING TR FEEDER  LS CRUSHER NO1 ROTOR  LS CRUSHER NO2 ROTOR</p> <p><b>Tarjun :</b>  Feeder 2P1-1S1-U#1 (Incoming 11 kV) in LSS-3  Feeder 3P2-1S1-U#A (331-BC2-M#1 250 kW) in LSS-3  Feeder 3P2-1S1-U#B (Trafo 3P2-1T1) in LSS-3  Feeder 3P2-1V1/1M1 ( Aux Trafo 3P2-1T1) in MCC LSS-3</p>



## **Annex 2: Request for Deviation**

 <p align="center"><b>CDM: Form for submission of requests for deviation</b> (version 02) (To be used by the DOE, for requesting a deviation)</p>	
Name of the entity (DOE) submitting this form	TÜV SÜD Industrie Service GmbH
Title of the project activity	Indocement Blended Cement Project
Title/Subject (give a short title or specify the subject of your submission, maximum 200 characters):	Request for deviation from registered monitoring plan regarding determination of electricity consumption
Deviation type:	<p>a) <input type="checkbox"/> Approved methodology (AM) If so, specify reference number, version and title of the AM: _____</p> <p>b) <input checked="" type="checkbox"/> Provisions of registered project documentation If so, specify project number and which documentation : 0526 Monitoring Plan</p>
Attach draft CDM-PDD of project activity:	<input type="checkbox"/> Yes, is attached.
Specify if you want this request to be treated as confidential:	<input checked="" type="checkbox"/> To be treated as confidential <input type="checkbox"/> To be publicly available (UNFCCC CDM web site)
Date and signature for the DOE	 05.06.2007
<b>Description of the request for deviation</b>  Please use the space below to describe the deviation and substantiate the reason for requesting a deviation from approved methodologies (validation/registration stage) or provisions of registered project documentation (verification/issuance stage) .	

&gt;&gt;

The registered monitoring plan defines in chapter D.2.1.1 of PDD for following monitored parameters

ID number	Data Type	Data Variable	Source of data	Symbol	Data Unit	Measured (m), calculated (c) or estimated (e)	How Will the Data be Archived (electronic/paper)
10	Quantity	Self generation of electricity for clinker production	Plant records	PELEsg_CLNK,y	MWh	m	Electronic
13	Quantity	Grid electricity for grinding BC	Plant records	PELEgrid_BC,y	MWh	m	Electronic
14	Quantity	Self generation of electricity for grinding BC	Plant records	PELEsg_BC,y	MWh	m	Electronic
15	Quantity	Grid electricity for grinding additives	Plant records	PELEgrid_ADD	MWh	m	Electronic
16	Quantity	Self generation of electricity for grinding additives	Plant records	PELEsg__ADD,y	MWh	m	Electronic

The request for deviation affects the method of determination which has been defined as “measured”. Indocement is operating a captive power plant; however it requires also electricity from the grid. The monitoring plan says that each source of electricity is measured only, which is practically not possible, because the electricity is consumed by machines no matter if it comes from the grid or self generated since they are connected by only one line. Otherwise the machines would need two electricity lines, one for grid consumption and one for self generated power.

The deviation shall lead to a determination based on **measured and calculated**. It means that consumed electricity shall be shared proportional according to the share of self generated and purchased electricity. In other words, project related consumption, the total produced and purchased electricity will be measured; however the proportional share at each machine will be calculated according to the proportional share of produced and purchased electricity.

The calculation procedure is clearly explained in Annex 1 attached.

Please use the space below to describe and substantiate the assessment of the DOE that the deviation does not require an amendment to the approved methodology used by the proposed project activity.

&gt;&gt;

The methodology does not require an amendment as far as the whole electricity comes from captive power plant or from regional grid.

The methodology has not to be amended because the methodology gives the choice to determine the electricity consumption by metering or/and calculating. However, Indocement fixed in the registered PDD that it will measure only which is actually not possible. Even if Indocement had chosen that the emissions from electricity would have been calculated and measured a concretisation would be required. This specification is expressed by Annex 1 to monitoring report and should be announced as a deviation from the original registered monitoring plan..

Please use the space below to describe the impact of the deviation on the estimates of the emissions reductions for the proposed project activity with the use of approved methodology as existing and with the deviation. Please substantiate the estimations with relevant and verifiable data.	
>> The deviation has not have any controversial effects on the determination of emission reduction, furthermore it is a more concretised description of the approach how electricity consumption and related emissions will be determined.	
Link to the documentation made available at validation stage or the monitoring report	<a href="http://cdm.unfccc.int/UserManagement/FileStorage/VZY9YYVGDO831KLON48J0BVIN4K07Y">http://cdm.unfccc.int/UserManagement/FileStorage/VZY9YYVGDO831KLON48J0BVIN4K07Y</a>
If necessary, list attached files containing relevant information which is not available through the above link	➤ Annex 1-Monitoring reports-Blended Cement-Final.pdf ➤ Indocement Letter.pdf ➤ Revised_Monitoring Report-Indocement Blended Cement Project.pdf
<b>Information to be completed by the secretariat</b>	
Date when the form was received at UNFCCC secretariat	
Date of transmission to the Meth Panel and Executive Board	



## **Annex 3: EB Decision on Request for Deviation**



**Request for Deviation - Issuance: Request for deviation from registered monitoring plan regarding determination of electricity consumption**

The Board decided to accept the request for deviation for this monitoring period and instruct the DOE to submit a request for revision of monitoring plan prior to the next request for issuance.