

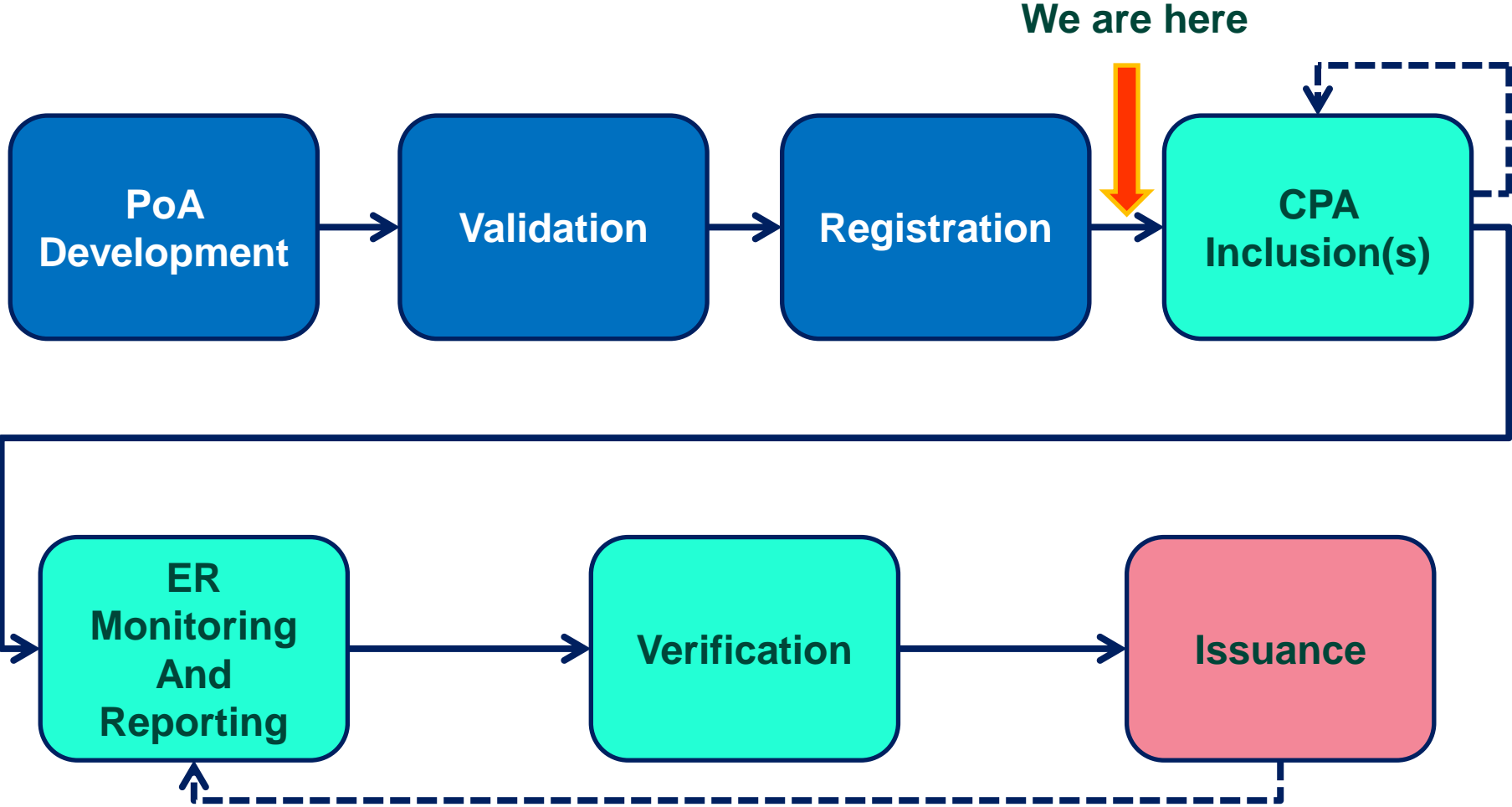


WORLD BANK CARBON FINANCE UNIT
CARBON PARTNERSHIP FACILITY
2013 SELLER PARTICIPANTS MEETING

**ROADMAP FROM PROGRAM REGISTRATION TO
ER ISSUANCE**

- **Roadmap for PoAs**
- **Key Activities and Deliverables:**
 - Inclusion of CPAs
 - ER Monitoring and Reporting
 - Verification
- **CDM Operations Plan—Guiding Document**

Roadmap for PoAs



Key Activities and Deliverables

Step	Activity	Deliverable
1.	CPA Inclusion	CPA-DD
2.	Monitoring and Reporting	Monitoring Report & ER Calculations
3.	Verification	Verification Report

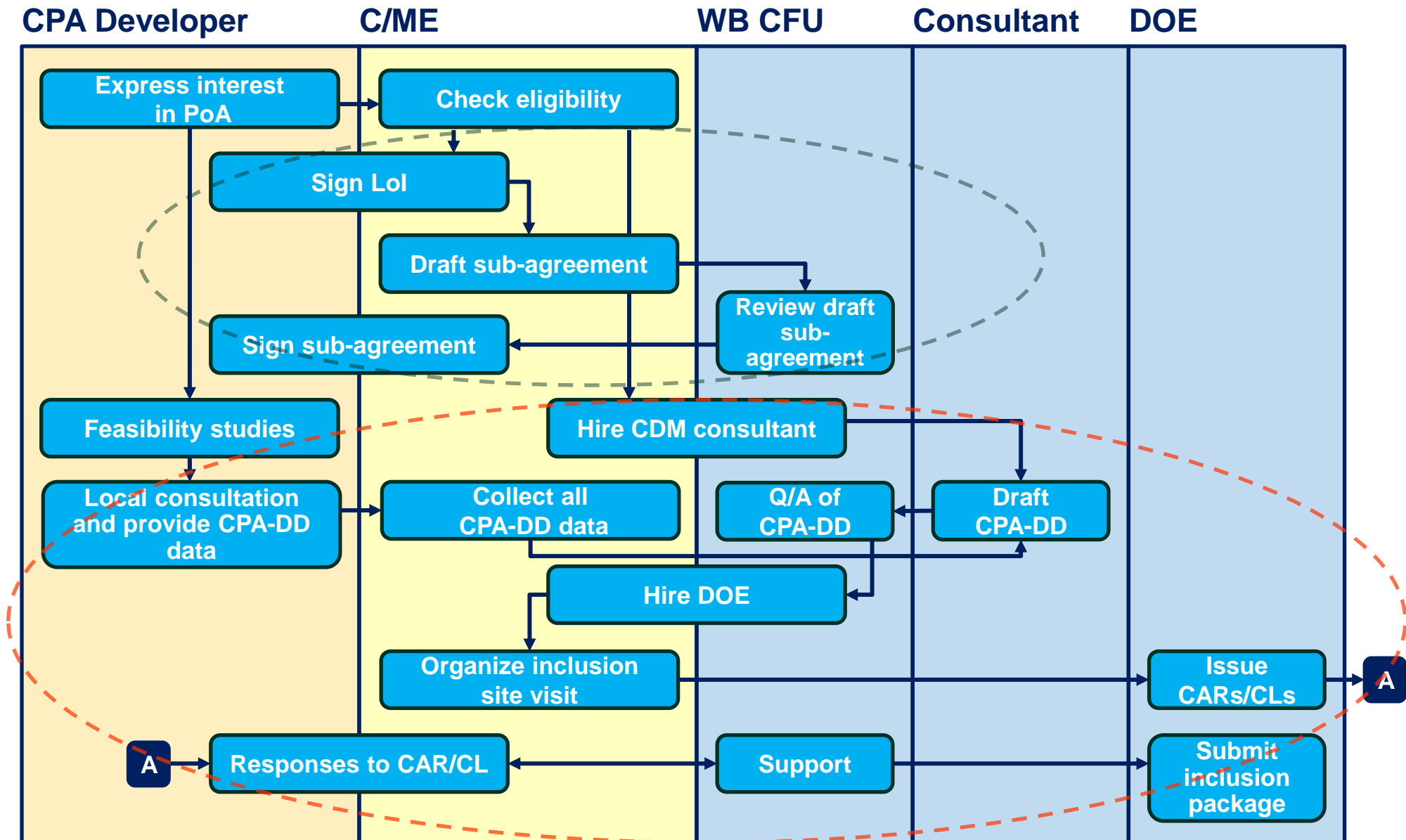
**Steady and
Smooth
Production
and
Operation**

CDM Operations Plan
Provides guidance on how to carry out these activities and defines roles and responsibilities

Step 1: CPA Inclusion

- ◆ Process for CPA inclusion in the PoA:
 - 1) Ensure CPA eligibility criteria are met:
 - Project scale (threshold criteria)
 - Methodology applicability, Additionality
 - Environmental permits and approvals are up-to-date
 - Local stakeholder consultation is complete.
 - 2) Draft CPA-DD using the generic template.
 - 3) Complete site visit by the DOE.
 - 4) Resolve all Corrective Action Requests (CARs) and Clarification Requests (CLs).
 - 5) Submit final CPA inclusion package by the DOE (UNFCCC's approval not required).

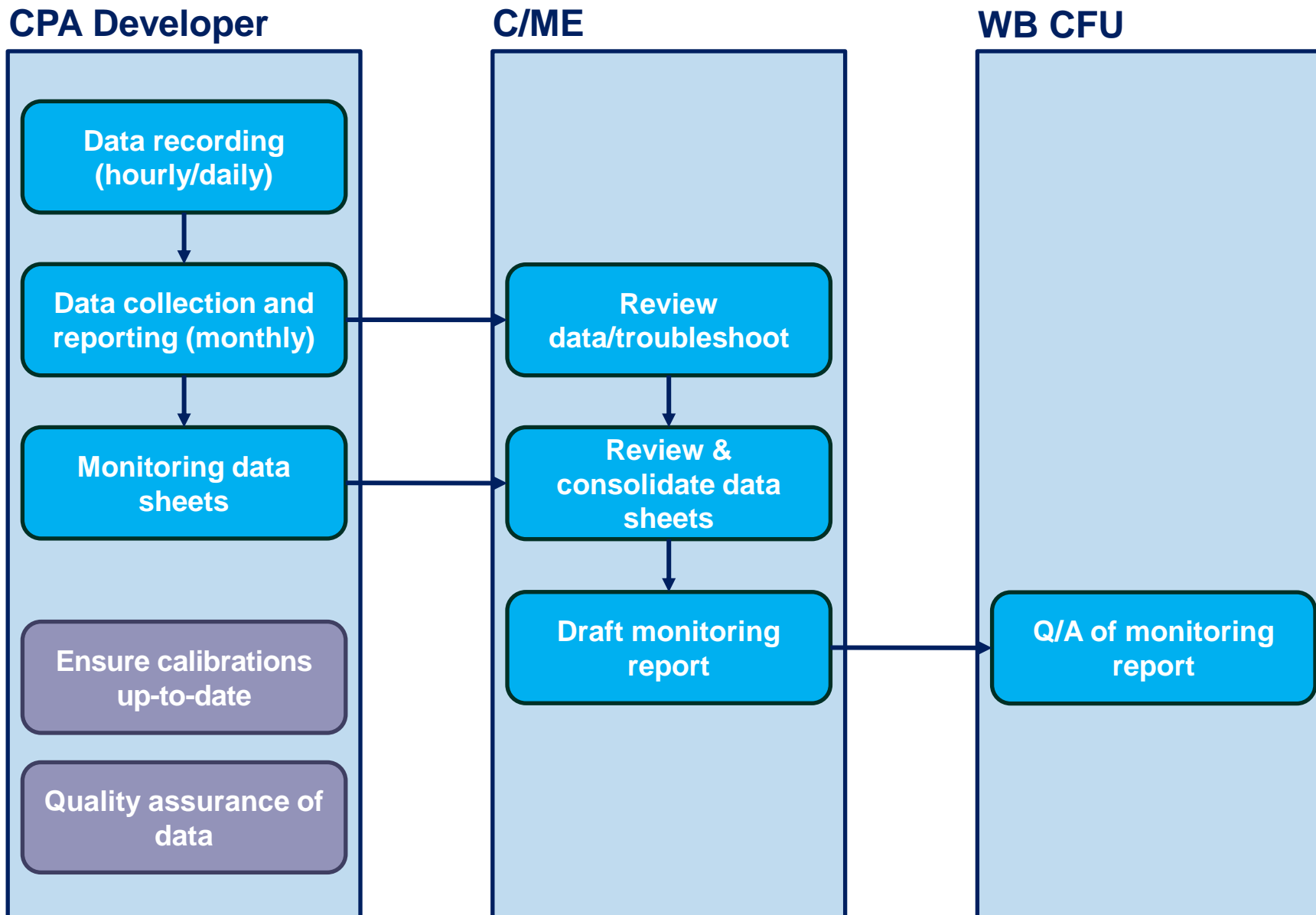
Step 1: CPA Inclusion Roles and Responsibilities



Step 2: Monitoring and Reporting

- ◆ To calculate emission reductions, detailed information is required and proper monitoring and reporting is critical.
- ◆ Data parameters will be monitored by each CPA and the values applied will be dependent on the individual CPAs.
- ◆ The monitoring and reporting process should be undertaken as follows:
 - 1) Record, collect, and consolidate data on parameters according to the methodology and PoA monitoring plan: Hourly/daily/monthly/annually.
 - 2) Maintain records on the calibration of meters and other measurement devices and ensure calibration frequency is according to appropriate standards (national/manufacturer, etc.).
 - 3) Implement quality assurance and quality control (QA/QC) procedures to detect and address errors in measurement.
 - 4) Document production events that affect operations, such as maintenance repair or unexpected events (e.g., storm damage, device malfunction).

Step 2: Monitoring and Reporting Roles and Responsibilities (1)



Step 2: Monitoring and Reporting Roles and Responsibilities (2)

- ◆ The C/ME should provide technical support / training to assist the CPA developer in:
 - establishing their system of monitoring and reporting with the proper quality controls.
 - troubleshooting on monitoring issues.
 - ensuring calibration of all meters.
- ◆ The C/ME and the CPA developer should identify a CPA-level CDM coordinator or focal point who will be in charge of collecting and reporting all data to the C/ME.

Step 3: Verification

- ◆ Key Elements for Verification Site Visit.
 - Status of Implementation in accordance with PoA-DD and CPA-DD.
 - Aggregated and detailed data sheets on parameters for the period covered in the monitoring report, ER calculation sheets.
 - Documentary evidence (calibration certificates, production operation and maintenance records, invoices, receipts, etc.).
 - Explanation of ER volume difference from CPA-DD estimates.
 - Revision or deviation of the monitoring plan / requests for changes (when applicable).
- ◆ Following DOE site visit/desk review, all CARs and CLs must be resolved to complete verification.

CDM Operations Plan

- ◆ The CDM Operations Plan is a key document that provides guidance on how to carry out all the relevant activities.
- ◆ It defines the organizational structure and roles and responsibilities between CME and CPA developer.
- ◆ It also describes the procedures for:
 - Quality Assurance / Quality Control (QA/QC)
 - Operations and Maintenance of Equipment and Monitoring Devices
 - Calibration of Monitoring Devices
 - Training of Personnel

Summary

Step	Activity	Deliverable
1.	CPA Inclusion	CPA-DD
2.	Monitoring and Reporting	Monitoring Report & ER Calculations
3.	Verification	Verification Report

CDM Operations Plan

Steady and Smooth Production and Operation

We look forward to our continued collaboration.

Thank you!

Annex - Example of Parameters to be Monitored

MONITORING & REPORTING SYSTEM			
CDM ID	PARAMETERS	FREQUENCY	
		MONITORING	REPORTING
Census	Number of heads, NLT,y	Daily	Monthly
Census	Number of days animal is alive in the farm, Ndays	Daily	Monthly
Census	Average animal weight , W site	Daily	Monthly
Flare	Biogas Flared or Combusted in Year “y”	Daily	Monthly
Flare	Flare Efficiency in the Year “y”, FE	Daily	Monthly
Flare	Temperature in the Exhaust Gas of the Flare, Tflare	Daily	Monthly
Flare	Days per year, Ndy	Daily	Monthly
Genset	Electricity generated by the project activity, Egy	Monthly	Monthly
Genset	Net quantity of electricity consumed, ECAE	Monthly	Monthly
Stocks	Genetic source of the production operations livestock	Annually	EOY
Feeds	Formulated feed rations, FFR	Annually	EOY
Manure	Fraction of manure handled in baseline , MS%BI, j	Daily	Monthly
Manure	Quantity of sludge applied to land, Qs	Daily	Monthly
Manure	Relative reduction of volatile solids from previous stage, RV	Daily	Monthly

Annex - Example of Monthly Data Sheet

Name of CPA:		CPA #1			
For the month of:		July 1-31, 2012			
Day	Biogas Flowrate, SCFM or Nm ³ /hr	Biogas accumulated volume, SCF or Nm ³ (1)	Total Volume of Gas Produced 5)	Remarks	
1	160.2	13561179	84158		
2	142.5	13640756	79577		
3	149.7	13713675	72919		
4	0	13777167	63492	Capstone operation started @ 2 P.M.	
5	124.5	13834532	57365		
6	190.1	13877215	42683		
7	0	13950474	73259	Capstone operation started @ 2 P.M.	
8	0	13963217	12743	Capstone operation started @ 1 P.M.	
9	0	14122851	159634	Capstone operation started @ 1 P.M.	
10	170	14158222	35371		
11	190	14169943	11721		
12	185	14247990	78047		
13	171	14356834	108844		
14	0	14423035	66201	Capstone operation started @ 2 P.M.	
15	140	14474868	51833		
16	190	14535465	60597		
17	190	14621426	85961		
18	179.8	14680342	58916		
19	0	14722765	42423	Capstone operation started @ 3 P.M.	
20	187.1	14739795	17030		
21	190	14849012	109217		
22	0	14933765	84753	No capstone operation	
23	169	14933765	0		
24	0	15036284	102519	No capstone operation	
25	0	15036284	0	No capstone operation	
26	0	15036284	0	No capstone operation	
27	0	15036284	0	No capstone operation	
28	0	15036284	0	No capstone operation	
29	0	15036284	0	No capstone operation	
30	0	15036284	0	No capstone operation	
31	0	15036318	34	Capstone operation started @ 4 P.M.	
Total			1,559,297		

Annex - Example of Calibration Frequency

Equipment Number	Equipment Name	Calibration Frequency	Remarks
Unit 1			
P 003	Power meter Trafo	5 tahun / 5 years	
P 001	Power meter Lhd 3,4 Line 1	5 tahun / 5 years	
P 002	Power meter Lhd 3,4 Line 2	5 tahun / 5 years	
P 105	Power meter House Load (Incoming 400 V, 2500 kVA)	5 tahun / 5 years	
P 205	Power meter House Load (Incoming 400 V, 1250 kVA)	5 tahun / 5 years	
FT 220	Separator demister flow transmitter	4 tahun / 4 years	
FT 401	Live Steam Flow Transmitter	4 tahun / 4 years	
FT 250	Live steam ejectors Flow transmitter	4 tahun / 4 years	
FT 440	Cooling tower basin Flow transmitter	4 tahun / 4 years	