

B.7 Application of the monitoring methodology and description of the monitoring plan:

B.7.1 Data and parameters monitored:

(Copy this table for each data and parameter)

Data / Parameter:	<i>Net Electricity Supply</i>
Data unit:	MWh
Description:	Net electricity supplied to the grid by the project
Source of data to be used:	Measured by meters
Value of data applied for the purpose of calculating expected emission reductions in section B.5	249.51 GWh
Description of measurement methods and procedures to be applied:	Hourly measurement and monthly recording; 100% of data will be monitored and electronic archived.
QA/QC procedures to be applied:	The measurement will in compliance with the National Guidelines and requirements of the grid company for accuracy and reliability. The calibration will be carried out according to relevant national standards and regulations by authorized organisation.
Any comment:	Double checked by receipt of sales.

Data / Parameter:	<i>the surface area of the reservoir</i>
Data unit:	m ²
Description:	<i>the surface area at full reservoir level</i>
Source of data to be used:	Measured at the beginning of the credit period.
Value of data applied for the purpose of calculating expected emission reductions in section B.5	374.601.87 m ²
Description of measurement methods and procedures to be applied:	The surface area at full reservoir level was measured at the beginning of the credit period.
QA/QC procedures to be applied:	The measurement will in compliance with the National Guidelines and requirements.
Any comment:	

B.7.2 Description of the monitoring plan:

This monitoring plan points out the main items in the CERs monitoring process. To serve as a guideline for the project owner to monitor the emission reduction of the proposed project during the proposed project implementation, a Monitoring Manual will be developed basing on this monitoring plan, on-site situation and the comments from the DOE. The contents of the Monitoring Plan are highlighted as follows:

1. Key data to be monitored

The net electricity delivered by the project to NWCG, which is the difference of the electricity supplied by the project to NWCG and the electricity supplied by NWCG to the project, is the key data for determining the CERs produced by the proposed project. Hence, two key data need to be monitoring:

- The electricity supplied by the project to NWCG
- The electricity achieved by the project from NWCG

2. Data Measurement and Collection

2.1. The electricity supplied by the project to NWCG

The electricity supplied by the project to NWCG will be monitored by two metering system.

The Main Metering System is installed at Dalu 110KV transmission substation. In order to measure electricity when the Main Metering System is out of order, a Backup Metering System is installed the on-site step-up substation. The metering systems are consisted of the electric meters and accessories, and designed and operated in compliance with the National Guideline “*Technical administrative code of electric energy metering*” (DL/T448—2000). The accuracy degree of the electric meters is 0.5S. The main metering system will be cross-checked by the owner and Qinghai Province Grid Company before operation. Both systems can monitor and record remotely and automatically.

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2.2. The electricity achieved by the project from NWCG

The electricity achieved by the project from NWCG will be monitored by the metering system installed at Dalu 110KV transmission substation. The metering system is consisted of the electric meters and accessories, and designed and operated in compliance with the National Guideline “*Technical administrative code of electric energy metering*” (DL/T448—2000). The accuracy degree of the electric meters is 0.5S.

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3. Calibration and Accidence Treatment of Meter and Metering

The calibration of the electric meters will be quarterly carried out according to relevant national standards and regulations¹². The main electric meters for the electricity delivered by the project to NWCG should be tested by a qualified metrical organization co-authorized by the owner and Qinghai Province Grid Company. After the calibration, the main electric

¹² JJG 597-89 and GB/T11150-2001(China national regulation of the meter checking)

meters should be jointly inspected and sealed on the behalf of the parties concerned and shall not be accessible by either party except in the presence of the other party or its accredited representatives.

If following works for the main metering system of the electricity delivered by the project to NWCG happen: remove, replacement, disassembling, sealing, seal-breaking, accident treatment and etc, the Qinghai Province Grid Company is the responsible operator, and the representative of the project owner should attend.

If the parties have dissidence on the operation of the main metering system, the main metering system will be calibrated by the qualified metrical organization co-authorized by both parties. Both parties will decide the amount of electricity depending on the results of the calibration and relevant regulations. If the parties have dissidence on the calibration results, a high qualification metrical organization will be authorized to re-calibrate the meters.

QC/QA:

Data and records will be checked prior to being archived. The data checks will be cross-check of the two metering system and the electricity on the receipts. All staffs are responsible for ensuring the collection and archiving of complete and accurate data and records.

If the main metering system of the electricity delivered by the project to NWCG has failure, damage or missing, the amount of the electricity delivered by the project to NWCG will be determined by the records of the backup metering system.

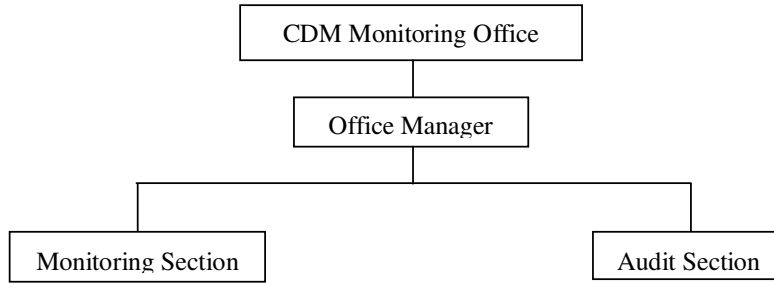
If the backup meter has failure, it will be repaired or replaced by an accredited equipment testing organisation. Maintenance records and any calibration documents will be retained by the project owner and available for the DOE.

The data from backup meter will be used for the period. If a difference between the main and the backup metering system is larger than the historic difference (allowing for transmission losses), it could be either or both electricity meter at fault. In this circumstance, the data will be from the records of other relevant metering system, or other measurements agreed by both parties.

4. The Operational and Management Structure for Monitoring

Prior to the start of the crediting period, the project owner will set up a CDM Monitoring Office and designate a qualified staff responsible for all relevant matters, including monitoring of emission reductions, data collection and archiving, QC/QA, and verification. The structure of the CDM Monitoring Office is outlined in Figure B-2.

Figure B-2 Organization Chart of the CDM Project Management Office



The responsibilities of the sections are briefly described as following:

- Office Manager: Manage the work of CDM Monitoring Office; Charge of all relevant matters with the monitoring activity.
- Monitoring Section: Monitor, collect and archive the data according to the Monitoring Plan.
- Audit Section: Audit the work of Monitoring Section and execute the QC/QA procedures according to the Monitoring Plan.

In addition, the CDM staff training system will be established. The CDM office manager will manage the process of training staff. All staff involved in the CDM project will receive some periodic training to collect and archive complete and accurate data for CDM monitoring from CPCEC CDM Development Centre. Records of trained CDM staff will be retained by the project owner. The CDM office manager will ensure that only trained staff is involved in the operation of the monitoring system. Further details of the training procedure will be described in the Monitoring Manual and available for the DOE.

5. Data Management System

Under the monitoring system, a data management system will be setup for keeping data and information, and tracking information from the primary source to data calculation, in paper format. It is the responsibility of the owner to provide additional necessary data, information and document for validation and verification requirements of respective DOE.

Paper documentation such as maps, diagrams and environmental assessment will be collected in a central place, together with this monitoring plan. In order to facilitate auditor's reference, monitoring results should be indexed. All paper-based information will be stored by the owner and kept at least one copy.

The data monitored and required for verification and issuance are to be kept for two years after the end of the crediting period or the last issuance of CERs for this proposed project activity, whatever occurs later.

6. Verification

A qualified DOE will be selected and engaged in the verification. The owner will make the arrangements for the verification and prepare for the audit and verification process to the best of its abilities. The owner will facilitate the verification by providing the DOE all required necessary information, before, during and, in the event of queries, after the verification.