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Validation Report

SUBHASH KABINI POWER CORPORATION LIMITED

VALIDATION OF THE REVISED MONITORING PLAN OF THE REGISTERED CDM-PROJECT NO. 087

20 MW KABINI HYDRO ELECTRIC POWER PROJECT, SKPCL, INDIA

REPORT NO. 1001738-RM

11 February 2008

TÜV SÜD Industrie Service GmbH

Carbon Management Service
Westendstr. 199 - 80686 Munich – GERMANY

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Subject: Validation of a Revised Monitoring Plan

Accredited TÜV SÜD Unit:	**TÜV SÜD Contract Partner:**
TÜV SÜD Industrie Service GmbH Certification Body "climate and energy" Westendstr. 199 - 80686 Munich Federal Republic of Germany	TÜV SÜD South Asia C-153/1, Okhla Industrial Estate Phase- 1 New Delhi – 110020 India
Client: Subhash Kabini Power Corporation Ltd. 8/2, Ulsoor Road, Bangalore, PIN- 560038, State- Karnataka, India	**Project Site(s):** Heggedadevana Kote Taluk, Mysore District, Karnataka, India

Project Title: 20MW Kabini Hydro Electric Power Project, SKPCL, India

Applied Methodology / Version: ACM0002 version 2	**Scope(s):** 1

Registered PDD Version:	**Revised Monitoring Plan:**
Registration Date: 2005-12-25 Starting Date of Crediting Period: 2003-06-24	Date of issuance: 2007-12-15
Assessment Team Leader:	**Further Assessment Team Members:**
Abhishek Goyal	Bratin Roy

Summary of the Validation Opinion:

☒ The review of the revised monitoring plan and the subsequent follow-up interviews have 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.

☐ 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.

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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. 087 with the project title:

20MW Kabini Hydro Electric Power Project, SKPCL, India

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 revised monitoring plan.

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 in written in bold letters):

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Abhishek Goyal	**ATL**	☑	☑	☑
Bratin Roy	GHG-A	☑	☑	☑

Abhishek Goyal is an Assessment Team Leader for CDM/JI projects and environment/energy expert at TÜV SÜD Industrie Service GmbH. Before joining the TÜV SÜD Industrie Service GmbH he has worked on development of PDDs and methodologies for several energy efficiency, renewable energy, and waste to energy projects. He has extensive experience in CDM.

Bratin Roy is a lead auditor for quality, environment and occupational health and safety management system (according to ISO 9001, ISO 14001 and OHSAS 18001) and an auditor for CDM/JI projects at TÜV SÜD South Asia. He holds a master degree in environmental science. He is based in Pune, India. He has received extensive training in the CDM validation and verification processes and has already participated in several CDM project assessments.

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2.2 Review of Documents

The monitoring report for the period 1 May 2006 to 30 April 2007 (http://cdm.unfccc.int/Projects/DB/SGS-UKL1129631164.48/iProcess/TUEV-SUED1179761775.9/view), the revised monitoring plan submitted and additional background documents related to further monitoring aspects were reviewed as initial step of the validation process.

2.3 Follow-up Interviews

In the period of 23-24 May, 2007, TÜV SÜD performed interviews on-site with project stakeholders to confirm selected information and to resolve issues identified in the first review of monitoring report for period 1 May 2006 to 30 April 2007. According to the CRs, CARs expressed during the verification process, client decided to make a request for revision of the monitoring plan of the registered PDD. Further, telephone conferences have been held with the responsible person of Subhash Kabini Power Corporation Ltd. in India discussing the revision of the monitoring plan.

2.4 Internal Quality Control

As final step of a validation the validation report has to undergo and 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

Based on review of the registered PDD, audit team is of the opinion that monitoring plan in the registered PDD is not consistent with section B.2 of the PDD. Table D.2.1.3 states that EFy: CO_2 emission factor of grid is recorded **yearly** whereas section B.2 of the PDD states that operating margin and build margin have been calculated ex-ante, which means that they are not required to be monitored for the first crediting period as per the option provided by methodology ACM0002, version 2.

In this scenario it is difficult to decide whether ex-ante or ex-post grid emission factor should be used for calculation of emission reductions during the verification process. To remove the inconsistencies, revised monitoring plan has been prepared by Subhash Kabini Power Corporation Limited.

The revised monitoring plan clarifies that for the entire 10 year fixed crediting period, simple operating margin emission factor and build margin emission factor will be used ex-ante as determined in registered PDD. Hence the combined margin grid emission factor for Karnataka Grid will be used ex-ante as determined in registered PDD i.e 0.832 ton CO_2/MWh. This approach is consistent with information in section B.2 of the registered PDD where it was clearly stated that operating margin and build margin have been calculated ex-ante, which means that they are not required to be monitored/updated during the crediting period. Taking in account the actual emission factor for Southern Region grid, the used value for state grid (Karnataka is a state in Southern Region grid of India) emission factor is more conservative, therefore TÜV SÜD considers the revised monitoring plan as acceptable and reasonable. It can be confirmed that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revision.

4 VALIDATION OPINION

TÜV SÜD has performed a validation of the revised Monitoring Plan of CDM Project 087:

20MW Kabini Hydro Electric Power Project, SKPCL, India

It can be confirmed that the level of accuracy or completeness in the monitoring and verification process is not reduced as a result of the revision and new monitoring plan complies with the applied methodology.

The review of the revised monitoring plan and the subsequent follow-up interviews have 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, 2008-02-11	Munich, 2008-02-11
Certification Body “climate and energy” TÜV SÜD Industrie Service GmbH	Assessment Team Leader