VCU VERIFICATION/ CERTIFICATION REPORT

VOLUNTARY CARBON STANDARD 2007

Vishnuprayag Hydro-electric Project (VHEP) by Jaiprakash Power Ventures Limited, India

REPORT NO. 2009-0217

REVISION NO. 01

DET NORSKE VERITAS

VCU VERIFICATION/ CERTIFICATION REPORT

Date of first issue: 2009-05-22	Project No.: PRJC-144829-2009-CCS-IND
Approved by: C Kumaraswamy	Organisational unit: Climate Change Services
Client: Jaiprakash Power Ventures Limited	Client ref.: Mr. Suresh Kumar

DET NORSKE VERITAS
CERTIFICATION AS

Veritasveien 1,
1322 HØVIK, Norway
Tel: +47 67 57 99 00
Fax: +47 67 57 99 11
http://www.dnv.com
Org. No: NO 945 748 931 MVA

Summary:

Det Norske Veritas Certification AS (DNV) has performed a verification of voluntary emission reductions reported for "Vishnuprayag Hydro-electric Project (VHEP) by Jaiprakash Power Ventures Limited)" in Uttaranchal (now Uttarakhand), India, for the period 1 October 2008 to 31 March 2009.

In DNV's opinion, the GHG emissions reductions reported for the "Vishnuprayag Hydro-electric Project (VHEP) by Jaiprakash Power Ventures Limited" in Uttaranchal (now Uttarakhand), India in the monitoring report dated 27 April 2009 are fairly stated. The GHG emission reductions were calculated correctly on the basis of the baseline and monitoring methodology provided in the PDD of 25 May 2007 (version 2).
DNV is able to certify that the emission reductions from the 'Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited', a run-of-the river hydro power project in Uttaranchal (now Uttarakhand),India managed by Jaiprakash Power Ventures Limited (JPVL) during the period 1 October 2008 to 31 March 2009 amount to 361 915 tonnes of CO_2 equivalent.

These emission reductions are not eligible as Certified Emission Reductions (CERs) under the CDM. DNV does not assume any responsibility towards the issuance and utilization of VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration. The verification of reported emission reductions is based on the information made available to DNV and the engagement conditions detailed in this report. Hence, DNV cannot be held liable by any party for decisions made or not made based on this report.

Report No.: 2009-0217	Subject Group: Environment
Report title: Vishnuprayag Hydro-electric Project (VHEP) by Jaiprakash Power Ventures Limited, India	
Work carried out by: Nitin Kapoor, Ramesh Ramachandran	
Work verified by: Kakaraparthi Venkata Raman	

Date of this revision:	Rev. No.:	Number of pages:
01-07-2009	01	14

Indexing terms

Key words	Service Area
Climate Change Kyoto Protocol Validation	Verification
	Market Sector
	Energy Industries

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Table of Content *Page*

1 INTRODUCTION 1

2 VERIFICATION METHODOLOGY. 4

3 VERIFICATION FINDINGS 4

4 VALIDATION OPINION 10

5 VERIFICATION STATEMENT 10

6 REFERENCES 12

Appendix A Monthly electricity generation

Abbreviations

BM	Build Margin
CEF	Carbon Emission Factor
CEA	Central Electricity Authority of India
CERC	Central Electricity Regulatory Commission
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
CER	Certified Emission Reduction(s)
CH4	Methane
DNV	Det Norske Veritas
DNA	Designated National Authority
ERU	Emission Reduction Units(s)
ERTL	Electronics Regional Test Laboratory
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GWP	Global Warming Potential
IPCC	Intergovernmental Panel on Climate Change
IPP	Independent Power Producers
JPVL	Jaiprakash Power Ventures Limited
MP	Monitoring Plan
MVP	Monitoring and Verification Plan
N2O	Nitrous oxide
NGO	Non-governmental Organisation
NEWNE	North East West NorthEast.
ODA	Official Development Assistance
OM	Operating Margin
PDD	Project Design Document
PPA	Power Purchase Agreement
UNFCCC	United Nations Framework Convention for Climate Change
UPPCL	Uttar Pradesh Power Corporation Limited
UEPPCB	Uttarakhand Environmental Protection and Pollution Control Board
VCS	Voluntary Carbon Standard
VCU	Voluntary Carbon Units
VER	Verified Emission Reductions
VHEP	Vishnuprayag Hydro Electric Project

1 INTRODUCTION

Jaiprakash Power Ventures Limited (JPVL) has commissioned Det Norske Veritas Certification AS (DNV) to carry out the verification of voluntary emission reductions (VERs) generated by the run-of-the-river "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited" , in India for the period 1 October 2008 to 31 March 2009. The verification of emission reductions was carried out as per Voluntary Carbon Standard (VCS) version 2007.1 /11/. This report contains the findings from the verification and a statement for the verified voluntary emission reductions.

The project was earlier validated and verified under VCS Version 1:

a) DNV's verification report 2007-2045, rev 1, dated 23-06-2007 for the period 3 June 2006 to 31 March 2007, as per VCS Version 1
b) DNV's verification report 2007-2062, rev 1, dated 27-03-2008 for the period 1 April 2007 to 30 September 2007, as per VCS 2007
c) DNV's verification report 2008-2043(1), rev 1, dated 6-10-2008 for the period 1 October 2007 to 31 March 2008, as per VCS 2007,
d) DNV's verification report 2008-2043(2), rev 1, dated 20-11-2008 for the period 1 April 2008 to 30 September 2008, as per VCS 2007.

This is the fifth verification for the period 1 October 2008 to 31 March 2009 as per VCS 2007.1.

1.1 Objective

Verification of emission reductions from a project activity is the independent review and *ex-post* determination by a Verification Entity or Designated Operational Entity (DOE) of the monitored reductions in GHG emissions that have occurred as a result of the implementation of the project activity during the defined verification period.

According to the VCS, the verification also includes an independent third party assessment of the project design. In particular, the project baseline, monitoring plan and the project compliance with relevant applicable protocols and criteria (i.e. UNFCCC, VCS, host Party and others) are to be validated in order to confirm that the project design, as documented, is sound and reasonable and meets the applicable criteria. This seems as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of voluntary emission reductions. This is the fifth verification report for the period 1 October 2008 to 31 March 2009 and as per VCS 2007.1.

Certification is the written assurance by a Certification Entity that, during a specific period in time, a project activity achieved the emission reductions as verified. According to the Verification Protocol and criteria of the IETA's Voluntary Carbon Standard, the Certification Entity is defined as an entity which has been accredited as a DOE by the CDM Executive Board for the particular scope into which the project falls or has been accredited as an approved Certification Entity by the VCS Steering Committee. DNV is an accredited DOE for the particular scope into which the project falls.

1.2 Scope and Criteria

The Verification scope is:

- Verify whether the reductions generated by the project are in line with the Voluntary Carbon Standard Verification Protocol and the information provided by the project participants contains all the necessary information to evidence the project's compliance with all criteria in the Voluntary Carbon Standard.
- Verify that the project was implemented as described in the Project Design Document (PDD) during the whole verification period.
- Confirm that the monitoring system was implemented and fully functional to generate voluntary emission reductions (VER/VCU[1]) without any double counting during the whole verification period.
- To evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement,
- To verify that the reported GHG emission data is sufficiently supported by evidence.

According to the VCS, the verification also includes an independent third party assessment of the project design. In particular, the project baseline, monitoring plan and the project's compliance with relevant applicable protocols and criteria (i.e. UNFCCC, VCS, host Party and others) are to be validated in order to confirm that the project design, as documented, is sound and reasonable and meets the applicable criteria.

1.2.1 Verification Criteria

According to the requirements and guidance of VCS 2007.1, the criteria of this verification include the relevant applicable rules and steps for CER verification under the CDM excluding:

• The public availability of the VER/VCS Monitoring Report;

• The public availability the Verification Report and VCU Certification Statement.

1.3 VCS Project Description

The purpose of the project is to harness renewable hydro power potential in Chamoli district of Uttarakhand and enable displacement of fossil fuel based electricity generating systems. JPVL has established this run-of-the-river hydro power project and operates the project in the region. The 400 MW project comprises four 100 MW impulse type Pelton turbines commissioned in four phases. The project activity includes development, design, engineering, procurement, finance, construction, operation and maintenance of hydro power based electricity generation and supplying it to Uttar Pradesh Power Corporation Limited (UPPCL) in Uttar Pradesh through the northern regional grid of India. The location and details of the turbines with respect to the project activity have been verified to be as per details provided in the PDD.

[1] As per VCS, Verified Emission Reductions (VERs) are considered to be VCUs only after successful registration in an approved VCU Registry.

The project activity will displace energy that is dispatched at the operating margin (primarily thermal energy) and also delay any planned expansion of the northern grid generation capacity by its equivalent size.

The verification report accounts for emission reductions generated by the project for the period 1 October 2008 to 31 March 2009. The power is supplied to Uttar Pradesh Power Corporation Limited (UPPCL) in Uttar Pradesh as per valid Power Purchase Agreements (PPAs) /5/ between the two entities.

The projects emission reductions are determined by multiplying the net amount of electricity supplied by the project activity by the ex-ante fixed grid emission coefficient of 0.75 t CO_2/MWh, taken from the CO2 database for emission factors developed and published by the Central Electricity Authority (CEA) of India. This is deemed conservative considering the fact that the latest grid emission factor for the NEWNE grid (which also comprises of the earlier northern grid of India), published for the year 2007-08 is 0.80 t CO_2/MWh.

The project emissions in the form of electricity import from the UPCL grid and while running the DG sets has also been adequately accounted in the net emission reductions. The capacity of the DG sets was verified to be 800 KW and hence as per the methodology an emission factor of 0.80 tCO_2/MWh (for DG sets >200 KW) has been taken while calculating the project emissions

Title of the project activity:	Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited
Location of the project activity:	Chamoli district in the state of Uttarakhand, India. (Between Lat. $30^0 32' - 30^0 42'$ N and Long. $79^0 28' - 79^0 38'$ E)
5th Verification period:	1 October 2008 to 31 March 2009.
Project Operation start date:	3 June 2006.

1.4 Level of assurance

As the VCS 2007.1 only recognizes verified emission reductions, DNV has focused on providing the highest level of assurance that the emission reduction calculation methodology used is appropriate and correctly applied, and that emission reductions have been accurately monitored.

For verifying/certifying VCUs, the desired level of assurance was based on the combined quantitative assessment of the accuracy of monitoring project performance and the identification of material risks.

2 VERIFICATION METHODOLOGY.

The verification of the emission reductions has assessed all factors and issues that constitute the basis for emission reductions from the project according to the applicable consolidated CDM methodology ACM0002, version 06 including,

- The review of the calculation of the carbon emission factor for the northern regional electricity grid of India (now a part of the NEWNE grid).
- The net electricity supplied by the project activity to the Uttar Pradesh Power Corporation Limited (UPPCL) in Uttar Pradesh multiplied by the estimated grid emission factor.

Verification Team:

Mr. Nitin Kapoor	DNV India	GHG Auditor, Project Manager
Mr. Ramesh Ramachandran	DNV India	CDM Verifier
Mr. Kakaraparthi Venkata Raman	DNV India	Technical Reviewer

Duration of verification:

Preparation – (monitoring report review baseline grid factor estimations etc.)	:	15 May 2009
Site visit	:	18-21 May 2009
Reporting & QA	:	22 May -30 June 2009

2.1 Review of Documentation

The monitoring report /1/ and the monthly electricity generation receipts from joint meter reading reports signed by UPPCL and JPVL were assessed as a part of the verification. In addition the VCS Project Design Document /2/, in particular the baseline estimations and the monitoring plan contained in the VCS PDD were also assessed.

2.2 Site Visit and Desk Interview

From 18 May 2009 to 21 May 2009, DNV carried out a project site visit at Vishnuprayag Hydro Electric Project (VHEP). During the visit, DNV verified the actual implementation of the project as described in the PDD. The commissioning certificates and the turbine details were also checked and found to be correct /4/. The electricity meters and meter test certificates of the meters were checked and found to be in order. The evidence of the reported net electricity generation was also verified, which in the project activity case is the monthly electricity generation joint meter reading reports signed by UPPCL and JPVL. In addition the invoices raised by JPVL on UPPCL were also verified to cross check the joint meter readings. The amount of electricity imported from the grid and generated from the DG sets to account for project emissions was also verified and found to be correct. The relevant calibration records were also verified and found to be in order.

3 VERIFICATION FINDINGS

3.1 Remaining issues, including any material discrepancy, from previous validation

Based on the validation report the verification team identified no missing steps, open issues or material discrepancy.

3.2 Project Implementation

The project has been implemented as planned. The 400 MW run-of-the-river hydro power project comprised of 4 units of 100 MW each, commissioned between June 2006 and October 2006. The commissioning certificates for the units were verified against the commissioning capacity details and found to be correct.

The generation details have been considered for the VER project period of 1 October 2008 to 31 March 2009. This data has been verified with the generation details as declared in the monthly 'Joint Meter Reading' forms. These forms are signed by the representative of JPVL and certified by the authorized signatory for UPPCL. The meter test reports and the joint inspection reports of commissioning of the project have been verified and found to be in order.

The approved baseline methodology ACM0002, version 6- "Consolidated baseline methodology for grid connected electricity generation from renewable sources"/10/, as valid at the time of validation of the project activity, has been adopted. The baseline methodology is applicable and justified for the project as the project involves electricity capacity additions through hydro sources. The project applies the baseline methodology approach – "existing actual or historical emissions". This is deemed as appropriate as the project is not representing common practice at the present time; it displaces fossil fuel based electricity that would otherwise be provided by the operation and expansion of the northern regional grid. The northern regional power sector is not dominated by generating sources with zero or low operating cost projects and their contribution is less than 50% of the total grid generation.

The baseline is the emission reductions occurring due to electricity generation through renewable sources, derived from the electricity consumed times the relevant emission factor of the selected grid. As the project activity is feeding the generated power to the Uttar Pradesh state grid, which is a part of the northern grid (now a part of NEWNE grid); the baseline for this project activity is the function of the generation mix of northern/NEWNE grid. The baseline emission factor for the northern regional grid was established *ex-ante* based on approved methodology ACM0002 using a combined margin approach.

JPVL has used the OM and BM data published in the CEA database (CO_2 data base of CEA web site (http://cea.nic.in/planning/c%20and%20e/Government%20of%20India%20website.htm)),, for calculating the baseline emission factor. The Central Electricity Authority, Ministry of Power, Government of India has published a database of carbon dioxide emission factors from the power sector in India based on detailed authenticated information obtained from all operating power stations in the country.
This database i.e. The CO2 baseline database provides information about the OM and BM factors of all the regional electricity grids in India. DNV confirms that the OM in the CEA database is calculated ex ante using the simple OM approach and the BM is calculated ex ante based on 20% most recent capacity additions in the grid based on net generation as described in ACM0002. The average of the OM for the three years 2005-06, 2006-07 and 2007-08 has been determined and verified to be 1.01 t CO2e/ MWh and the BM for 2007-08 to be 0.60 t CO2e / MWh. This has

been used for calculating project emissions due to the electricity that has been imported from the grid.

As stipulated in the methodology ACM0002 version 6, dated May 19 2006 and as relevant for hydro power projects, JPVL has considered a weightage for OM as 0.5 and for BM as 0.5. Accordingly, using the values for operating margin and build margin emission factors provided in the CEA database and their respective weights for calculation of combined margin emission factor, the baseline carbon emission factor (CM) has been established ex-ante as 0.75 t CO_2e/MWh. This is conservative compared to the calculated value of 0.80 t CO_2e/MWh for the year 2007-08 based on the CEA data base for the NEWNE grid (which also comprises of the northern grid)

Project Additionality

The project activity has four units commissioned from June 2006 to October 2006. The additionality of the project had been validated as per the requirements of VCS, version 1 standard and the project is now verified for the chosen 5th crediting period and as per the requirements of VCS 2007.1 standard.

Enforcement of applicable laws and regulations:
The project is not mandated by any laws or regulations of the country or state. The hydro power project is developed voluntarily by the developer in the region and is not under any mandatory requirement. Valid consents to operate from the state pollution control authorities for the verification period have been obtained and verified during the site visit /6/.

Common practice analysis:
It has been demonstrated that the private sector participation in the development of hydro power plants, especially, large scale projects is very low in India and also in the northern region, and VHEP is one of the few IPPs in the northern region supplying electricity to the grid. This is substantiated through data published by the CEA (2004-05) that in the northern region the total power generation from hydro sources is only 24% and contribution from the IPPs is just 4% in the region. This low penetration of IPPs have been attributed to the financial unattractiveness, high capital cost, geological risks, engineering difficulties and also unhealthiness of state utilities who are the sole buyers of power from IPPs.
DNV is able to confirm that the power generated as per CEA data in 2004-05 from hydro sources is 35 884 MWh and that from Hydro power IPPs is 1 416 MWh, which is around 3.9%. Thus, the private sector participation in hydro power generation cannot be viewed as a common practice scenario in the region.

Comparison analysis which demonstrates that the hydro generation is not the least cost option for to the off-takers:
The project is not a least cost option for power and this as been demonstrated through the existence of investment barriers. The cost of the project has been compared with various other fuel based power generation alternatives as given in the following table and VHEP have demonstrated that the capital cost per MW for the VHEP project is 1.04 USD Million/MW

compared to the dominant technology of coal based plants at 0. 93 USD Million/MW in the region. Thus the investment cost for the project is much higher than the coal or gas based plants.

Type of Power Project	**Capital Cost (Mn/MW)**
Gas based	0.82
Coal based	0.93
Wind	1.4
Co Generation	0.9
VishnuPrayag Project	(ProjectCost) (USD Mn/MW)
	1.04

The project activity is thus deemed additional to those that would have other wise occurred and elaborated in DNV's verification report 2007-2045, rev 1, dated 23-06-2007. Hence it is demonstrated that the project activity using Test 1 has demonstrated that it faces investment return as a barrier and VER revenue is critical to overcome the barrier.

3.3 Completeness of Monitoring

The reporting procedures reflect the content of the monitoring plan. The monitoring mechanism is effective and reliable. The monitoring indicator, i.e., the net electricity generation, has been monitored with calibrated energy meters as described in the monitoring plan of the PDD and monitoring report.

3.4 Accuracy of emission reduction calculations

The main meter and check meters are installed by JPVL and the ownership has been transferred after commissioning to UPPCL for future maintenance. The monthly meter readings (both main and check meters) are taken jointly by the parties on the last day of the month at 12 noon. At the conclusion of each meter reading an appointed representative of the UPPCL and JPVL sign a document indicating the amount of kilowatt-hours indicated by the meter. This is then translated to a format (Joint Energy Meter Reading) and signed by UPPCL and JPVL which clearly indicates the net electricity exported and becomes the basis for calculations of the emission reductions.

Each meter is jointly inspected and sealed on behalf of the parties and is not interfered-with by either party except in the presence of the other party or its accredited representatives. The general conditions set out for metering, recording, meter readings, meter inspections, test & checking and communication are as per the PPA (power purchase agreement) with UPPCL. If the variation between the main meter and the check meter during any of the monthly meter readings is more than the permissible limit for meters of 0.2 accuracy classes, all the meters are re-tested and calibrated. Test and joint inspection reports have been verified.

The electricity generated from the DG sets has been fed into the incomer where it is metered (S.No 619139) calibrated on 27 September 2008 having an accuracy of $\pm$ 0.5%

Based on the above, DNV is of the opinion that for the current verification period (1 October 2008 to 31 March 2009), the project developer has taken sufficient steps to ensure the accuracy of reported emission reductions.

3.5 Quality of evidence to determine emission reductions

The emission reductions ER_y by the project activity during the crediting period is the difference between baseline emissions (BE_y), project emissions (PE_y) and emissions due to leakage (L_y), as follows:

1) Baseline emissions: Baseline emissions (BE_y in tCO_2) are the product of the baseline emissions factor (EF_y in tCO_2/MWh) times the electricity supplied by the project activity to the grid (EG_y in MWh). This is in line with the VCS PDD.

2) Project emissions: The project emissions are regarded as 296 tonnes of CO_2e.

3) Leakage: No leakage has to be considered for the proposed project activity.

The net amount of electricity of 482 948 608 kWh and thus the claimed emission reductions of 361 915 tCO2e reported for the period 1 October 2008 to 31 March 2009 was verified by reviewing the presented electricity generation joint meter reading reports of UPPCL and JPVL as well as accounting for the project emissions during the corresponding period. The sales invoice has been cross checked with the meter readings and found to match with the monthly meter readings as a double check.

There has been auxiliary power consumption during off season, through import of power from the UPCL grid and by running of the DG Sets. This has been duly accounted-for as project emissions. For the purpose of estimating the project emissions, the recently published grid emission coefficient value of 0.803 t CO_2e/MWh has been calculated based on the CEA (version 4) has been used for calculating the project emissions from the grid, these being more conservative then the ex-ante emission coefficients used by the project proponent for calculating the baseline emission reductions. The diesel emission coefficient of 0.8 t CO_2e/MWh as applicable and stipulated in AMS-I.D for > 200 KW DG sets has also been used to account for emissions from running of the DG Sets. It has been confirmed during the site visit that the capacity of the DG sets is greater then 200 KW. The monthly generation is provided in appendix A

The energy generated and emission reductions claimed for the proposed period were as shown in the following table:

Period	Energy Generated (kWh)	Baseline (tCO_2)	Project Emissions (tCO_2)	VCUs (tCO_2)

1 October 2008 to 31 March 2009	**482948608**	**362211**	**296**	**361915**

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The GHG calculations are complete and transparent, and their accuracy has been verified.

3.6 Management System and Quality Assurance

Monitoring and reporting of electricity generation is part of normal operations of JPVL. The quality of meter readings is assured through calibration of electricity meters /8/ and through cross checking of readings between the main meters and the check meters.

4 VALIDATION OPINION

Det Norske Veritas Certification AS (DNV) has performed a validation of clauses of the VCS Project Description template for "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited (JPVL)".
It is DNV's opinion that the "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited (JPVL)" in Uttaranchal (now Uttarakhand), as described in the VCS PDD dated 25 May 2007 meets requirements of clauses of the VCS Project Description template (http://v-c-s.org/docs/VCS%20PD.doc).

5 VERIFICATION STATEMENT

Det Norske Veritas Certification AS (DNV) has performed a verification of emission reductions reported for the "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited" from 1 October 2008 to 31 March 2009.

JPVL is responsible for the collection of data in accordance with the validated monitoring plan and the reporting of GHG emissions reductions from the project. It is DNV's responsibility to express an independent verification statement on the reported GHG emission reductions from the project.

In DNV's opinion the GHG emissions reductions reported for the project in the monitoring report of 27 April 2009 are fairly stated and the project design meets all VCU Verification Criteria. The GHG emission reductions were calculated correctly on the basis of the baseline and monitoring methodology, ACM0002 version 6 and the monitoring plan provided in the VCS PDD. The emission reductions are claimed as Voluntary Carbon Units (VCU) under the Voluntary Carbon Standard (VCS).

DNV is able to certify that the emission reductions from the "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited" during the period 1 October 2008 to 31 March 2009 amount to 361 915 tCO_2e.

DNV does not assume any responsibility towards the issuance and utilization of the VCUs hereby verified and certified. Request for issuance of VCUs shall be made by the project proponent to an approved VCS Program Registry based on the requirements set out under the most recent version of the VCS Program Guidelines clause on VCS Registration.

The verification of reported emission reductions is based on the information made available to us and the engagement conditions detailed in this report. DNV cannot guarantee the accuracy or correctness of this information. Hence, DNV cannot be held liable by any party for decisions made or not made based on this report.

Reporting period: from 1 October 2008 to 31 March 2009

Verified emissions reductions in the above reporting period: 361 915 tCO_2e.

Nitin Kapoor	Ramesh Ramachandran	C Kumaraswamy
Project Manager	CDM Verifier	Regional Manager

Climate Change Services

Det Norske Veritas Certification AS

6 REFERENCES

Category 1 Documents:

Documents provided by the Project Participants that relate directly to the GHG components of the project. These have been used as direct sources of evidence for the initial verification conclusions, and are usually further checked through interviews with key personnel.

/1/ Monitoring Report of "Vishnuprayag hydro-electric project by Jaiprakash Power Ventures Limited (JPVL)" version 1, dated 27 April 2009.

/2/ Project Design Document – "Vishnuprayag Hydro-electric Project by Jaiprakash Power Ventures Limited (JPVL)" dated 25 May 2007.

/3/ Uttaranchal Pollution Control Board – 'No objection certificate' dated 6 March 2003.

/4/ JPVL: Commissioning certificates of the 4 units dated 13 October 2006, 31 August 2006, 17 June 2006 and 14 July 2006.

/5/ Amended Power Purchase Agreement (PPA) signed with UPPCL, September 2002 and approved by UPERC, 14th June 2003. Final PPA incorporating further orders of UPERC signed with UPPCL, dated 16th January 2007.

/6/ Valid consent to operate-Air and Water (Reference No UEPPCB/HO/Con/J-26/08/234) dated 15.05.2008, valid till 31.03.2009.

/7/ DNV's verification report 2007-2045, rev 1, dated 23/06/2007, and 2007-2062, rev 1 dated 21/03/2008, 2008-2043(1), rev 1, dated 6/10/2008, 2008-2043(2), rev 1, dated 20/11/2008.

/8/ Calibration Certificates of the Line 1, Line 2 (Main and Check Meter) dated 30/09/2008, 31/12/2008 and 30/04/2008, 17/11/2008 respectively. The Master Meter has also been calibrated by ERTL (North)-Reference Certificate No ERTL (N)/90(4)-2K8/A1688 dated 15/09/2008 valid till 14/09/2009. Internal calibration record of DG Incomer (S.No 619139) dated 27/09/2008 and 23/03/2009. Internal Calibration of Grid Incomer (S.No 619137, 619136) dated 24/03/2009 and 27/09/2008 were verified.

Category 2 Documents:

Background documents related to the design and/or methodologies employed in the design or other reference documents. Where applicable, Category 2 documents have been used to cross-check project assumptions and confirm the validity of information given in the Category 1 documents and in verification interviews.

/9 / Refer CDM Validation and Verification Manual http://cdm.unfccc.int/public_inputs/2008/VVM/vvm.pdf

/ 10/ ACM0002 – Approved Consolidated baseline and monitoring methodology.

/11 / Voluntary Carbon Standard 2007.1 (VCS 2007.1), 18 November 2008

Persons interviewed:

Persons interviewed during the initial verification, or persons contributed with other information that are not included in the documents listed above.

/12/ Mr. Suresh Kumar, JPVL, stationed at New Delhi

/13/ Mr. Sanjeev K Goel, JPVL stationed at New Delhi

/14/ Mr. Ram Kumar Porwal, JPVL stationed at New Delhi

/15/ Mr. Ravi Chadda, JPVL stationed at VHEP, Chamoli, Uttarakhand, India

/16/ Mr. S M Dheer, JPVL, stationed at VHEP, Chamoli, Uttarakhand, India

/17/ Mr Kumar Vishal , Emergent Ventures India (P) Limited, Gurgaon, Haryana, India

/18/ Mr. Ashutosh Pandey, Emergent Ventures (P) Limited, Gurgaon, Haryana, India

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Appendix A.

Month	Electricity Delivered to the grid by the project activity (kWh)
Oct-08	163,858,018
Nov-08	96,385,358
Dec-08	72,796,291
Jan-09	61,109,029
Feb-09	38,661,780
Mar-09	50,138,132
Total	**482,948,608**