

SAN CLEMENTE HYDROELECTRIC POWER PLANT



Document Prepared By Colbún S.A. and Poch Ambiental S.A.

Project Title	San Clemente Hydroelectric Power Plant
Version	02
Date of Issue	14-October-2013
Prepared By	Colbún: Cristián Mosella V. Poch Ambiental: María Luz Farah G (CDM consultant)
Contact	<u>Colbún:</u> Apoquindo 4775, Las Condes, Santiago, Chile, phone: +56 2 4604280, email: cmosella@colbun.cl, www.colbun.cl <u>Poch Ambiental:</u> Renato Sanchez 3838, Las Condes ,Santiago, Chile Phone: +56 2 2070154, email: marialuz.farah@poch.cl, www.poch.cl

Table of Contents

1	Project Details.....	3
1.1	Summary Description of the Project.....	3
1.2	Sectoral Scope and Project Type.....	3
1.3	Project Proponent.....	3
1.4	Other Entities Involved in the Project.....	3
1.5	Project Start Date.....	3
1.6	Project Crediting Period.....	3
1.7	Project Scale and Estimated GHG Emission Reductions or Removals.....	4
1.8	Description of the Project Activity.....	4
1.9	Project Location	4
1.10	Conditions Prior to Project Initiation	6
1.11	Compliance with Laws, Statutes and Other Regulatory Frameworks	6
1.12	Ownership and Other Programs	6
1.12.1	Right of Use.....	6
1.12.2	Emissions Trading Programs and Other Binding Limits	6
1.12.3	Participation under Other GHG Programs	6
1.12.4	Other Forms of Environmental Credit.....	6
1.12.5	Projects Rejected by Other GHG Programs	6
1.13	Additional Information Relevant to the Project.....	6
2	Application of Methodology.....	7
2.1	Title and Reference of Methodology	7
2.2	Applicability of Methodology	7
2.3	Project Boundary.....	7
2.4	Baseline Scenario	7
2.5	Additionality.....	7
2.6	Methodology Deviations	7
3	Quantification of GHG Emission Reductions and Removals.....	7
3.1	Baseline Emissions	7
3.2	Project Emissions.....	7
3.3	Leakage	7
3.4	Summary of GHG Emission Reductions and Removals	7
4	Monitoring.....	7
4.1	Data and Parameters Available at Validation	7
4.2	Data and Parameters Monitored.....	7
4.3	Description of the Monitoring Plan	8
5	Environmental Impact.....	8
6	Stakeholder Comments.....	8

1 PROJECT DETAILS

1.1 Summary Description of the Project

Please refer to the CDM PDD of the project.

1.2 Sectoral Scope and Project Type

Scope 1: Energy (renewable/non-renewable). San Clemente hydroelectric power plant is a non-grouped project.

1.3 Project Proponent

The project has been implemented by Colbún S.A., which is responsible for the total investment for the project activity.

Organization	Colbún S.A
Address	Avenida Apoquindo 4775, 11 th Floor
City	Santiago
State/Region	Región Metropolitana
Postfix/ZIP	7580097
Telephone	(56 2) 460 4280
Fax	(56 2) 460 4005
Email	dgordon@colbun.cl cmosella@colbun.cl
URL	www.colbun.cl
Represented by:	
Title	Mr.
Last Name	Gordon
First Name	Daniel
Position	Environment Manager
Title	Mr.
Last Name	Mosella
First Name	Cristian
Position	Sustainability and Climate Change Supervisor

1.4 Other Entities Involved in the Project

Please refer to the CDM PDD of the project.

1.5 Project Start Date

September 16th, 2010. The starting date of the project is the day when the power plant started commercial operations.

1.6 Project Crediting Period

September 16th, 2010 – 31th October, 2011. One year, 1 month and 15 days.

1.7 Project Scale and Estimated GHG Emission Reductions or Removals

Project	X
Large project	

Years	Estimated GHG emission reductions or removals (tCO ₂ e)
2010 (from 16 th September to 31 th December)	4,855
2011 (from 01 January to 31 th October)	13,792
Total estimated ERs	18,647
Total number of crediting years	1 year, 1 month and 15 days
Average annual ERs	16,560

1.8 Description of the Project Activity

Please refer to the CDM PDD of the project.

1.9 Project Location

The project is located in San Clemente commune, Talca Province, VII Region of Maule, about 33 km south east of the Talca city, in an area known as Sanatorio, close to the north bank of the Maule River and downstream from the Colbún reservoir.

The project geographic boundary encompasses the power house, the forebay tank and the discharge channel.

The project does not consider the development of new roads, as it will utilize the existing routes CH 115 (Talca - San Clemente – Colorado) and rol K721 (Perquín – Colorado).

The specific coordinates of the project are the following:

Table 1: Project Coordinates.

	South	West
Intake	35° 35' 48.1"	71° 20' 15.7"
Adduction channel	35° 35' 48.4"	71° 20' 18.1"
Foreby tank	35° 35' 50.5"	71° 21' 42.2"
Power house	35° 35' 50.7"	71° 21' 20.2"
Penstock	35° 35' 51.5"	71° 21' 17.8"
Discharge channel	35° 35' 50.4"	71° 21' 20.8"

1.10 Conditions Prior to Project Initiation

The project is a new run-of-river power plant installed at a site with no other power generation plants operating prior to the project activity initiation. The project replaces energy from the grid partially generated by fossil fuel-fired power plants reducing GHG emissions.

Therefore, it is clear that the project has not been implemented to generate GHG emissions for the purpose of their subsequent reduction, removal or destruction.

1.11 Compliance with Laws, Statutes and Other Regulatory Frameworks

Please refer to the CDM PDD of the project.

1.12 Ownership and Other Programs

1.12.1 Right of Use

The Letter of Approval, document granted by the Ministry of Environment of Chile, Designated National Authority, is considered as an evidence of San Clemente Hydroelectric Power Plant right of use.

1.12.2 Emissions Trading Programs and Other Binding Limits

Not applicable as the host country (Chile) does not have obligatory national emission reduction targets under the Kyoto Protocol, nor a domestic GHG trading scheme or any other binding limits.

1.12.3 Participation under Other GHG Programs

The project was registered as a CDM project with UNFCCC (reference number: 4800). The date of registration is 22/09/2011 and its first CDM crediting period starts on 01st November 2011.

1.12.4 Other Forms of Environmental Credit

The project neither has nor intends to generate any other form of GHG-related environmental credit for the same GHG emission reductions claimed under the VCS Program.

1.12.5 Projects Rejected by Other GHG Programs

Not applicable.

1.13 Additional Information Relevant to the Project

Eligibility Criteria

Not applicable. The project is not a grouped project.

Leakage Management

AMS I.D v.16 states that leakage is to be considered if the energy generating equipment is transferred from another activity. As the project activity will use new equipment, leakage is not considered.

Commercially Sensitive Information

All information in the project documents is available for public review.

Further Information

Not applicable.

2 APPLICATION OF METHODOLOGY**2.1 Title and Reference of Methodology**

Please refer to the CDM PDD of the project.

2.2 Applicability of Methodology

Please refer to the CDM PDD of the project.

2.3 Project Boundary

Please refer to the CDM PDD of the project.

2.4 Baseline Scenario

Please refer to the CDM PDD of the project.

2.5 Additionality

Please refer to the CDM PDD of the project.

2.6 Methodology Deviations

Not applicable.

3 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS**3.1 Baseline Emissions**

Please refer to the CDM PDD of the project.

3.2 Project Emissions

Please refer to the CDM PDD of the project.

3.3 Leakage

Please refer to the CDM PDD of the project.

3.4 Summary of GHG Emission Reductions and Removals

Please refer to the CDM PDD of the project.

4 MONITORING**4.1 Data and Parameters Available at Validation**

Please refer to the CDM PDD of the project.

4.2 Data and Parameters Monitored

Please refer to the CDM PDD of the project.

4.3 Description of the Monitoring Plan

Please refer to the CDM PDD of the project.

5 ENVIRONMENTAL IMPACT

Please refer to the CDM PDD of the project.

6 STAKEHOLDER COMMENTS

Please refer to the CDM PDD of the project.