MJ2 TECHNOLOGIES S.A.R.L.

October 2009

VERY LOW HEAD TURBINE NEWS LETTER N°9

IN THIS ISSUE:

HYDRO 09
Lyon, October 26-28
Come and meet us
at booth #50

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MJ2 TAKES OFF AND MOVES

Dear Friends and Partners

MJ2 is now taking off. Since the beginning of the year, MJ2 has delivered 5 new VLH turbines, 3 of which have been commissioned. (see next chapters)

Clairvaux Hydropower PLant

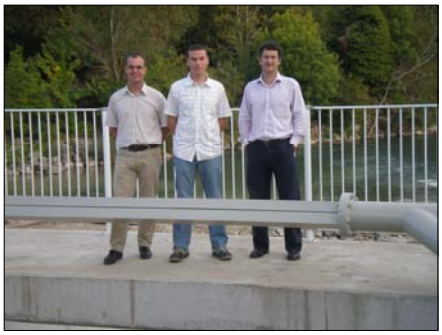
3 other units are currently being assembled: 2 will be delivered in November, and the last one in December.

Our 2010 backlog is already looking good, with 4 units sold outside of France (2 in Belgium and 2 in Italy). Intents to purhase have also been signed for 3 other machines, also deliverable in 2010. We are expecting new orders for the end of the year and the beginning of 2010.

To face this significant development, MJ2 has structured and has incorporated new members.

A technician, Matthieu Solignac, has joined our engineering department. Our technical team has been strengthened with the arrival of an electrical engineer, Arnaud Fevre, who enables us to integrate automated systems, frequency converters, and electric design skills within MJ2.

Finally, an engineer from the French Arts et Métiers school, Nicolas Klein, has joined us to become the manager of the Millau Site and take charge of the industrialization of the VLH.



From left to right, Arnaud Fevre, Matthieu Solignac, and Nicolas Klein

The MJ2 team also includes an engineer on a work-study program and an assembly technician, and thus now has 11 members.

Due to these new incorporations, we have moved to premises better adapted to our business, with more office space.

Technically, the VLH is still maturing. As planned and announced in our NewsLetter #8, we have incorporated the new fish-friendly profile of the discharge ring to the last VLHs deliverable by the end of the year (see page #5).

We will thus be able, at the beginning of 2010, to perform a new fish passing test campaign to end the validation of the high fish-friendliness of the VLH.

These new tests will have an international character since we plan to organize them in cooperation with Belgian and German experts.

You will be informed of the results in our next Newsletter.

Marc Leclerc
General Manager

CLAIRVAUX VLH

The Clairvaux hydroelectric power plant is located on the Aube river. This project has been disclosed in our previous Newsletter.

Installation of the VLH in its housing

The 278-kW at grid connection level, DN 3350 VLH has been delivered and installed in spring and connected on June 19.

Electric and auxiliary equipment room

It has operated at an industrial rate during the month of July. In August, we have taken advantage of a very low flows to lift the VLH in order to finish the site surroundings and the upstream protection grid, and for minor modifications on its trash rake cleaner.

Clairvaux – upstream view of the water intake

Downstream view of the Clairvaux power plant

"3rd VLH commissioned at Clairvaux, on the Aube river"

HUNINGUE CHANNEL PROJECT

The Huningue channel is now harnessed with two VLHs at the place where the 3 French, Swiss, and German borders meet.

Lock #3 VLH and equipment room

The first 198-kW DN 3550 VLH, under a 1.98-m net head, is installed at lock #3. It has been commissioned in June. The July, August, and September output meets our expectations.

Metal supporting structure of the VLH and of the equipment room

Each VLH rests on a metal structure, bolted to the lock floor and to the two side walls. No civil engineering works have been required for the implantation of the two turbo generators.

Before and after installation of the VLH

The two locks are located in a preserved area, close to a nature reserve. We have been very careful to visually integrate the equipment so as to obtain very inconspicuous installations.

Equipment rooms are thus located at the back of the VLHs and below the floor level in the actual lock. They can be accessed by a gangway.

Rear view of the equipment room and of the access gangway

The small prefab equipment room contains all the equipment necessary for the operation of the VLH.

The 2nd VLH of lock #2 has been commissioned in September.

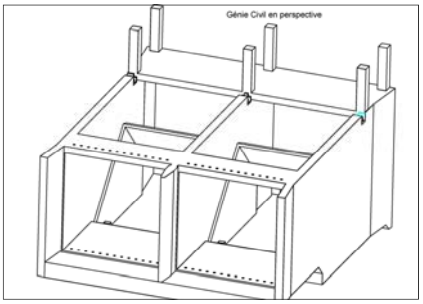
Electric equipment and equipment room

Bottom view of the Huningue lock #2 VLH In lifted position

"2 VLHs installed on 2 locks of the Huningue channel close to the Swiss and German borders"

2 VLH TURBINES AT AULX LES CROMARY

The first hydroelectric power plant with two VLHs assembled side by side is in its final construction phase. It is located in Aulx les Cromary (Haute Saone), on the Ognon river,



Layout plan of two VLHs side by side

and will be equipped with 2 DN 3550, each developing a 202 kW output at grid connection level.

Upstream view of the implantation of the two VLHs

Civil engineering works have started in spring with preliminary excavations and the laying of a sheet pile around the future site of implantation of the two VLH turbines.

The side walls have been made in walled concrete. The upper bridge beam and the two rear inclined shells have been cast on conventional formworks.

Placing of the parts to be sealed with the positioning tools provided by MJ2

Special tools provided by MJ2 are used to position parts to be sealed, also provided by MJ2, in the second stage concrete.

Unloading of a runner and
of a half distributor

The two VLHs and the 4 half-distributors have been delivered at the end of August and immediately assembled on site.

Two weeks later, the two VLH turbines are assembled and ready to be installed.

The 2 assembled VLH Turbines

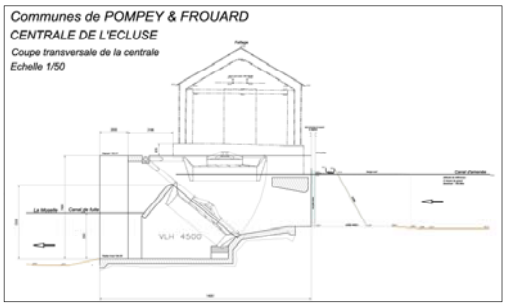
The commissioning of the power plant is planned for mid-November 2009.

"First plant with two VLH turbines side by side"

FROUARD POWER PLANT

FIRST VLH WITH A SPHERICAL DISCHARGE RING IMPLANTATION IN AN EXISTING BUILDING

In Frouard, we are facing the challenge of implanting a DN 4500 VLH (width of 6 ml) on an existing site, inside of the plant building which used to house a vertical-axis Francis turbine. Works have begun with the construction of a track for accessing downstream of the weir. Then, the upstream and downstream cofferdams supported by a powerful pumping have enabled to dewater the site.



Implantation of the VLH under the existing building

Demolitions downstream of the building

The existing structure could thus start to be demolished. In addition to the turbine chamber and to the downstream channel, the roof and part of the walls have had to be put off to make room for the location of the future VLH.

Constructions works have started with the floor slab, followed by the lateral concrete shells used as side walls.

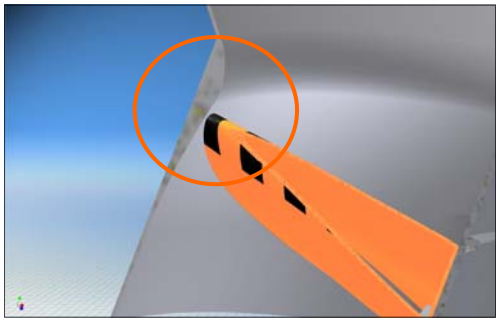
Building of the downstream right-hand side wall

The VLH is planned to be delivered by the end of November, to be commissioned before the end of the year.

First VLH with a spherical discharge ring

The Frouard DN 4500 VLH will have the first super fish-friendly discharge ring of spherical shape. The second fish passing test campaign will thus be carried out on this site at the beginning of 2010 to scientifically quantify the improvement brought by this new profile to the mortality coefficient of migrating fish. These tests will be performed in cooperation with Belgian and German experts to validate the results at a European level.

Demolitions downstream of the building



Spherical discharge ring

"First VLH with a spherical discharge ring"

"Implantation of a DN 4500 VLH in an existing building"

ON-SITE ASSEMBLY OF A VLH

Sequences of the on-site assembly of a VLH

The runner is positioned in a half-distributor, the 2nd half-distributor is placed alongside the first one, bolted to it, after which the cables and hoses coming out of the runner are slipped into their housings in the assembled distributor.

OTHER PROJETS AND PERSPECTIVES

"4 other ongoing projects"

"3 other VHL turbines in design phase"

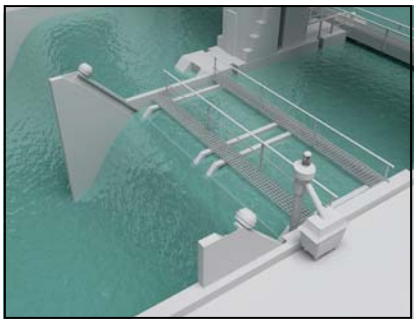
4 other projects with VLH turbines are under way. In France: the Les Barrets plant on the Garonne at St Martory, and the 2nd VLH on the Mayenne river for SCHEMA (an EDF subsidiary), a prelude to the full harnessing of 16 Mayenne weirs exploited by this company.

This wide-ranging and ambitious renovation program will be launched in 2010.

Les Barrets plant civil works

L'Ame plant civil works

In Italy, the Vila d'Alme and Montodine projects have also started.



View of the project of installation of 2 VLH turbines at Marcinelle on the Sambre river in operating position

The two VLHs turbines of the Marcinelle project, as well as a DN 5000 for the CNR, are under study.

Water intake of the Vila d'Alme Plant

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