A highly safe construction site

Address given by Mr. Daniel Mouchet, Chairman of Cleuson-Dixence Construction SA.
Press presentation on April 30, 2010

Only the spoken version shall be authentic

Ladies and gentlemen the press representatives,

In 2001, following the failure of the Cleuson-Dixence penstock, a delegation of the owner companies - which are Grande Dixence SA and Alpiq Suisse SA (formerly EOS) - was formed in order to deal with the accident and study the possible scenarios for rehabilitating the installations.

Advised by a group of internationally reputed experts, the delegation made safety a priority, not only in the phase of designing the rehabilitation works but also in that of setting up the construction site and commissioning the facility.

In terms of designing the project, a first important decision was taken: the penstock was to be rehabilitated over its whole length, with the exception of the zone that had been weakened by the accident, which would be avoided by means of a bypass.

In this context a safety factor of 1.8 was set for the enclosed parts of the conduit and of 2.0 for the free part in the gallery. Here again, top priority was given to safety: these values are actually higher than those of the profession, which are 1.5. The weldability criterion, for its part, determined the choice of steels.

In the execution phase, all the welding procedures used to make and assemble the cylindrical steel sections were tested and validated under real-life conditions on the construction site prior to their being incorporated in the structure. Once they had been completed, all the welds were inspected using ultrasound, magneto and exudation, first by the sheet-metal contractor who executed them, and a second time by an independent company appointed by Cleuson-Dixence Construction.

We are also very proud to have completed this large-scale construction project without any significant accident.

As far as the Bieudron power station is concerned, all the installations underwent continuous preventive maintenance. The installations were thus inspected point by point between 2008 and summer 2009. All the safety elements were also tested individually over an eight-month period. No anomaly was detected. The installations were also subjected to load increases up to full power, followed by load reductions.

Water was channelled through the penstock in late August 2009, with close monitoring. In accordance with the group of experts' recommendations, a continuous monitoring system was put in place for the penstock. This system is still in operation.

All the tests carried out confirmed the perfect operating condition of the three groups of the Bieudron power station and the smooth functioning of the safety systems.

Without further delay, I will now give the floor to Mr. Jean-François Nicod, Chief Executive of Cleuson-Dixence Construction.