

From first dig to sandy riverbed to critical hydropower plant protection.

Axis network cameras protect major Devoll Hydropower plant in Albania.



Organization:
Devoll Hydropower Sh.A

Location:
Devoll River, Albania

Industry segment:
Critical infrastructure

Application:
Safety and security

Axis partner:
Synapse ATS Sh.p.k.,
AxxonSoft

Mission

Devoll Hydropower Sh.A. (DHP) is an Albanian registered company, owned and operated by the Norwegian power company Statkraft AS. In line with a concession agreement signed and approved by the Albanian Parliament in 2009, Devoll Hydropower will develop, construct, and operate hydropower plants in cascade along the Devoll River in southeast Albania. Construction of the entire cascade should be completed in 2019. Resources are required to meet the growing demand of electricity consumption in Albania. Devoll Hydropower will increase electricity production in Albania by 17%, all of it through renewable and clean energy. There was a need for a CCTV system that would provide surveillance at four different locations, including two power plants. The primary focus was on quality.

Solution

The CCTV solution was based on Axis network cameras. A total of 62 Axis cameras protect an office building in Banja, an office building in Gramshi, the Banja hydropower plant, and the Moglice hydropower plant construction site. The cameras are used to ensure the physical security of the perimeter, protect assets, and monitor worker adherence to safety and operational regulations. At the Devoll hydropower plant, they cover all the main facilities: the power house, switch yard, intake, spillway, grunting gallery, and emergency outlet.

Result

The customer is very satisfied with the quality provided by Axis network cameras. They are reliable and their PoE (Power over Ethernet) makes them easier to install than old-school analogue systems. Moreover, the image quality is incomparably better than analogue CCTV, and the customer is already considering using analytics for network cameras to improve their functionality.

“We liked the Axis IP cameras. You can see the difference from the other brands as soon as you unpack an Axis camera. In terms of reliability, they are incomparable. Our first IP camera was installed in 2014, and we’ve never had an issue with any camera. We’re glad that we went with a network camera solution. Just imagine installing analogue cameras on a complex of this size. Construction and maintenance costs would be astronomical compared to network cameras.”

Mr. Oltion Elezi, ICT Manager in the Devoll Hydropower plant.

Optics required

It can prove quite a challenge to secure a complex of this size. One of the largest challenges was the sheer size of the hydropower plant. Separate buildings and the large perimeter area required construction of an optical network for connectivity. Multiple cameras were needed at the plant’s service points to ensure worker adherence to safety and operational regulations. The most-used network cameras were AXIS P1354-E for their great performance, AXIS P1405-LE with IR lights and very good night vision mode, and PTZ camera AXIS P5635-E. Cameras are positioned both inside and outside all of the facilities and office buildings in Banja and Gramshi and are connected to centralized video rooms by means of a local internet service provider. There are only a few cameras at the Moglice construction site, but since it’s similar to Banja, the company foresees the addition of many more network cameras to the system.

Different levels of access, more applications

As mentioned earlier, there are three different uses for the CCTV network, the first and second of which focus on perimeter security and the protection of assets. These two are managed by security staff and do not currently use analytics. Also, each security staff has access to his or her protected facility only. The company is already considering adding the AXIS Perimeter Defender application. The third use is the protection of workers and monitoring of the hydropower plant. This is done from a control room by a manager and personnel supervisor. It essentially allows supervisors to monitor critical parts and verify there are no workers in critical situations, such as working around vents during emergency water discharge. The system is based entirely on the Axxon Soft Next Professional Plattform VMS. Currently, there is no connection to other systems, such as safety, fire, access, and CRM.

Intense competition, reliability is key

Competition on the video surveillance market in Albania is very intense. The market is flooded with less reliable and cheaper cameras, but there are customers that need reliable and trusted network cameras.

This is reflected in the words of Mr. Oltion Elezi manager of CCTV in the Devoll Hydropower plant: “We liked the Axis IP cameras. You can see the difference from the other brands as soon as you unpack an Axis camera. In terms of reliability, they are incomparable. Our first IP camera was installed in 2014, and we’ve never had an issue with any camera. We’re glad that we went with a network camera solution. Just imagine installing analogue cameras on a complex of this size. Construction and maintenance costs would be astronomical compared to network cameras. As we have another project progressing on schedule, it will be necessary to extend the CCTV network as well. Fortunately, the IP solution is easily scalable and adding new Axis network cameras is very easy.”

