The largest Catalonian nuclear plant deploys SAF

Partner: Artsys Telecom S.L.
Cutomer: ANAV
Location: Spain (Catalonia)
Industry: Electricity Provider
Challenge: To provide connectivity between two nuclear plants
Solution: SAF CFQ (155Mbps) split mount and SAF CFIP-108 full outdoor

" With the SAF radio link solution we have the most secure and solid backup line of our optical fibre communications. We need to provide IP data to different remote points without optical fibre connectivity, for that reason we trust in license SAF equipments."

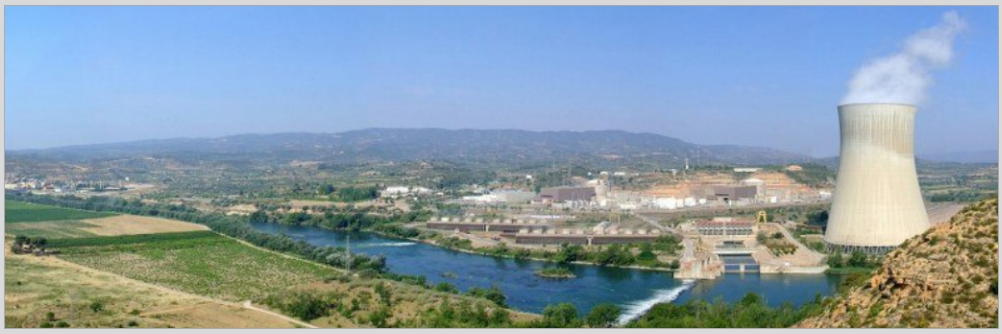
Enric Orero
Technical consultant
ANAV.

CUSTOMER

Asociacion Nuclear Asco-Vandellos (ANAV) is an electricity company provider which covers the 25% of country's nuclear capacity in Catalonia. There are six nuclear power plants in operation in Spain where Asco and Vandellos power plants are operated by ANAV. The Vandellós II Nuclear Power Plant operated by ANAV is located in the municipal area of L`Hospitalet del Infant, on the shores of the Mediterranean Sea. The plant operates by means of a nuclear steam supply system that includes a pressurised light water reactor. The total electrical power produced by Vandellós II Nuclear Power Plant is 1.087,1 Mwe with thermal output of 2.940,6 MWt. The Ascó nuclear power plant is located in the municipal area of Ascó (province of Tarragona), on the right bank of the river Ebro. (source: Consejo De Securidad Nuclear)

CHALLENGE

Both nuclear power plants of ANAV needed to be interconnected in order to transmit control system information and Tetra voice communication between the sites. To provide redundant access both nuclear power plants were initially connected via optical fibre and unlicenced spectrum radio links. When the nuclear power plants perform the recharge of both nuclear reactors they require more capacity and prefer to use radio links for specific data transmissions. As a matter of fact the public spectrum links could not provide constant capacity and E1 traffic. ANAV required a better solution - microwave links which would support both Ethernet and E1 interfaces.



ANAV plant, Catalonia, Spain

SOLUTION

To replace unlicensed spectrum radio links ANAV had chosen SAF radio systems. The main driver to chose SAF was the performance of the radio links which fully satisfied ANAV and provided redundant connectivity between both sites. Low power consumption of CFIP links was also a benefit to ANAV which allowed to use solar pannels to backup conventional power line over grid to feed backhaul site. Also SAF links had met the long distance requirements, the longest link was 50km long.

SAF

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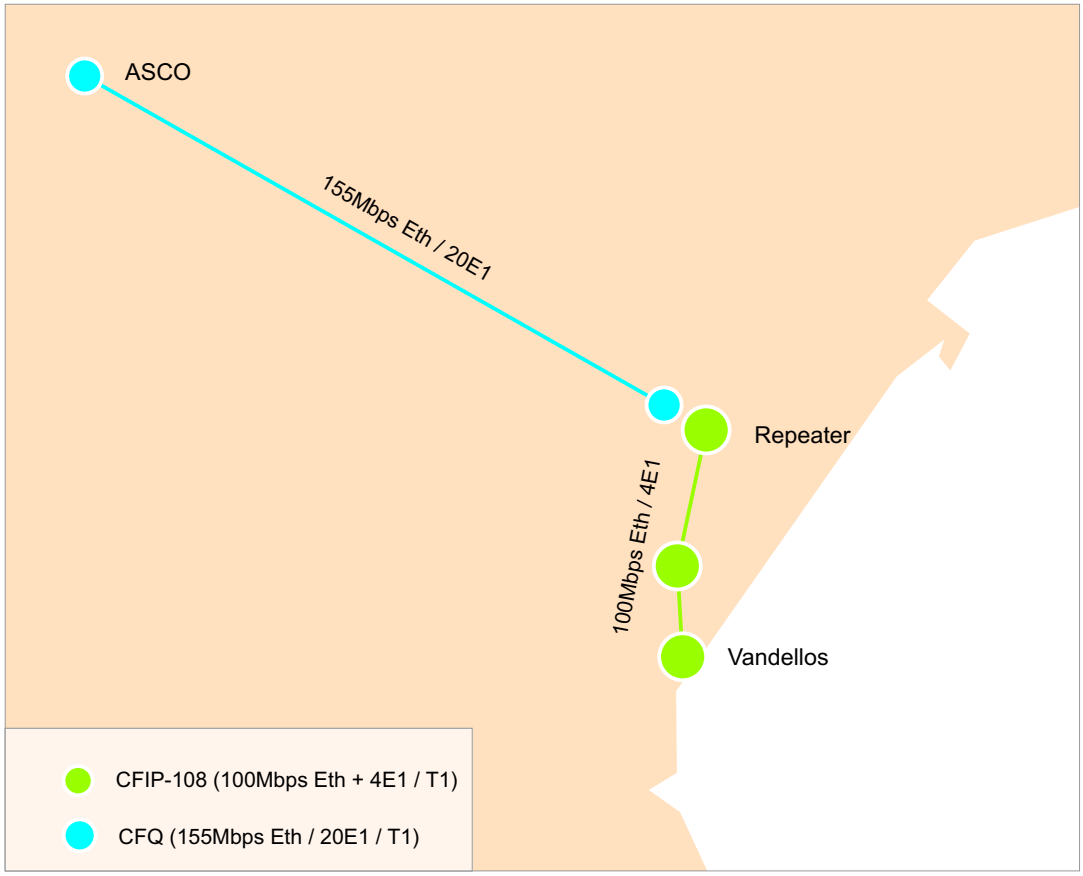
EU
Produced in **Europe**

Catalonia, Spain

Topology

Asco - Vandellos topology utilizing SAF links



Asco - Vandellos network details

Equipment: 1 CFQ (6GHz) & 2 CFIP-108 (15GHz) links
Link distances: up to 50km
Frequency: 15GHz/6GHz
Capacity: up to 155Mbps
Services: Ethernet and Tetra

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