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New technologies for electrical transmission and distribution in FCC

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At this stage of the feasibility study of FCC, few challenges were identified, and the electrical network has a role to play in improving them.

Indeed, the study highlighted the need to use as little space as possible: on surface sites to limit the environmental impact, but underground as well to limit the civil engineering cost. In this sense, the electrical network is designed to reduce its footprint. Some improvements are developed for transmission and distribution substations, that are initially big space consumers, to reduce their size and location.

Regarding the electrical network itself, it is developed to improve the network stability and its immunity from external disturbances. The power quality needs also to be managed, for this way, some equipment needs to be installed and design all around the machine. Their size, position and technology are studied to be optimized.

The aim of this presentation is to show the progress done on the optimization of the electrical network for the FCC, using new technologies.

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