Contribution ID: **27** Type: **not specified**

Energy reduction: example of a test facility upgrade with pulsed magnets instead of DC magnets, saving 90% of energy consumption

Thursday 24 October 2013 12:00 (20 minutes)

CERN has many experimental areas connected to three synchrontrons PSB, PS and SPS. A supercycle is managing all users and each facility receives beams when its cycle is played. For example, the PS East area is the destination of the beam for 7 cycles over 42 of the supercycle. This facility is powered in DC. If we compare the time of the beam presence in the area to the powering time of the magnet, the ratio is less than 5%. By powering this facility in pulsed operation, the energy consumption could be reduced by 95%. The talk will present the project of upgrading the EAST area to pulsed operation and how this upgrade could be financed by energy saving.

Presenter: Dr PAPASTERGIOU, Konstantinos (CERN)

Session Classification: Energy Efficiency at Research Infrastructures