

## **Case study:**

### Implementing DPS4 Power Backup with Power Boosters

HFC node consists of three power sites normally fed from their respective local power supplies.

Output voltage of the local power supplies is 60V (*complying European standard maximum AC voltage level of 65V RMS*).

Normal loads for the Sites 1, 2 and 3 are 7.8A, 6.4A and 7.7A respectively.

DPS4 based backup may be built on cables connecting optical receiver with trunks in Sites 2 and 3.

However, the AC voltage drops in the system depending on the load, distances and loop resistance, appear to be so significant that the input voltages of several line extenders of Sites 1 and 3 tend to fall below 40 VAC. This makes the stable functioning of these amplifiers impossible.

## **Safecom solution:**

Two Power Boosters are installed as shown on the schematic diagram : one at the Site 1 and the second at the Site 3.

They provide improvements of 16 - 17 V in voltage levels which results in excellent backup functionality.

# Power Backup with DPS4 and Power Boosters

