

Future Trends in the Power Supply for Telco and Data Centres: AC or DC

DC is an option in public power distribution

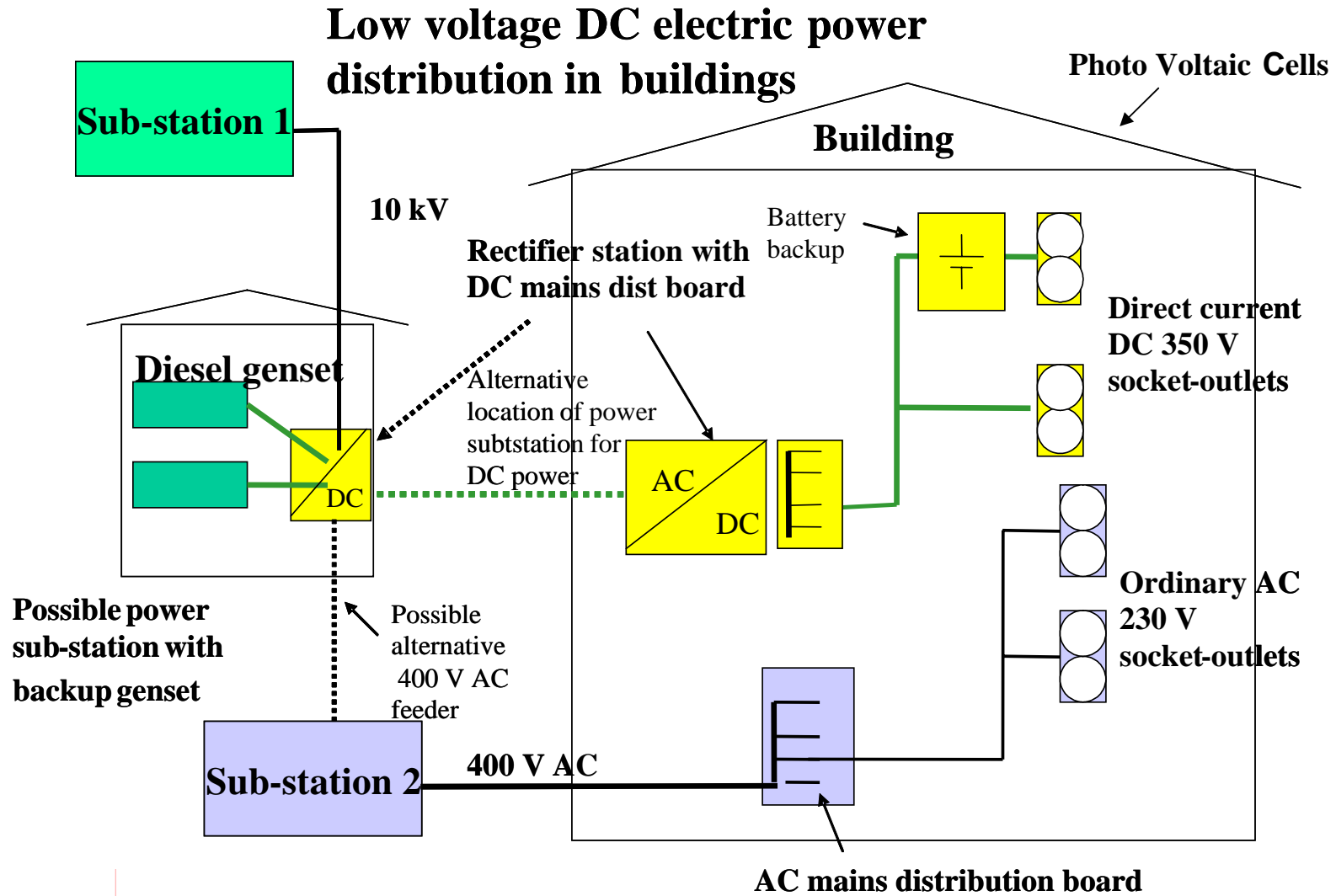
DC is a better product than AC for electronic load

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DC is an option in public power distribution

- Almost all future load will become electronic
- The grid was never designed for electronic load
- Sub stations need to become more efficient and adjusted for electronic load.
- Almost all of today's electronic equipment can be fed with both AC and DC at the same input.
- Easier support of local power generation

DC is an option in public power distribution



DC is a better product than AC for electronic load

- 5 – 30 % higher efficiency than AC depending on application
- Filters dips and very short outages without battery
- Protects against transients
- No harmonics on AC mains and distribution networks – sine wave input current
- Keeps the voltage constant
- Delivers flicker free voltage

DC is a better product than AC for electronic load

- UPS batteriers can be located downstream any place where required
- No vibration and no noise
- Less leakage current
- Less vagabond current
- Less risk for magnetic fields in buildings
- Reduces the PQ-requirements on the grid
- Increases the sustainability of the society