

Milan Internet eXchange new datacenter

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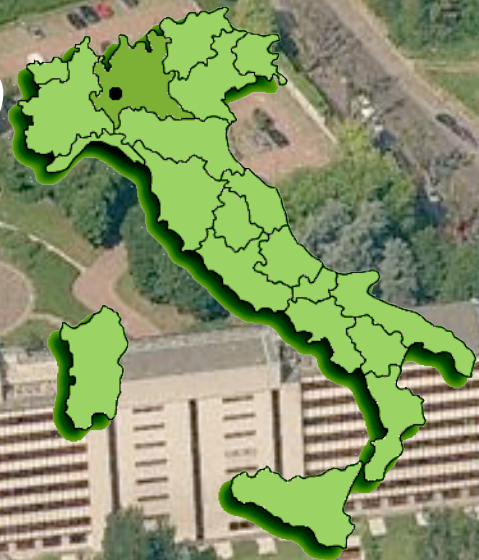
RIPE 57 - Dubai



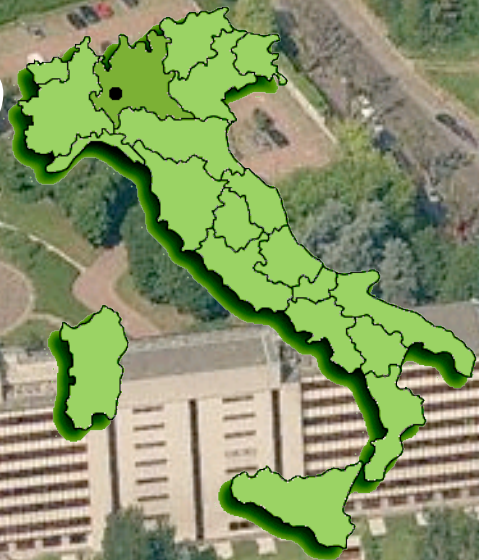
Where is MIX?



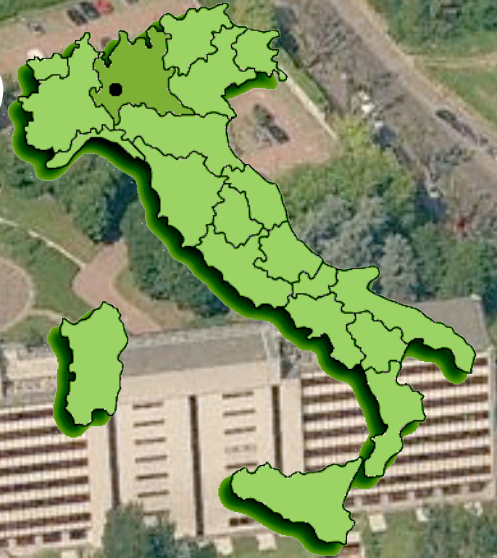
Where is MIX?



Where is MIX?



Where is MIX?



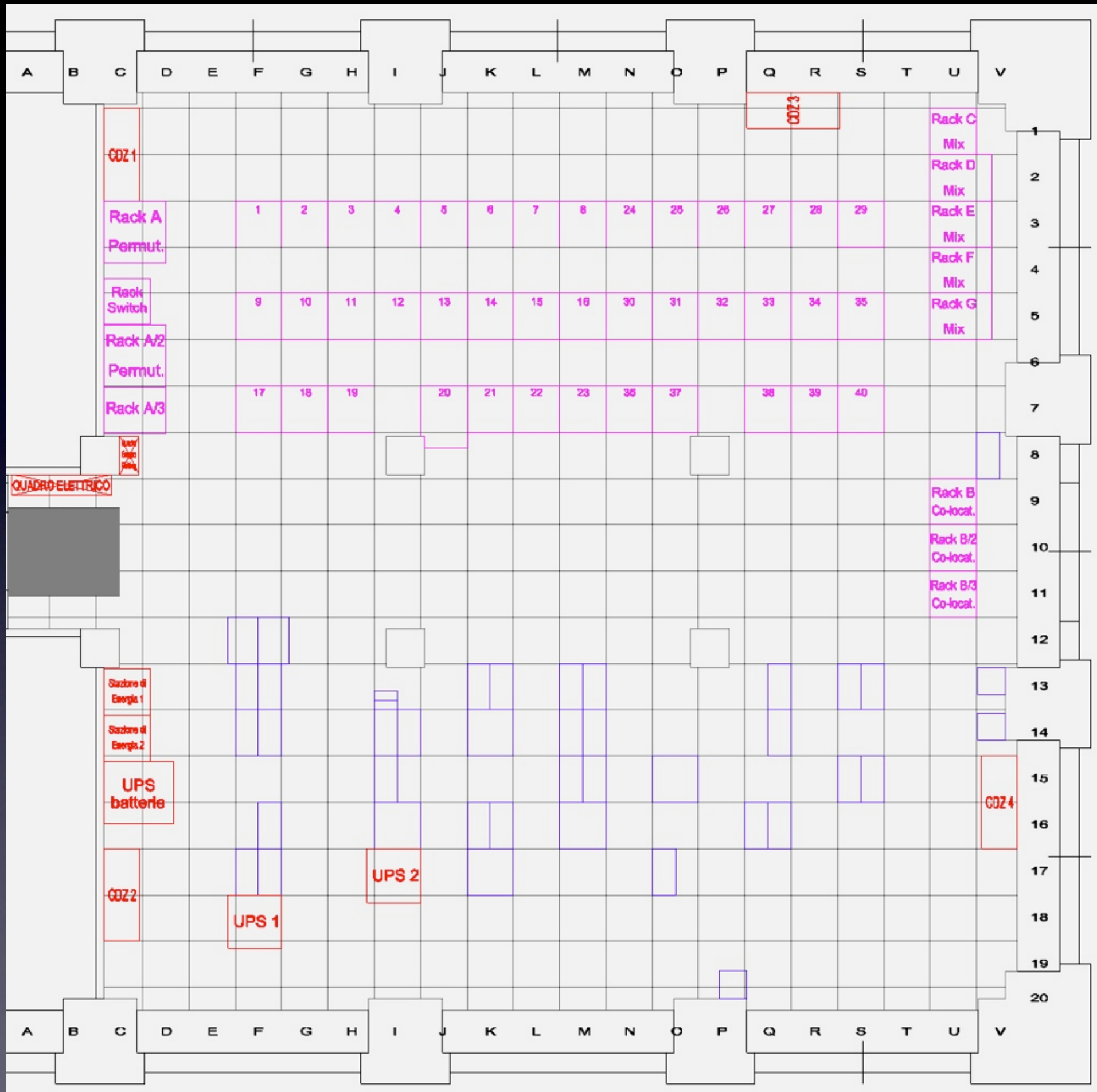
~ 20 network operators

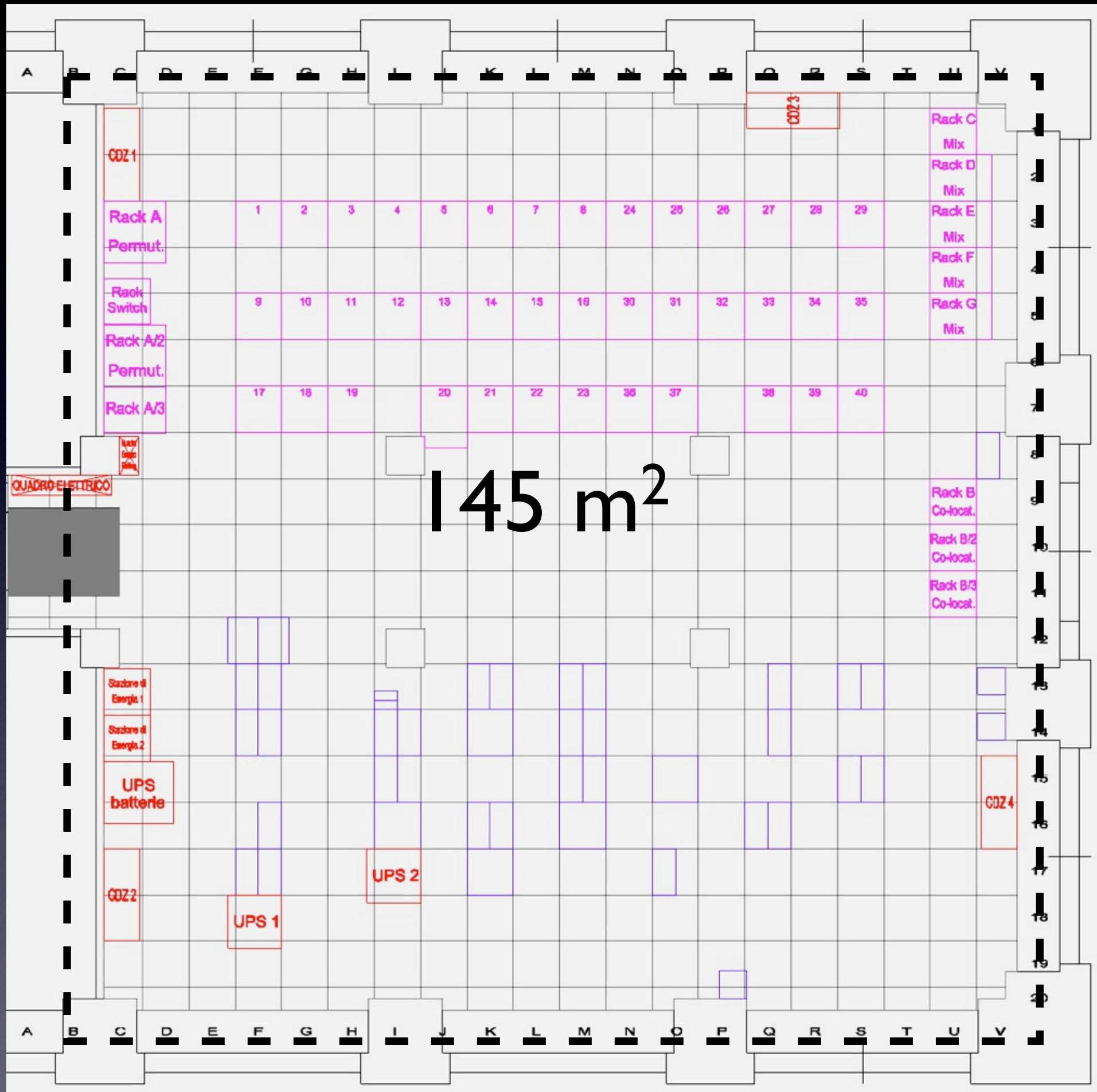


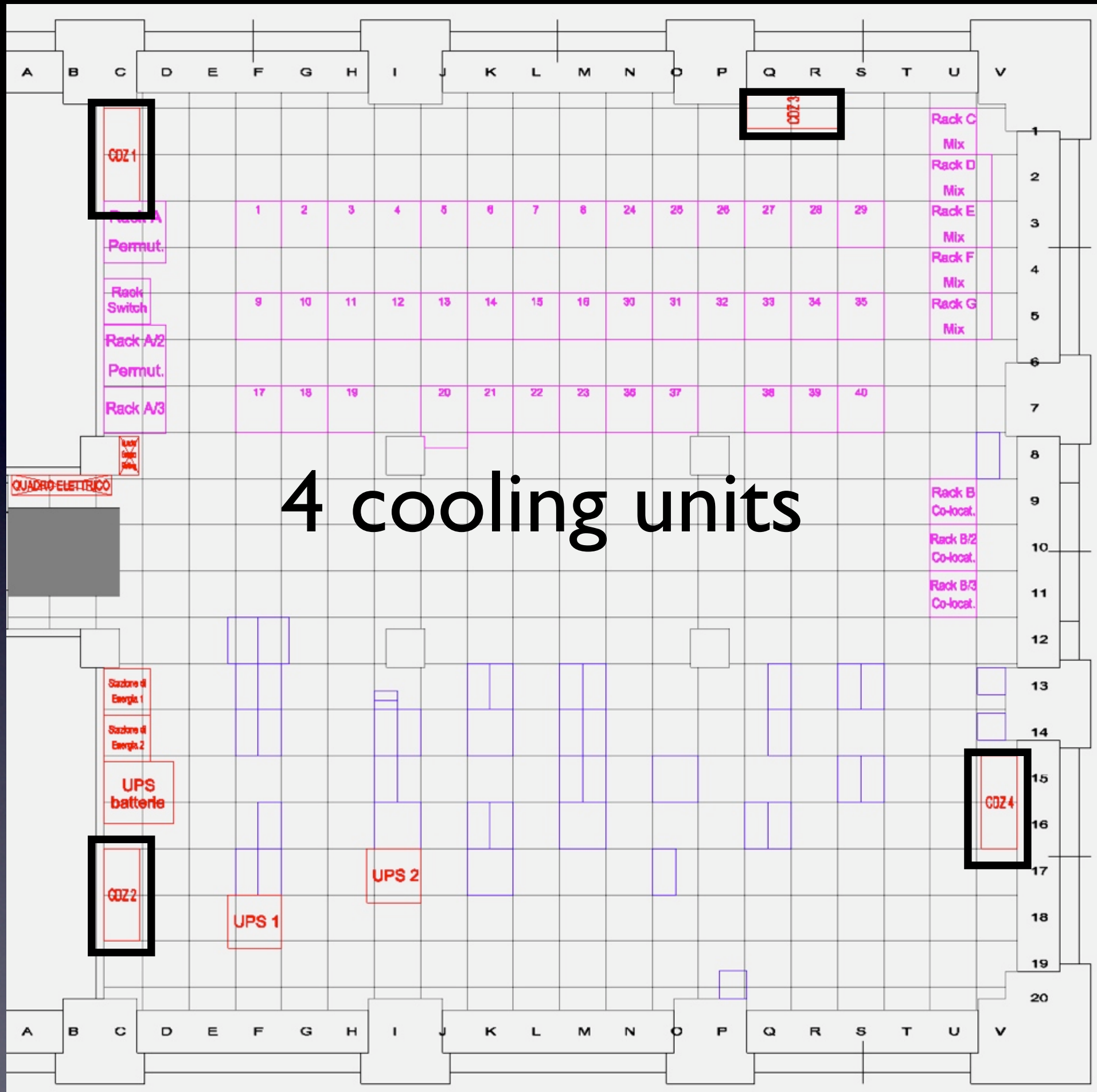
Main services

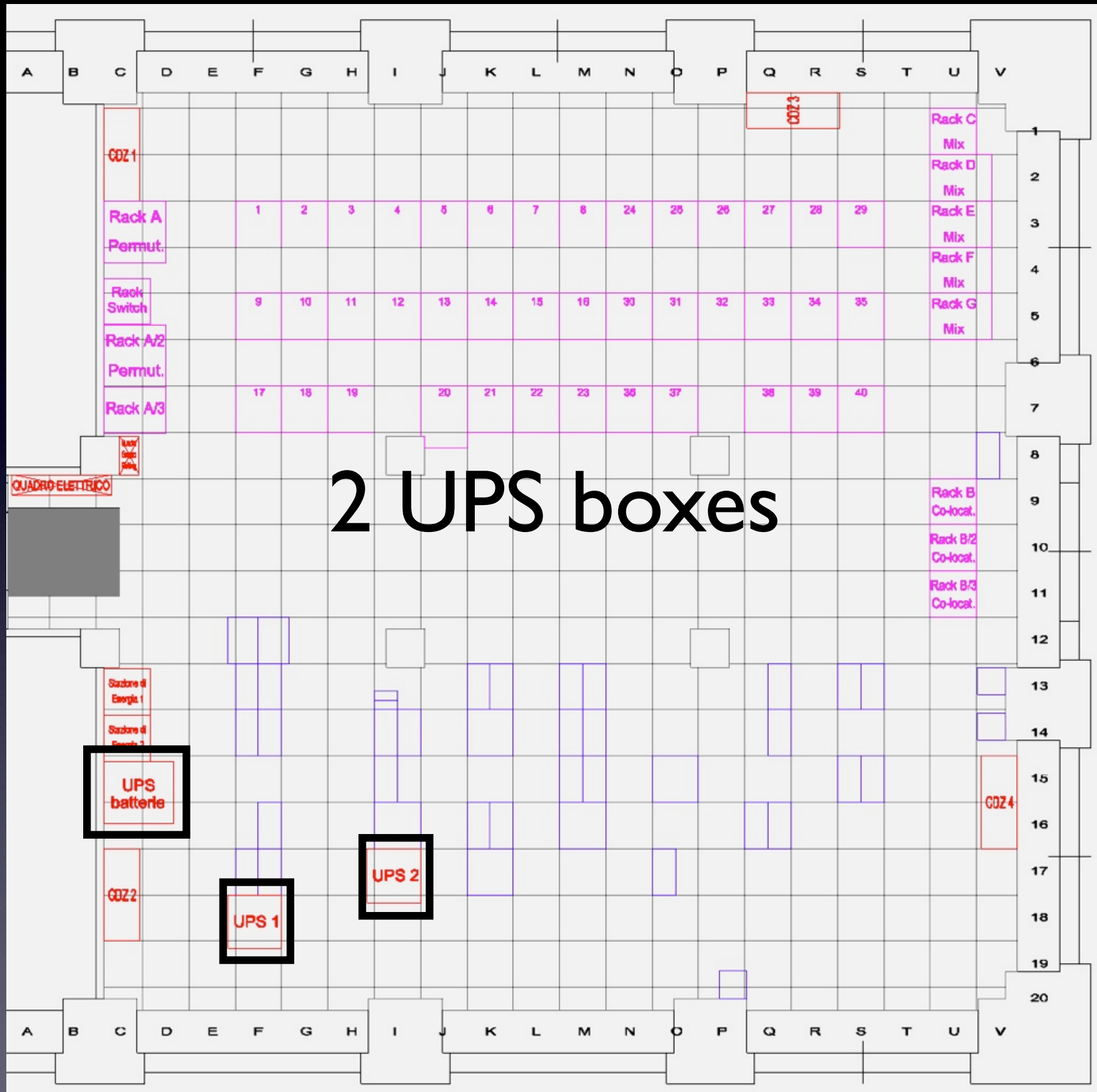
- Open membership
 - ▶ ISPs - carriers - hosters - content providers
- Colocation space for our members
 - ▶ rack space for ISPs
 - ▶ floor tile space for carriers
 - ▶ H24 access service
- Public / private / CUG peering on v4/v6
- Private interconnections (e.g. transit)

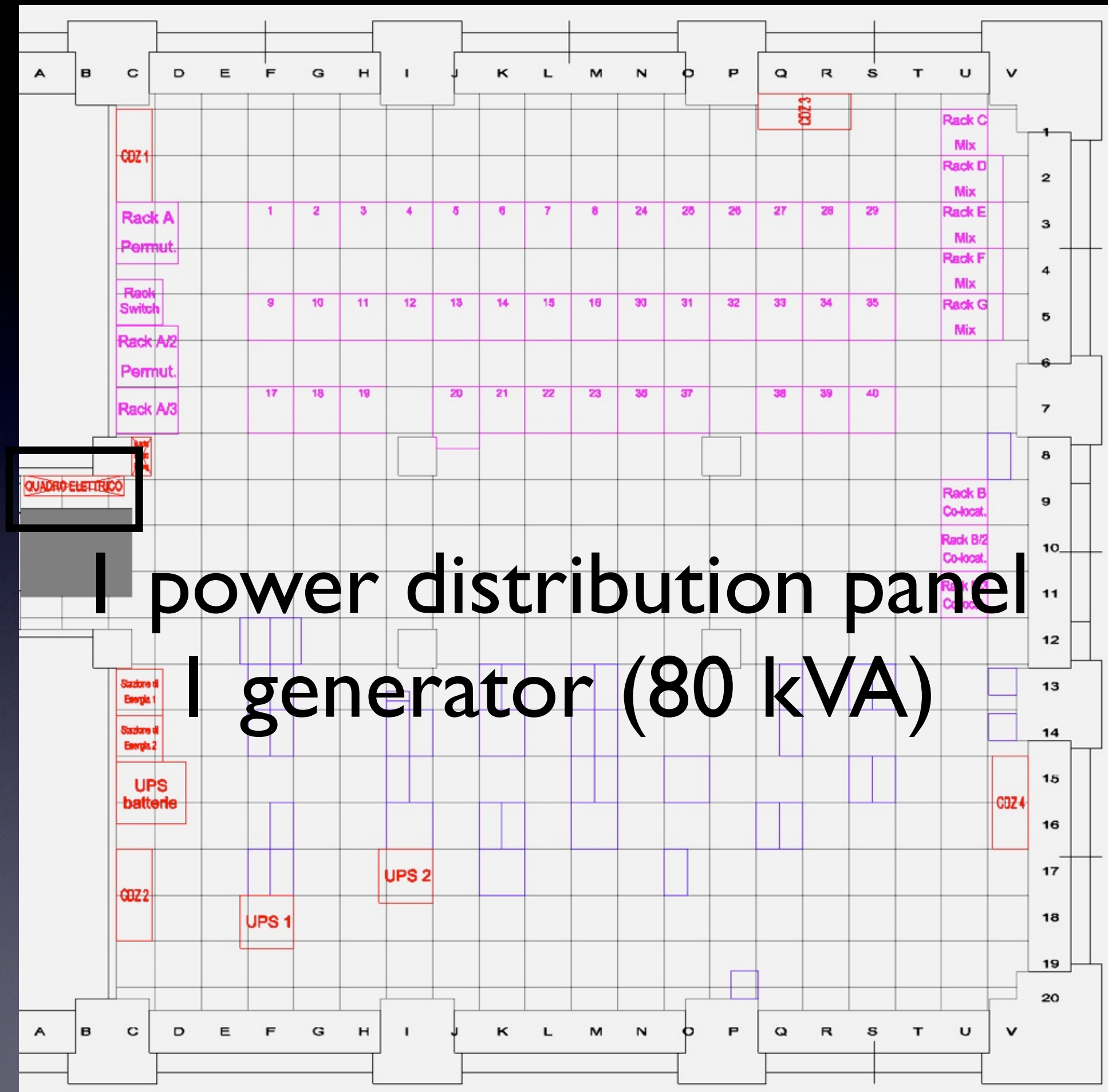


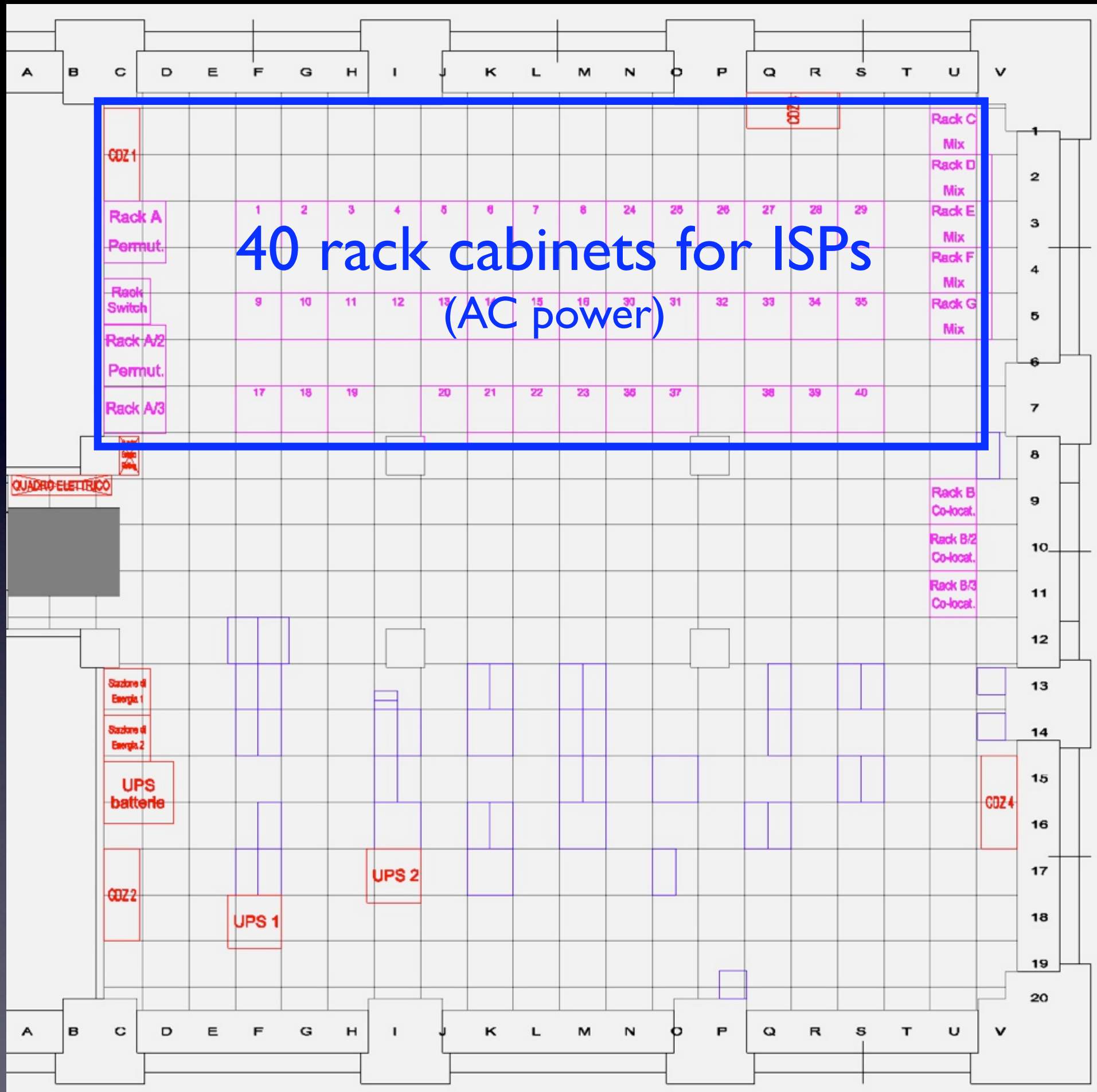


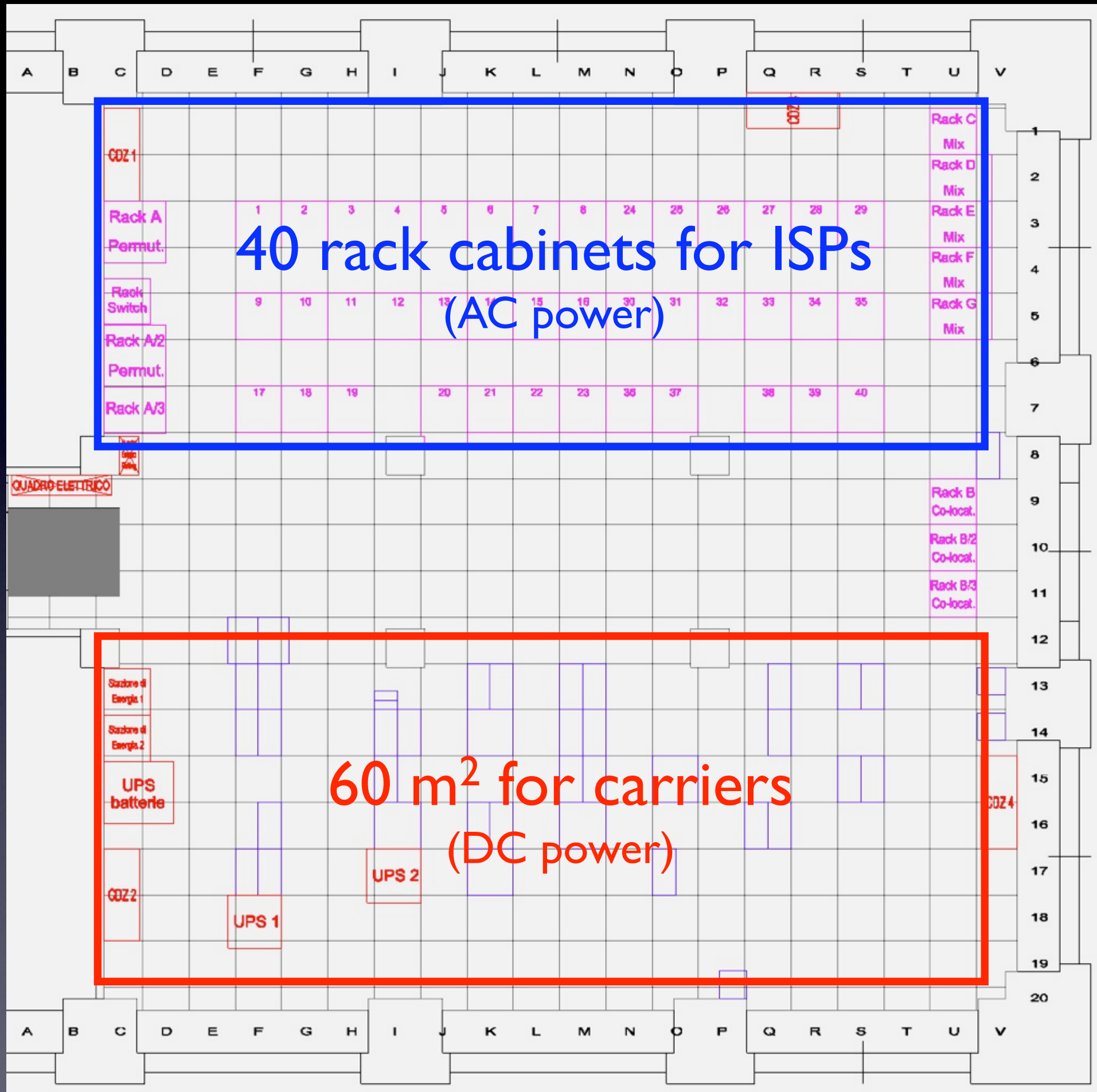


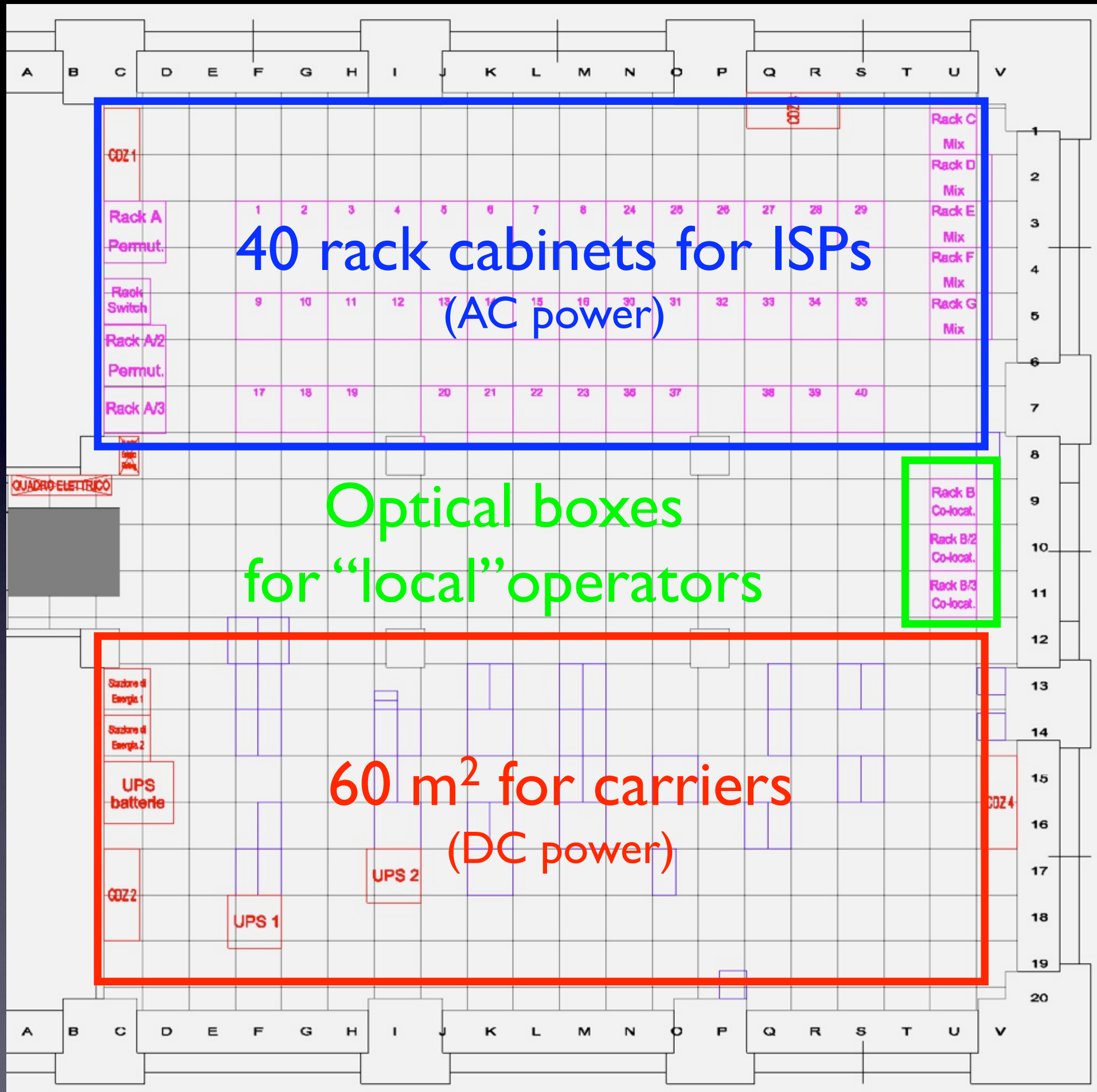








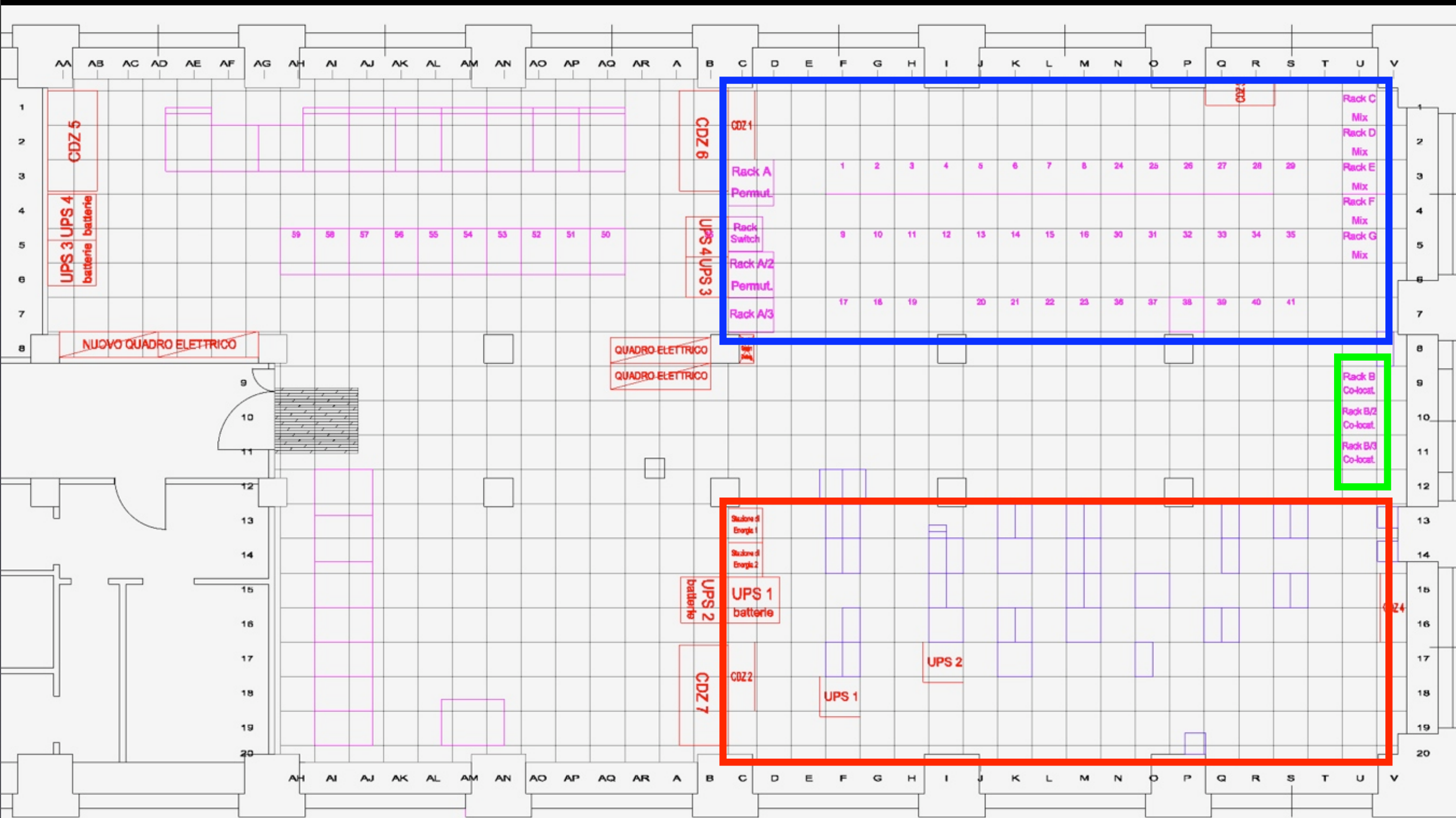




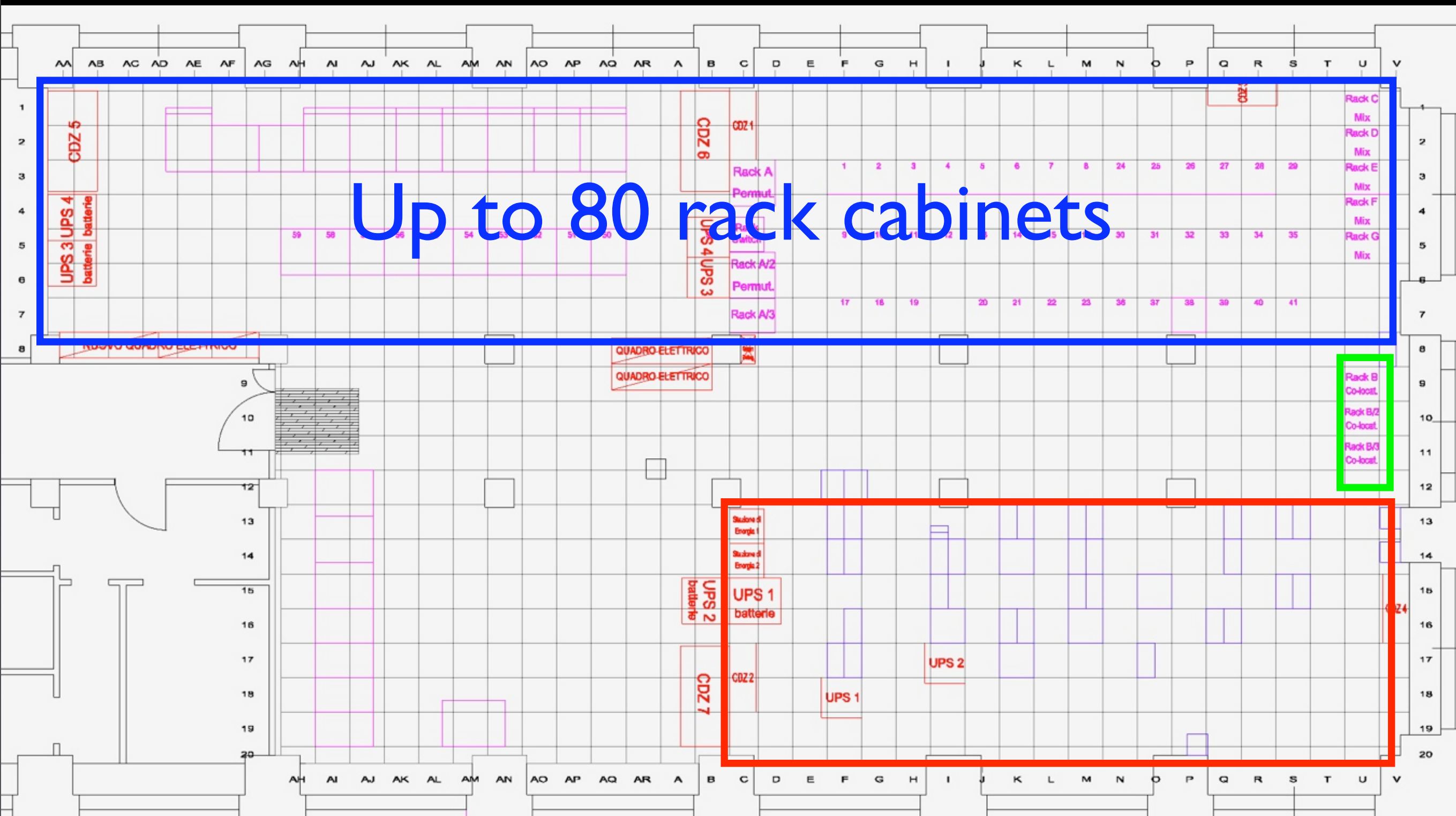
40 rack cabinets for ISPs
(AC power)

Optical boxes
for "local" operators

60 m² for carriers
(DC power)



Up to 80 rack cabinets



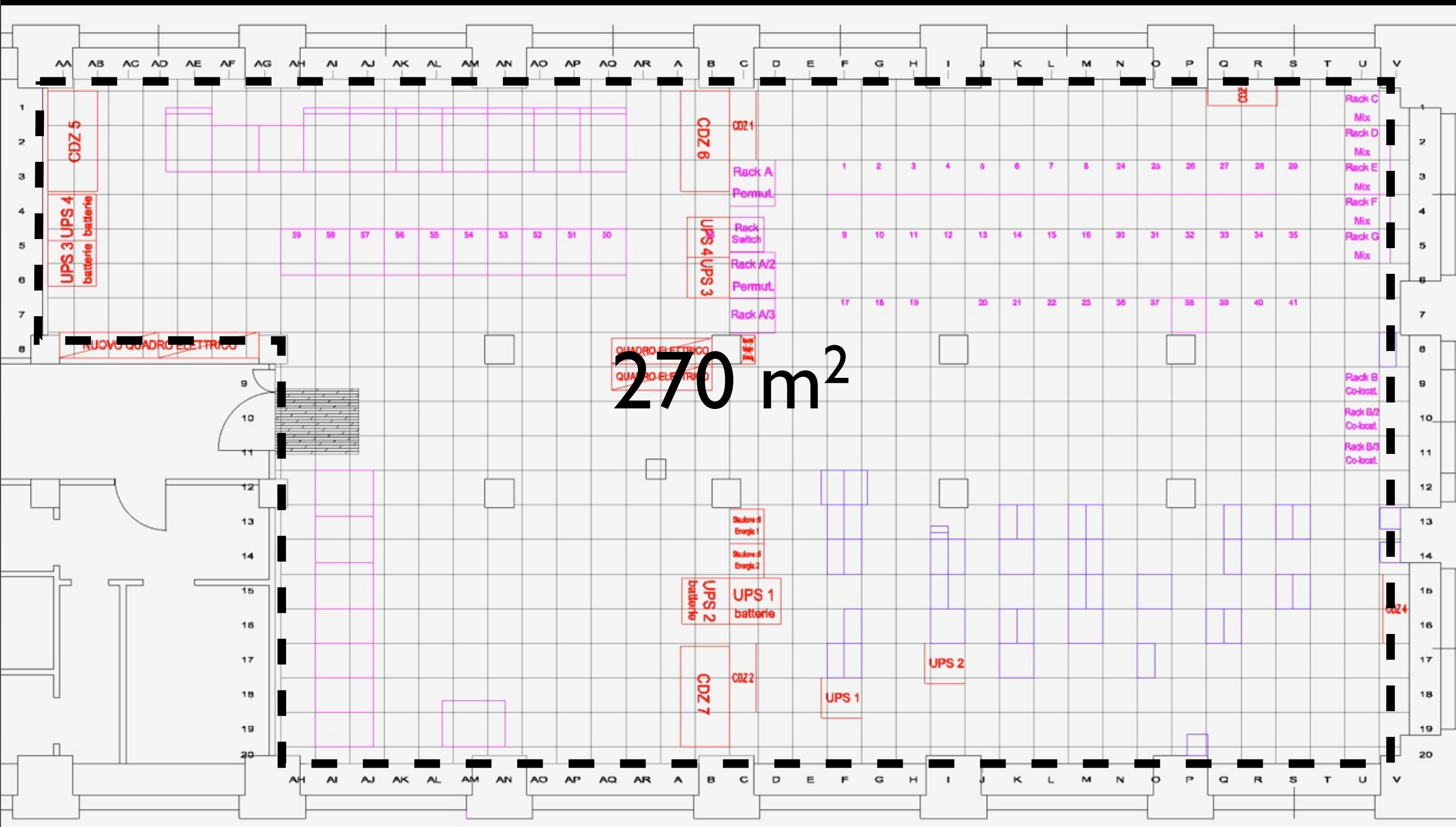
Up to 80 rack cabinets

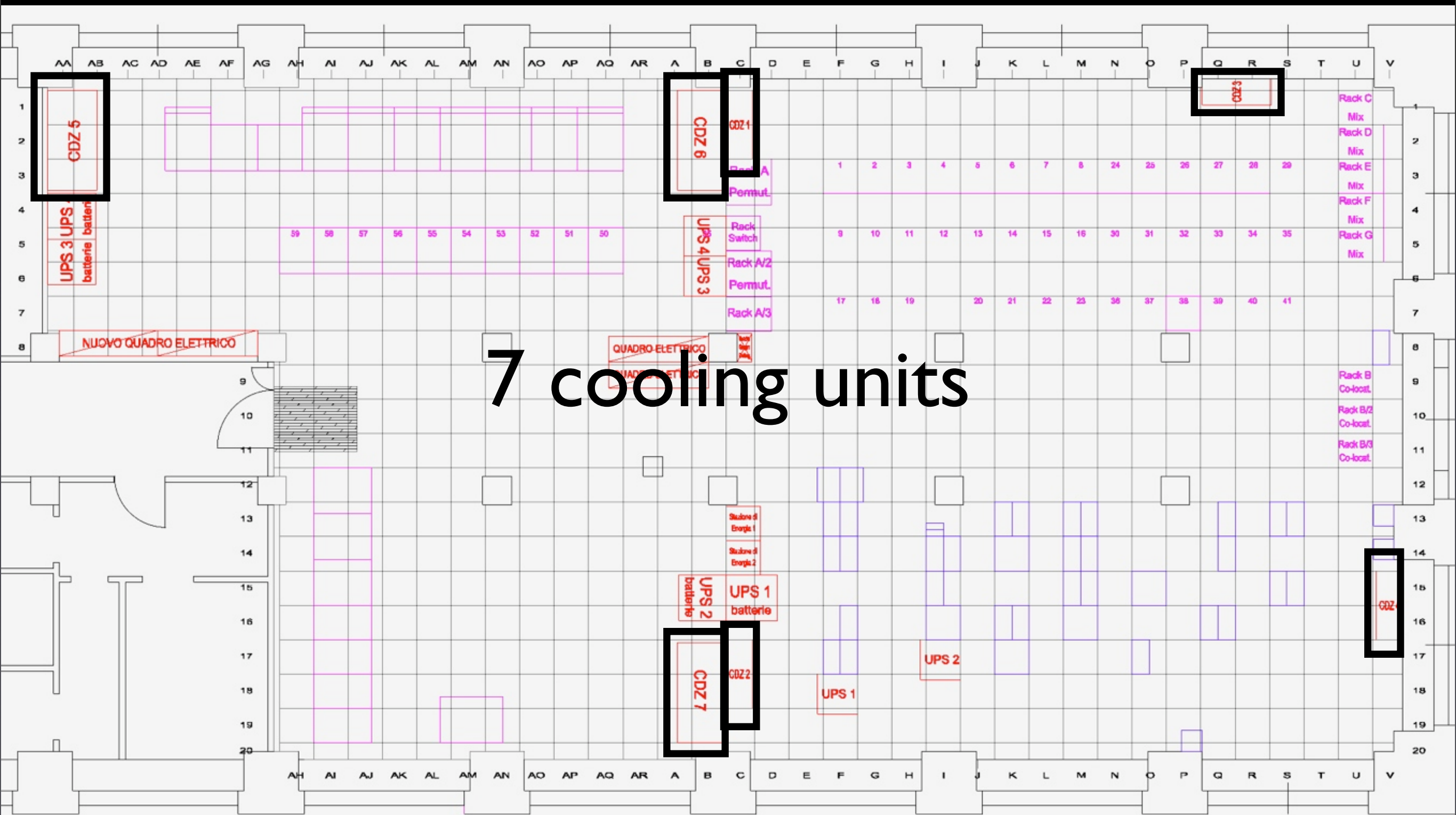
35% available

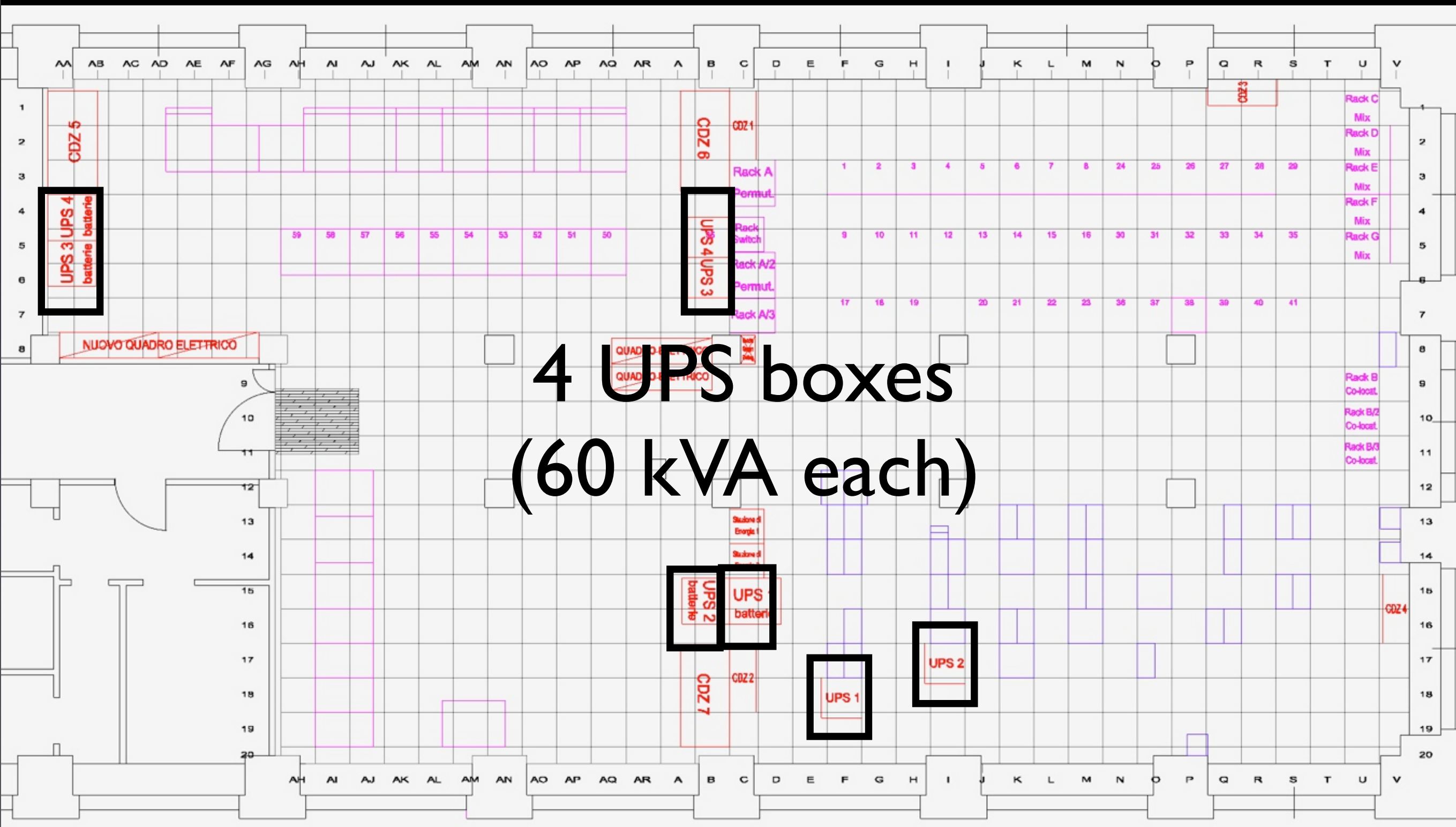
Up to 80 rack cabinets

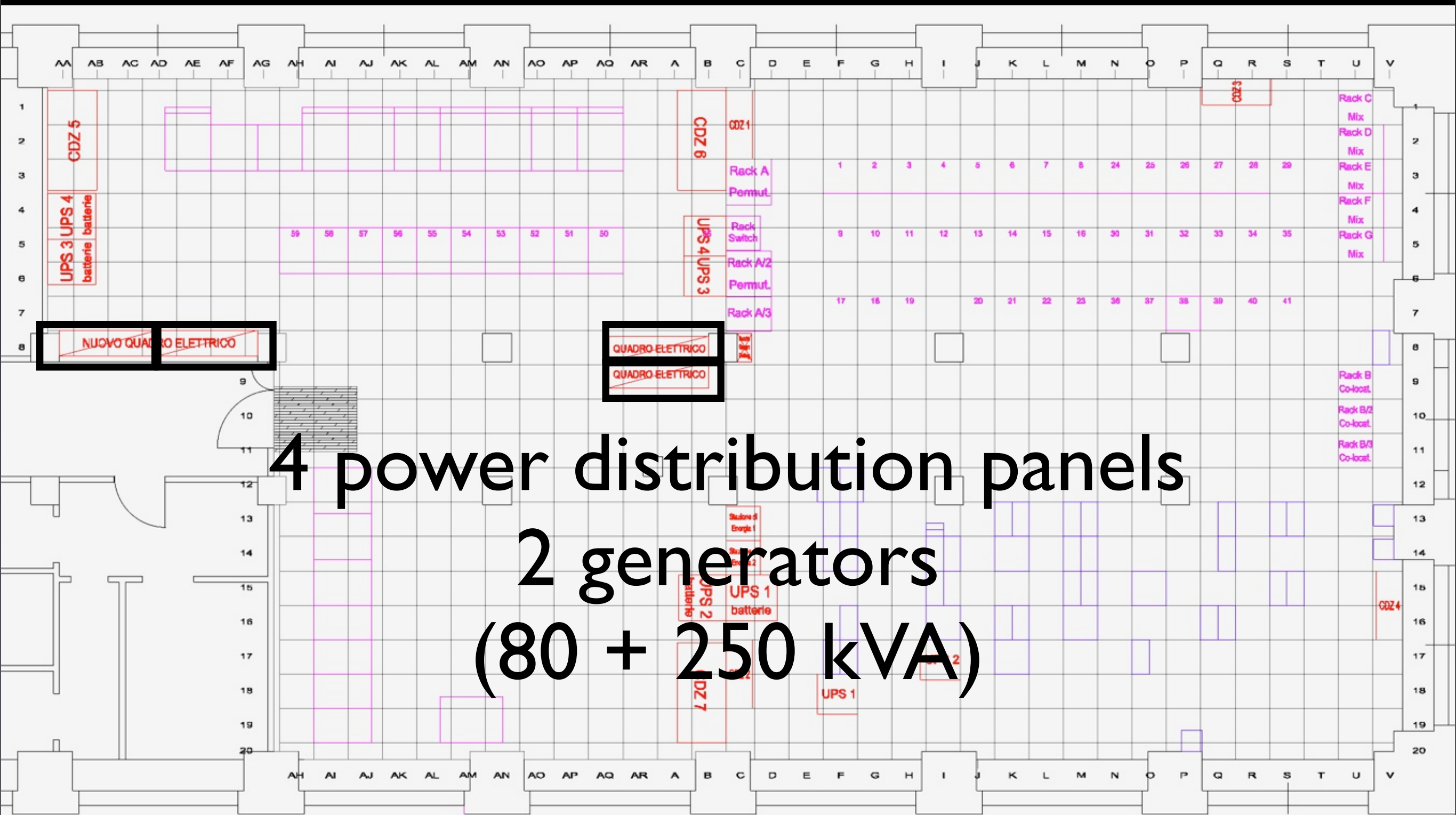
Miscellaneous
equipment
(AC/DC)

35% available





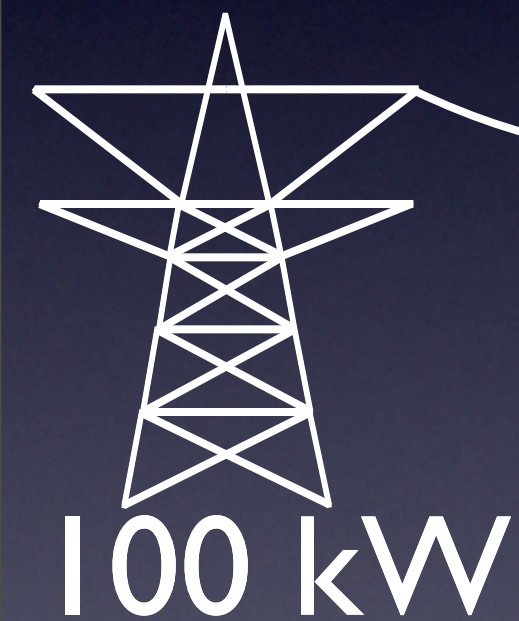




From old to new

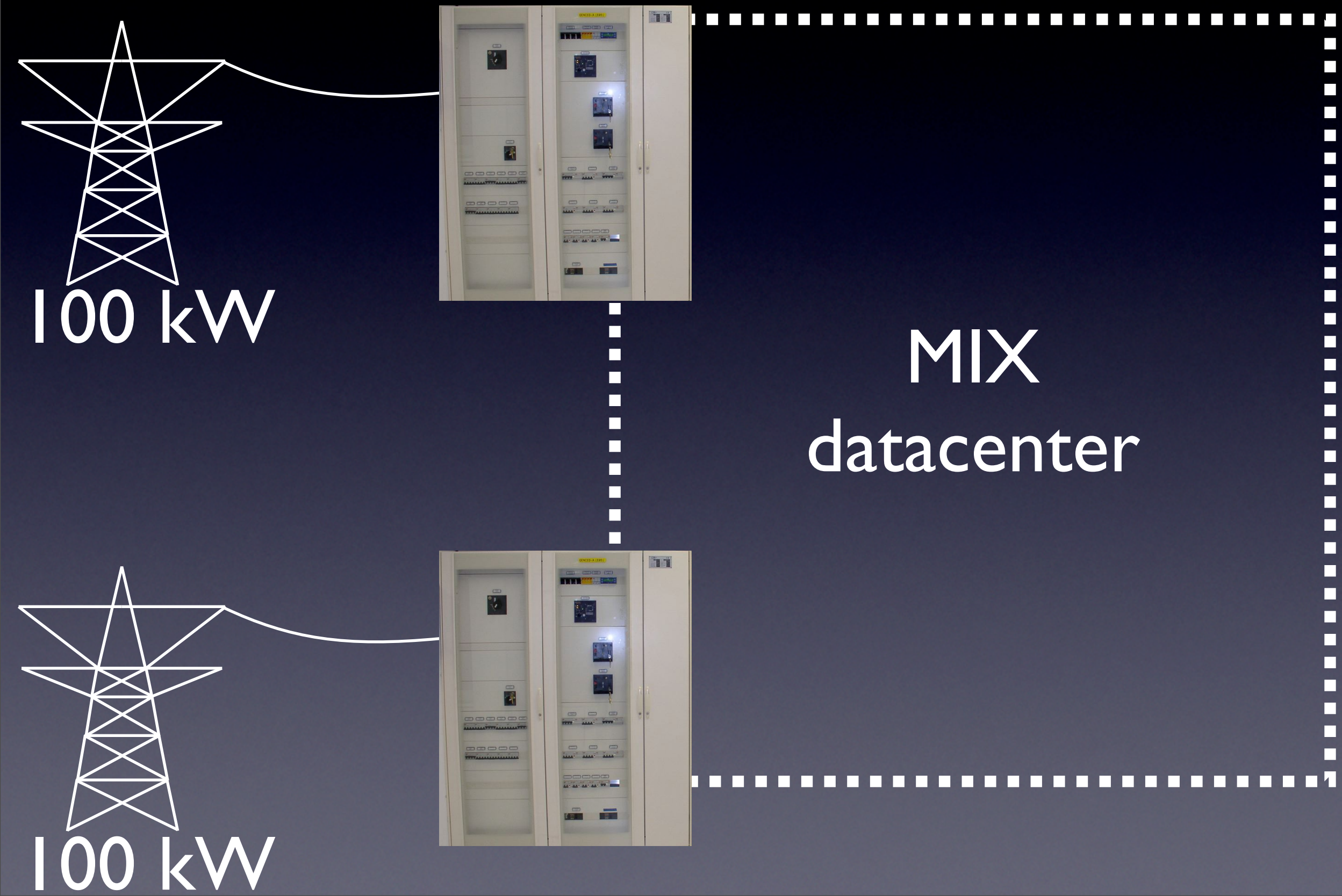
- 145 m² (~ 1600 ft²)
 - 40 cabinets
 - 4 cooling units
 - 2 UPS
 - 1 generator (80 kVA)
 - 1 power distribution panel
- 270 m² (~ 2900 ft²)
 - Up to 80 cabinets
 - 7 cooling units
 - 4 UPS
 - 2 generators (80 + 250 kVA)
 - 4 power distribution panels

Electrical redundancy

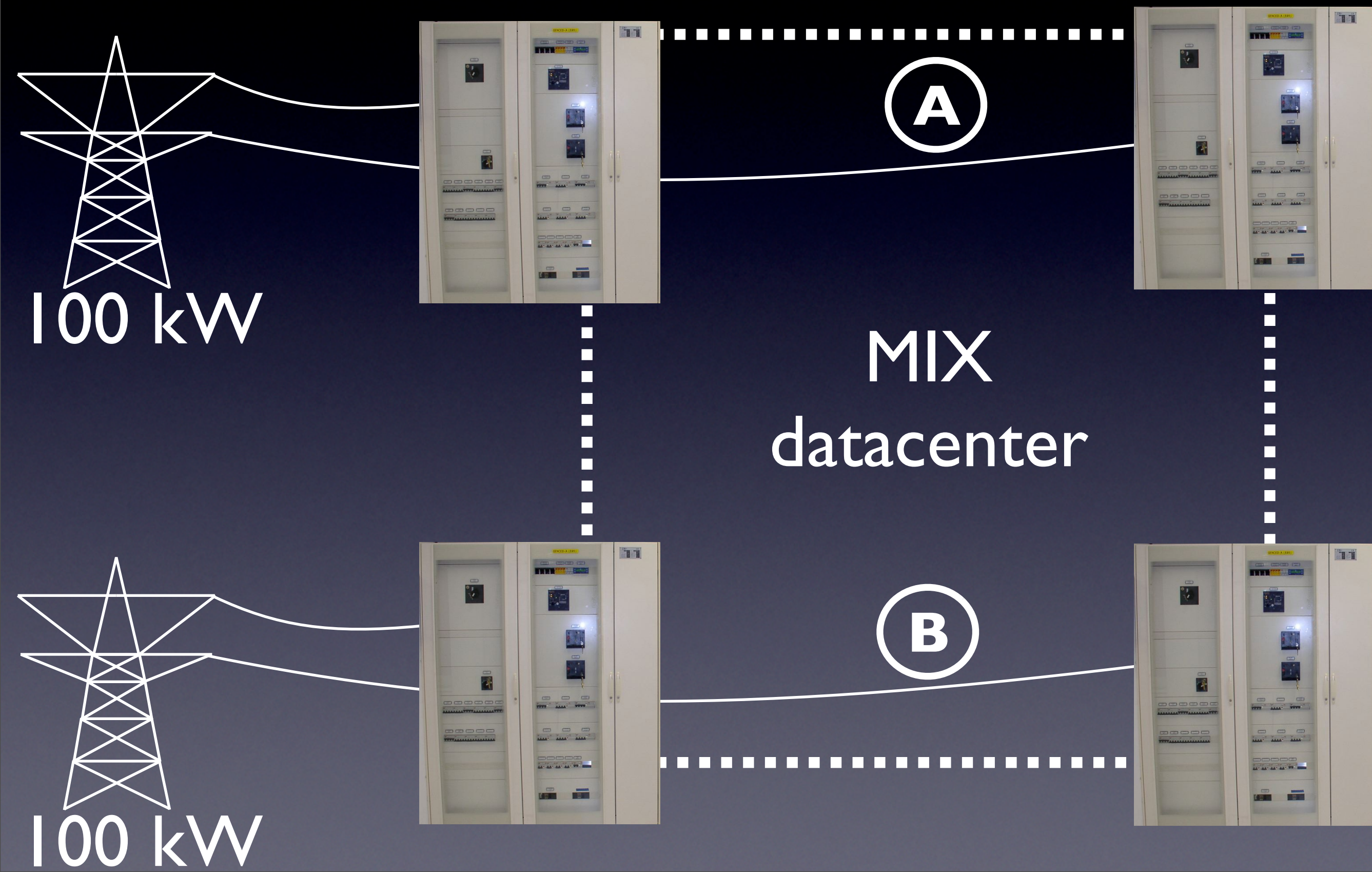


MIX
datacenter

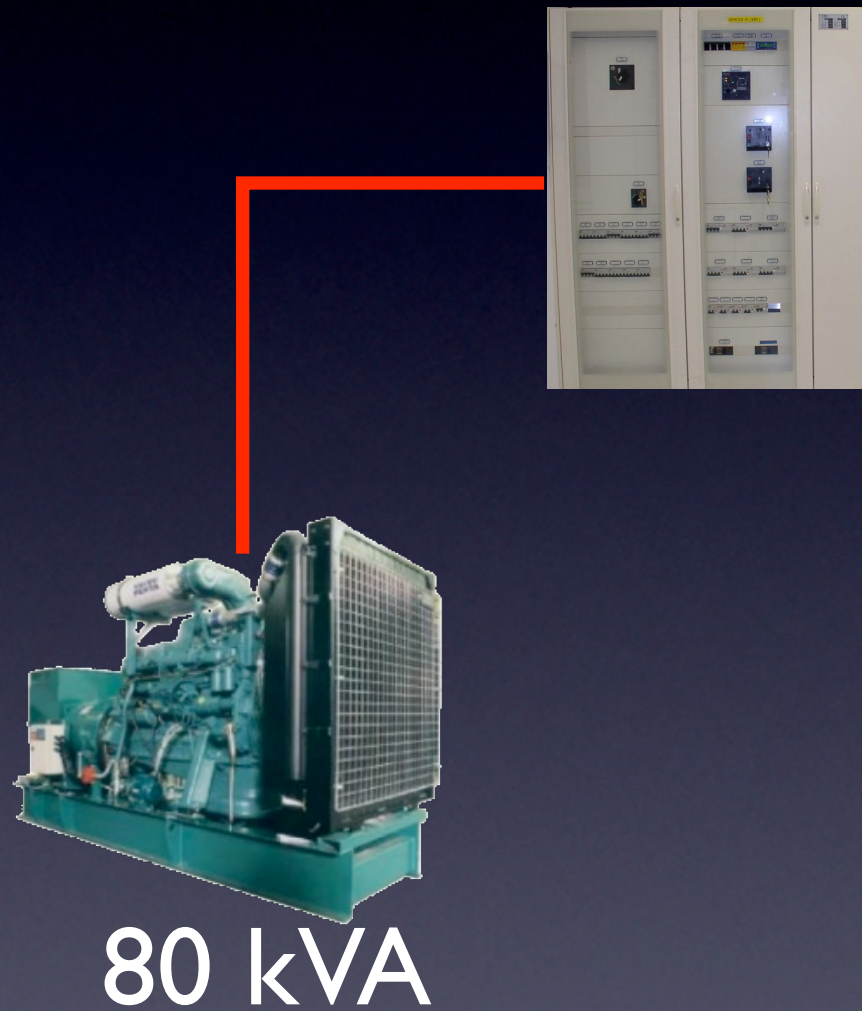
Electrical redundancy



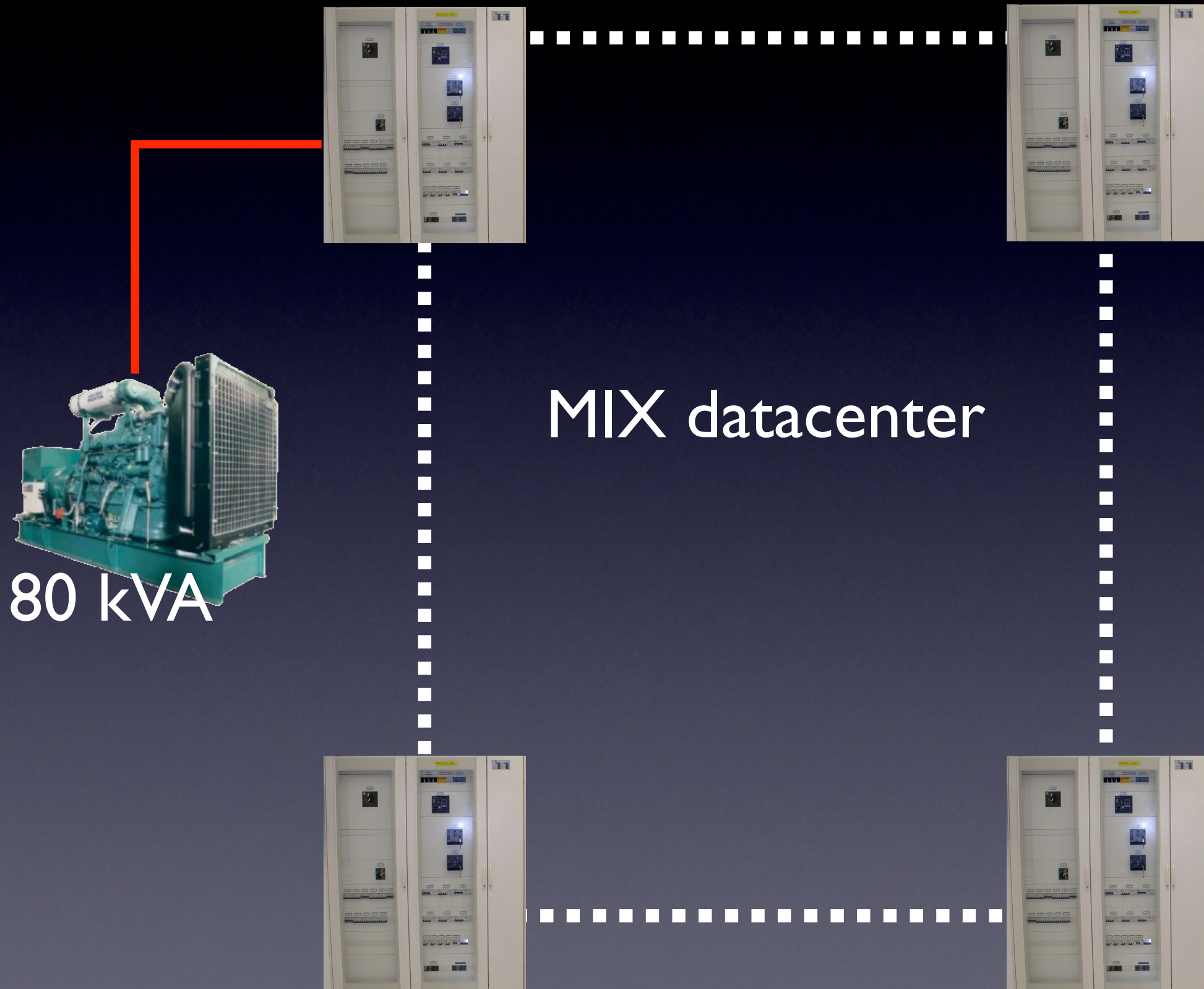
Electrical redundancy



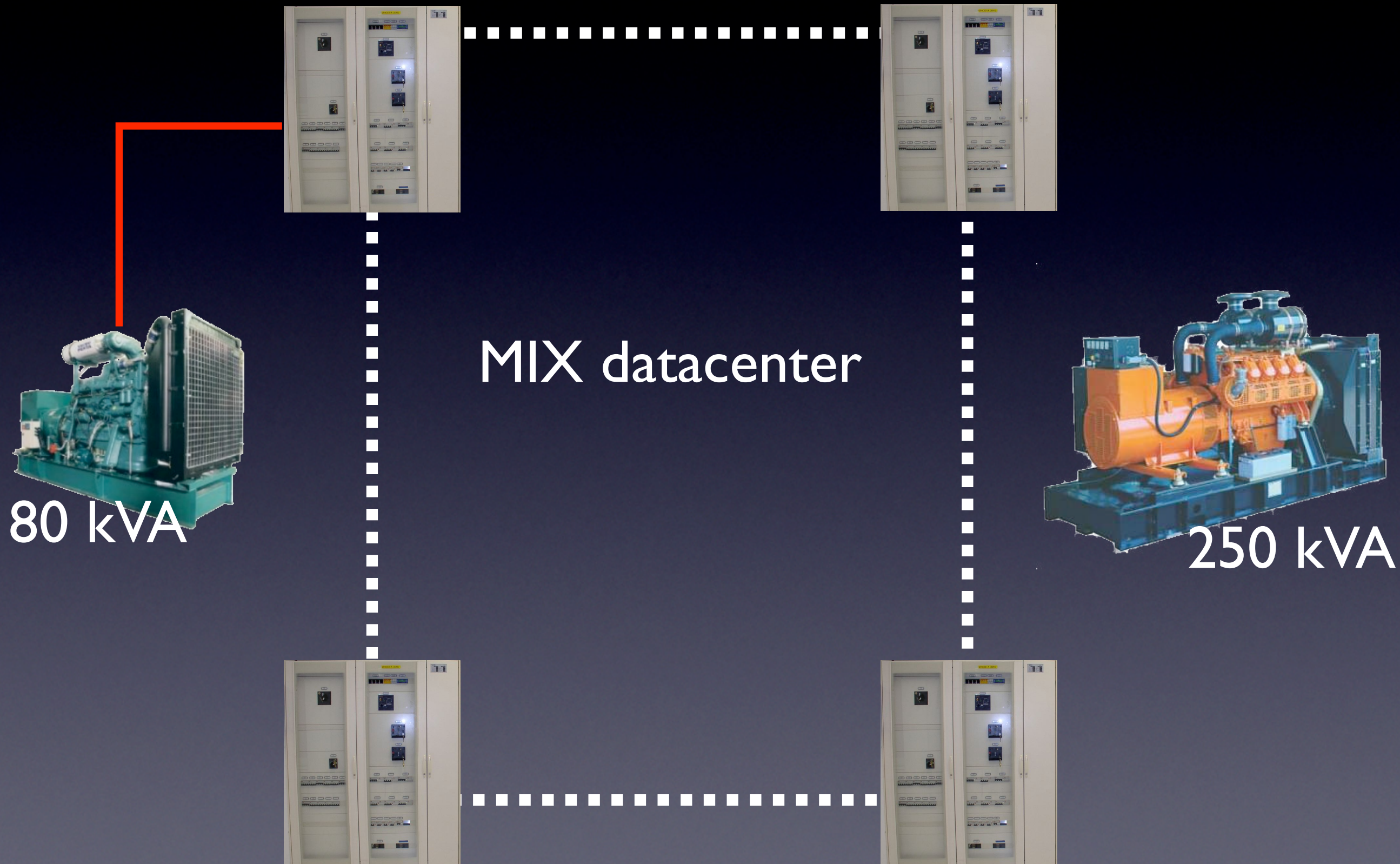
Electrical redundancy



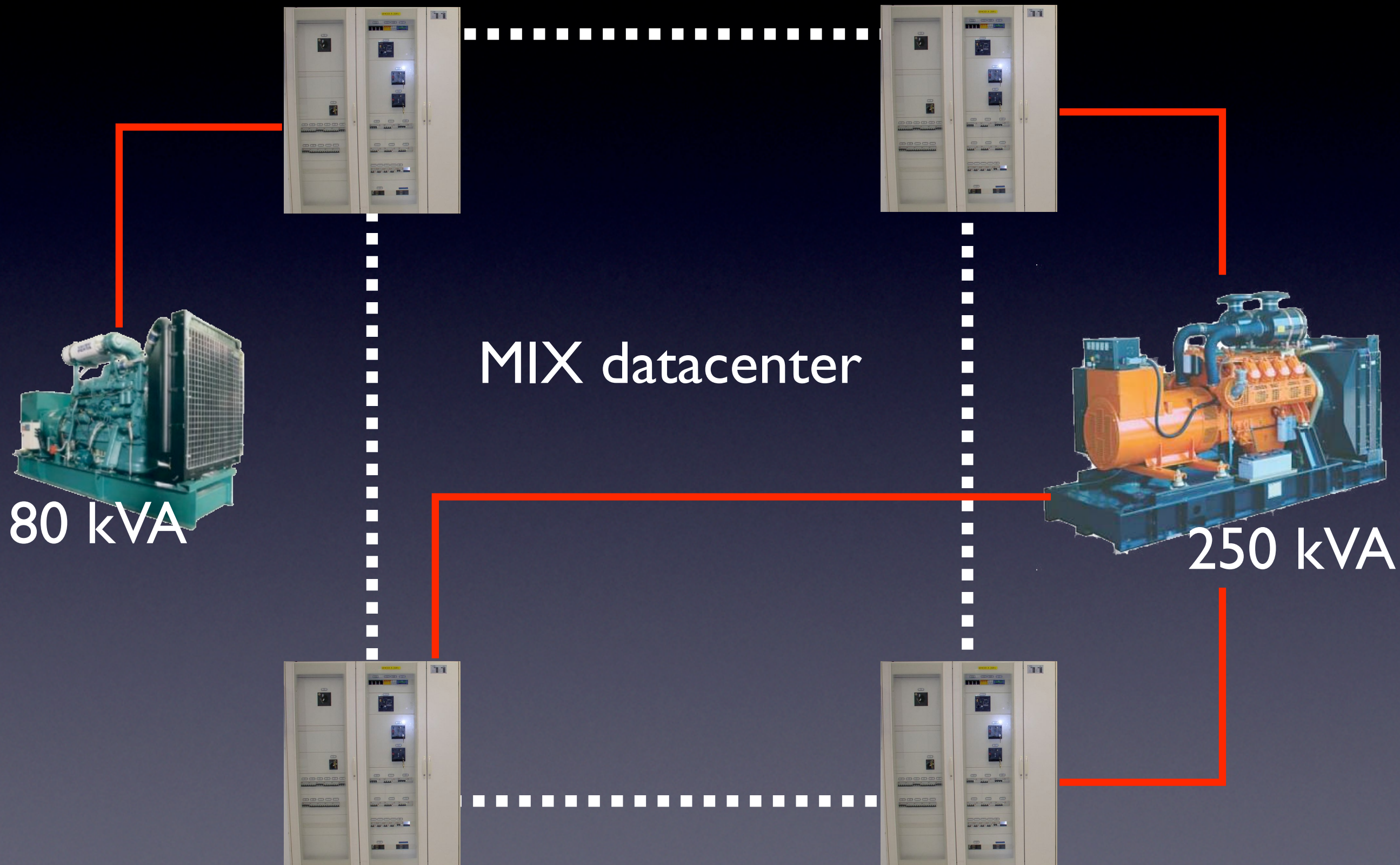
Electrical redundancy



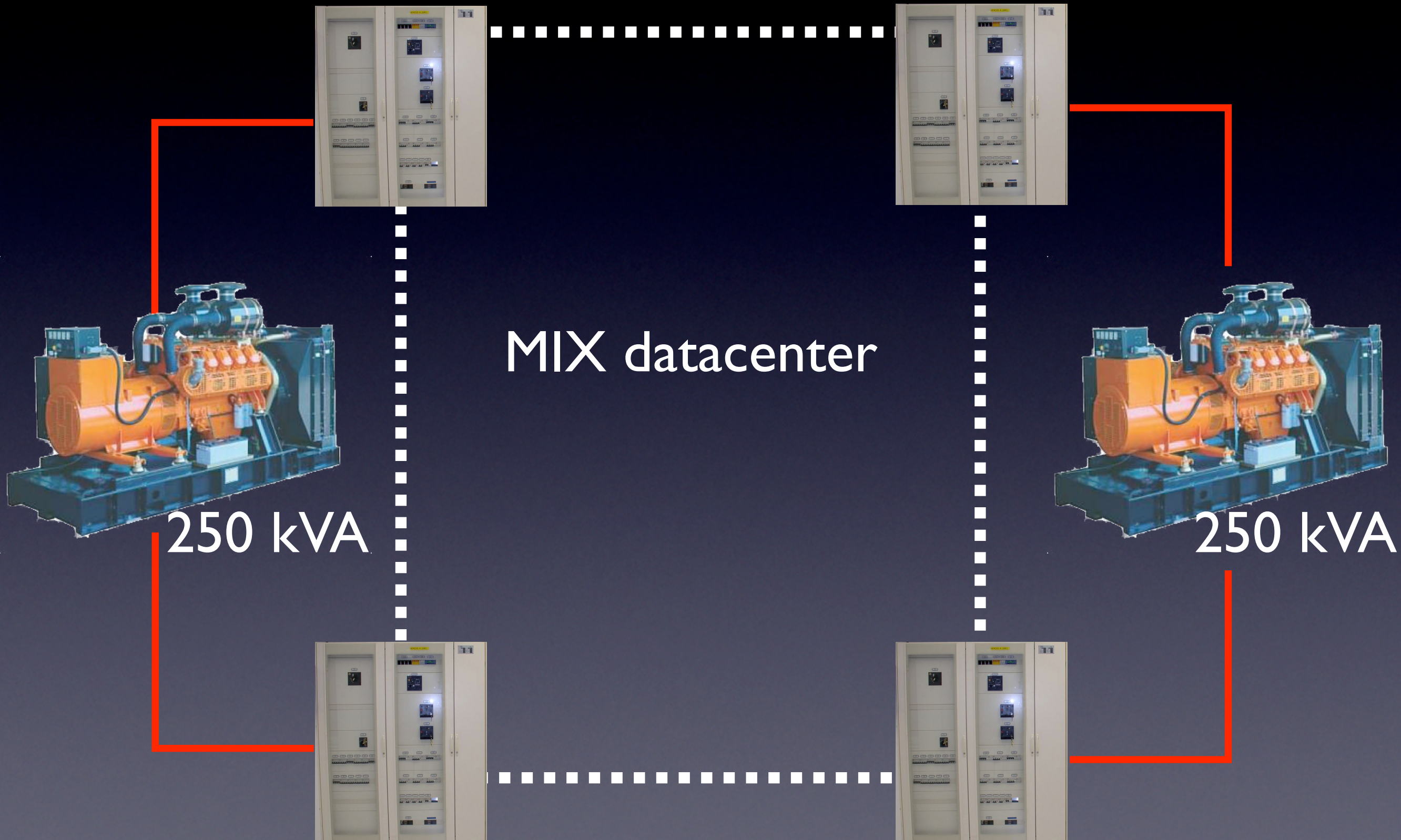
Electrical redundancy



Electrical redundancy



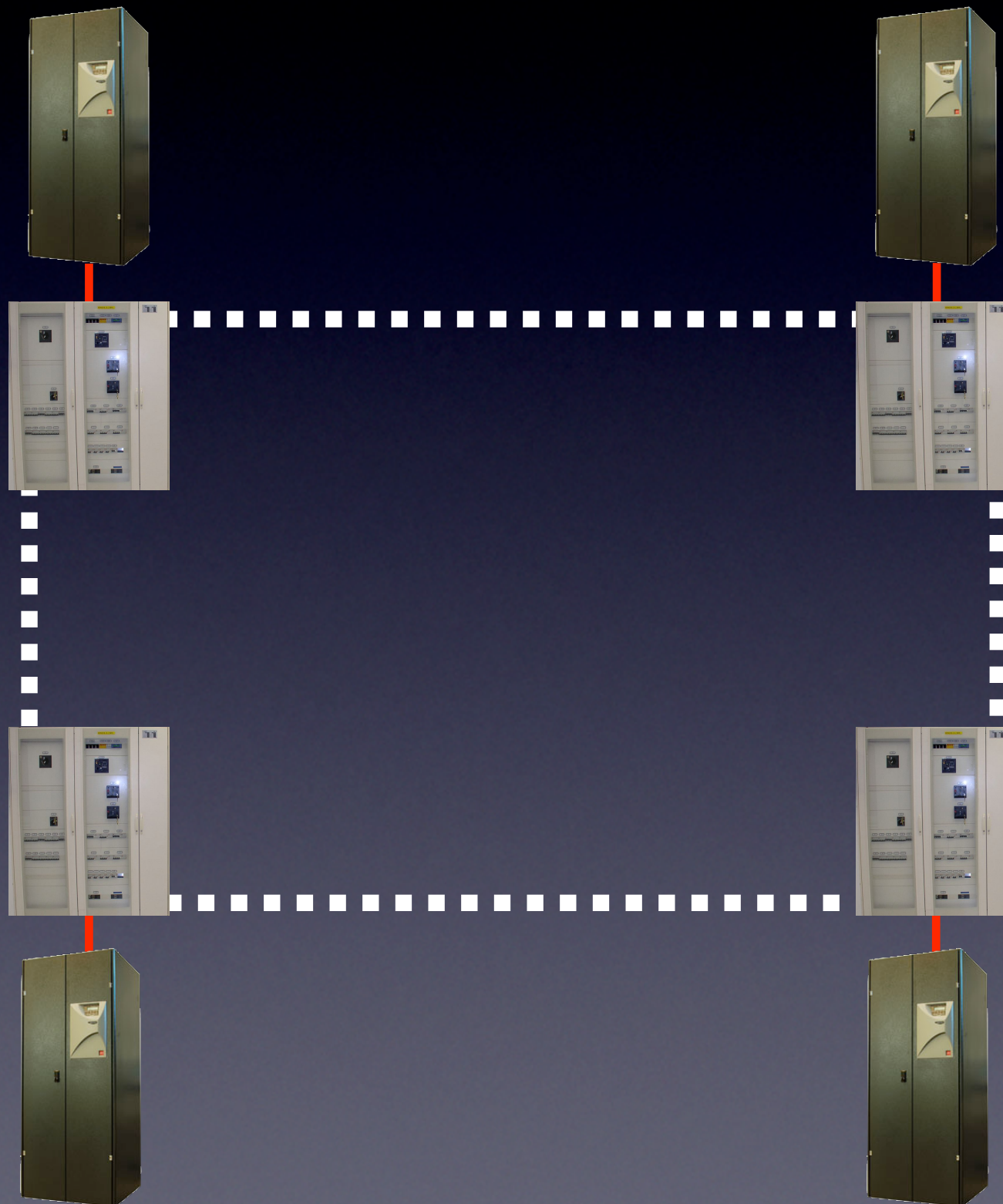
Electrical redundancy



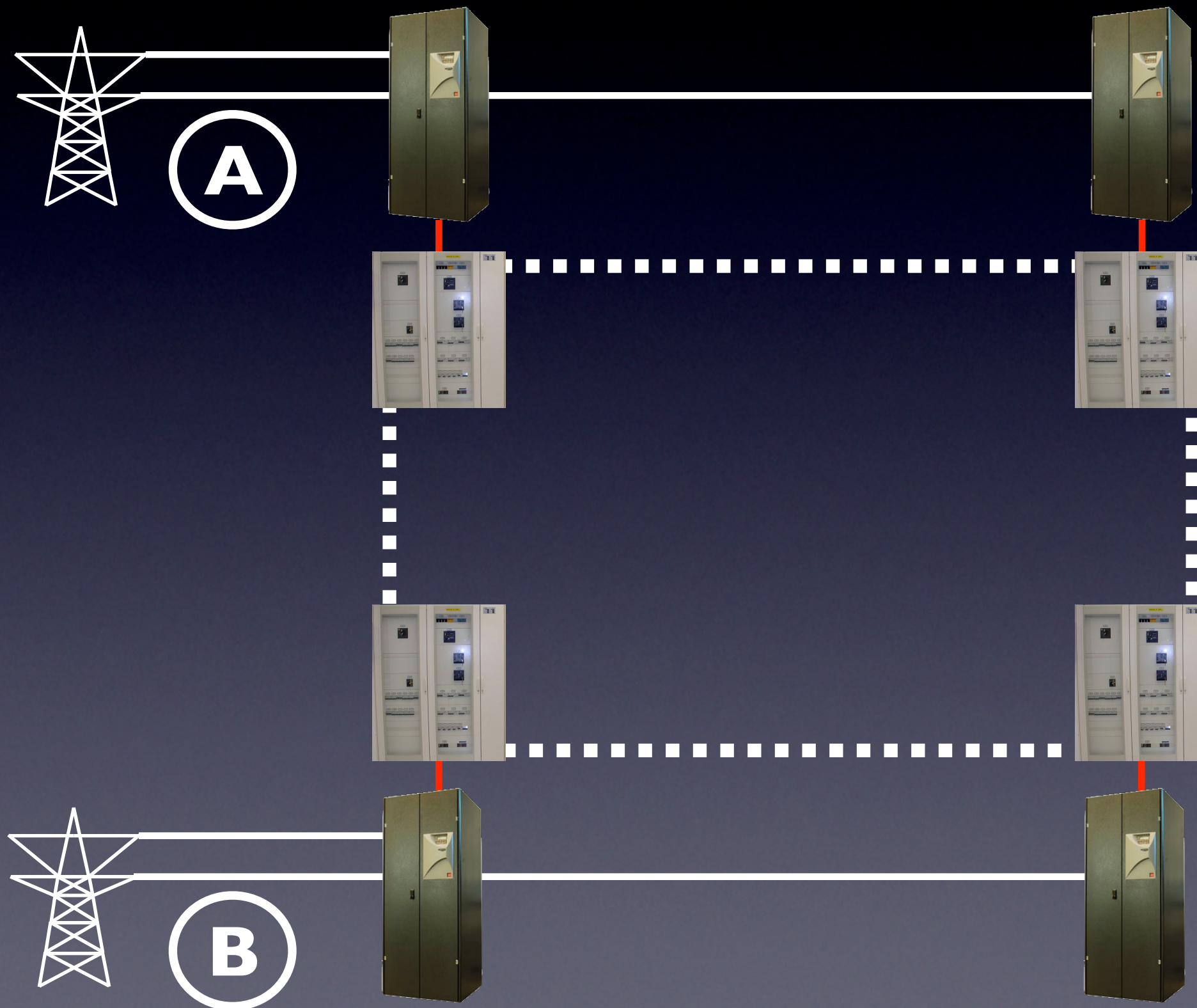
Electrical redundancy



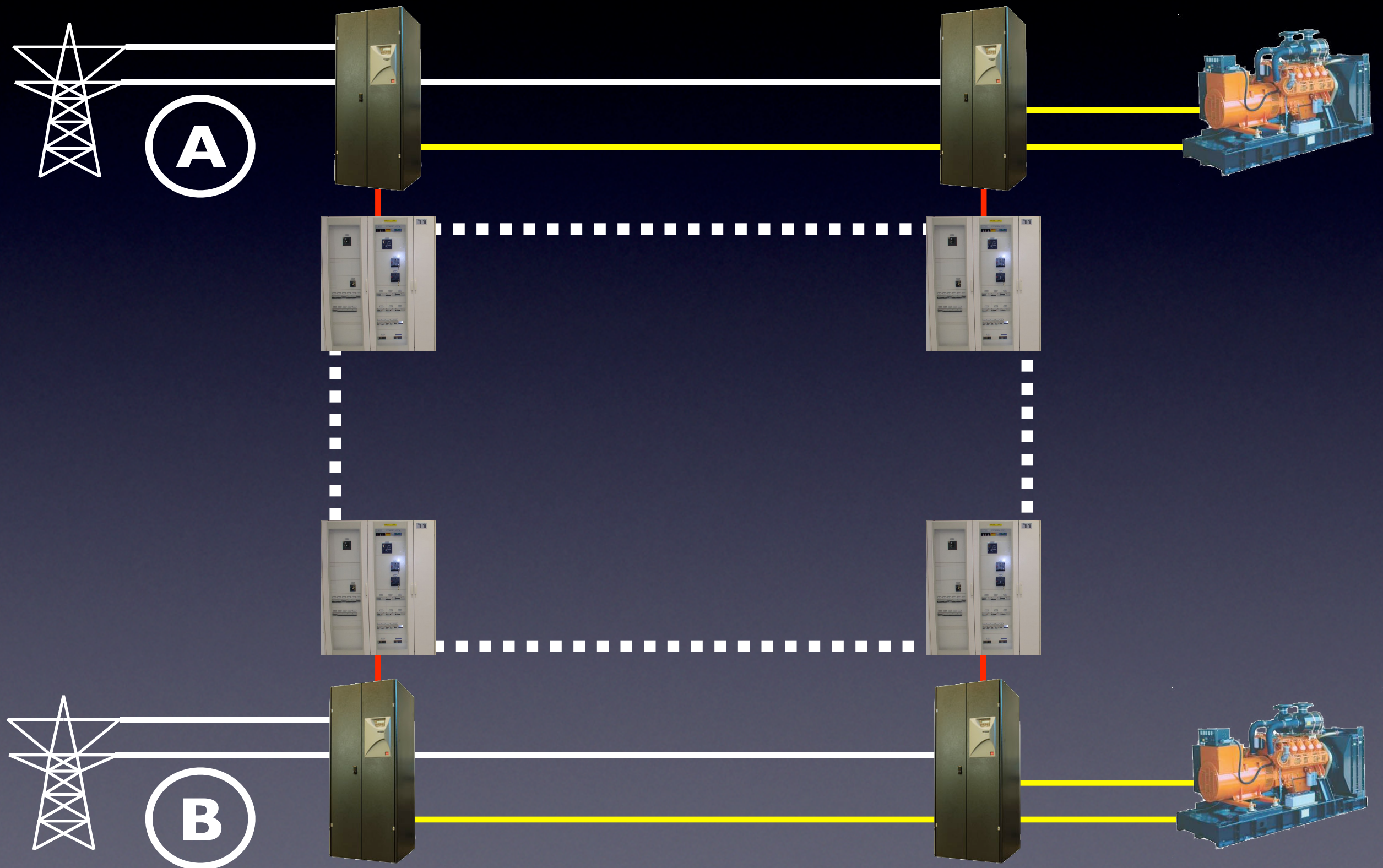
Electrical redundancy



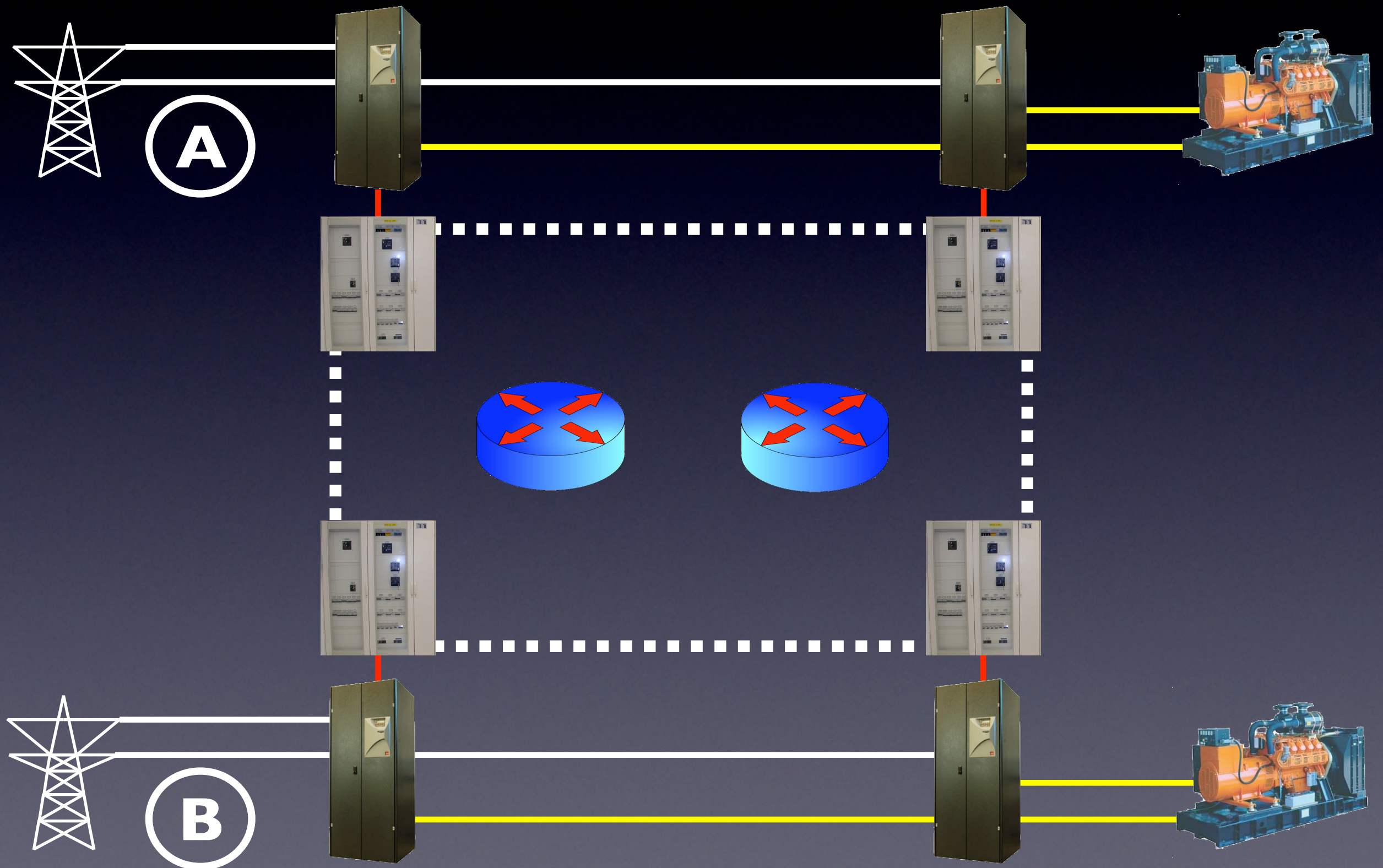
Electrical redundancy



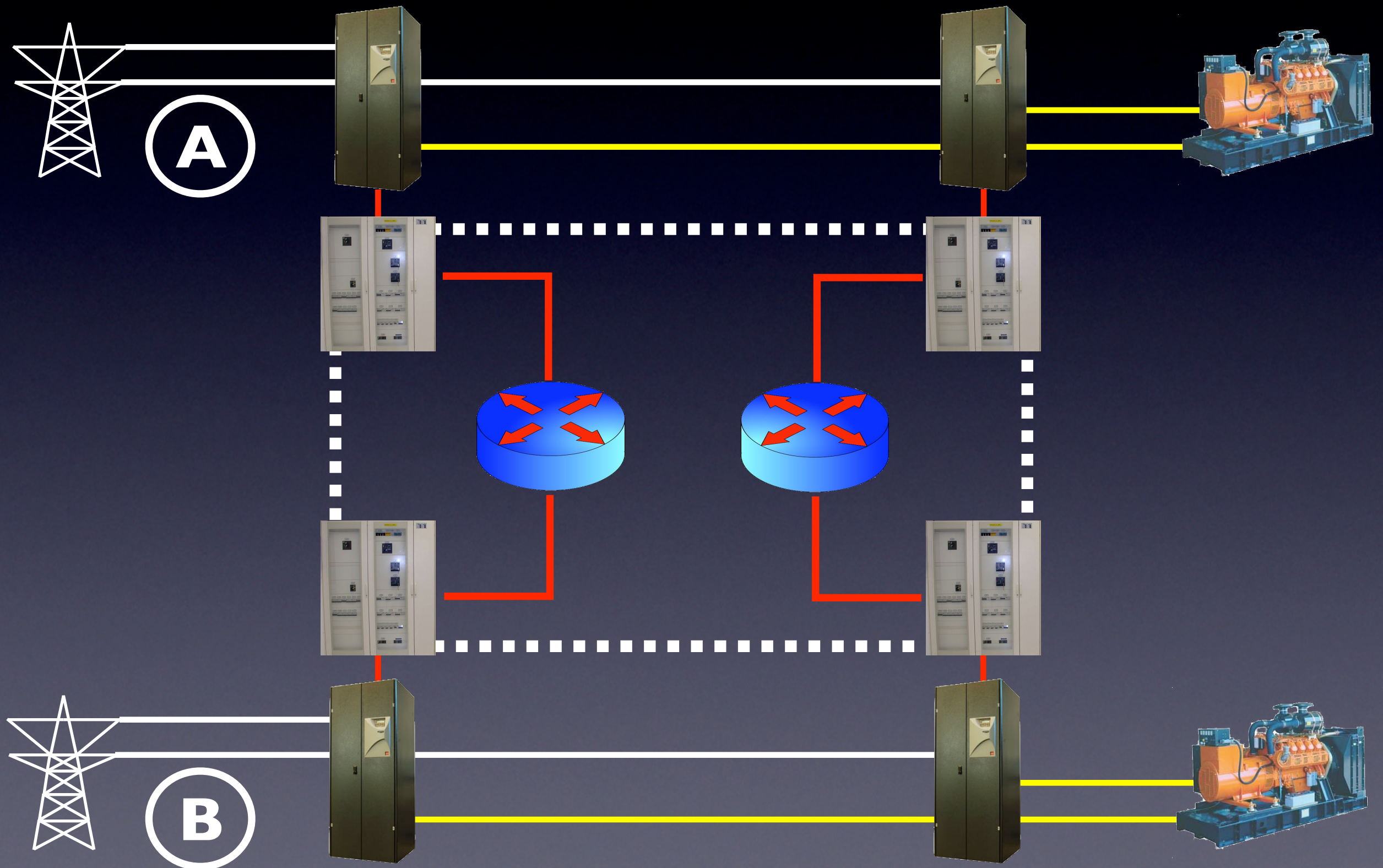
Electrical redundancy



Electrical redundancy



Electrical redundancy



Advantages

- Full redundancy against
 - ▶ Power line failure
 - ▶ UPS failure
 - ▶ Generator failure
- Maintenance “by sector”
 - ▶ No service interruption

Single power supply

- Reasons
 - ▶ impossibility
 - ▶ choice
- Strong suggestion
 - ▶ Second power supply if possible
 - ▶ rack Automatic Transfer Switch

Single power supply



Single power supply



- Redundancy
- Cheaper

Single power supply



- Redundancy
- Cheaper



Single point of failure

Maintenance plan



Black-out simulation	2 times/year
UPS	4 times/year
Generators	3 times/year
DC power system	2 times/year
Cooling systems	monthly
Generators start (no load)	2 times/month
Burglar/fire/flood system	2 times/year

Questions?

- Website
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- Contacts
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 - ▶ noc@mix-it.net
 - ▶ +39 02 4091 5701

