電力壓降防護策略分享 - DUPS

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2012/09/21

UMC

Customer-Driven Foundry Solutions

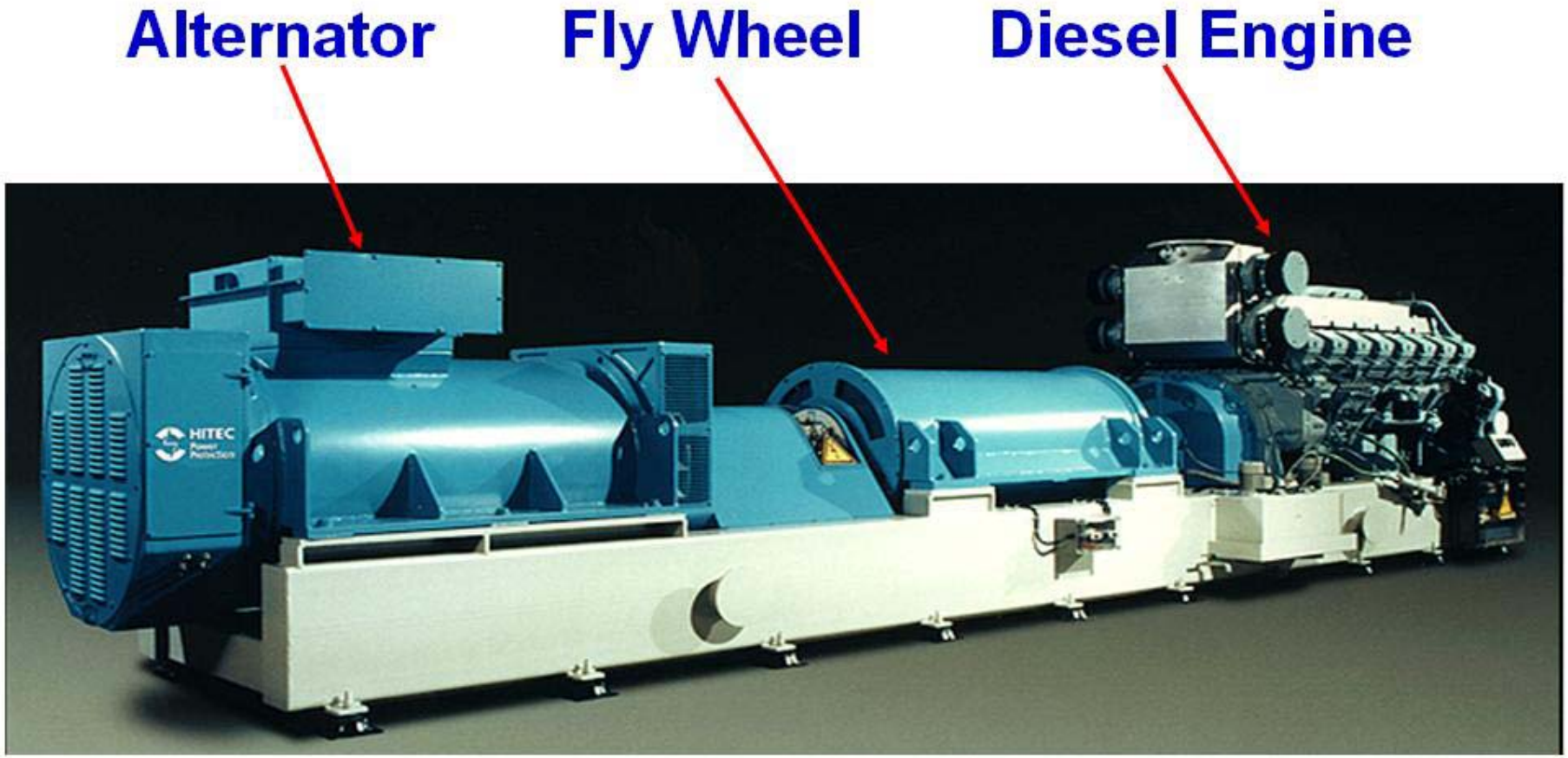
Outline

- DUPS
  - Technical Data
  - Structure
  - Operation Sequence
- UPS supply concept

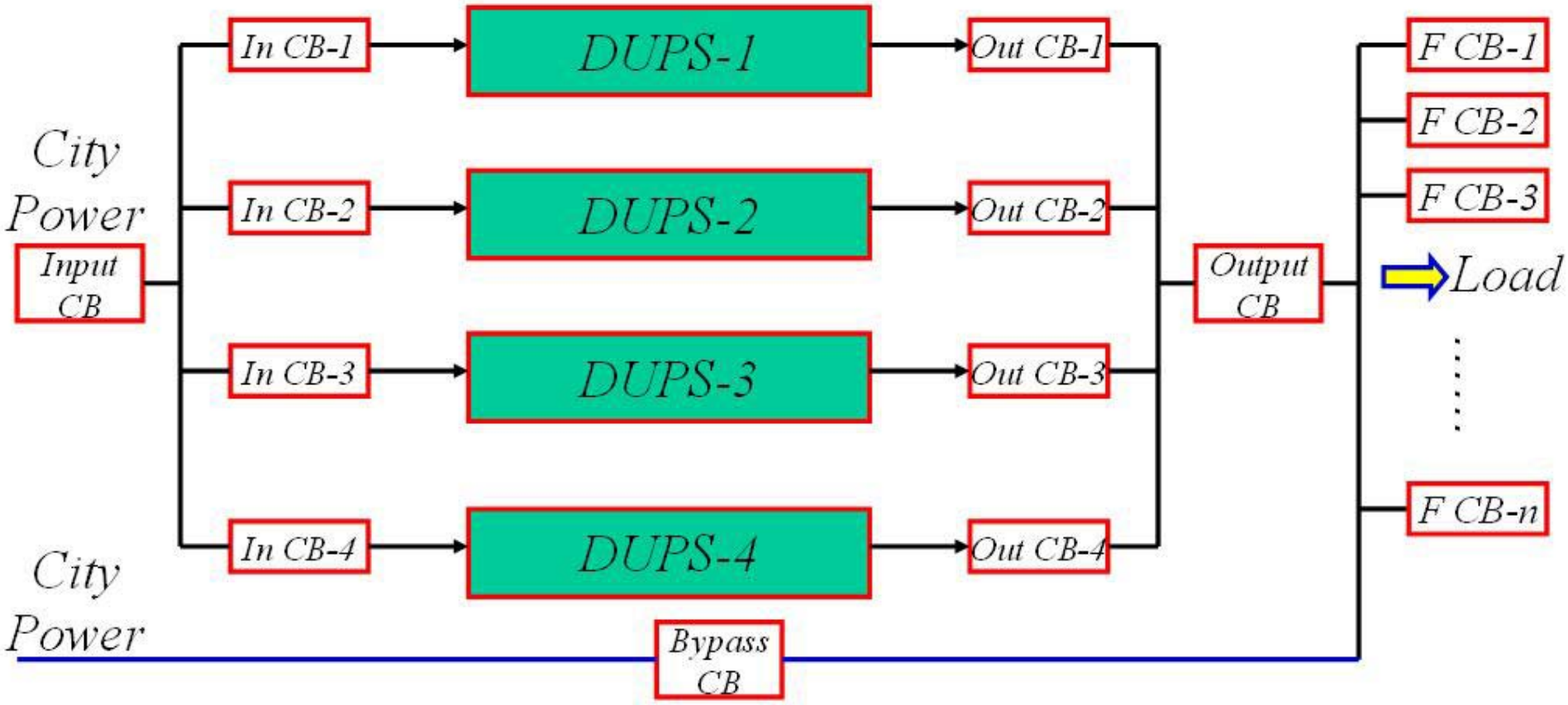
Dynamic Uninterruptible Power Supply

- **Electrical Data**
  - Total Rated Power 1600 kVA
  - Active Power 1280 kW
  - Consumer power factor 0.8
- **Overload capacity**
  - Mains-operation at:
  - 110 % load 60 min.
  - 125 % load 10 min.
  - 150 % load 2 min.
- **Short Circuit Current**
  - Peak short circuit current (max. 10 ms) approx.10x IN
  - Substained short circuit current (max. 3 sec) approx.3 x IN
- **Efficiency / Losses**
  - At rated load and cos. $\varphi = 1$ approx. 92.7%
  - At rated load and cos. $\varphi = 0.8$ approx. 91%

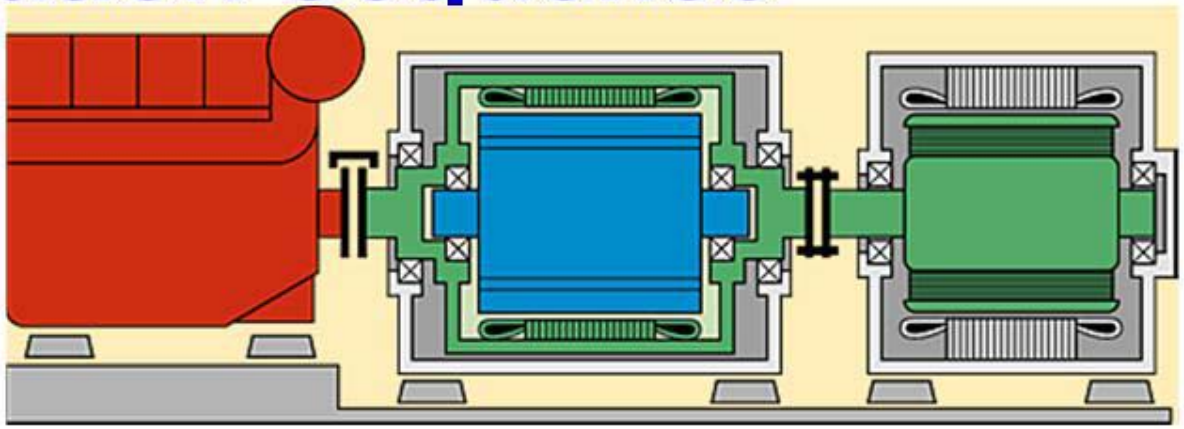
DUPS complete set

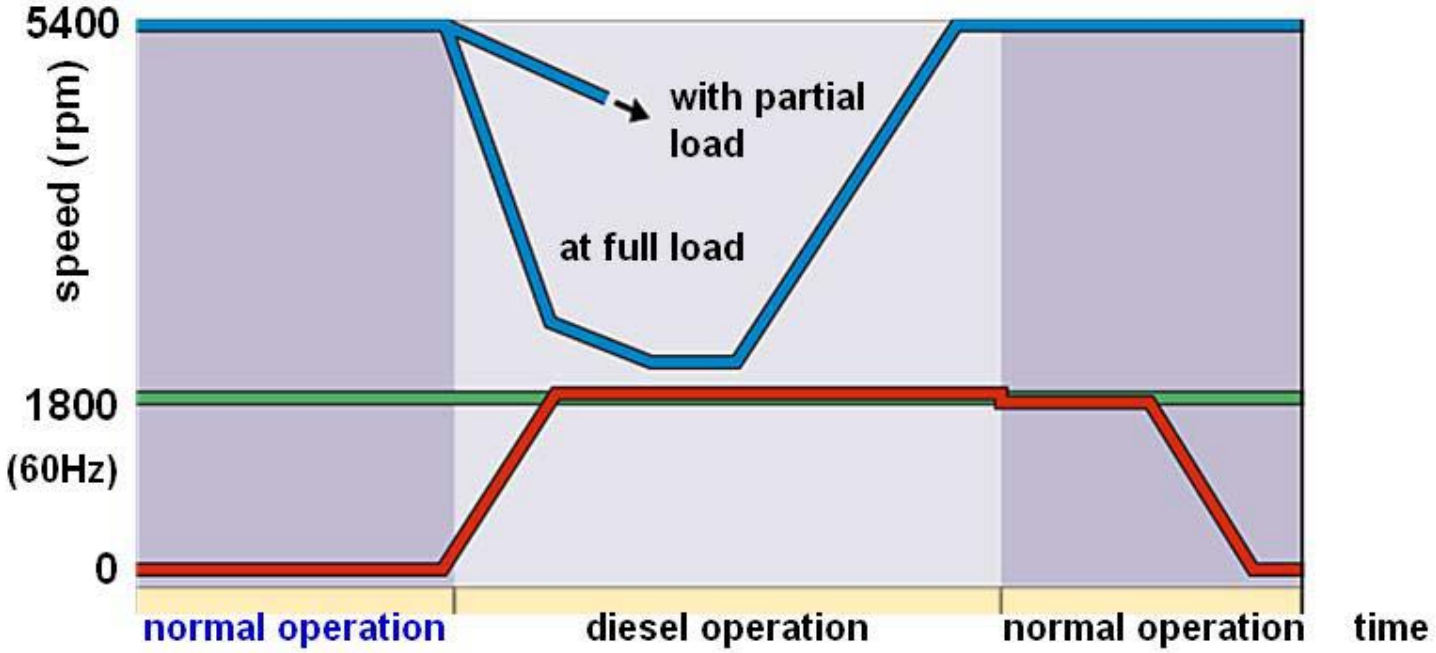


DUPS system


City Power
Input CB
In CB-1
In CB-2
In CB-3
In CB-4
DUPS-1
DUPS-2
DUPS-3
DUPS-4
Out CB-1
Out CB-2
Out CB-3
Out CB-4
Output CB
F CB-1
F CB-2
F CB-3
F CB-n
Load
City Power
Bypass CB

Operation Sequence





UPS supply concept

- Criteria
  - Huge cost loss
  - Damage critical parts
  - By recover time
  - Central supply system

- Risk Assessment
  - By system (DUPS / Down stream)
  - Aggregative pool (Advantage or Disadvantage)

End of report!

Thank you for your participation!