

Power Electronic and Storage Activities at KEMA

Johan Enslin & Gerard Thijssen

j.h.r.enslin@kema.nl; g.thijssen@kema.nl

KEMA, T&D Power

WWW.KEMA.NL

Who is KEMA

KEMA is an independent company providing professional services and know-how, in the fields of:

- energy systems**
- environment**
- R&D, testing and certification**

Technical and Cost-benefit analyses
KEMA primarily serves the Industry, Electric Utilities and their customers.

Staff : worldwide >1 800 engineers and consultants



USA



Belgium



The Netherlands



Germany



Russia



Indonesia



KEMA T & D Power
KEMA Consulting
KEMA Powertest
KEMA KRQ; KPS
XENERGY
MACRO

Canada



Czech Republic



Poland



Hong Kong



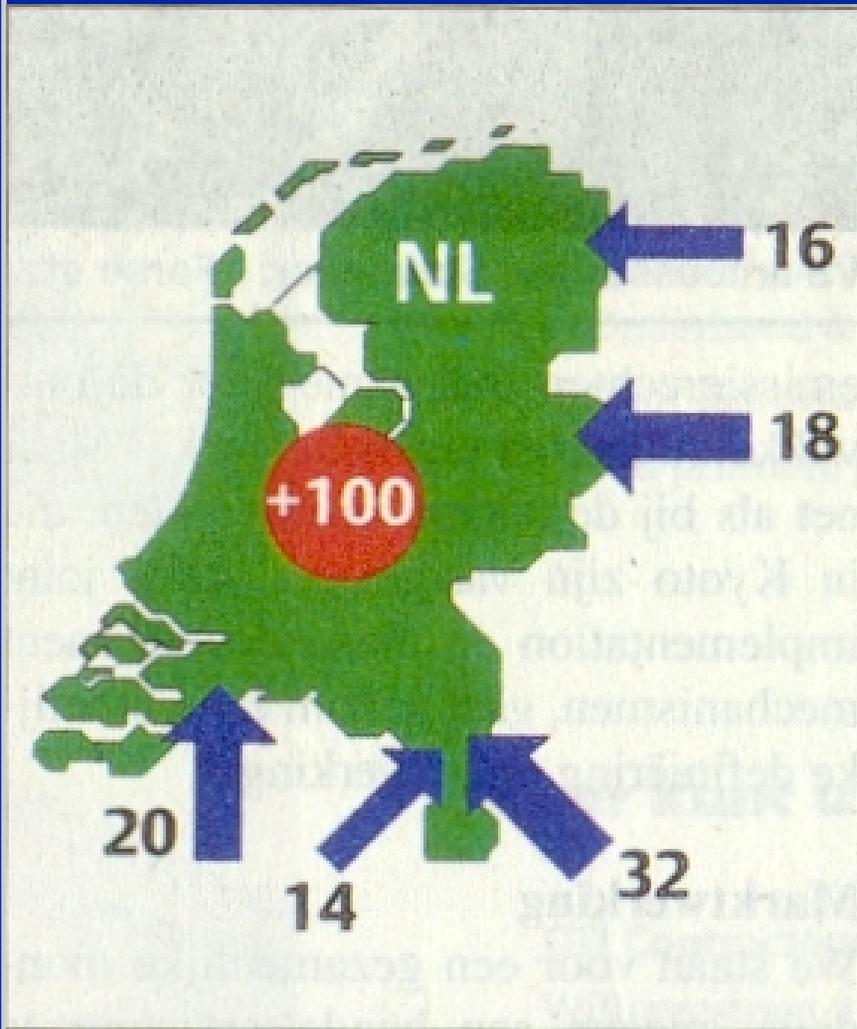
T&D Power



Selected References (PE & Storage)

- **Network Studies and Engineering in Energy Storage, MVDC, Distributed Power, Wind-farms, PV, UPFC, STATCOM, DVR, etc. (European Utilities; EnergieNed, TenneT, Electrabel, Kashima-Kita)**
- **HVDC links: Three-Gorges; NorNed (CPG – China; SEP – Norway;)**
- **Real-Time Digital Simulators & Control Centers (TenneT; NaPoCo – Philippines)**
- **Railway power system design (RIB - NL)**
- **Rectifier station design (Alusaf - ZA)**
- **Failure Analyses**
- **Power Quality & EMC analysis, audits, mitigating solutions. (European companies: Corus, Utilities, NS, Schiphol, Etc.)**

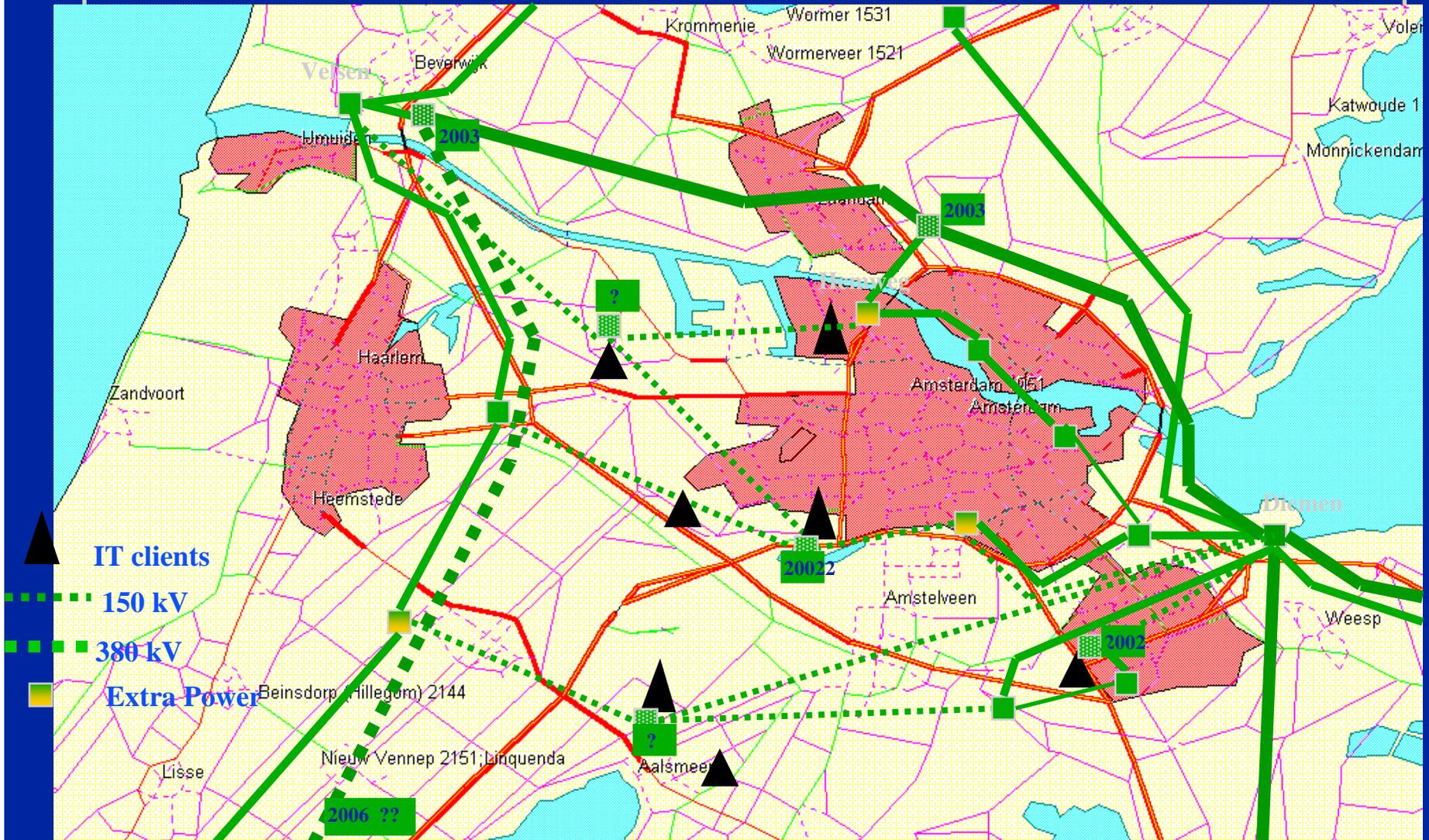
Net Power Import to The Netherlands



- Reactive Power Control
- FACTS & SVC
- Storage
- Wind Farms

Project 2002 Full Power Amsterdam

From 1000 MW to 2000 MW



T&D Power

