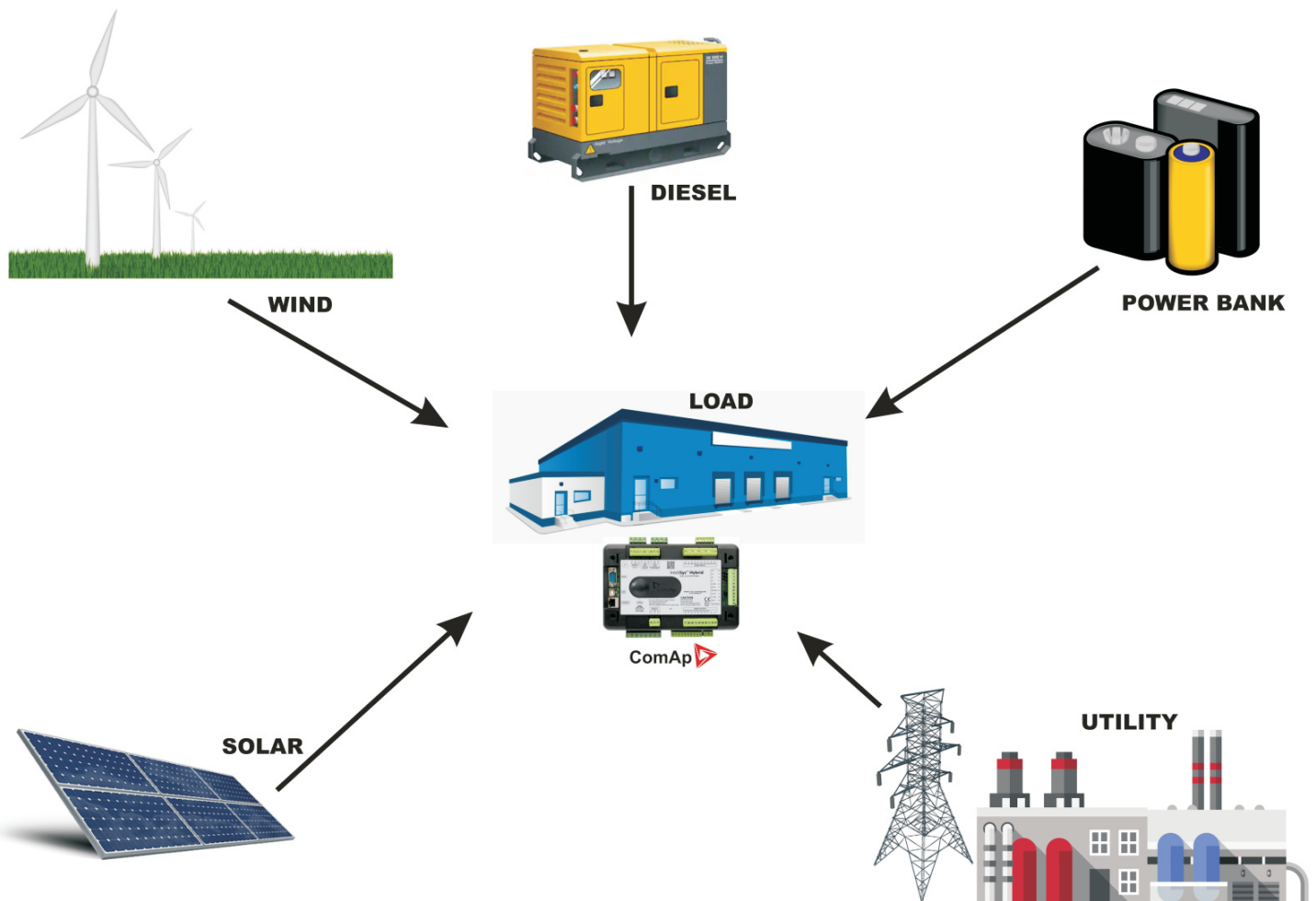




R.A. MICROGRID SYSTEM AN EFFICIENT & WISE POWER MANAGEMENT



Suite # 216, 2nd Floor, MASHREQUE CENTER, GULSHAN-E-IQBAL BLOCK 14
KARACHI - PAKISTAN, TEL +92-21-34852125, 34852126, FAX . +92-21-34853363
EMAIL. raelect@cyber.net.pk, WEB, www.raeng.com

WHAT IS MICROGRID SYSTEM

A Microgrid is a localized group of electricity sources and loads that normally operates connected to and synchronous with the traditional wide area synchronous grid (macrogrid), but can also disconnect to "island mode" — and function autonomously as physical or economic conditions dictate.[1]

In this way, a microgrid can effectively integrate various sources of distributed generation (DG), especially Renewable Energy Sources (RES) - renewable electricity, and can supply emergency power, changing between island and connected modes.

BENEFITS

- Provide efficient, low-cost, clean energy
- Improve the operation and stability of the regional electric grid
- Critical infrastructure that increases reliability and resilience
- Reduce grid "congestion" and peak loads
- Enable highly-efficient CHP, reducing fuel use, line losses, and carbon footprint
- Integrate CHP, renewables, thermal and electric storage, and advanced system and building controls

► IntelliSys^{NTC} Hybrid

IntelliSys^{NTC} Hybrid controller offers complex control of PV/Diesel hybrid applications (microgrids). It allows smooth integration of renewable energy to conventional power generation from reciprocating gen-sets while maintaining high reliability, safety and efficiency of the site.

Key Functions

- ◆ Modbus RTU/TCP**interface to multiple PV inverters
- ◆ Protection against gen-set underloading
- ◆ Dynamic spinning reserve management for
- ◆ maximized fuel savings
- ◆ Support of up to 100% renewable energy penetration*

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Key Features

- Extensive flexibility due to built-in PLC
- Interface with various site components (PV inverters, BMS, gen-set controllers, etc.)
- Smooth integration of renewable energy source(s) with genset(s), energy storage systems and the grid
- Direct PV output power control (analog/digital or Modbus)
- Continuous monitoring and control of all energy sources (Actual power output from: PV, Genset, Battery and grid)
- Statistics of generated energy and fuel consumption
- Long term renewable energy penetration calculation
- Inputs and outputs configurable for various customer needs
- Interface to remote display units (InteliVision 8, InteliVision 5 RD, InteliVision 12Touch, InteliVision 18Touch)
- USB 2.0 slave interface
- Ethernet, Modbus and CAN communication
- Pre mortem history (50 records)
- Event-based history (up to 4000 records)
- 160 additional programmable protections



For more details please click the link below

www.raeng.com



Thanks for your time
(R.A. Engineering)