

ZIV Protection & Control IEDs & Systems

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UtilityWeek
LIVE
2024
21-22 MAY | HALL 12
NEC BIRMINGHAM



ZIV e-NET
FLEX family
suite:

**all protection
functions**

ZIV IRL

**Compact Feeder Multifunction
solution for MV switchgear,**
with Load Shedding Function to
ensure the stability of the system,
Back-Up performing capability in
HV lines and powerful built-in
Control Logic Module.



ZIV IRS

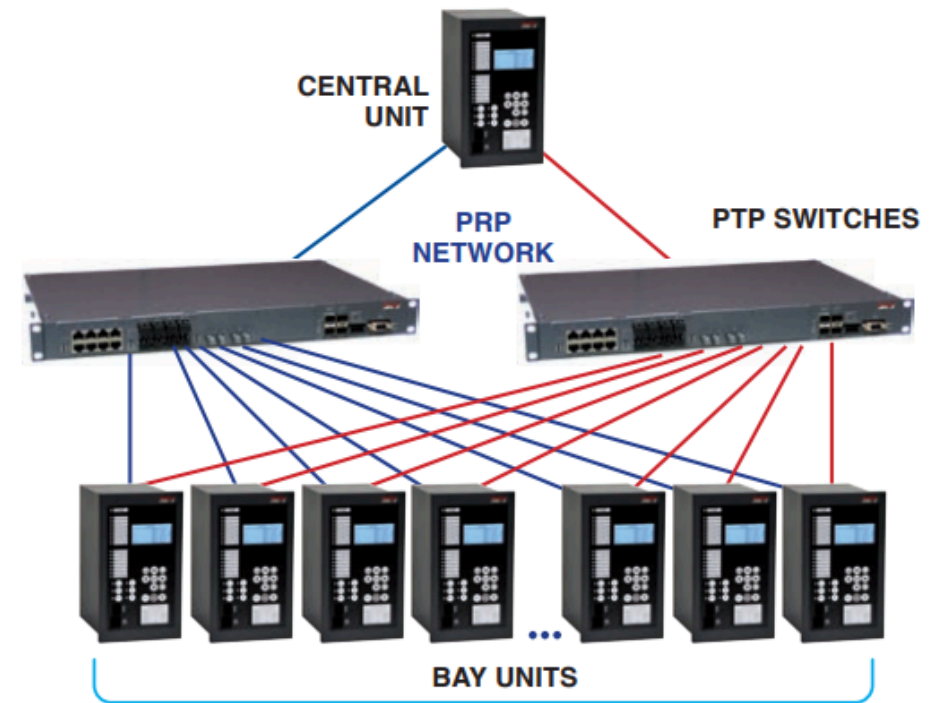
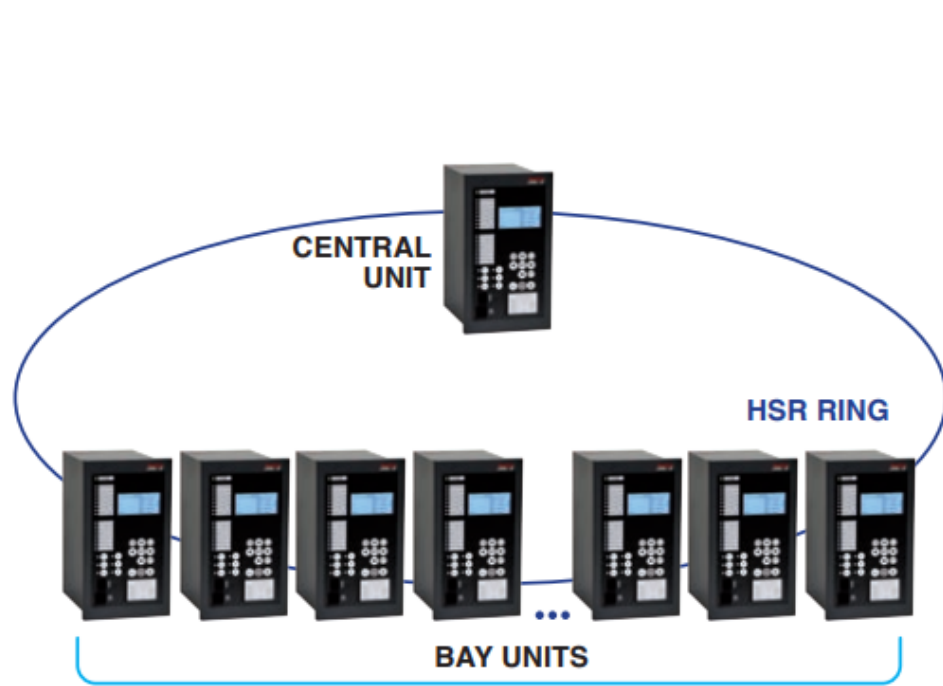
**Self-powered Overcurrent
and Breaker Failure
Protection Relay with
Harmonic Blocking**



Distributed Busbar Protection



DBF



With Ethernet HSR or PRP Redundant communication between the central and bay units, based on process bus

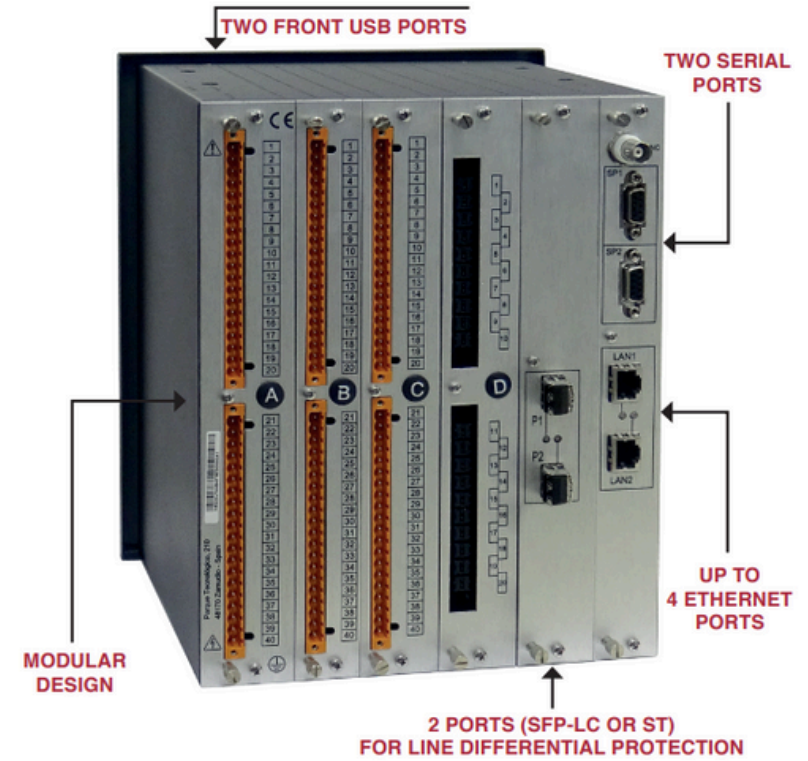
Line Differential Protection with Distance Backup



DLF

Both units are suitable for lines of any voltage level, overhead or under ground, multiterminal, and single or parallel circuits.

- DLF-A: for single breaker
- DLF-B: for double breaker or breaker-and-a-half, when CTs are at the line side (1 single set of 3 CTs)

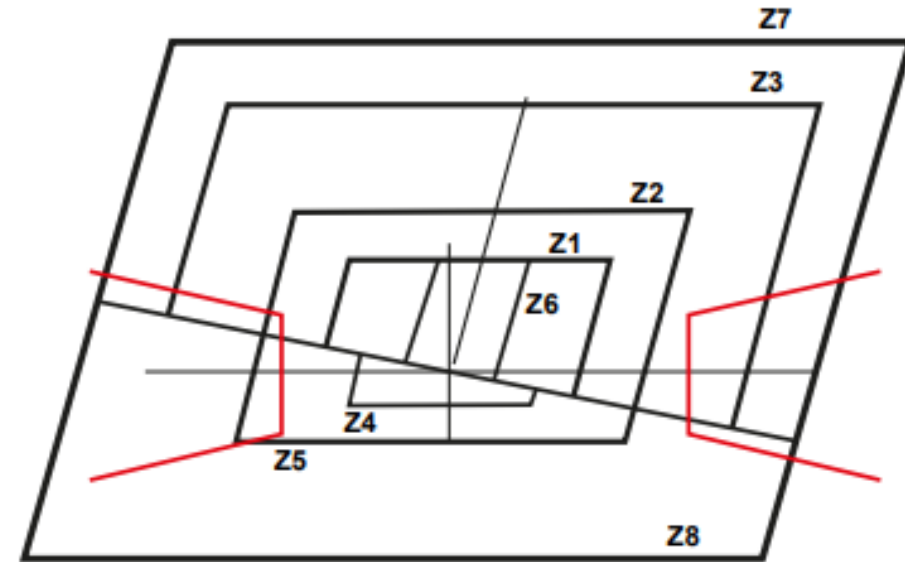


Distance Protection

ZLF

Suitable for lines of any voltage level, single or double circuit breaker with any configuration: overhead or underground, single or parallel circuits

- ZLF-B: for single breaker
- ZLF-C: for double breaker or breaker-and-a-half



Distance zones with quadrilateral characteristic and load limiters



Transformer Protection



IDF

for two to four winding transformers or autotransformers, of any voltage level, with single or double circuit breaker.

- IDF-A: for two windings transformers
- IDF-B: for up to three windings transformers
- IDF-E: for up to four windings transformers, or three windings transformers with one winding on breaker-and-a-half



Feeder Protection



IRF

for distribution feeders, transformers and generators, transmission line backup, and BCU (Bay Control Unit for single or double circuit breaker).

- IRF-A: MV Feeder Protection & Control
- IRF-B: double breaker or breaker-and-a-half BCU
- IRF-C: general alarms BCU / I/O Box
- IRF-D: single breaker BCU

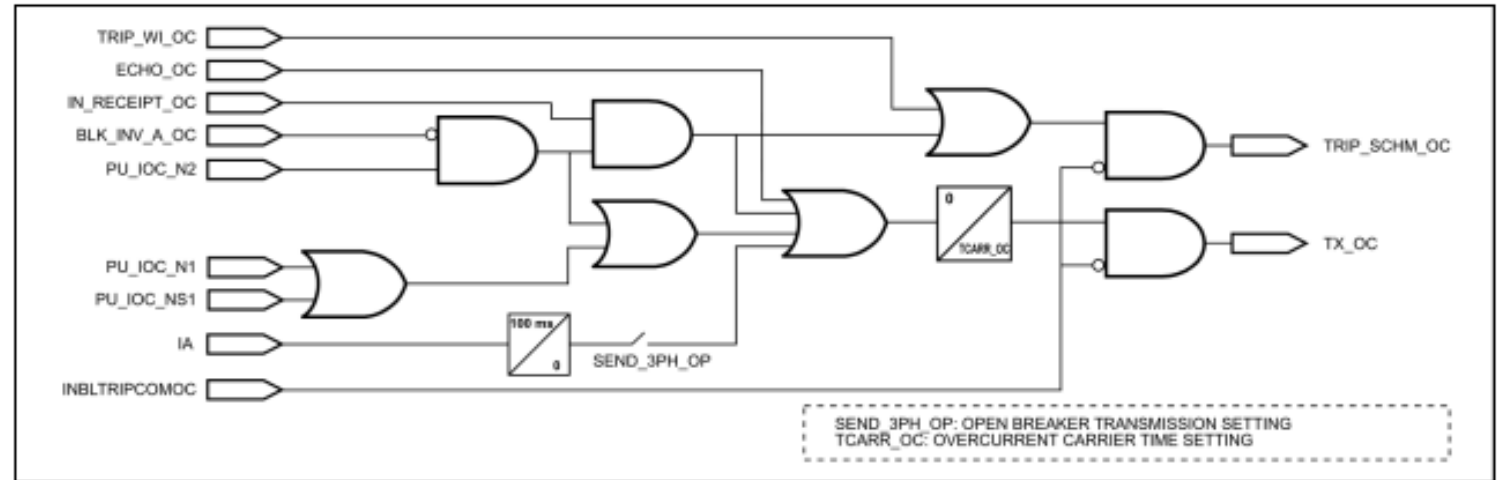


Figure 6. Permissive Overreach Trip Scheme Block Diagram (Overcurrent).

Automatic Voltage Regulator



RTF

for up to 5 power transformers in parallel.

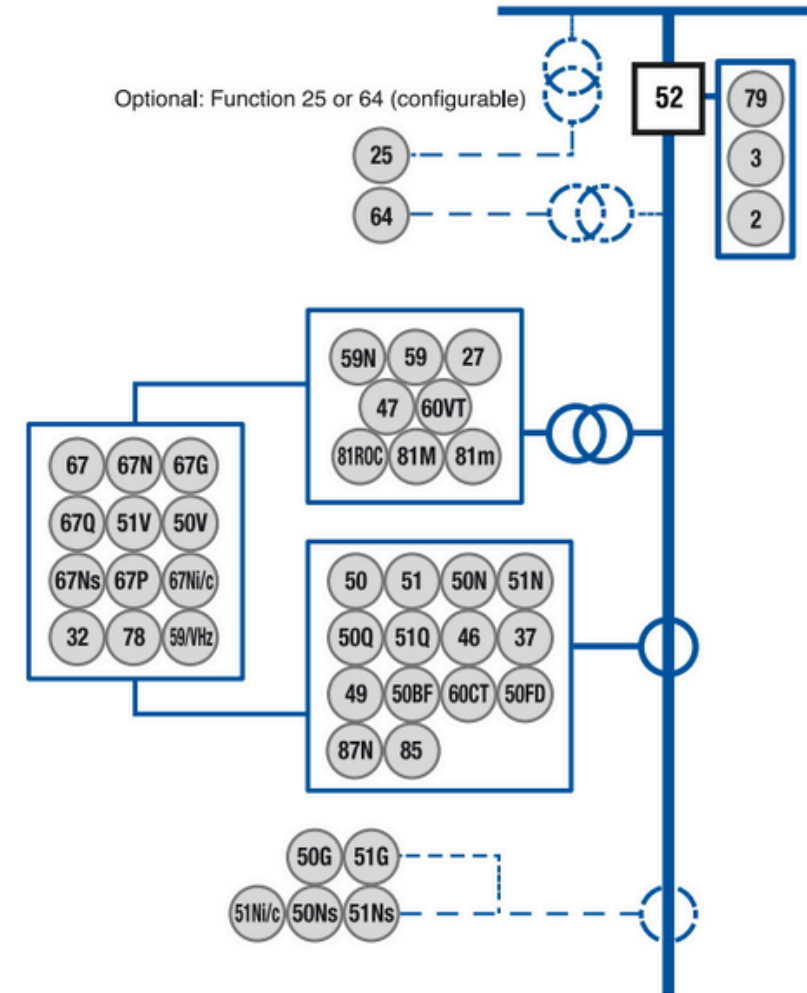


ANSI	Function	Uns.
90	Voltage Regulator.	1
	LDC (LDC-Z, LDC R-X).	1
	Under Voltage Block with Temporization.	1
	Maximum Switching Current Block.	1
	Voltage Out of Range Block with Temporization and Reset.	1
	Power Reversal Detection.	1
	Tap Changer Monitoring.	1
59	Phase Overvoltage.	1
81m	Underfrequency.	1
60VT	VT Supervision.	1

Compact Feeder Multifunction Protection

IRL-F

- Compact Feeder Multifunction solution for MV switchgear, with Load Shedding Function to ensure the stability of the system, Back-Up performing capability in HV lines and powerful built-in Control Logic Module

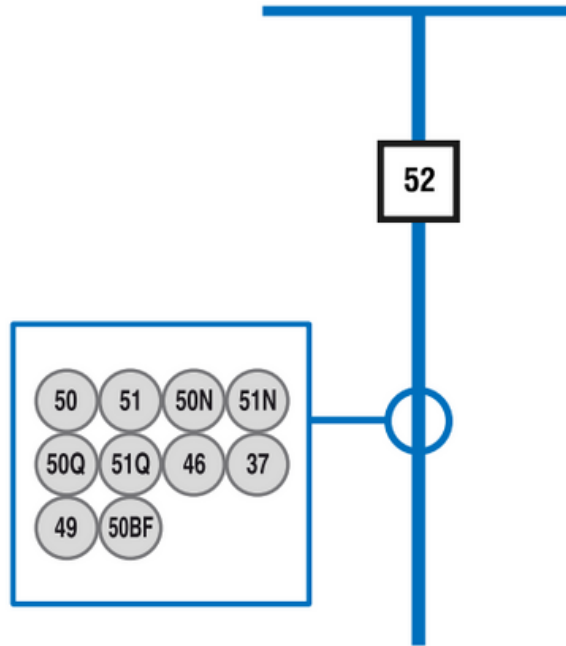


Self-powered Overcurrent and Breaker Failure Protection Relay with Harmonic Blocking



IRS

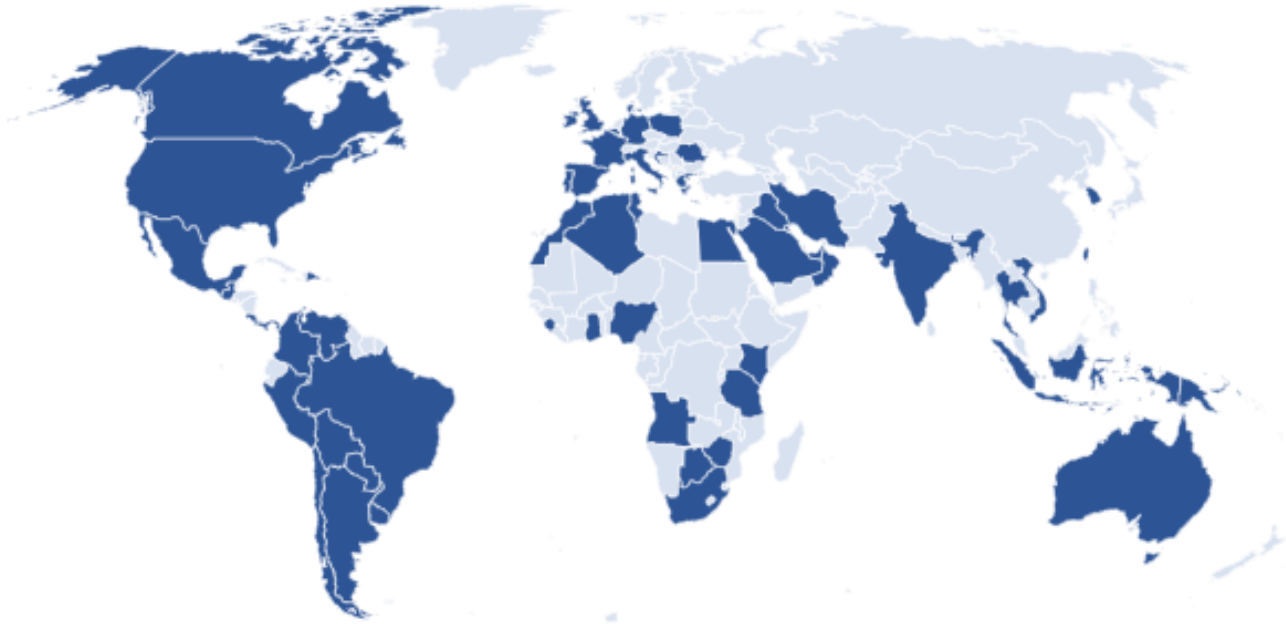
Where dependable auxiliary power source is not available, the IRS Relay can be energized either directly from Main Current Transformers, AC/DC Auxiliary Voltage or through the USB Front Port.



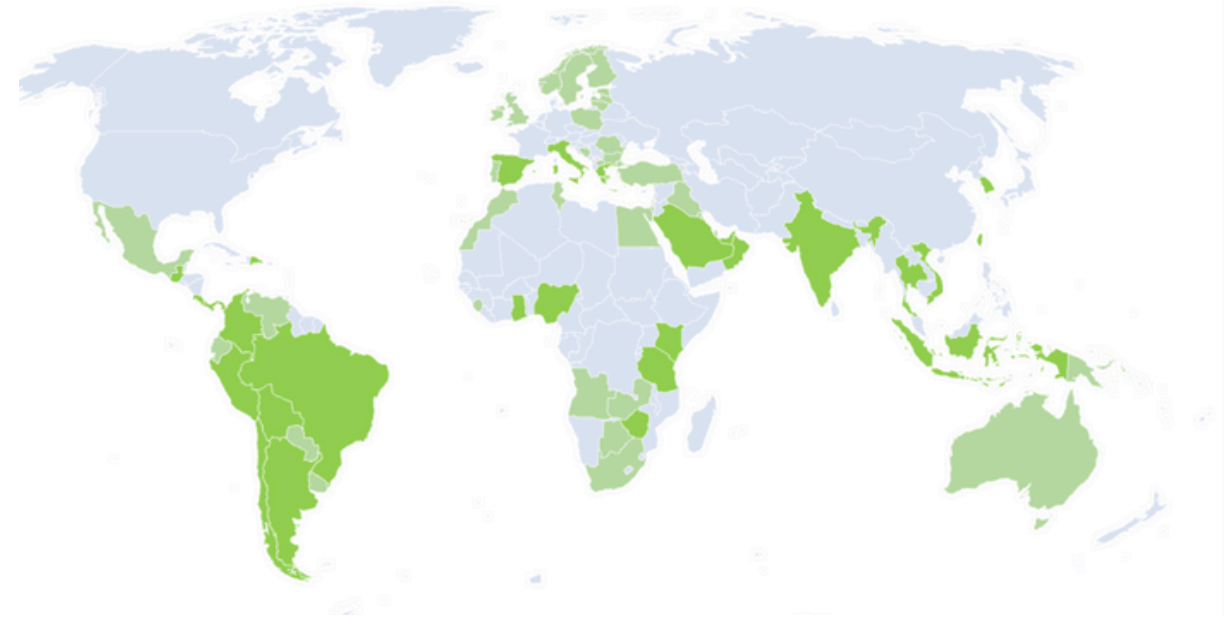


References & Homologations

References



IEDs certified



Use cases



LATAM

EUROPE & AFRICA

IBERIA

ME

BRAZIL

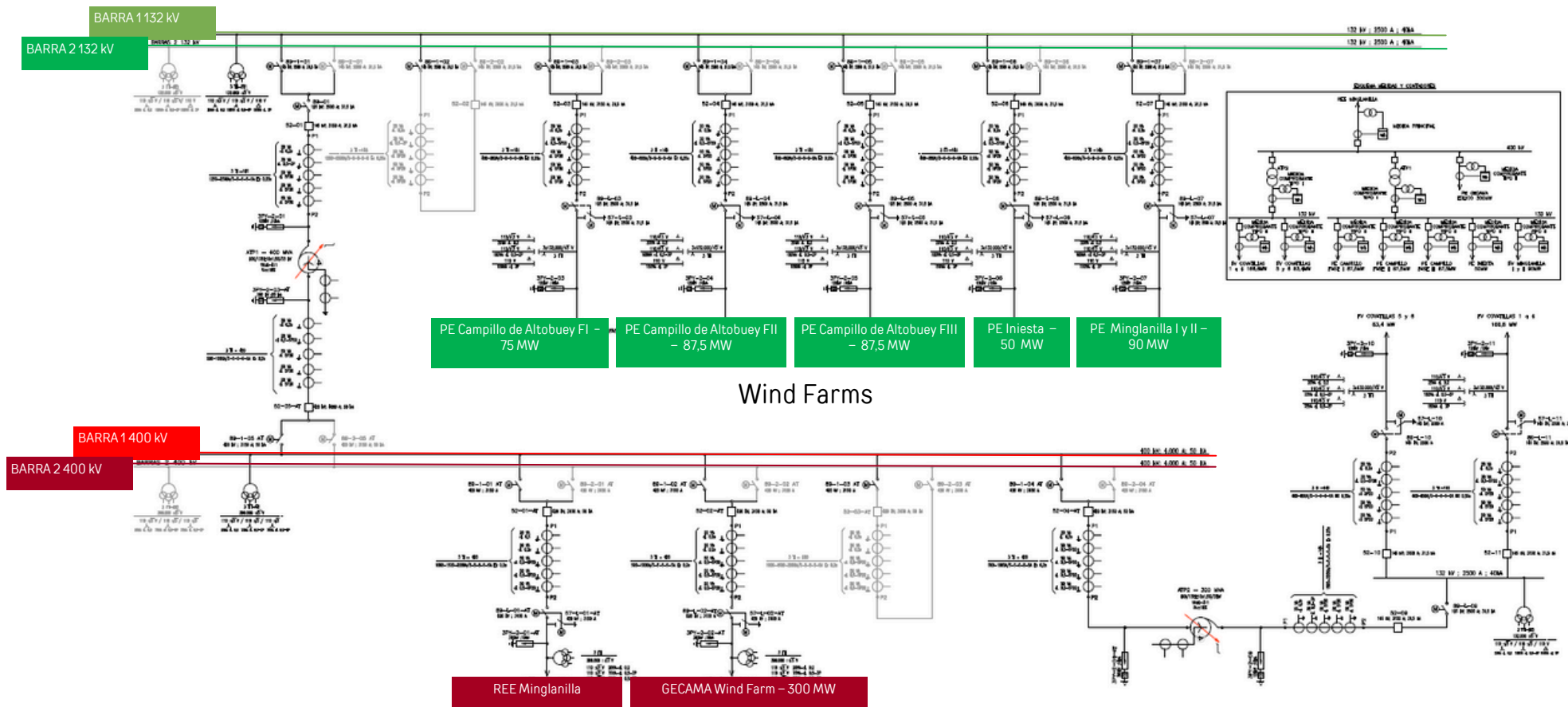
INDIA

APAC

A **Wind Farm** Substation Automation System (30/132kV subst., 132kV line, Generation Subst. 132/400 kV, & **evacuation line 400kV**)

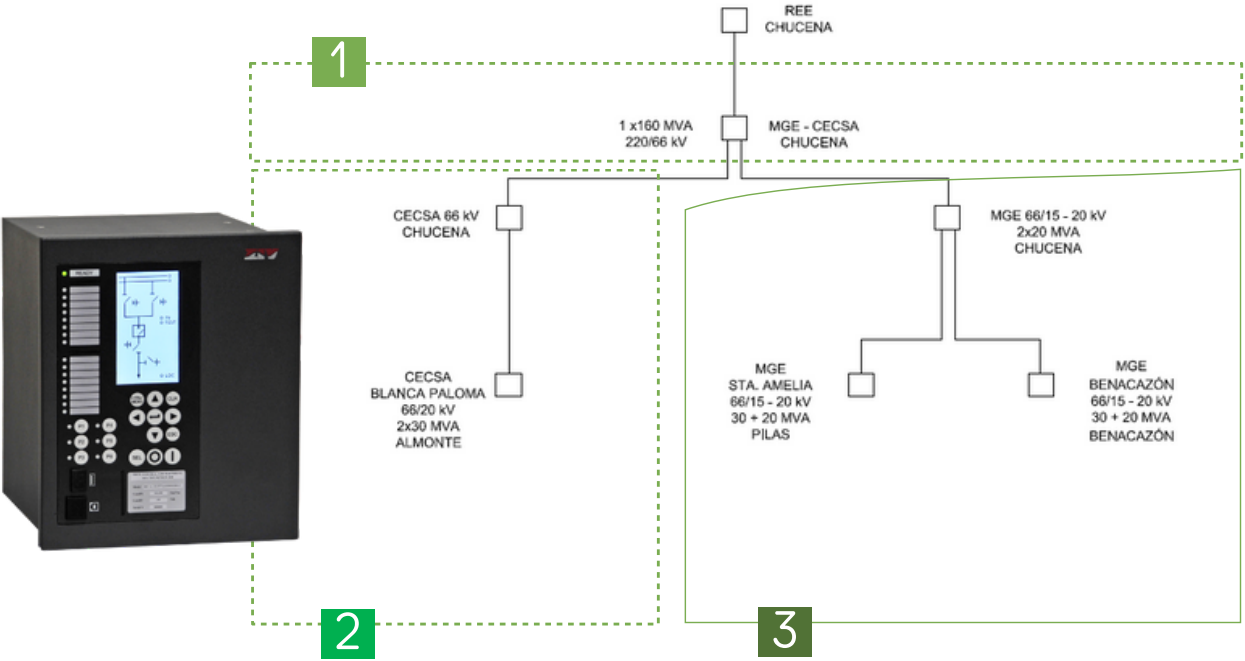
SAS

+600MW



SYSTEM INTEGRATION

Eg. Collector Substation
 Electrical & Logical Engineering
 IEDs supply + System integration + FAT + Commissioning



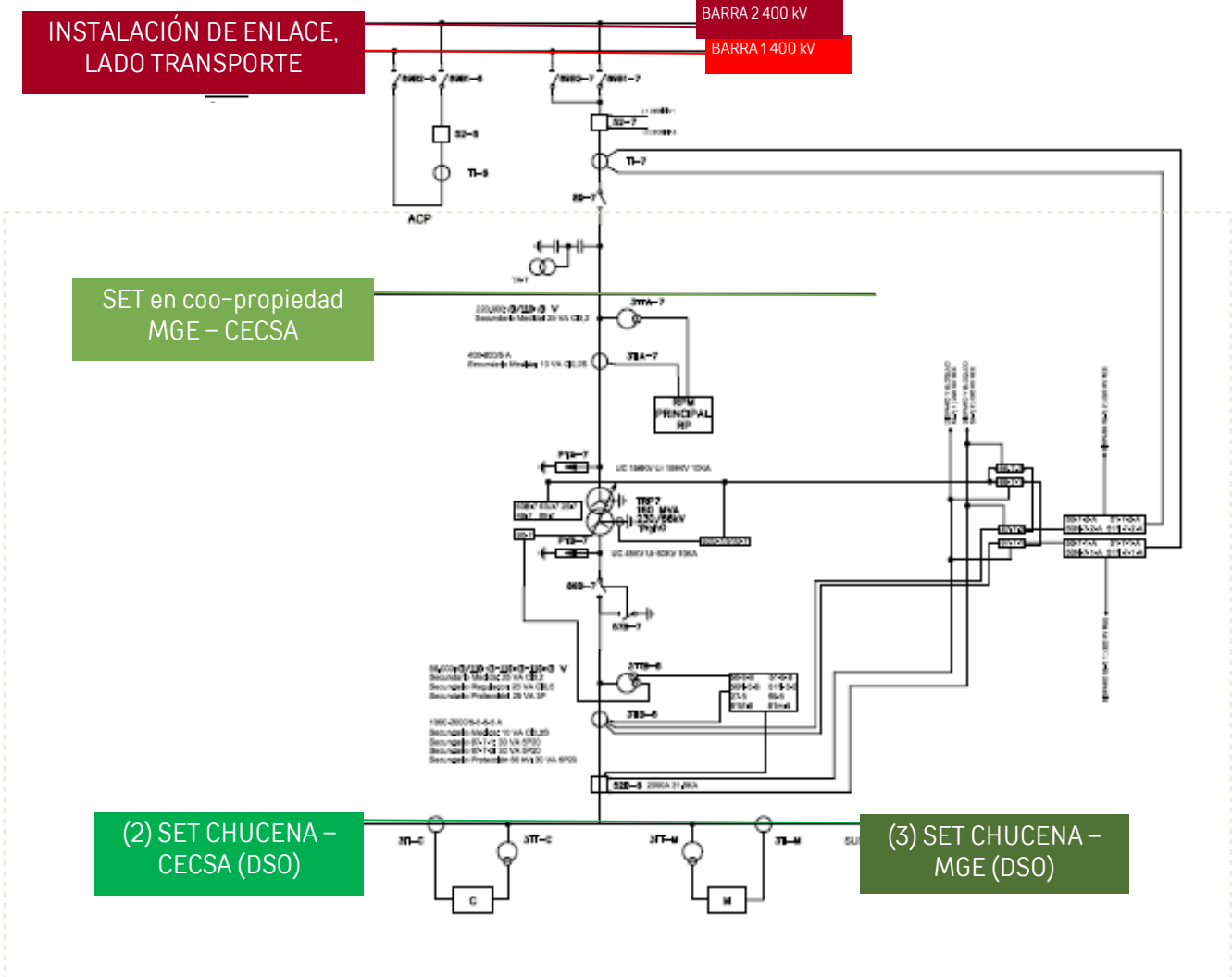
INSTALACIÓN DE ENLACE,
 LADO TRANSPORTE

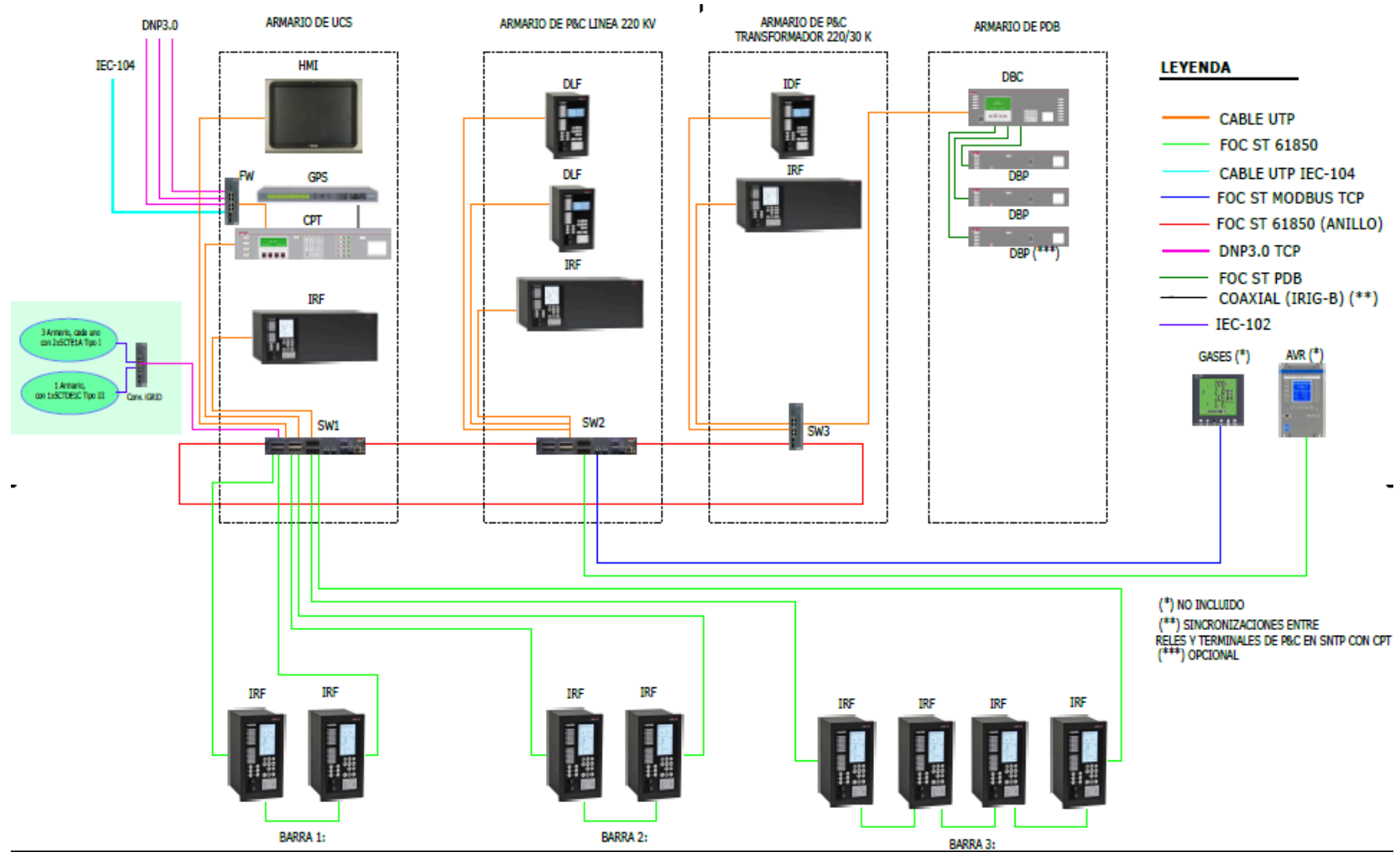
BARRA 2 400 kV
 BARRA 1 400 kV

SET en coo-propiedad
 MGE - CECSA

(2) SET CHUCENA -
 CECSA (DSO)

(3) SET CHUCENA -
 MGE (DSO)

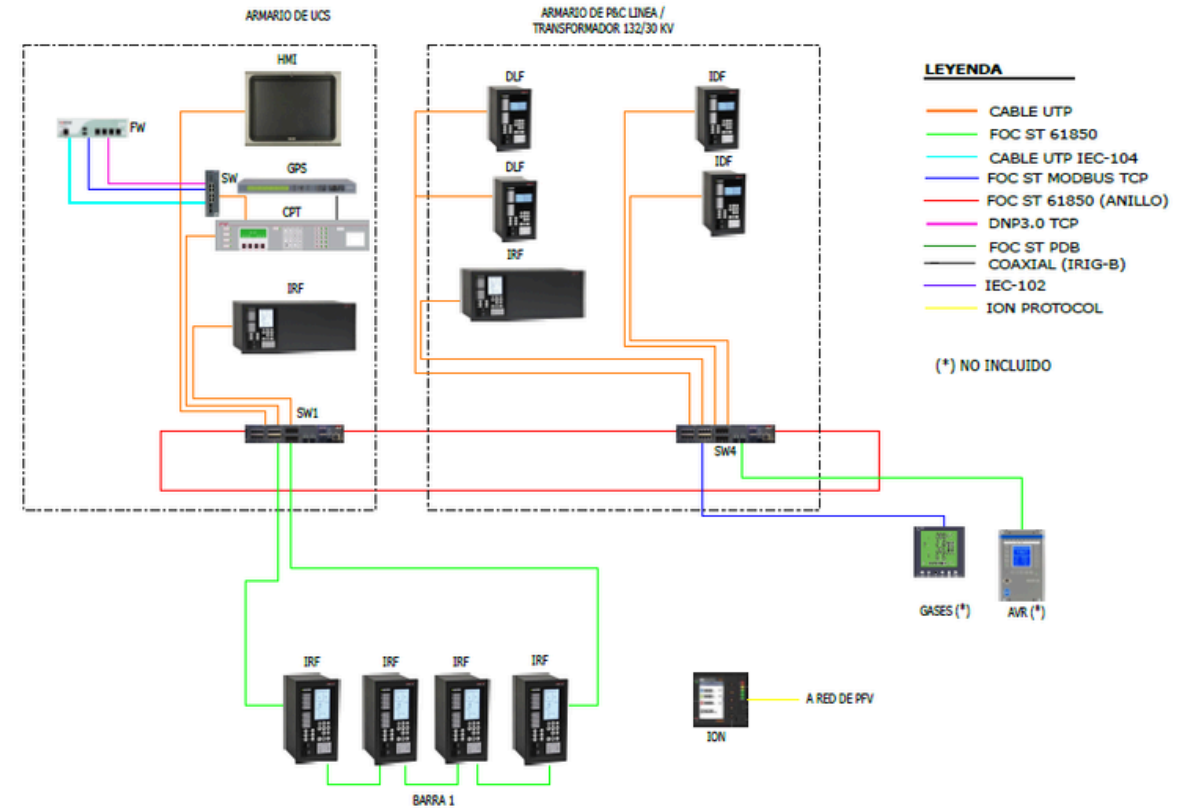
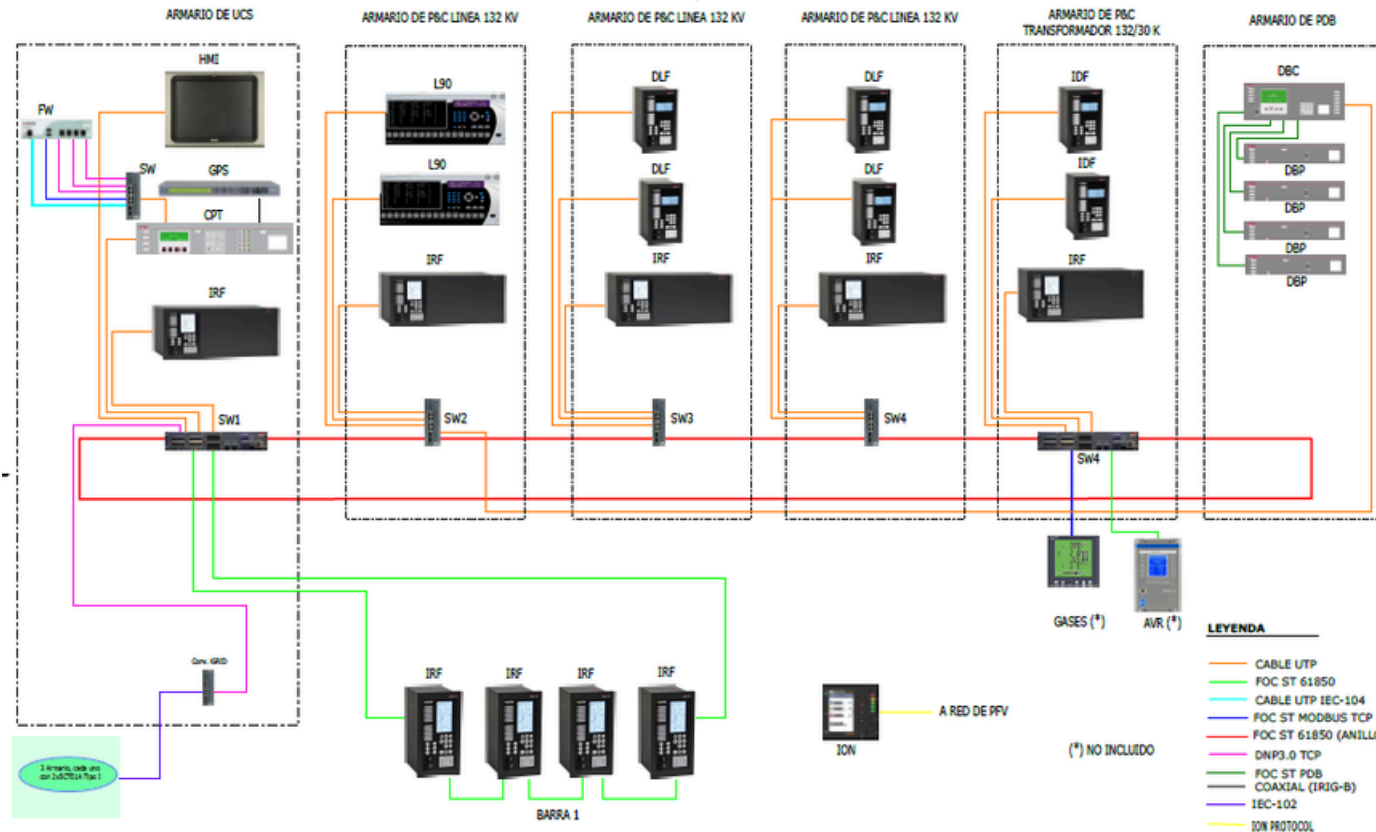




[Read more](#)

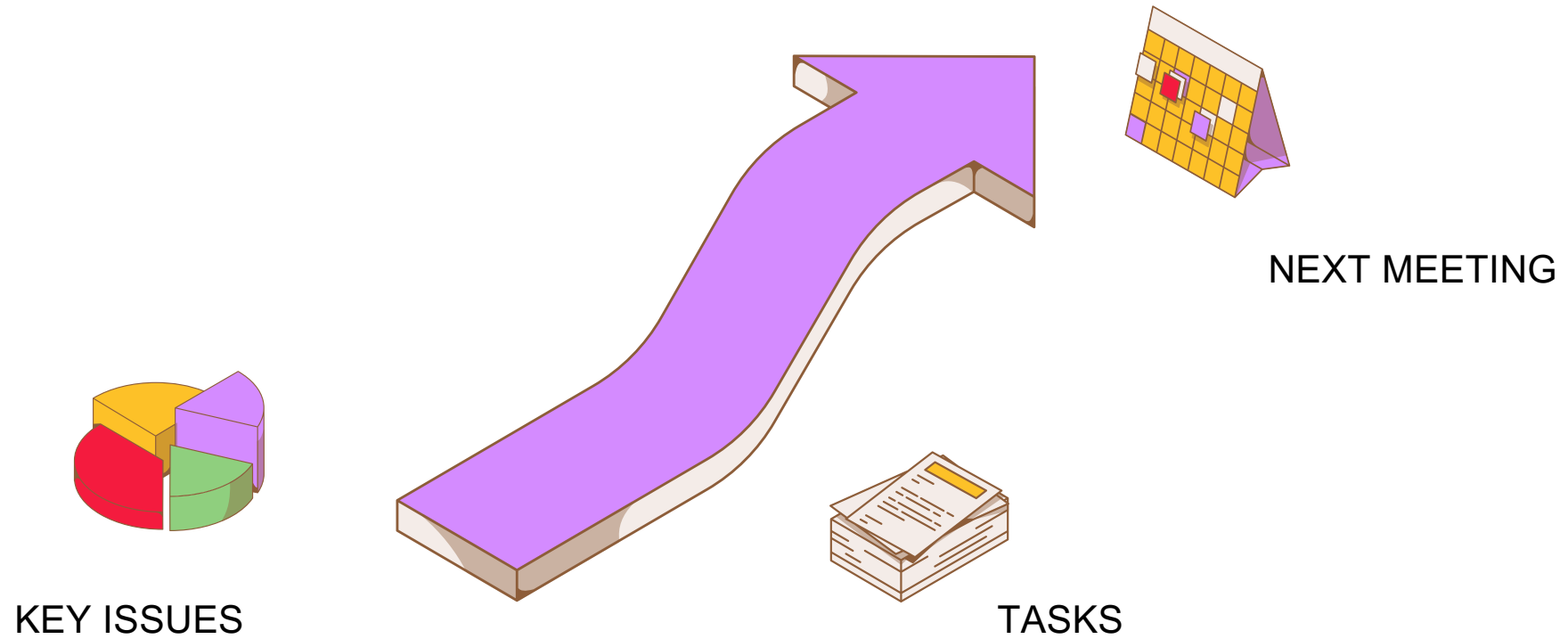
ZIV has equipped the new Venalta substation and a new line position for Huéneja (220kV).
A complete SAS for three solar parks capable of generating 150MW

SAS | Los Llanos I -II- III



Next step

Let`s spend 10 min together to identify



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Contact us now for further information
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