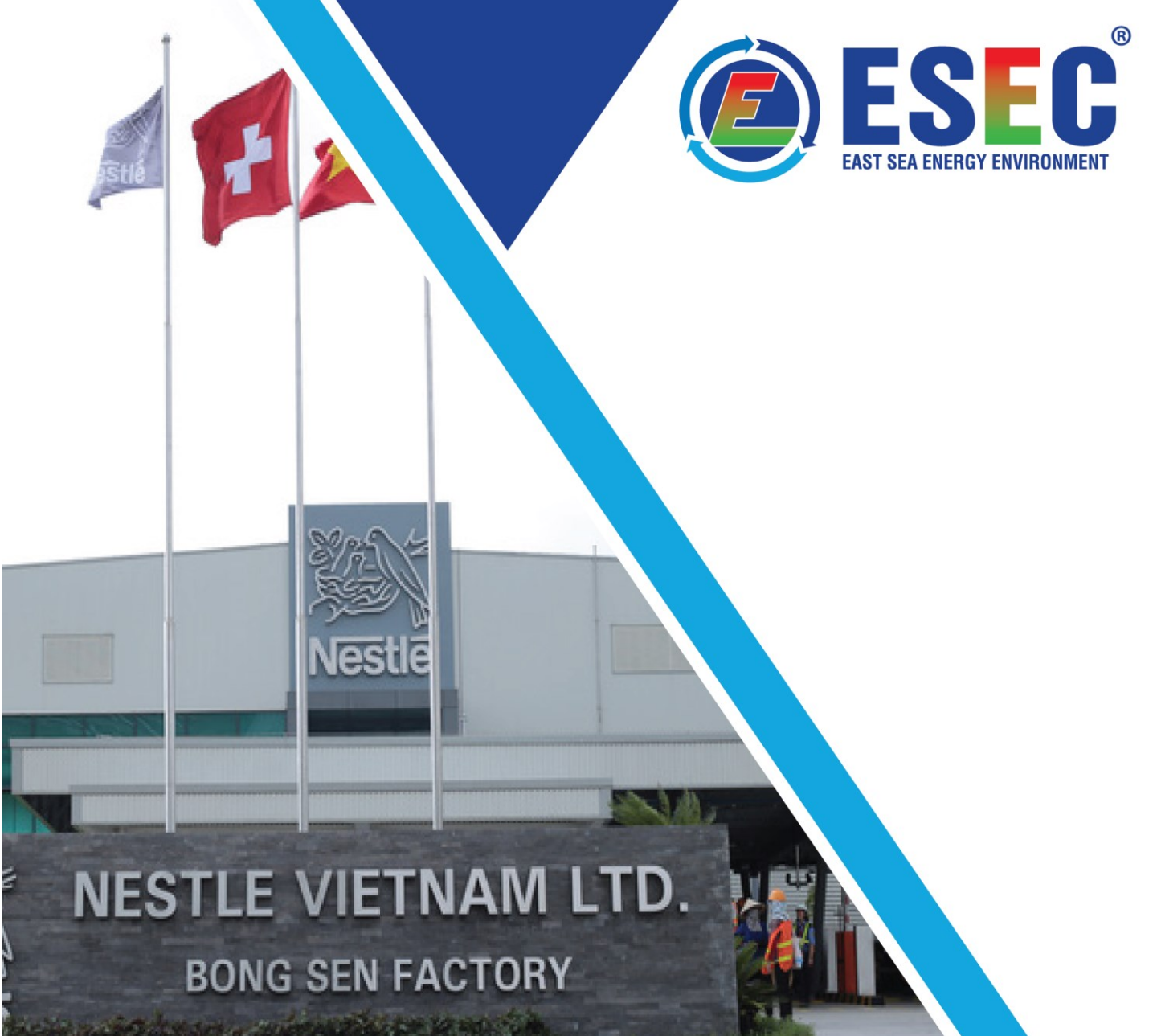




ESEC[®]
EAST SEA ENERGY ENVIRONMENT



NESTLÉ VIETNAM LTD.
BONG SEN FACTORY

Project: ETAP POWER ENGINEERING SERVICE

Customer: NESTLÉ VIETNAM

TURN IT BALANCE

Customer Profile



Nestlé is the leading company in the world of Food and Beverage, with production networks and wide business globally.

Nestlé nearly 500 factories operating in 86 countries worldwide.

PROBLEM

1

Power System Data have NOT overall evaluation yet

2

Relay Setting Values are NOT selective co-ordination, between upstream-downstream, bus



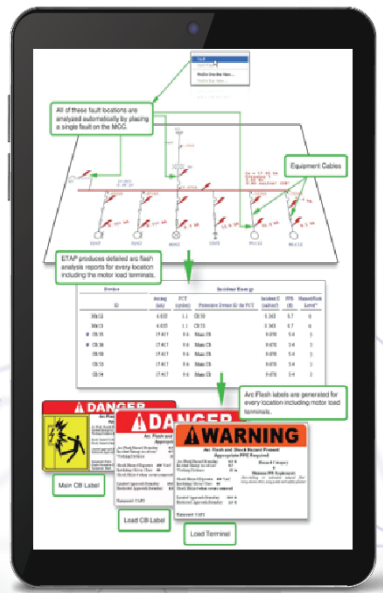
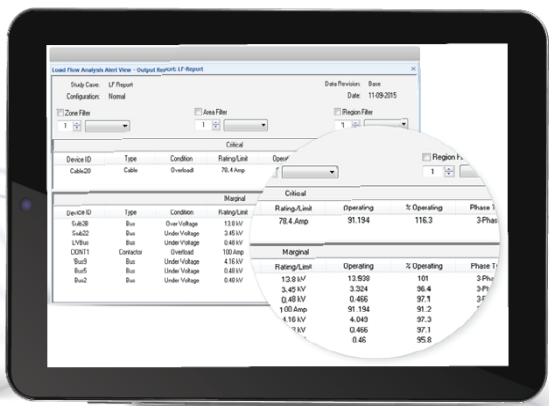
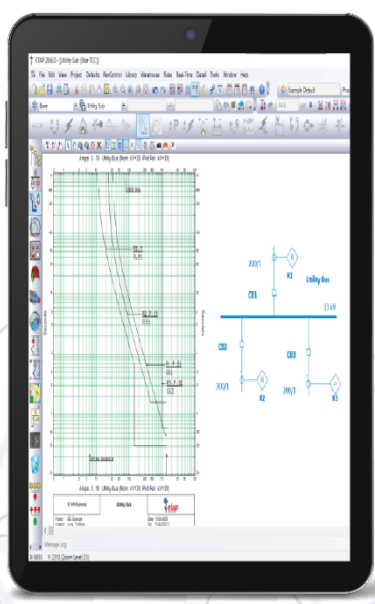
3

Arc Flash category of electrical panels is NOT Calculated

4

To load calculation for the future expansion

The Solution



ETAP Power Engineering Service
 Perform Power Engineering Service using ETAP software to
 perform works with report and recommendation

- Data collection & verification.
- System modelling.
- Load Flow analysis.
- Short Circuit calculation.
- Protective Relay co-ordination.
- Arc Flash analysis with NFPA 70E, IEEE 1584 standard
 indicates the required PPE category

Customer benefits

Whole electrical system has evaluated, overall re-calculated and analyzed for power system comprehensively. In addition, the future expansion also take into account.

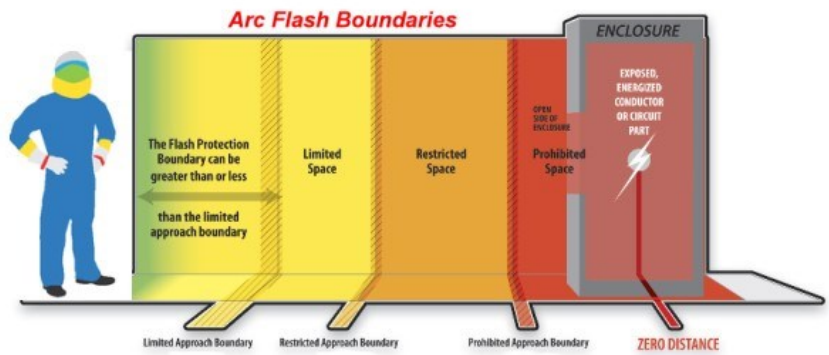
Incident energy and arc flash level are evaluated correctly, reduced risk

Arc Flash values can help to select PPE and optimize the safety system

Equipment duty, operating parameters were well checked, verified and adjusted

All switchboards from MV to LV are labelled and configured arc flash boundary

Protection relay devices were selective co-ordination, and to make sure the operating system correctly



WARNING	
Arc Flash & Shock Hazard Appropriate PPE Required	
ARC FLASH PROTECTION	SHOCK PROTECTION
Arc Flash Hazard Category _____	Voltage Shock Hazard _____
Incident Energy (cm/in ²) _____	Limited Approach Boundary _____
@ Working Distance _____	Restricted Approach Boundary _____
Arc Flash Boundary _____	Prohibited Approach Boundary _____
	Glove Class _____