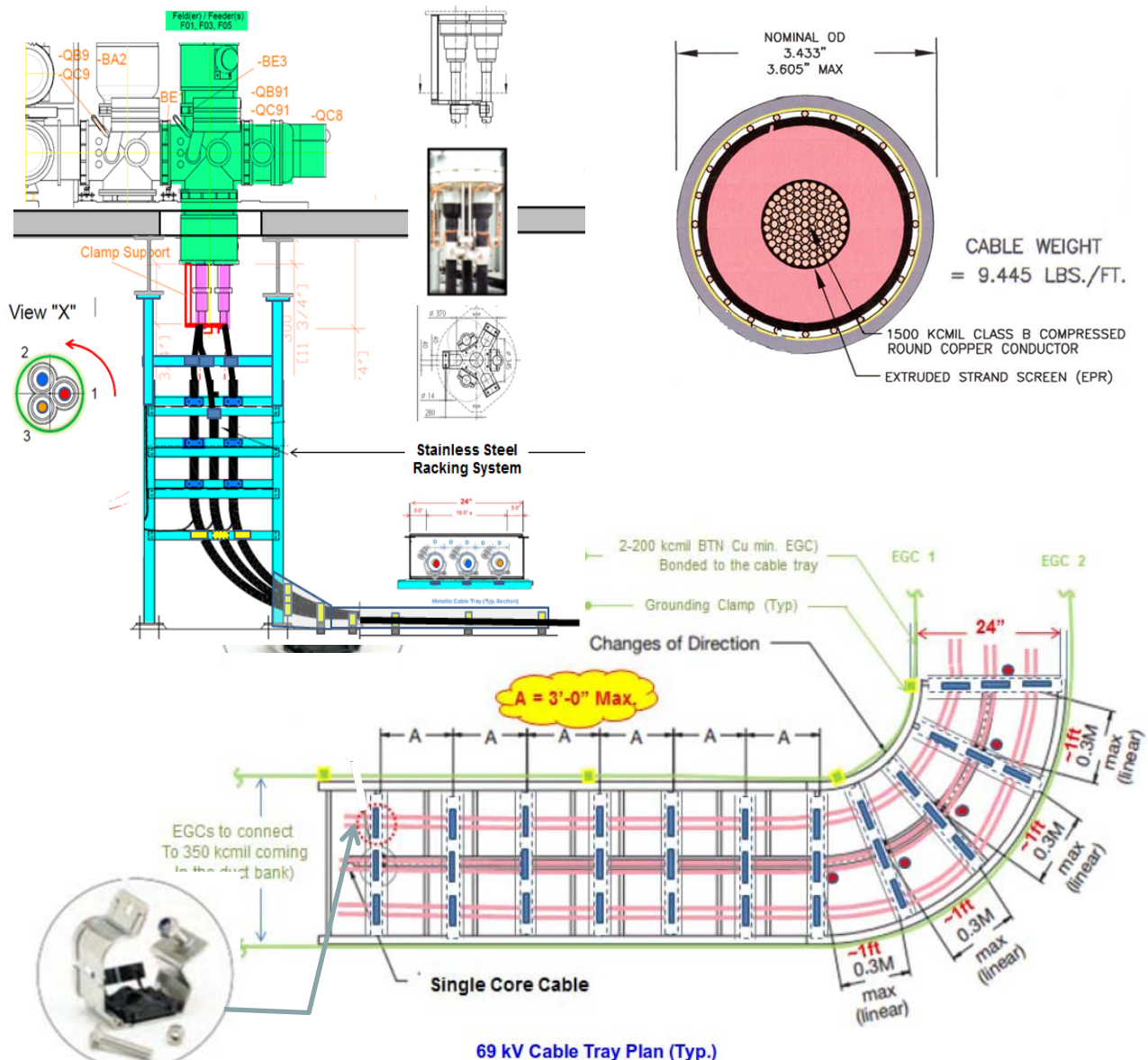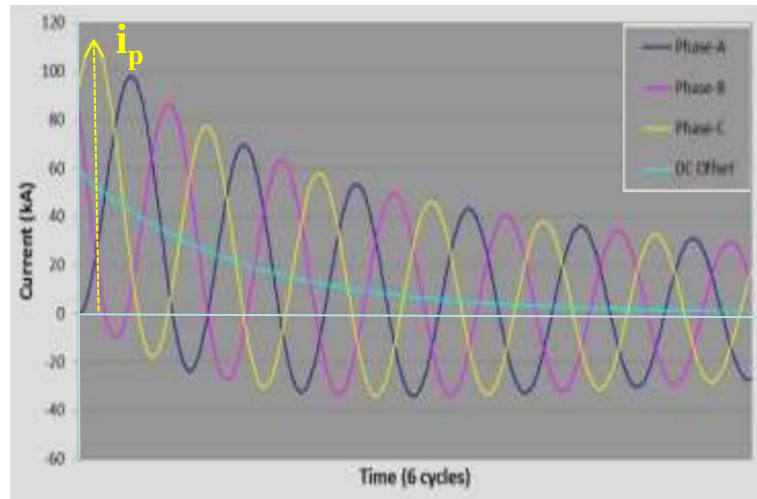# CABLE MAX FORCE

$$F_t = \frac{0.17 \times i_p^2}{S}$$

F_t	is the maximum force on the cable conductor in a trefoil configuration for a three phase short circuit [N/m] *****
i_p	is the peak short-circuit current [kA]
S	is the centre to centre distance between two neighbouring conductors [m] (for Trefoil arrangements S = Cable Diameter)

* *1 (N /m) =0.0685 lbf /ft*

i_p

Current (kA) — Time (6 cycles)

Phase-A
Phase-B
Phase-C
DC Offset

Feld(er) / Feeder(s)
F01, F03, F05

-QB9
-QC9
-BA2
-BE3
BE1
-QB91
-QC91
-QC8

Clamp Support

View "X"

2
1
3

Stainless Steel
Racking System

NOMINAL OD
3.433"
3.605" MAX

CABLE WEIGHT
= 9.445 LBS./FT.

1500 KCMIL CLASS B COMPRESSED
ROUND COPPER CONDUCTOR

EXTRUDED STRAND SCREEN (EPR)

2-200 kcmil BTN Cu min. EGC)
Bonded to the cable tray

EGC 1   EGC 2

Grounding Clamp (Typ)

Changes of Direction

24"

A = 3'-0" Max.

A — A — A — A — A — A

EGCs to connect
To 350 kcmil coming
in the duct bank)

~1ft
0.3M
max
(linear)

Single Core Cable

69 kV Cable Tray Plan (Typ.)

REFERENCE:

αβε's Personal Notes