K. HRC fuses shall have built-in blown fuse indicator feature.

L. PFCC enclosure shall be fitted with forced ventilation fan and louvers if necessitated. IP rating in the case of forced ventilation shall be maintained to IP43 minimum.

M. It shall be ensured to isolate the PFCC equipment completely in case alternate source of power supply using generator set is employed.

N. PFCC enclosure shall be sized to accommodate an additional step of equal rating in the future if so necessitated.

O. Capacitor shall be designed to carry 135% of rated current and 110% of rated voltages continuously at 50 degree C.

P. Internal wiring within the PFCC enclosure shall be fire-retardant to 105 degree C.

1.3.18.2 Detuned Reactors/Harmonic Filters

A. Anti-resonance reactor detuned or filters deemed necessary to reduce the harmonic content shall be provided in accordance with the regulation of the ADDC.

B. Total Harmonic Distortion (THD) of voltage at point of common couplings shall adhere to **IEEE** Harmonic Standard 519-1992 and ER G5/4.

1.3.18.3 Power Factor Regulator

A. The minimum number of capacitor switching steps shall be four (4) as far as practically possible for smaller rating capacitor banks and between 6 to 12 steps for others. The capacitors' KVAr shall be so chosen to provide maximum programming flexibility such as switching sequence 1:2:2:2, 1:1:1:1 etc. in order to maintain the power factor within the set limits for most of the operating time.

B. An alphanumerical LCD, micro-processor based automatic power factor correction regulator shall be provided to control steps and display measurement of the following:-

a. Power Factor

b. No. of steps connected

c. Step connection and disconnection time

d. Actual current

e. Reactive current