- 3-Term Lines
- 87T connections for Δ-Y.
  - G1/G2 - phase shift; Δ or Y CT secs.
  - G2/G3 - phase-shift setting.
Three. Terminal Lines

Fig. 12.12, p. 43

INFEED

- Zone 2, Zone 3

H "INFEED"
\[ \tilde{V} = I_{GH} Z_{GH} + I_{HF} Z_{HF} \\
= I_{GH} Z_{GH} + (I_{GH} + I_{RH}) Z_{HF} \\
= I_{GH} (Z_{GH} + Z_{HF}) + I_{RH} Z_{HF} \]

All V due to infeed...
\[ Z_{app} = \frac{\bar{V}}{\bar{I}} = Z_G + Z_H + \frac{I_R H Z_H}{I_G H} \]

Voltage drop is more due to in-feed. Apparent \( Z \) bigger than actual.

\[-\text{Underreach: Reach of relay is less than setting.}\]
Properly connect the CT secondary circuits so that the phase angles of the currents flowing into the differential relays are correct. At the bottom of the page, sketch out three phasor diagrams showing the currents \( I_a' \), \( I_b' \), and \( I_c' \), the currents \( I_{R1A} \), \( I_{R1B} \), and \( I_{R1C} \), and the currents \( I_{R2A} \), \( I_{R2B} \), and \( I_{R2C} \).