1. Finish Transformer Protection
   - Overload
   - Over voltage
   - Through-fault protection

\[
\phi = \phi_m \sin(\omega t + \theta), \\
E = N \frac{d\phi}{dt} = N \phi_m \omega \cos(\omega t + \theta), \\
\frac{V}{f} = N \phi_m 2\pi \cos(\omega t + \theta) \\
V/Hz
\]

2. Line Protection
   - Distance Protection
   - Communication aided Protection
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- Series Capacitor Protection

- Mutually coupled line

3. Out-of-step Protection

\[ \theta \]

\[ \leq \theta \]