Compensator Currents in Alpha-Beta Frame

\[
\begin{bmatrix}
u_a \\
v_b \\
-\nu_a
\end{bmatrix}
\begin{pmatrix}
\phi_t \\
(\pi/4)
\end{pmatrix}
\]

Transform Filter Currents to ABC Frame
Hysteresis Regulator

IFILTA → ERRA

IFILTB → ERRB

IFILTC → ERRC

Hyst: 0.001
Commanded current and filter current

(file af switching.pl4; x-var t) t: IFILTA c:IFILTA-BUS1A
factors: 1 1 -1
offsets: 0 0 0
P and Q at the load
- Switching frequency is variable
Current regulated PWM
- Also sometimes used in response to external faults

(in general, not active filter)
- Often fault limited to 110% - 150% of rated load current

- Typically balanced 30 currents

- Control power factor → somewhat

Leaky