



$$\begin{aligned}
 Q_{\text{new}} &= P \tan \phi_{\text{new}} \\
 &= 25.5 \times \tan 18.19^\circ \\
 &= 8.38 \text{ MVAR}
 \end{aligned}$$

$$\begin{aligned}
 P &= 30 \times 0.85 = 25.5 \text{ MW} \\
 Q &= P \tan \phi = 15.8 \text{ MVAR}
 \end{aligned}$$