

Quiz 1 - Solution

1.1 → False, price has decreased.

1.2 → False, Geothermal prices are higher

1.3 → True, along with low natural gas prices & improved gas turbines

1.4 → False, we look into average value of $p(t)$

1.5 → False, it is zero

$$2.1 \rightarrow |S| = |V| |I| = 100 \times 20 = 2000 \text{ VA}$$

$$2.2 \rightarrow p.f = \cos(\pi/3) = 1/2 = 0.5$$

2.3 → Inductive load

$$2.4 \rightarrow P = |S| \cos(\pi/3) = 1000 \text{ W}$$

$$2.5 \rightarrow Q = |S| \sin(\pi/3) \approx 1732 \text{ VAR}$$