

P #59

Ch 16 - pg 528

$$U_c = 300 \text{ W} \cdot \text{s} = 300 \text{ J}$$

$$C = 30.0 \text{ } \mu\text{F} = 30 \times 10^{-6} \text{ F}$$

$$U_c = \frac{1}{2} \cdot C \cdot V^2$$

$$\text{so } 300 \text{ J} = \frac{1}{2} \cdot (30 \times 10^{-6} \text{ F}) \cdot V^2$$

$$V = 4470 \text{ V}$$