

Problem 1-7

100 billion kWhr saved in one year:

$$(a) \quad \therefore P = \frac{100 \times 10^9 \times 10^{-3} \text{ MW-hr}}{(24 \times 365) \text{ hr}} = 11,415 \text{ MW}$$

Approximately equal to the output of
 $11\frac{1}{2}$ generating plants (1000 MW) each.

$$(b) \quad \text{Savings} = 0.1 \times 100 \times 10^9 \\ = 10 \times 10^9 \text{ \$}$$