steady state

transfer fn. \( \hat{V}_0(s) \frac{d(s)}{d(s)} = (\cdot) \)
\[ V_o = V_{in} \left( \frac{1}{1-D} \right) \Rightarrow \frac{1}{1-D} = \frac{V_o}{V_{in}} \]

\[ 1 - D = \frac{V_{in}}{V_o} \Rightarrow D = 1 - \frac{V_{in}}{V_o} \]
1. Trial & Error (Ziegler-Nichols method)

2. Model based
   thru' Root Locus Technique
$V_{o1} \Rightarrow 200W$

$V_{o2} \Rightarrow 50W$

Highest Output Power
Other uncontrolled outputs need to be locally regulated.

How?

1. Linear Regulator
2. Switched non-isolated topology
3. Coupled inductor
Switched Non isolated converter

Regulator Method

Control input

Higher power

V_{in}

V_{02}