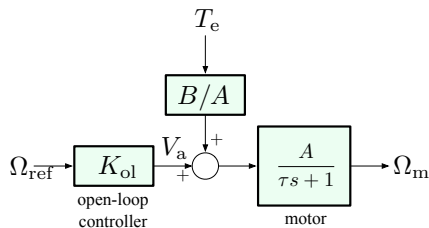


Disturbance Rejection

Goal: maintain $\omega_m = \omega_{\text{ref}}$ in steady state in the presence of *constant* disturbance.

Open-loop:



- the controller receives *no information* about the disturbance τ_e (the only input is ω_{ref} , no feedback signal from anywhere else)
- so, let's attempt the following: design for *no disturbance* (i.e., $\tau_e = 0$), then see how the system works in general