Te:	electrical torque, gen. by coils	[Nm]
Ic:	coil current	[A]
Tfr:	rotor dynamic friction torque	[Nm]
Trb:	torsion bar torque	[Nm]
w:	angular velocity	[rad/s]
yrad:	angular position	[rad]
ydeg:	angular position	[°]
Ucci:	current controller input	[V]
Ucco:	current controller output	[V]
Ush:	shunt voltage	[V]

CL:	coil inductance	[H]
CR:	coil resistance	[ohm]
RIN:	rotor inertia	[kg*m²]
KTR:	torsion bar const	[Nm/rad]
BEM:	back EMF const	[V*s/rad]
FR:	rotor dyn. friction	[Nm*s/rad]
TRC:	torque const	[Nm/A]

Torque produced by coil current will rotate the rotor until it is balanced by the opposing torque of torsion bar, load and dynamic friction torque.
balance of force: Te=Ttb+Tfr
Te - (Ttb+Tfr)=0 -> no movement