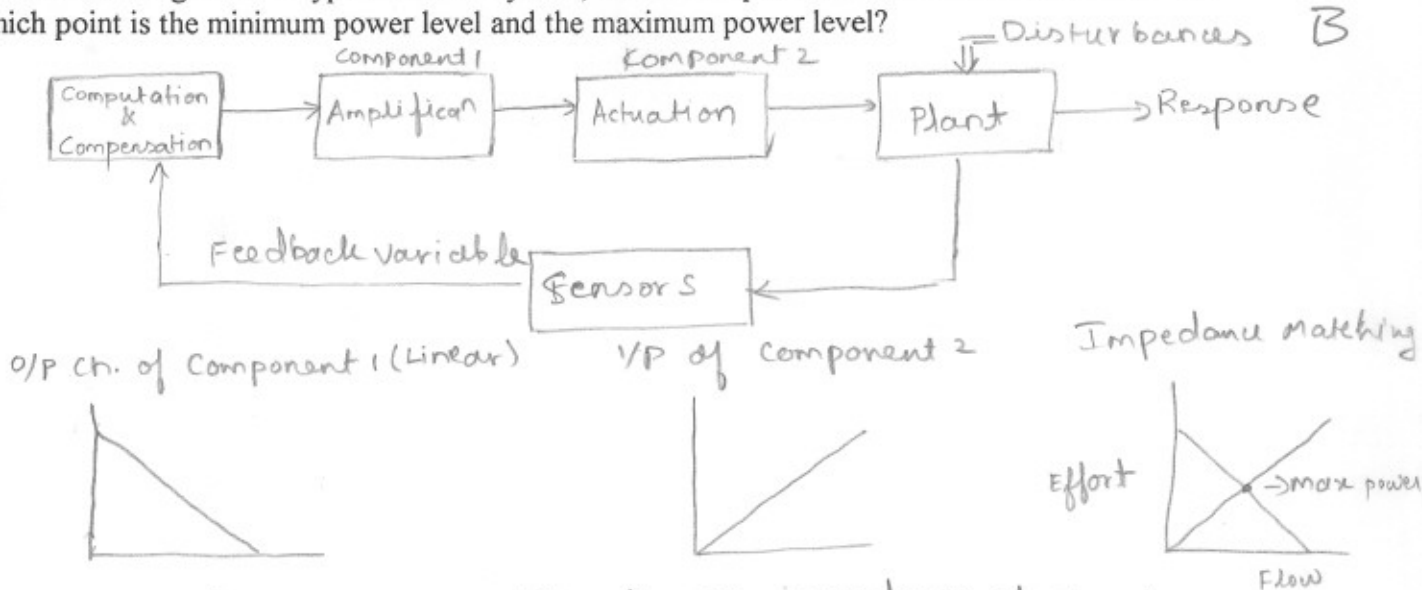


Control Systems Components

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Name PATHAPALLI THANUJ

In the block diagram of a typical control system, discuss the power levels around each block. At which point is the minimum power level and the maximum power level?



The Max Power occurs where the o/p impedance of Comp. 1 matches with the i/p impedance of component 2.

The min Power point occurs when either of the variables (Flow or Effort) is zero \Rightarrow Power = 0

What are some advantages to multiport modeling? How is a multiport diagram different from a conventional controls block diagram? Is multiport modeling limited to linear systems? A-

Multiport modeling visualizes systems as an interconnection of components and this reduces the the whole system consisting of various components into a single multiport equation.

The multiport diagram consists of multiport equations which are easy to comprehend, where as the conventional controls basically deals with a mathematical model

No, multiport modeling can be extended to nonlinear systems as well.