Sensors:

* eH – high water level
* eM – medium water level
* eL – low water level
* eZ – zero water level
* f1 – output frequency of the first generator
* u1 – output voltage of the first generator
* uref1 – reference voltage of the first generator
* f2 – output frequency of the first generator
* u2 – output voltage of the first generator
* uref2 – reference voltage of the first generator

Actuators:

* V1 – First valve
* V2 – Second valve
* G1 – First generator
* G2 – Second generator

Outputs:

* U11 – First valve control signal
* U12 – First generator control signal
* U21 – Second valve control signal
* U22 – Second generator control signal

Tasks:

* DEC:
  + Input ports: eH, eM, eL, eZ
  + Output ports: start1, halt1, start2, halt2
* DTC1:
  + Input ports: start1, halt1
  + Output ports: u11, u12
* DTC2:
  + Input ports: start2, halt2
  + Output ports: u21, u22

Modes:

* Mode1: Pornire
  + Tasks:
    - DEC, frequency: 1
  + Period: 1 sec
* Mode2: Generare1:
  + Tasks:
    - DEC, frequency: 1
    - DTC1, frequency: 1000
  + Period: 10 sec
* Mode3: Generare2:
  + Tasks:
    - DEC, frequency: 1
    - DTC1, frequency: 1000
    - DTC2, frequency: 1000
  + Period: 10 sec

Mode switchers:

* Mode1-> Mode2:
  + eM- Enabled
* Mode2-> Mode3:
  + eH- Enabled
* Mode3-> Mode2:
  + eL- Disabled
* Mode2-> Mode1:
  + eZ- Disabled

Mode 1 reprezinta modul de pornire al procesului, in care taskul DEC primeste la intrari valorile senzorilor eH, eM, eL si eZ, si in functie de valorile lor, returneaza la iesiri semnalele de control pentru DTC1 si DTC2, dupa caz. Modul 1 se executa o data pe secunda(=1 sec)

Mode 2 este modul de fuctionare in cazul in care nivelul lacului este mai inalt de M, astfel senzorul eM este activat. Generatorul1 este pornit si regulat de DTC1 pentru al mentine la frecventa de 50 Hz si voltajul de referinta uref1.

Mode 3 este activ atunci cand nivelul lacului trece de H. Ambele generatoare sunt utilizate si regulate de taskurile DTC1, respectiv DTC2.