IBM Power Management Discussion

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- "Active" Power Management:
    - Voltage and Frequency Scaling
    - Memory "sleep" or idle
    - Other component level idle.
    - Fast response time – no loss in availability and serviceability

- Inactive power level 1:
    - Processor core level "folding": workload is moved to a single core and all other cores are "inactivated".
    - Response time is one or two seconds.

- Inactive power level 2:
    - All systems are powered off.
    - Service processor and network connection are maintained as active: power levels of 10 to 30 W.
    - Recovery time is measured in 10 or more minutes.

- Functions of Active Power Management and Inactive Power Management 1 can be combined.

- Enables more dynamic data center power level control
    - Maximize consolidation to workload on active servers.
    - Create a "bench" of inactive power level 1 servers.
    - Inactivate remaining servers into a near power off situation.

DEEP INACTIVE STATE: "INACTIVE" POWER LEVEL 2