

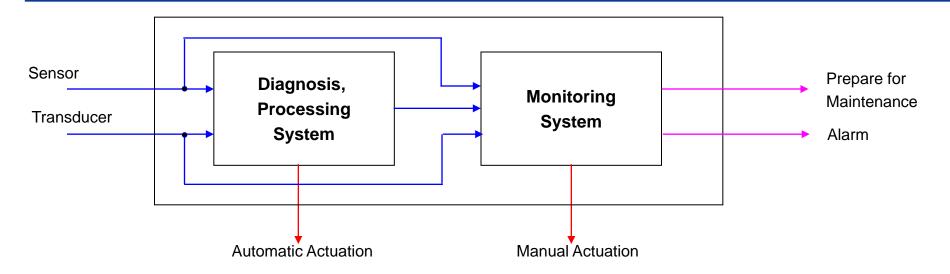
Advanced Monitoring & Diagnostic Technology in NPPs

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Monitoring & Diagnostic Technology



□ purpose of diagnosis:

- maintenance and lifetime management
- manual actuation
- automatic actuation

□ implementation method

- duplication of sensors, transducers, computers
- model based(analytical) diagnosis
- combined method(historical, expert system approach, duplication)

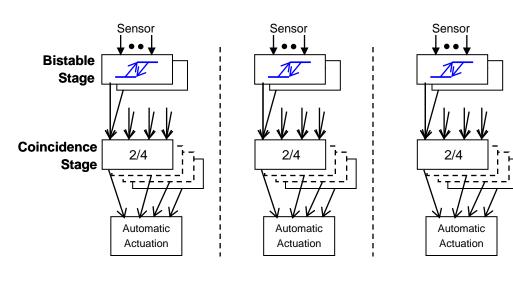
☐ response(diagnosis) time limit

- very fast
- relatively slow

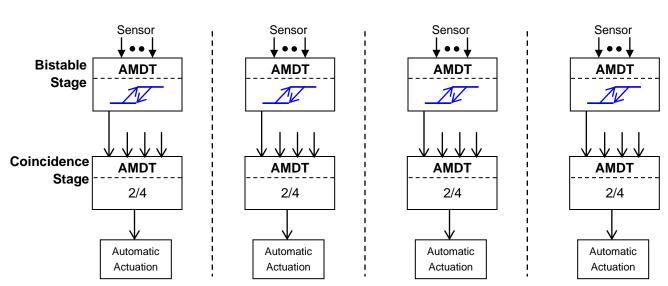


Example: Protection system

Protection system based on redundancy diagnosis



Is the simple structure with AMDT and S/W fault tolerance technology Possible?





Sensor

2/4

Automatic

Actuation