

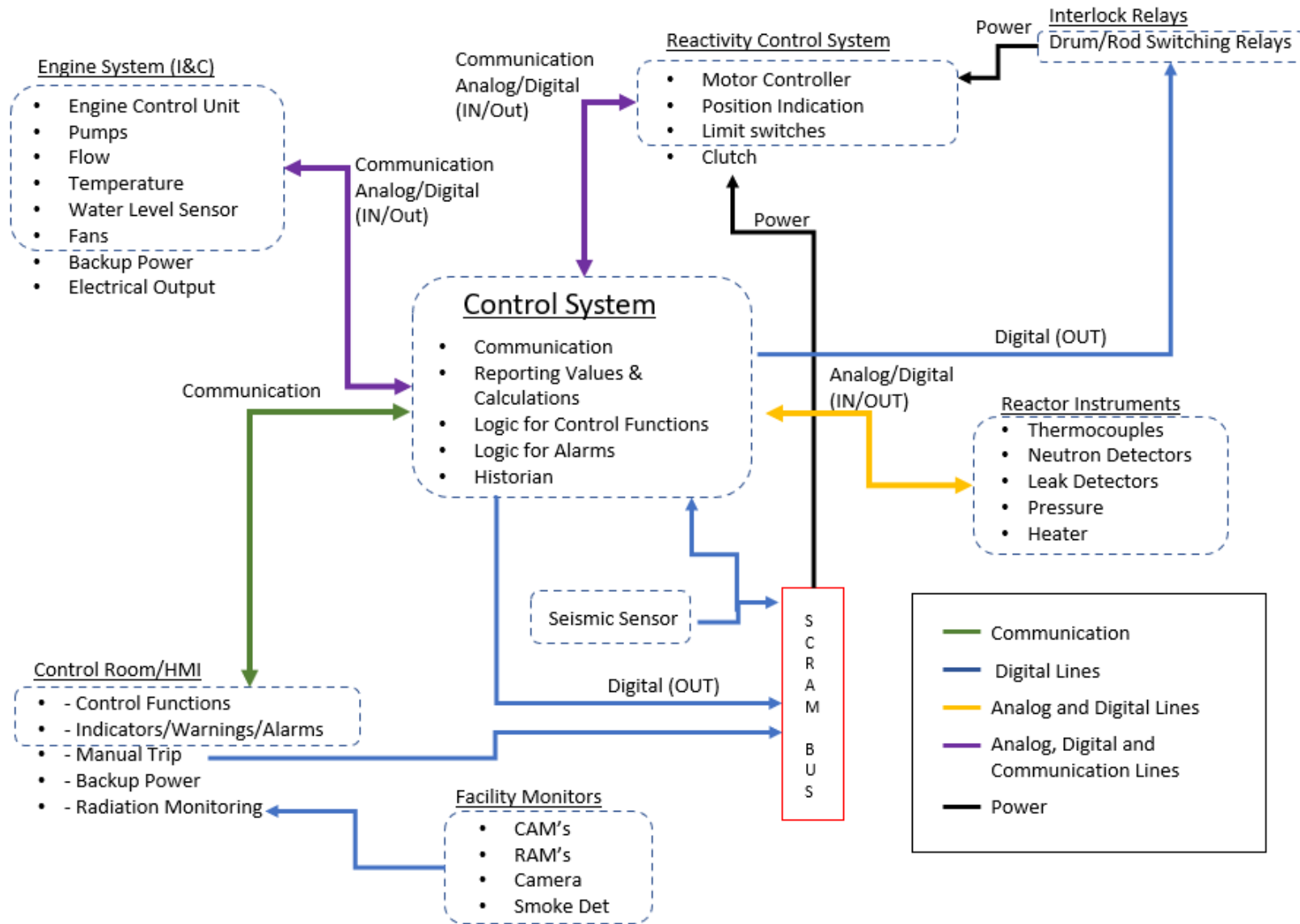
MARVEL Control System Demo

MARVEL Technology Review

October 20, 2022

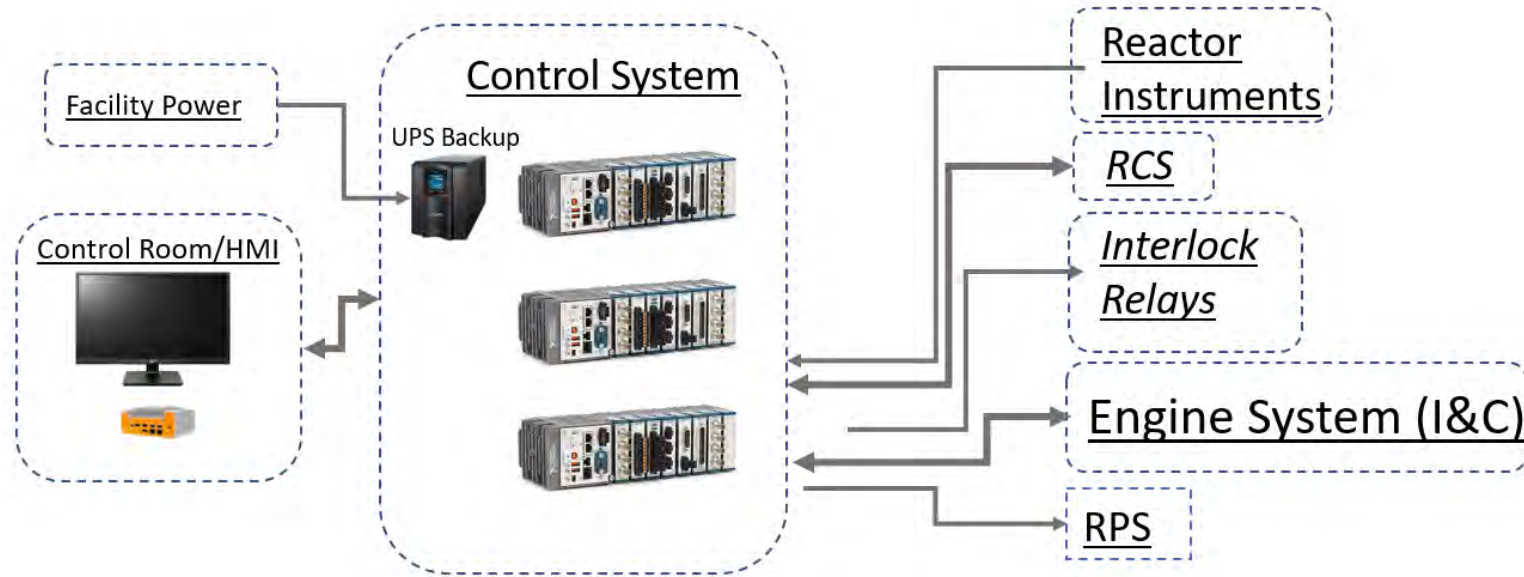
Benjamin Baker | PhD Nuclear Science & Engineering

Instrumentation & Control Overview



Control System Overview

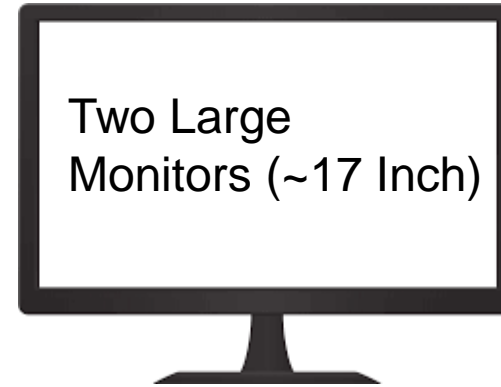
- Control System
 - Provides a lot of defense in depth (DID)
 - Designed to allow future autonomous control



Control Room Components



Radiation Monitoring



Pressure Gauges

Key Switch



Scram Buttons
Reset Buttons



Limit Switches



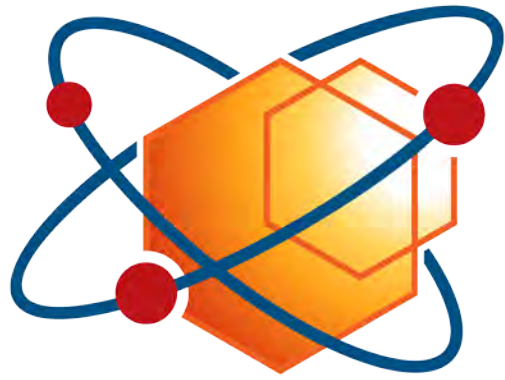
Facility Monitoring



MRP Microreactor Program

Demo

- Initial HMI (Initial adapted for Presentation Viewing)
- Operator Interface
- Operational overview



MRP Microreactor
Program