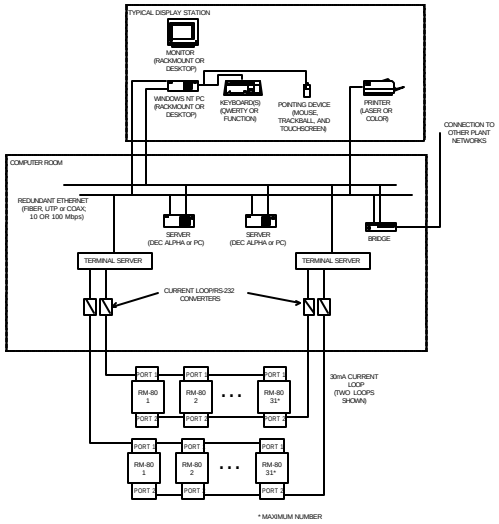


CSI Replacement Design Features

1. Supports RM-80 communications using the existing loop cables.

2. Open-Architecture (e.g., TCP/IP, RS-232) allows for future use of radiation monitor alternatives other than RM-80s.

3. Existing infrastructure is largely unchanged. Radiation monitors, RM-80s, RM-23s, and cabinets are not changed. Most cables are reused.

4. Nominal engineering and construction costs. Power sources are reused since new equipment draws less power. New equipment generates less heat and noise.

5. Advanced MMI, running on Windows 2000, Windows NT, and Windows 98, with remote display capabilities. Monitor your RMS System away from the office.

6. Same SAIPMS base software as many plant systems; includes source code; easy to add custom applications; software is field proven.

7. Online alarm response procedures.

8. Easy to use drag and drop display building.

9. Fully redundant base system ready for installation five months after contact award.

10. Near "Bumpless" installation/startup.

11. During installation and SAT, replacement RMS can operate in parallel with the existing RMS.

12. System can be replaced on-line. No outage is required.

13. Interface to the main plant computer system and other external systems.

14. Interface to other plant networks to support remote monitoring of RMS data.

15. Increased redundancy and reliability. One system runs Primary while the other is a Hot Standby. Five-second failover support.

16. Unlike the existing system, the CSI design allows either server computer to communicate with either of the two ports on the RM-80.

17. Advanced loop management techniques include load balancing and traffic tunning.

18. Advanced loop communication diagnostics with graphically displayed loop breaks and predictive maintenance indicators.

19. Custom online application development services for Operations, Health Physics, Chemistry, and Maintenance personnel.

20. Extensive simulator stimulation support for Initial Condition Resets, Snapshots, Backtracks, Freeze, Run, etc. Turn-key simulator integration capabilities.

RM-11 REPLACEMENT SYSTEMS BY CREATIVE SYSTEMS INCORPORATED

Future RMS Solutions Now

For More Information, Contact:

Creative Systems Inc.

1508 Marks Dr.
Hartselle, AL 35640
Phone (256) 751-3075
Fax (256) 751-3077

"A Nuclear Real-Time Systems Integration and Consulting Services Company"

Radiation Monitoring System

Creative Systems Inc. (CSI) has developed a state-of-the-art fully redundant replacement system for the Sorrento Electronics RM-11 radiation monitoring system. Our solution is currently installed and operational at: Limerick Generating Station, Seabrook Station, and Waterford 3 Steam Electric Station. The CSI design solves all the critical RM-11 problems in a timely, proven and cost-effective manner. The risk is low and the short replacement schedule supports immediate plant needs.

Problems to Solve

1. Obsolescence, replacement hardware parts are not readily available and systems are now problematic and malfunctioning.

2. Current system capabilities (displays, MMI, alarm features) are limited and obsolete.

3. Most plants have no tools or source code needed to modify the RM-11 software. The existing system is difficult to maintain and expensive to customize and reconfigure.

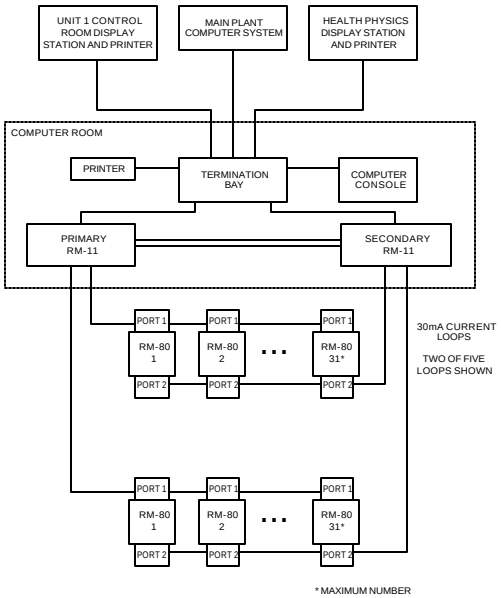
4. The current system limits the plant to one company for long-term support and maintenance.

5. The current system is proprietary and does not use State-of-the-Art technology.

6. Year 2000 (Y2K) date error.

Typical RM-11 System

The following Block Diagram shows a typical RM-11 system with DEC model PDP11/xx computers and Aydin Display stations. RM-23s and detectors are not shown.



Non-Replacement Solution Alternatives

The plant must inventory many obsolete and expensive spare parts that are short in supply and have limited use and limited life spans.

The plant must utilize a short-term work around to the Y2K problem by initializing the RM-11 with a false date.

CSI Solution

CSI recommends that the RM-11 computers and display stations be replaced with a field proven system using proven plant monitoring software and configuration techniques that are widely used in nuclear plants across the globe.

Benefits of CSI Solution

1. Redundant Field-Proven Solution – SAIPMS is used in the majority of Nuclear Plant Monitoring Solutions.

2. New Y2K-compliant system with a true "365/24" mission-critical design and upgraded man-machine interface (MMI.).

3. The radiation monitors, RM-80s, RM-23s, cabinets, power cables, and communication cables can be reused and are not impacted.

4. Multi-vendor SAIPMS support and spare hardware parts are commodity items.

5. With the supplied source code and development tools the plant can easily make future RMS modifications to the software.

Creative Systems Inc.
1508 Marks Dr.
Hartselle, AL 35640
Phone (256) 751-3075