

# CONFIGURATION MANAGEMENT FOR METEOROLOGICAL MONITORING

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## Background

At the last NUMUG meeting in South Bend, Indiana, TVA reported on a streamlining process that resulted in about a 25% reduction in the meteorological monitoring costs at its three nuclear plants. It was also indicated that a Problem Evaluation Report had been issued as part of an internal audit stating that TVA Nuclear (TVAN) was not providing adequate guidance and oversight of the non-nuclear group providing meteorological and other support. One of the corrective actions for this finding was formation of a standing committee to address these needs for radiological environmental and meteorological monitoring. This committee was formed in the fall of 1997 and is called REMIC for Radiological Environmental and Meteorological Instrumentation Committee. At about the same time, NRC issued requirements for configuration management. REMIC was also charged with addressing this issue.

REMIC is made up of ten members that encompass the organizations involved in this monitoring. Table 1 provides a summary of its membership. It is charged with:

- Implementing requirements of the Quality Assurance Program and
- Resolving problems and ensuring adequate communication between organizations responsible for the instrumentation.

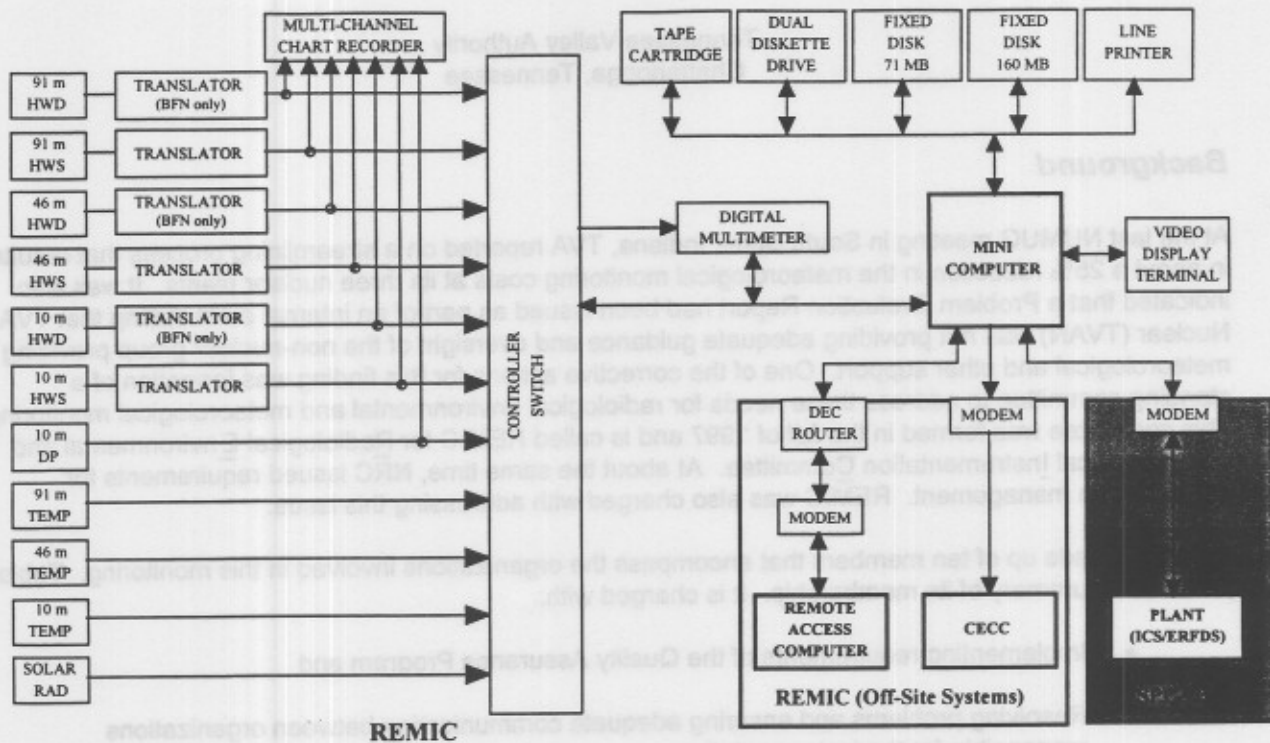
The scope of REMIC includes the calibration of the instruments and the collection of the measurements. The activities are performed to fulfill the requirements of the Offsite Dose Calculation Manual, the TVAN Standard Programs and Processes documents, and the intergroup agreement between TVAN and the offsite support organization.

Table 1: REMIC Membership

Organization	Responsibility
TVAN, SQN Radiological and Chemistry Control	Onsite responsibility for implementation of monitoring
TVAN, BFN Radiological and Chemistry Control	Onsite responsibility for implementation of monitoring
TVAN, WBN Radiological and Chemistry Control	Onsite responsibility for implementation of monitoring
TVAN, Corporate Radiological and Chemistry Services (R&CS)	Corporate oversight of monitoring
TVAN, R&CS, Emergency Preparedness	Maintenance of meteorological instrumentation
TVAN, R&CS, Environmental Radiological Monitoring and Instrumentation	Calibration, maintenance, and processing of radiological environmental data
River System Operations and Environment (RSO&E), Laboratory Services	Calibration of meteorological instrumentation
RSO&E, Water Management, Environmental Compliance	Meteorological data validation
RSO&E, Atmospheric Sciences & Environmental Assessment (2)	Implementation of requirements and chair the committee

Another configuration management issue was at what point does the plant become responsible for the system, or what can be considered "offsite." This is illustrated by the block diagram in Figure 1.

Figure 1: Block Diagram (Environmental Data Station - Meteorological Monitoring):



REMIC agreed that all but the lower right box should be considered offsite. As a result, the line of demarcation between the offsite system and onsite is between the modems that transmit the data to the plant. Therefore, any system changes before this modem are handled by REMIC. Beyond this modem (e.g., plant computer), changes are handled by the plant modification and design change control procedure.

### Design Changes

Offsite meteorological monitoring design changes are handled using a REMIC design change. The design change package typically includes:

- Configuration Management Screening Form
- Coversheet and Change Record for Baseline Specifications for Meteorological Monitoring
- Revision to Baseline Specifications for Meteorological Monitoring
- 10 CFR 50.59 Review
- Work Plan

This change process is used in lieu of the process used for plant modifications and engineering document revision which is much more detailed and lengthy. REMIC is required to review and approve the modification prior to implementation. This ensures that necessary plant review and approval is obtained through the plant representation on REMIC. It also ensures that necessary documentation is obtained to describe modifications to the system.

## Procurement

The REMIC charter requires generation of a list of expected equipment purchases for the upcoming fiscal year. This assists in the budget and work planning. Any equipment changes are then evaluated against the system specifications to ensure that requirements will continue to be met.

## Organizational Transfers

Soon after REMIC was formed, two functions were transferred from the offsite supporting group to TVAN. These were computer support and instrument maintenance. Although these functions were not represented by official members of REMIC, they were asked to attend when the agenda items warranted. This practice continued after the transfer for the computer support and a new member was added for the instrument maintenance function. REMIC provided a very useful forum for addressing issues involved in the transfer and for keeping abreast of the status of the change.

## Procedure Review/Approval

One of the largest impacts from the transfer of the functions to TVAN was procedural. REMIC developed a list of all the affected procedures and monitored their revision/deletion. REMIC is also charged with review, approval, and 10 CFR 50.59 review of all implementing procedures within the scope of REMIC. This helped ensure that no requirements were omitted. It also has allowed the instrument maintenance work to be performed without the use of plant work orders. This allowed a more efficient and streamlined process. For procedures that fall outside the scope of REMIC but are performed by the offsite organizations, an Independent Qualified Reviewer from each affected nuclear plant must approve the procedure.

## **Results**

The use of a standing committee, REMIC, has proven to be very effective in addressing configuration management at TVA nuclear plants for the radiological environmental and meteorological instrumentation systems. As a result, the quality of the programs has not declined in spite of tight budgets and heavy workloads. One of the temptations that REMIC has resisted is to proceduralize its operation. Instead, meeting minutes are used to document decisions and operating practice. Some of the successes include:

- Improved communication and relationships between the involved organizations
- Better TVAN oversight of the programs
- No additional audit findings
- More efficient operation of the monitoring programs
- Additional opportunities for support to the plant
- A forum for reviewing task status
- An avenue to address further potential changes to the programs