

**INSPECTION, MAINTENANCE & COMPONENT REPLACEMENT**

**A SYSTEMATIC AND SAFETY RELATED APPROACH**

by ALLAN PATERSON

SCOTTISH NUCLEAR LIMITED

EAST KILBRIDE

SCOTLAND

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**KEY AREAS ADDRESSED BY THIS APPROACH**

1. DECIDE/DEFINE TOTAL WORK TO BE DONE
  2. ENSURE WORK IS DONE AS SPECIFIED (QUALITY CONTROL)
  3. ABILITY TO DEMONSTRATE COMPLIANCE
  4. ENSURE RELIABILITY OF PLANT
  5. QUICK EFFECTIVE RETURN TO SERVICE OF PLANT
  6. CORRECT WORK DONE TO CORRECT MAINTENANCE/INSPECTION PROCEDURES
  7. CONVENTIONAL SAFETY OF PEOPLE AND PLANT
  8. ABILITY TO MONITOR WORK IN PROGRESS
  9. HISTORY RECORDS
  10. CORRECT COMPONENTS - THEIR FITTING AND MOVEMENT
  11. ANALYSIS OF RECORDED DATA
- .....

**A SYSTEM SOLUTION**

**G.O.M.I.S.  
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**G.O.M.I.S.**

**A COMPUTERISED MAINTENANCE/ INSPECTION SYSTEM**

**OPERATED BY SIX POWER UTILITIES WORLD-WIDE**

**AND MODIFIED/DEVELOPED TO MEET**

**THE SPECIFIED NEEDS OF**

**NUCLEAR GENERATION**  
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**G.O.M.I.S. OUTLINE**

**WORK CONTROL**

**PLANT RELIABILITY**

**AUDITABILITY**

**EMPLOYEE SAFETY**  
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**WORK CONTROL**

- \* REAL TIME DEFECT REPORTING TO CENTRAL DATABASE BY REMOTE ELECTRONIC INPUT
  - \* WORKBANK OF ROUTINE AND STATUTORY TASKS, TIME SCHEDULED AND SAFETY ASSESSED
  - \* FACILITY TO CREATE PACKAGES OF WORK TO BE DONE EXTRICATED FROM VARIOUS SECTIONS OF DATABASE
  - \* FEEDBACK OF COMPLETION OF TASKS TO SPECIFICATION
  - \* SYSTEM TRANSPARENT TO ALL AUTHORISED USERS
  - \* AUTOMATIC REPORTS ON WORK IN PROGRESS
  - \* INSTRUCTIONS AND PROCEDURES ELECTRONICALLY LINKED TO WORK DONE
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**PLANT RELIABILITY**

- \* ELECTRONIC CONFIRMATION OF TASK COMPLETION TO PREDEFINED STANDARDS
  - \* COMPREHENSIVE HISTORY DATA READILY AVAILABLE TO ASSIST IN IMPROVEMENT OF WORK TECHNIQUES AND COMPONENT DESIGN
  - \* REPORTS ON RELIABILITY TRENDS
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**AUDITABILITY**

- \* PERMANENT RECORD OF WORK DONE AND SPECIFICATIONS USED
  - \* ACCOUNTABILITY FOR ALL SYSTEM TRANSACTIONS
  - \* NON COMPLIANCES ELECTRONICALLY RECORDED
  - \* SECURITY OF DATA BUILT INTO SYSTEM
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**EMPLOYEE SAFETY**

- \* MANDATORY ASSESSMENT OF WORK FOR PERSONNEL AT RISK
  - \* INTERFERENCE TO WORK CONTENT AUTOMATICALLY CANCELS SAFETY ASSESSMENT AND HALTS WORK
  - \* AVAILABILITY OF ALL DATA TO THIRD PARTY SAFETY ASSESSORS
  - \* RECORDING OF PERSONNEL ENVIRONMENTAL DATA
- .....

**GOMIS AND SCOTTISH NUCLEAR**

G.O.M.I.S. HAS BEEN IN USE WITH SCOTTISH NUCLEAR SINCE 1985 AND HAS CONTRIBUTED TO ITS EXCELLENT PERFORMANCE AND SAFETY RECORD.

THE MANAGEMENT OF SAFETY HAS BEEN AUDITED AT SNL AND THE USE OF G.O.M.I.S. HAS FORMED AN IMPORTANT PART OF THE ABILITY OF THE OPERATOR TO DEMONSTRATE COMPLIANCE.