

**DEPT. OF NUCLEAR TECHNOLOGY**  
**CHULALONGKORN UNIVERSITY**

**Presentation - 10**

**"The ASSESSMENT FUNCTION"**

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## The ASSESSMENT FUNCTION

### OBJECTIVES:

To review :

- ◆ Self assessment
  - Self checking
  - Peer evaluation
  
- ◆ Auditing
  
- ◆ Assessment of QM



**Definition of SELF ASSESSMENT**

**Self Assessment is the evaluation  
of performance or output of an  
individual or an organization**

by

that individual or  
that organization  
itself

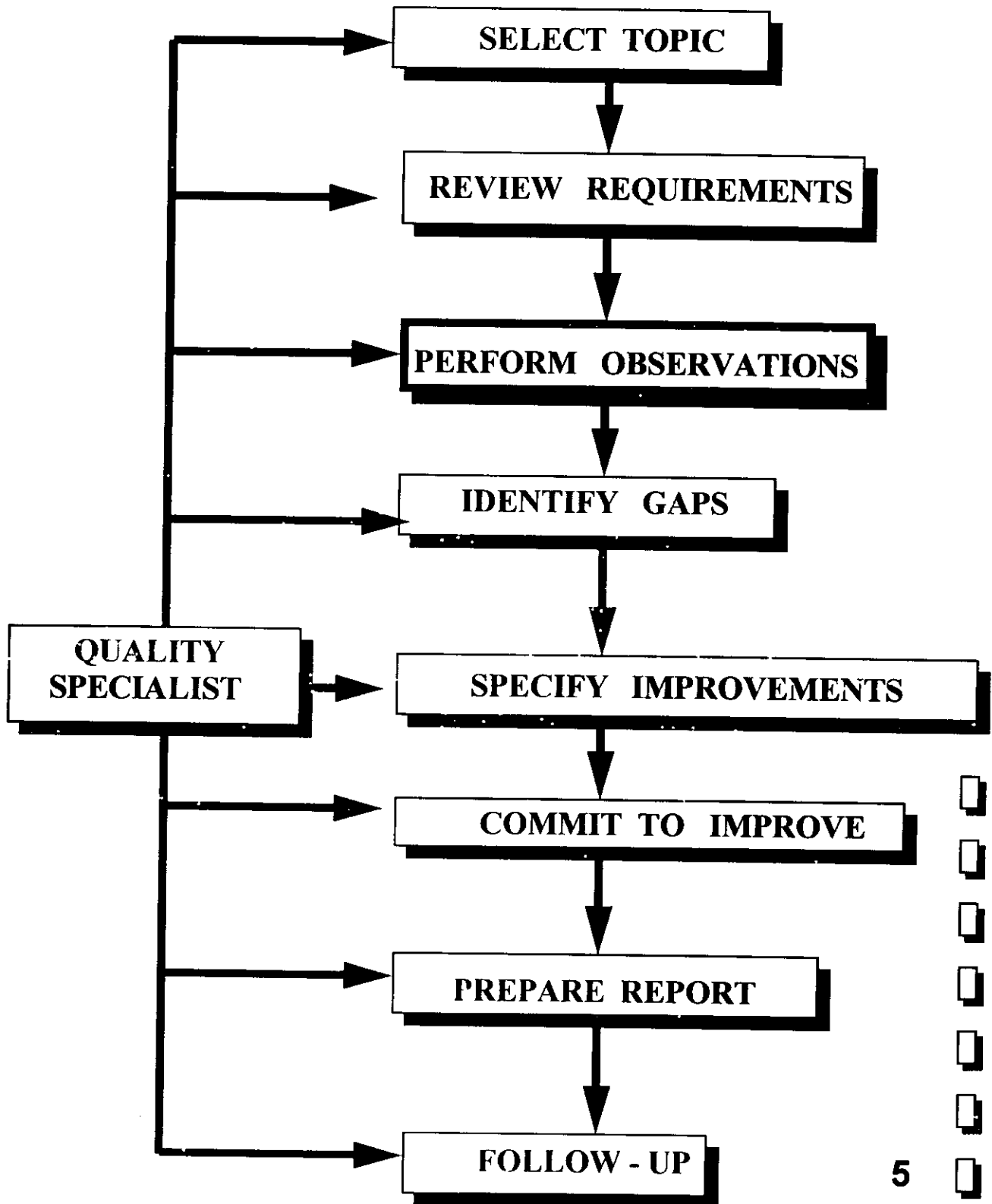


## SELF - ASSESSMENT CULTURE

- ◆ Self identification of problems and the motivation to fix them by all levels of the organization
- ◆ A structured approach to excellence
- ◆ Performance rather than compliance
- ◆ Management actively seeks out problems and resolves them, rather than relaying on others to identify the issues
- ◆ Emphasis on fixing the system rather than on blaming individuals



**SELF-ASSESSMENT PROCESS**



## FIVE ISSUES OF SELF ASSESSMENT

- ◆ Is there a performance standard ?
- ◆ Does performance meet the standard
- ◆ Are personnel qualified ?
- ◆ Are the standards, qualifications and performance adequately documented ?
- ◆ Is there reasonable expectation that the performance will improve in the longer term ?



## SELF ASSESSMENT - the ENVIRONMENT

- ◆ Clear understanding of long and short term goals by everyone
- ◆ Commitment to these goals
- ◆ Process for input to the goals
- ◆ Understanding of how individual's work impacts on the goals
- ◆ Ability to influence how the work is done
- ◆ Regular feedback on the status of achievement of goals



## SELF CHECKING - "STAR"

### ◆ STOP

- pause before acting
- focus attention

### ◆ THINK

- identify equipment
- current indications and  
and expected response

### ◆ ACT

- maintain eye contact
- touch equipment

### ◆ REVIEW

- verify expected response
- take appropriate conservative  
action





## PEER EVALUATION

- ◆ Uses defined criteria of excellence
- ◆ Performance based
- ◆ Evaluates the managed process
- ◆ Performed by Peers from a different plant
- ◆ Results based on many observations of work in progress
- ◆ Identifies areas for improvement
- ◆ Identifies excellent activities



## QA AUDITS -

### PERFORMANCE STANDARDS

Performance shall be compared against defined criteria

such as :

- ◆ International ( IAEA, WANO, INPO )
- ◆ National QA and other Standards
- ◆ Utility and Plant regulations
- ◆ Accepted Industrial Standards



**QA AUDITS - TOPICS for TYPICAL**

**AUDIT of MAINTENANCE**

- ◆ Training
- ◆ Qualification
- ◆ Maintenance procedures
- ◆ Spare parts control
- ◆ Substitution of parts
- ◆ Calibration



## MANAGEMENT OF QA AUDITS

### Audit program must be managed

There shall be :

◆ Audit policy and procedure

- annual and longer term plan
- generic audit process
- qualification requirements for auditors
- criteria for audit topic selection
- verification requirements
- reporting relationships



## QA AUDITS - AUDIT PROCESS

### Preparation :

- develop a detailed plan
- select and train team
- study documentation

### Conduct :

- review of documentation
- observations in the field
- interviews

### Follow-up :

- re-visit findings and corrective actions during subsequent audits



## WARNING ABOUT AUDITS

### Long-term audit plan must strike a balance

between :

- Commitment of resources to auditing
- Significance of audit findings
- Frequency of audits
- Effectiveness of auditee response

There can be too many audits

and

AUDIT OVERLOAD



## AUDITOR PRIVILEGES:

- ◆ Auditors must be independent:
  
- ◆ Have free access to
  - plant
  - personnel
  - documents and records
  
- ◆ Be free of cost and schedule considerations
  
- ◆ Have neither performed nor verified the activities being audited



**CAUTION ABOUT**  
**PERFORMANCE INDICATORS**

- ◆ Indicators show past results.  
To improve performance - improve process
- ◆ Don't punish staff for poor results , or  
they will be hidden
- ◆ Use consistent definitions and don't change them
- ◆ Take prompt action to correct problems and  
involve staff
- ◆ Analyze indicators carefully

“ WE are DROWNING in DATA,  
but are  
SHORT of INFORMATION  
and KNOWLEDGE ”





## PARETO PRINCIPLE

*“ 80 % of problems are*

*caused*

*by 20% of population ”*

therefore :

- ◆ ANALYZE using accurate information
- ◆ CONCENTRATE on the main problem

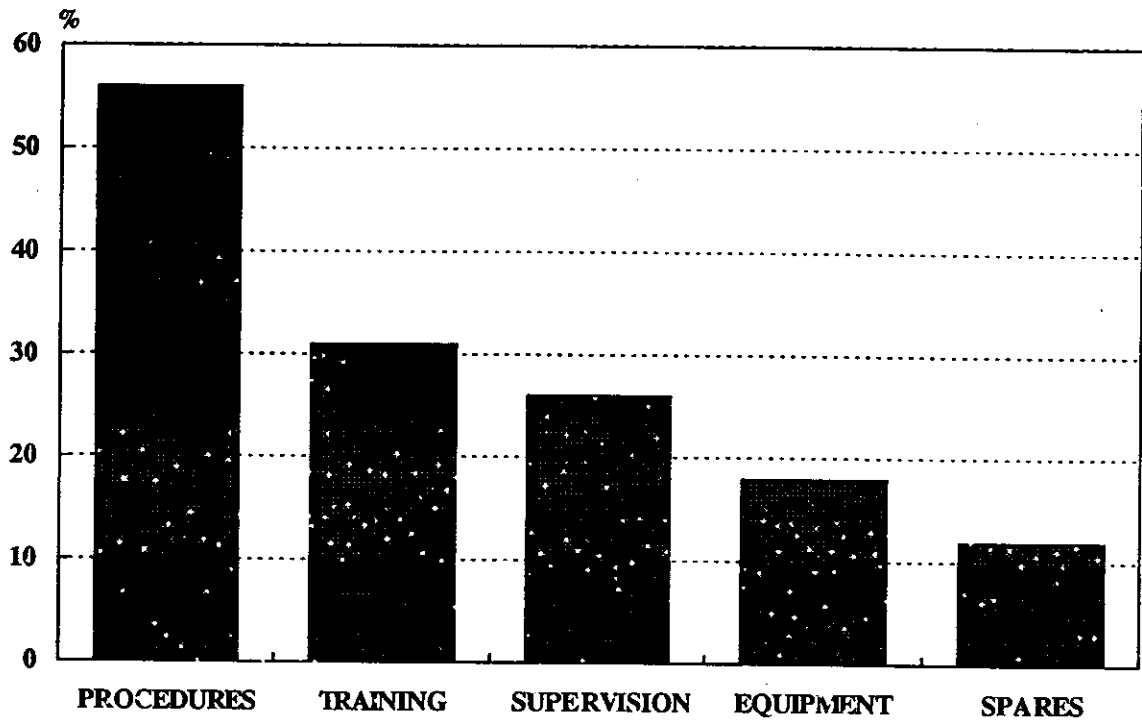


**SOME MEASURES of SUCCESS**  
**of QUALITY MANAGEMENT**

- ◆ Performance trends show steady improvement
- ◆ Problems are solved permanently, on schedule and with willing cooperation
- ◆ People are proud of their solutions and accomplishments
- ◆ Activities are planned - there is little “ fire fighting “
- ◆ Number of recurrent problems decreases



CAUSES OF POOR PERFORMANCE  
IN MECH. MNICE



**PROCEDURAL PROBLEMS**

