

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**

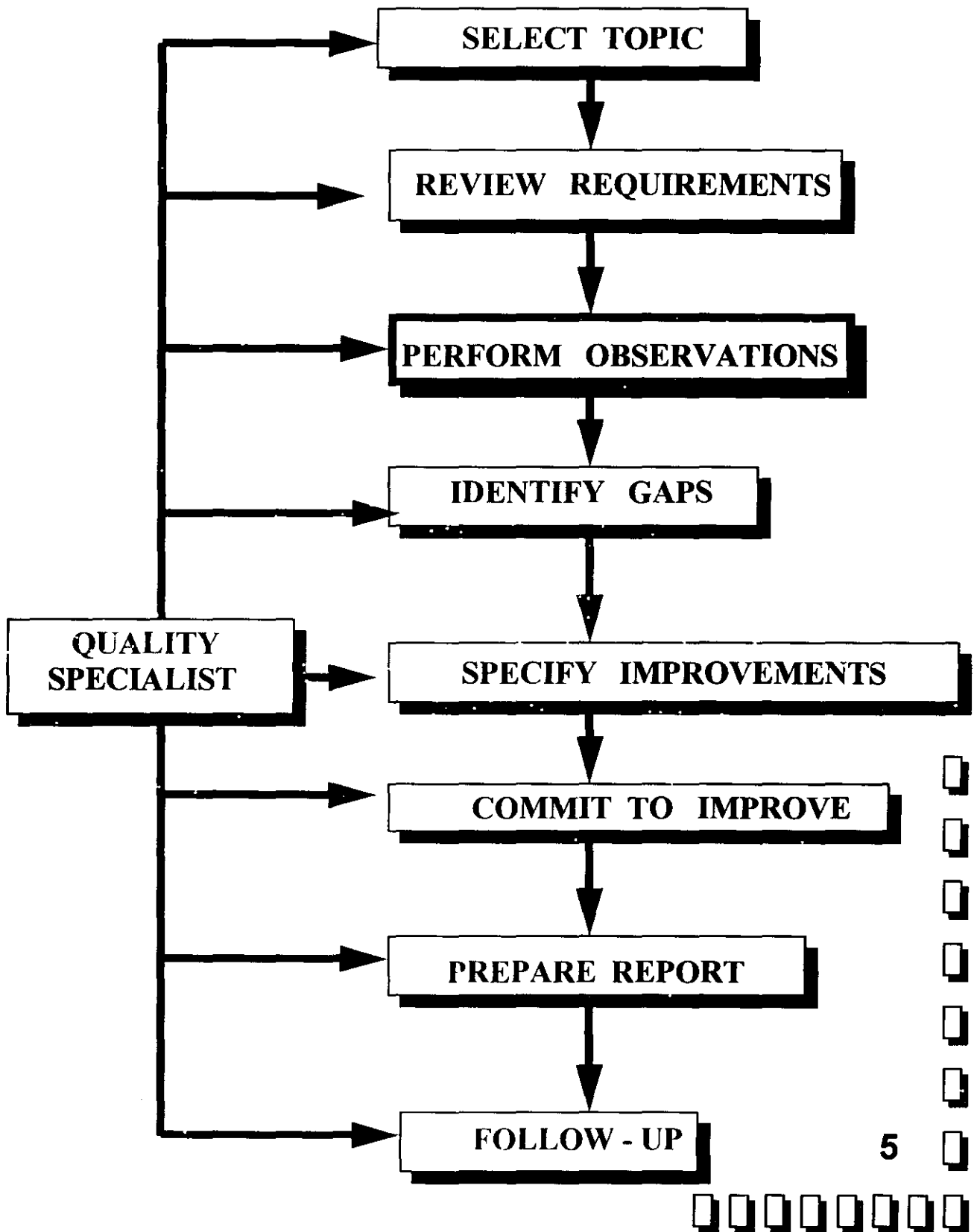


SELF - ASSESSMENT CULTURE

- ◆ **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 :

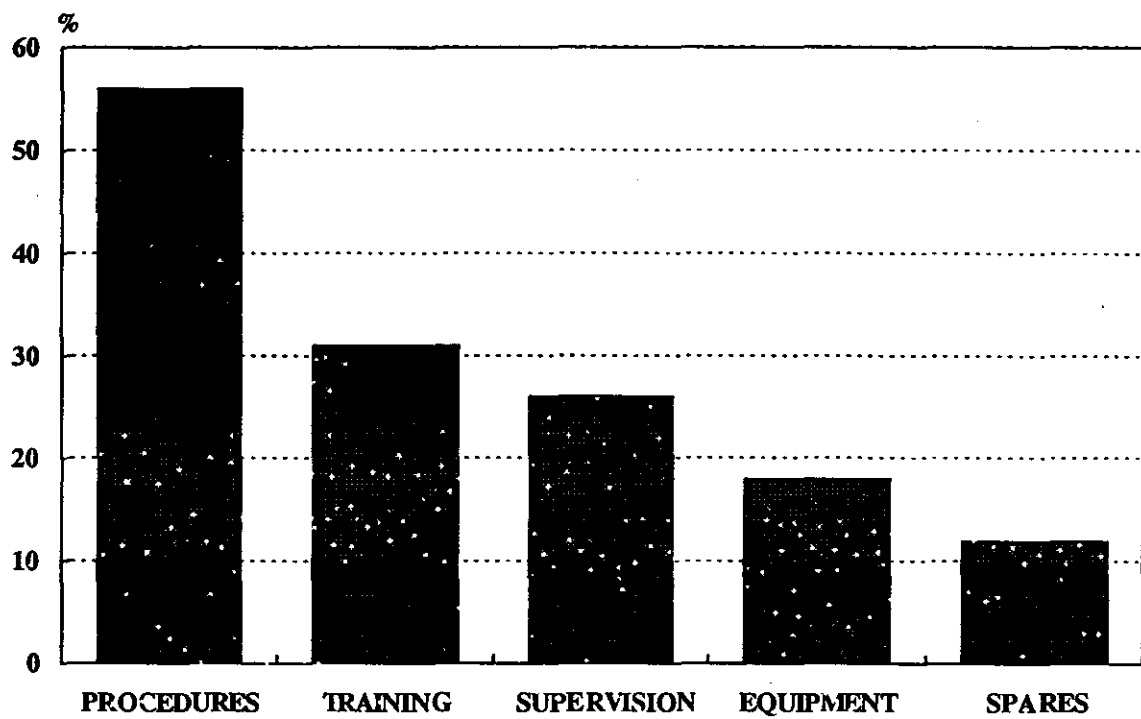
- ◆ ANALYZE using accurate information
- ◆ CONCENTRATE on the main problem

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. MNTCE



PROCEDURAL PROBLEMS

