UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

November 19, 1997

MEMORANDUM TO: File

FROM: David Louis Gamberoni
Inspection Program Branch
Division of Inspection and Support Programs
Office of Nuclear Reactor Regulation

SUBJECT: PUBLIC MEETING ON INTEGRATED REVIEW OF ASSESSMENT

On November 6, 1997, the NRC staff held a public meeting to discuss improvements to current NRC performance assessment processes and the Integrated Review of Assessment (IRA). Attachment 1 is a list of the meeting attendees. Attachment 2 is a copy of the NRC handout that was used in the meeting. Attachment 3 is a copy of a Nuclear Energy Institute handout that was used in the meeting.

The staff made brief presentations that addressed: (1) the information base for the senior management meeting (SMM), (2) improvements to the SMM process, and (3) the Integrated Review of Assessment.

Following the staff presentations, the Los Alamos National Laboratory contractor facilitated a comment period. Comments from the public and industry included:

- The trend models do not include scrams, significant events, and safety system actuations. These performance indicators are tied closely to safety. A trend model (if used) should be based on public health and safety.
- Plants are unique and can not be graded on a single scale or against each other.
- Eliminate the SALP program and Watch List because they provide no meaningful information.
- Alternatively, (if necessary) consider annual presentations to the Commission that describe safety performance for each plant in a region and the NRC's regulatory priorities.
- Match SALP functional areas (if retained) to template categories.
- Economic indicators should not be used because they can not discriminate between a plant that is cutting corners and one that is improving productivity.
- The trend models are event driven and are not useful. They are inconsistent with Commission staff requirements memoranda.

- Develop performance expectations for each area that have a direct relationship to public health and safety. Objective indicators should be defined for determining the degree to which performance expectations are being met.
- Assessments should be accurate, timely, and objective.
- Assessments should be tied to public health and safety and focus on specific safety issues.
- SALP assessments are untimely. The Watch List is untimely, misleads the public, and is open to political pressures.
- The Watch List results in unfair treatment of licensees because there is no licensee response and no opportunity for hearing.
- Allegations should not be used for performance assessment because it could result in less allegations being raised.
- If a new assessment process is put in place it is very important to communicate the new process to the public.

The staff invited the attendees to provide written comments. The Integrated Review Team will consider the comments received at the meeting and any written comments that are received.

Attachments: 1. List of Attendees
2. NRC Handout
3. Nuclear Energy Institute Handout

cc w/att: See next page

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DATE	11/19/97		11/19/97				

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Meeting Summary on Integrated Review of Assessment dated: November 19, 1997

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Integrated Review of Assessment - Public Meeting

November 6, 1997

Name	Organization
Bill Borchardt	NRC/NRR/PIPB
Mike Johnson	NRC/NRR/PIPB
David Gamberoni	NRC/NRR/PIPB
Tim Frye	NRC/NRR/PIPB
Bill Dean	NRC/OEDO
Glenn Tracy	NRC/OEDO
Gail Marcus	NRC/NRR/DRPW
Bill Reckley	NRC/NRR/DRPW
Melinda Malloy	NRC/DRPM/PGEB
Larry Nicholson	NRC/Region I
Mark Lesser	NRC/Region II
Michael Parker	NRC/Region III
Bill Johnson	NRC/Region IV
Ernie Rossi	NRC/AEOD
Alan Madison	NRC/AEOD
Peter Prescott	NRC/AEOD
Jose Ibarra	NRC/AEOD
Joel Kramer	NRC/RES
Heidi Hahn	Los Alamos National Laboratory
Pamela Ulibarri	Los Alamos National Laboratory
Steve Floyd	Nuclear Energy Institute
Herb Fontecilla	Virginia Power
David Lochbaum	Union of Concerned Scientists
John Matthews	Morgan, Lewis, and Bockius LLP
Deann Raleigh	SERCH
David Stellfox	McGraw-Hill
M. Straka	NUS Info Services

Attachment 1

PUBLIC MEETING PRESENTATION ON

IMPROVEMENTS TO NRC PERFORMANCE ASSESSMENT PROCESSES

NOVEMBER 6, 1997

Attachment 2

OUTLINE

- Information base for the senior management meeting
- Improvements to the SMM process
- Integrated Review of Assessment Processes

OBJECTIVE - CONSISTENT - LEADING - SCRUTABLE

THE COMMISSION HAS INITIATED A COMPREHENSIVE REVIEW OF THE SENIOR MANAGEMENT MEETING PROCESS

A SERIES OF STAFF REQUIREMENTS MEMORANDA HAVE CALLED FOR INDICATORS THAT:

"CAN PROVIDE A BASIS FOR JUDGING WHETHER A PLANT SHOULD BE PLACED ON OR REMOVED FROM THE WATCH LIST,"

ARE "OBJECTIVE, MEANINGFUL AND LEADING,"

"REDUCE RELIANCE ON EVENT-DRIVEN ASSESSMENTS,"

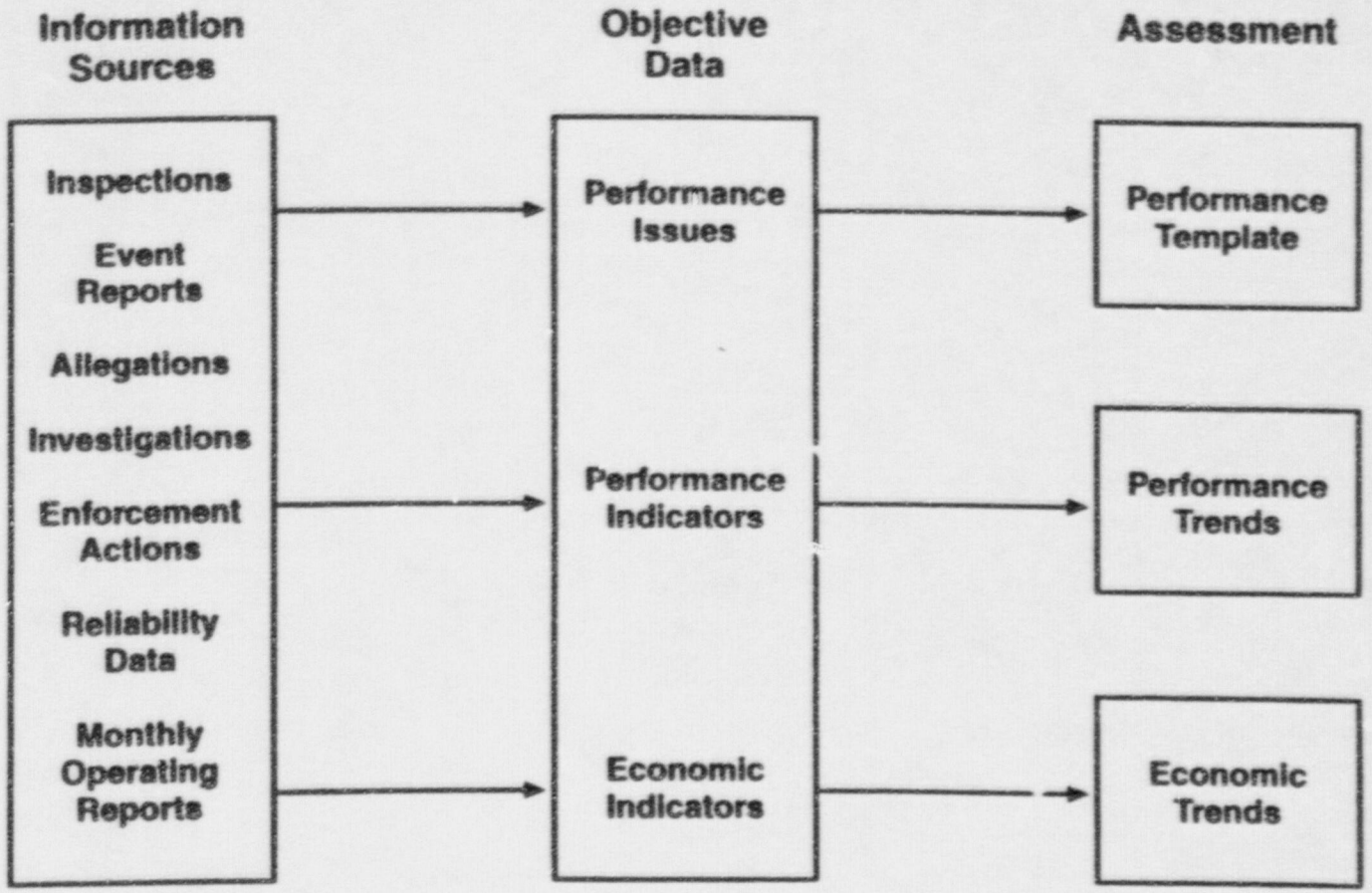
"ESTABLISH(ES) AN UNDERSTANDABLE LEVEL OF PERFORMANCE EXPECTATION,"

"IDENTIFY FACILITIES ... IN A CONSISTENT MANNER."

IMPLEMENTATION PLAN

- Template
  - Indicators and measures
  - Criteria for watch list plants
- Trending Methodology
  - Criteria for discussion plants
- Economic Indicators

PERFORMANCE ASSESSMENT INFORMATION



PLANT PERFORMANCE TEMPLATE

1 Operational Performance (Frequency of Transients)

- 1A Normal Operations
- 1B Operations During Transients
- 1C Programs & Processes

2 Material Condition (Safety System Reliability/Availability)

- 2A Equipment Condition
- 2B Programs & Processes

3 Human Performance

- 3A Work Performance
- 4B Knowledges/Skills/Abilities
- 3C Work Environment

4 Engineering and Design

- 4A Design
- 4B Engineering Support
- 4C Programs & Processes

5 Problem Identification & Resolution

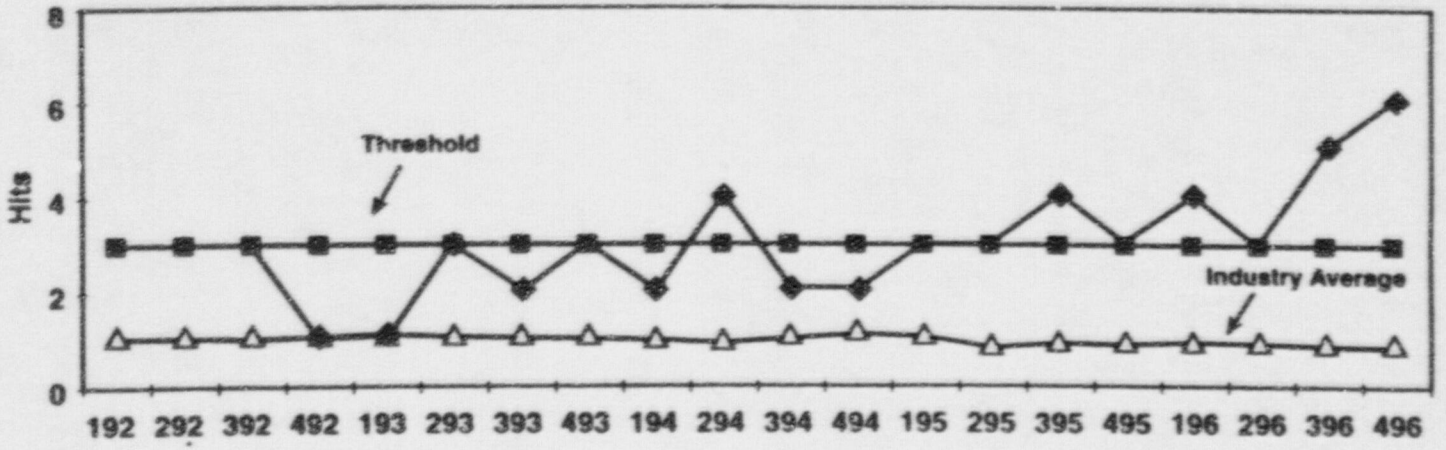
- 5A Identification
- 5B Analysis
- 5C Resolution

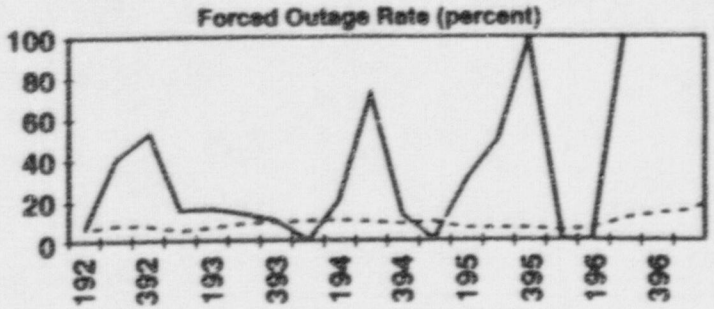
6 Organizational Effectiveness

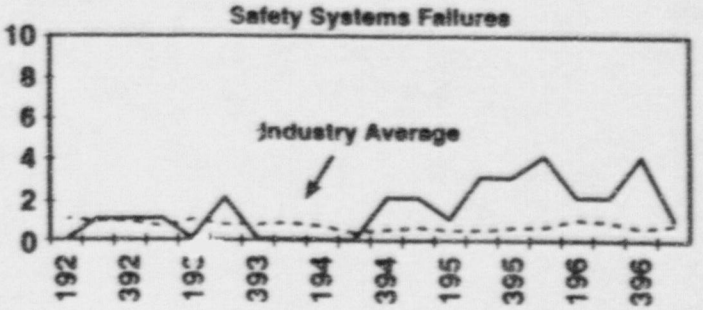
TEMPLATE INPUT MEASURES

- o Multiple sources of "issues"
  - Start with regional Plant Issues Matrix (PIM)
  - Safety significant LERs, Significant events, AEOPs
  - Escalated enforcement and civil penalties
  - Substantiated allegations and investigation findings
- o Issues evaluated by appropriate staff based on guidance from HQ
  - Merge redundant issues
  - Assign risk significance (high/medium/low)
  - Map issues to template subcategories
- o Headquarters audit of implementation

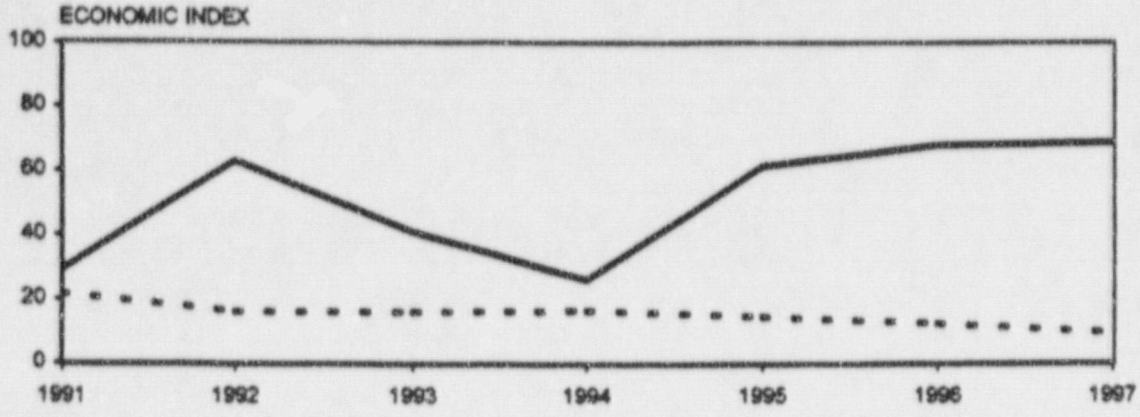
PLANT103 PERFORMANCE TREND MODEL (6-QTR)

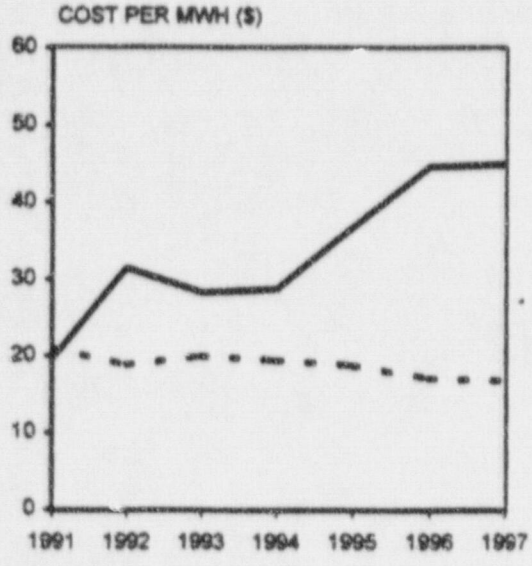


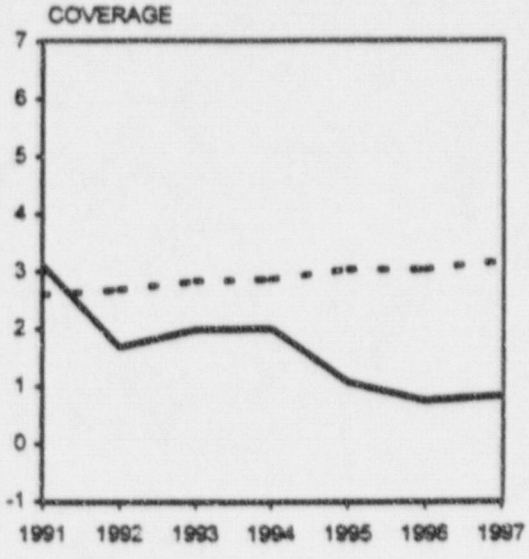


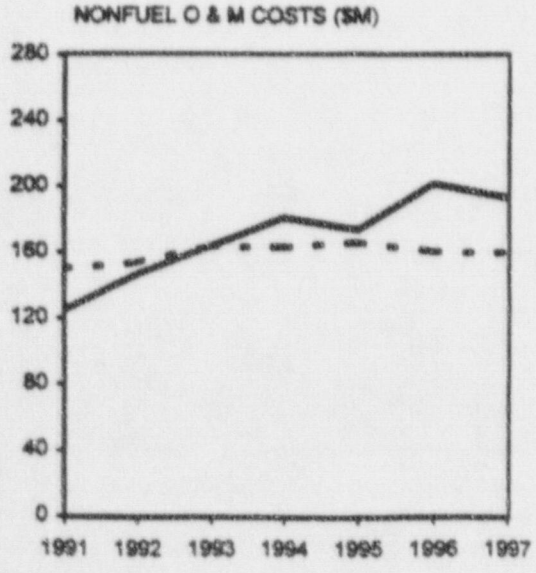


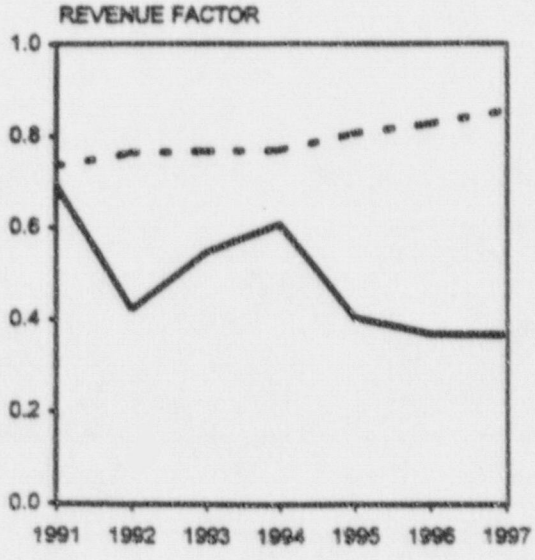
ECONOMIC VARIABLE TRENDS: MULTI-UNIT FACILITY



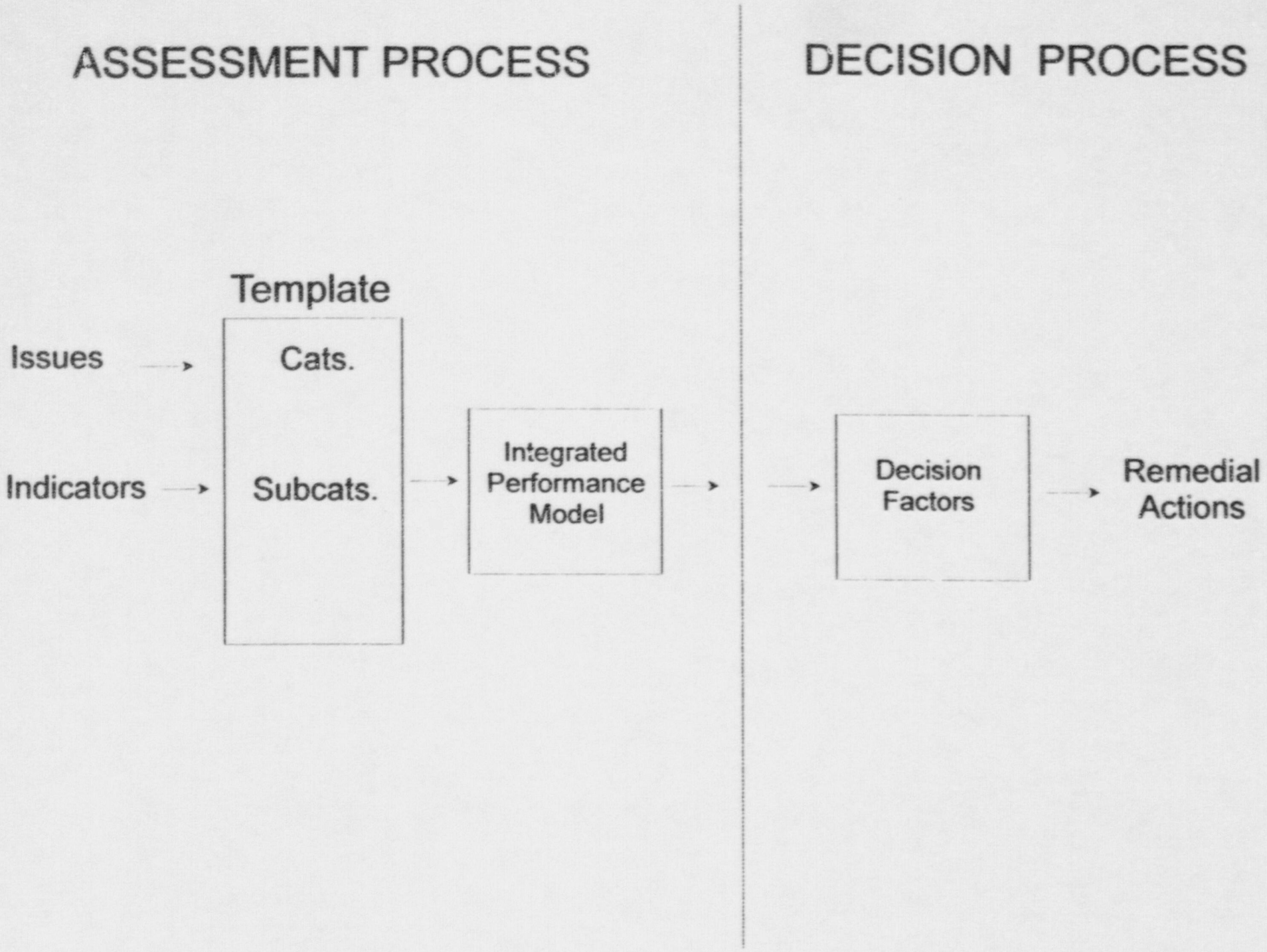








site value - - - - industry median for multi-unit. Note: actual data are lagged one year.


ASSESSMENT PROCESS
DECISION PROCESS
Template
Issues
Indicators
Cats.
Subcats.
Integrated Performance Model
Decision Factors
Remedial Actions

INTEGRATED REVIEW OF THE NRC ASSESSMENT PROCESS FOR OPERATING COMMERCIAL NUCLEAR REACTORS

OVERVIEW OF CURRENT ASSESSMENT PROCESSES

- **SYSTEMATIC ASSESSMENT OF LICENSEE PERFORMANCE (SALP)**
  - Implemented in 1980 following TMI event
  - Allowed for a systematic, long-term, integrated evaluation of overall licensee performance
- **SENIOR MANAGEMENT MEETING (SMM)**
  - First implemented in April 1986 following the 1985 Davis-Besse loss-of-feedwater event
  - SMM developed to bring to the attention of the highest levels of NRC management those plants whose performance was of most concern
  - Process developed so that the primary focus of the SMM is on operational safety
  - Allowed senior NRC managers to plan a coordinated course of action

OVERVIEW OF CURRENT ASSESSMENT PROCESSES (Continued)

- **PLANT PERFORMANCE REVIEW (PPR)**
  - Initial process implemented in October 1990 as a quarterly activity
  - Developed to provide mid-course adjustments in inspection focus in response to changes in licensee performance & emerging plant issues
  - A major emphasis to improve the PPR process occurred following the South Texas Lessons Learned Task Force
- **PLANT ISSUES MATRIX (PIM)**
  - Implemented across the regions in Spring 1996
  - Developed as part of the effort to improve the integration of inspection findings following the South Texas Lessons Learned Task Force
  - Provides an index of the primary issues that are evaluated during the PPR, SALP and SMM processes.

(+)STRENGTHS/(-)WEAKNESSES OF CURRENT ASSESSMENT PROCESSES

- PPR
  - (+)PPR provides short term, integrated assessments and is effective at identifying leading indicators of change in performance
  - (-)PPR is not as effective at identifying long term trends and recurring issues
- SALP
  - (+)Periodic, integrated reviews of licensee performance over an extended time period are effective at identifying long term trends
  - (-)Due to a long assessment period, the SALP process is backward looking and provides lagging indicators of licensee performance
  - (+)SALP process categorizes licensee performance so that relative performance between plants can be measured
  - (-)SALP scores are not clearly defined, not well understood by the public, and often misused by the public, financial institutions and industry

(+)STRENGTHS/(-)WEAKNESSES OF CURRENT ASSESSMENT PROCESSES (Continued)

- SMM
  - (+)SMM provides for a coordinated agency position for both declining and superior performance
  - (-)Significant administrative requirements placed on staff and senior managers in preparing for and participating in SMMs
  - (+)SMM process effective at highlighting agency concern to licensees. Plant performance often increases following Watchlist designation and issuance of trending letters
- GENERAL
  - (-)Many assessment processes are redundant and have similar end products
  - (-)Assessment criteria differs between processes such as the SALP and SMM
  - (-)Processes have potential for inconsistent implementation among the regions
  - (-)Processes have gone through many changes and require more resources for implementation than originally intended

SUCCESS CRITERIA FOR INTEGRATED REVIEW

- **ATTRIBUTES TO MAXIMIZE**
  - Single assessment process. Early identification of declining licensee performance. Ability to detect long term trends and recurring events
  - Staff job assignments for critical assessment activities well defined
  - Open dialogue of assessment results with the industry and public
- **ATTRIBUTES TO MINIMIZE**
  - Inconsistent assessment criteria between different steps of the process
  - Overlapping responsibilities among staff. Excessive administrative requirements to implement the process
  - Latitude among regions/HQ in implementing the process
  - Opportunities for conflicting messages on performance

BOUNDARY CONDITIONS FOR INTEGRATED REVIEW

- Not tied to the "Status Quo" of any existing processes
- The inspection program and enforcement policy are not included in this review
- Performance of all plants categorized
- Public interaction and opportunity for licensees to respond

INTEGRATED REVIEW ASSESSMENT

- PROCESS
  - NRR has project lead
  - A series of meetings will be held with active participation from all regions and several program offices
- SCHEDULE
  - March 1998-Integrated Review and Assessment Results Finalized
  - May 1998-Public/Industry Comments Received and Reviewed
  - June 1998-Implementation Plan Developed
  - June 1998-Commission Briefing For Approval of Process and Implementation
  - July 1998-Commission Approval For Process Implementation
  - December 1998-Implementation of New Assessment Process

SCHEDULE / MILESTONES

- PUBLIC COMMENT PERIOD AND WORKSHOP FOR BOTH PROJECTS: SPRING, 1998
- RECOMMENDATION FOR COMMISSION DECISION: SUMMER, 1998
- IMPLEMENTATION: END OF CALENDAR YEAR 1998
  - REVISION TO MANAGEMENT DIRECTIVE 8.14

Guiding Principles for Performing Safety Assessments

1. The objectives of the assessment activity should be clearly defined.

2. Performance expectations should be well defined and be clear and understandable for each assessment area.

3. Performance expectations should have a direct relationship to public health and safety.

4. Objective indicators should be defined for determining the degree to which performance expectations are being met. Attributes of appropriate indicators are:

    - direct relationship between the indicator and safety
    - necessary data should be available or capable of being generated
    - able to be expressed in quantitative terms
    - unambiguous
    - meaningful
    - significance should be understood
    - not susceptible to manipulation
    - able to be validated

5. Assessment findings should be supported by the direct measurement of the performance indicators.

6. Assessment findings should be scrutable and repeatable.