March 28, 1996

Virginia Electric and Power Company
ATTN: Mr. J. P. O'Hanlon
Senior Vice President - Nuclear
Innsbrook Technical Center
5000 Dominion Boulevard
Glen Allen, VA 23060

SUBJECT: MEETING SUMMARY - VIRGINIA ELECTRIC AND POWER COMPANY ENGINEERING INITIATIVES - SURRY AND NORTH ANNA POWER STATIONS - DOCKETS 50-280, 50-281, 50-338, 50-339

Gentlemen:

This refers to the meeting conducted at your request at the NRC Region II Office in Atlanta, Georgia on March 26, 1996. The purpose of the meeting was to discuss Nuclear Engineering Initiatives.

It is our opinion that this meeting was beneficial. It provided us with a better understanding of the Nuclear Business Unit Re-engineering efforts, self-assessment initiatives, and other major activities and current issues.

A list of attendees and a copy of your handout are enclosed.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10 Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the NRC Public Document Room.

Sincerely,

Original signed by
David M. Verrelli for:

Charles A. Casto, Chief
Engineering Branch
Division of Reactor Safety

Docket Nos. 50-280, 50-281, 50-338, 50-339
License Nos. DPR-32, DPR-37, NPF-4, NPF-7

Enclosures: 1. List of Attendees
2. VEPCO Presentation

cc: (See page 2)

IE45

cc: M. L. Bowling, Manager
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Supervisors
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Dendron, VA 23839

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Virginia State Corporation
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(Distribution - See page 3)

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COPY?	(YES)	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRS\EB\VEPCOMTG.SUM

LIST OF ATTENDEES

Virginia Electric and Power Company:

M. Kansler, Vice President, Nuclear Engineering & Services
L. Hartz, Manager, ISI/NDE & Engineering Programs
D. Benson, Manager, Nuclear Engineering

Nuclear Regulatory Commission:

L. Reyes, Deputy Regional Administrator, Region II (RII)
A. Gibson, Director, Division of Reactor Safety (DRS), RII
E. Merschoff, Director, Division of Reactor Projects (DRP) RII
C. Casto, Chief, Engineering Branch, DRS, RII
G. Belisle, Chief, Reactor Projects Branch 5, DRP, RII
L. Garner, Project Engineer, Reactor Projects Branch 5, DRP, RII
M. Thomas, Senior Reactor Inspector, Engineering Branch, DRS, RII

Enclosure 1

Enclosure 2

Nuclear Engineering Update

March 26, 1996

VIRGINIA POWER

PP362.1

Michael Kansler
Vice President
Nuclear Engineering & Services

Leslie Hartz
Manager ISI / NDE & Engineering Programs

David Benson
Manager Nuclear Engineering

Agenda

- Re-Engineering
- Self-Assessment
- Major Activities; Current Issues
  - Risk Based ISI
  - Conversion to Improved Standardized Technical Specifications
  - License Renewal
  - Fuel Defects-Surry Unit 1
  - RCCA Performance
  - Control Rod M-10, Independent Rod Position Indication - Surry Unit 2
  - Steam Generator Blowdown Upgrades - North Anna
- Closing Remarks

Nuclear Business Unit Reengineering

- Objective

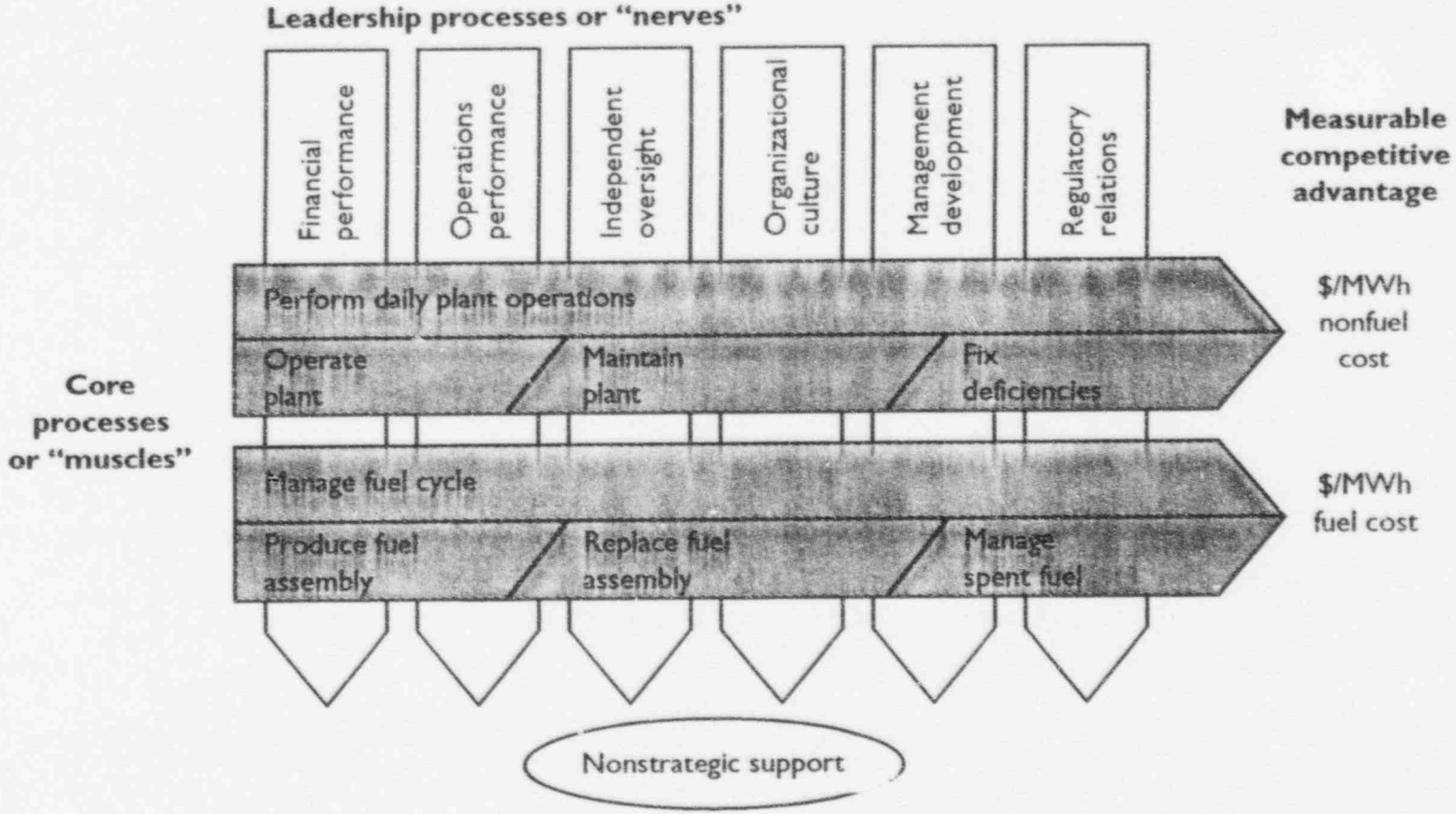
  To transform Nuclear Business Unit from world-class performer under economic regulation to world-class performer in competitive generation industry

- Strategy

  Improve economic performance with continued emphasis on safety and standards of excellence

  Control our destiny

Identification of Core and Support Processes



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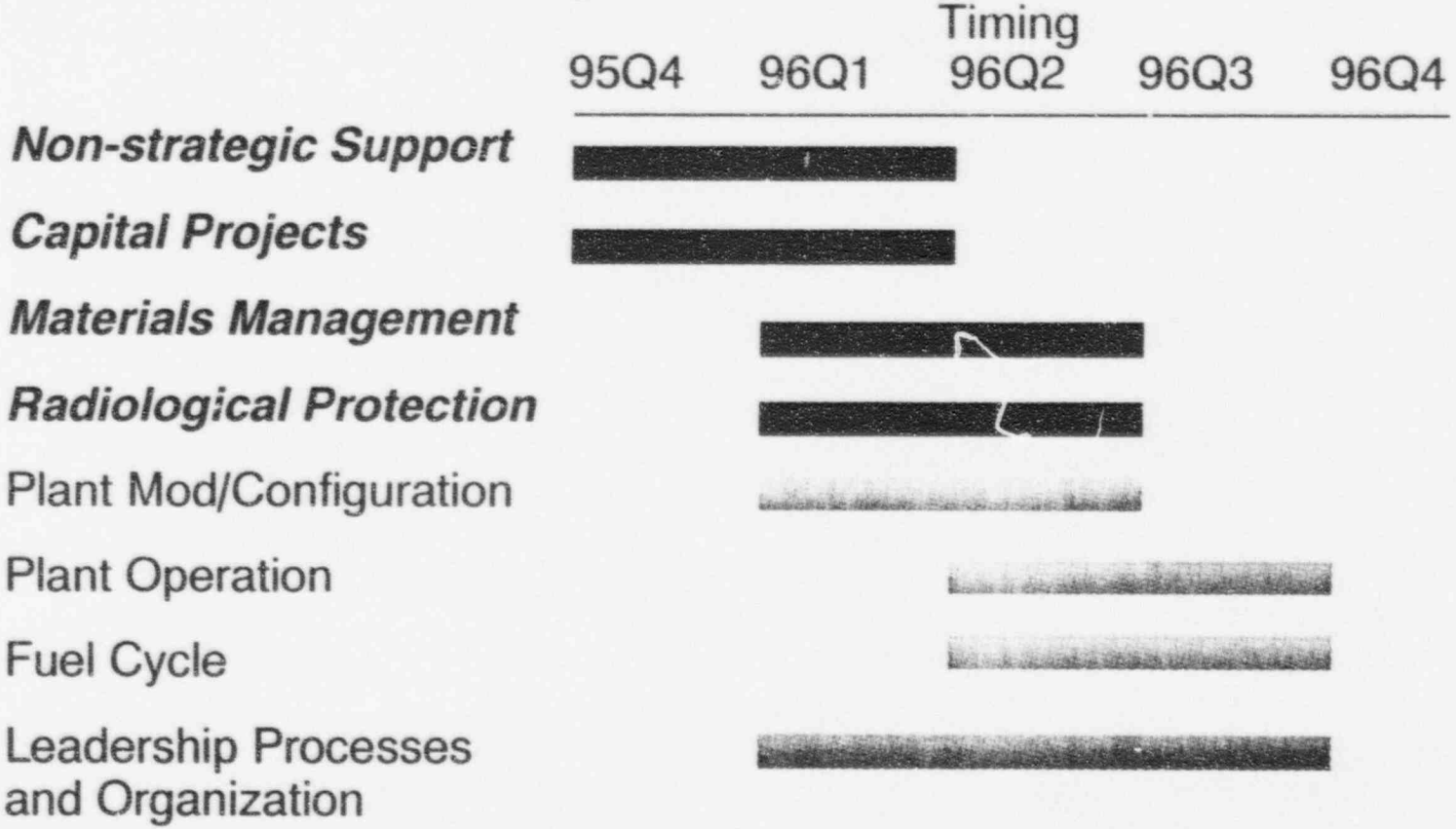
Identification of Nonstrategic Processes

- Training
- Graphics
- Finance
- Emergency Preparedness
- Chemistry Support
- Environmental Monitoring
- Operational Experience
- IT / Telecom
- Maintenance Support
- Security / Access Services
- Records
- Facilities Support
- Human Resources
- Administrative Procedures
- Industrial Safety / Loss Prevention
- Licensing
- Oversight

Nuclear Processes Divided Among Eight Modules



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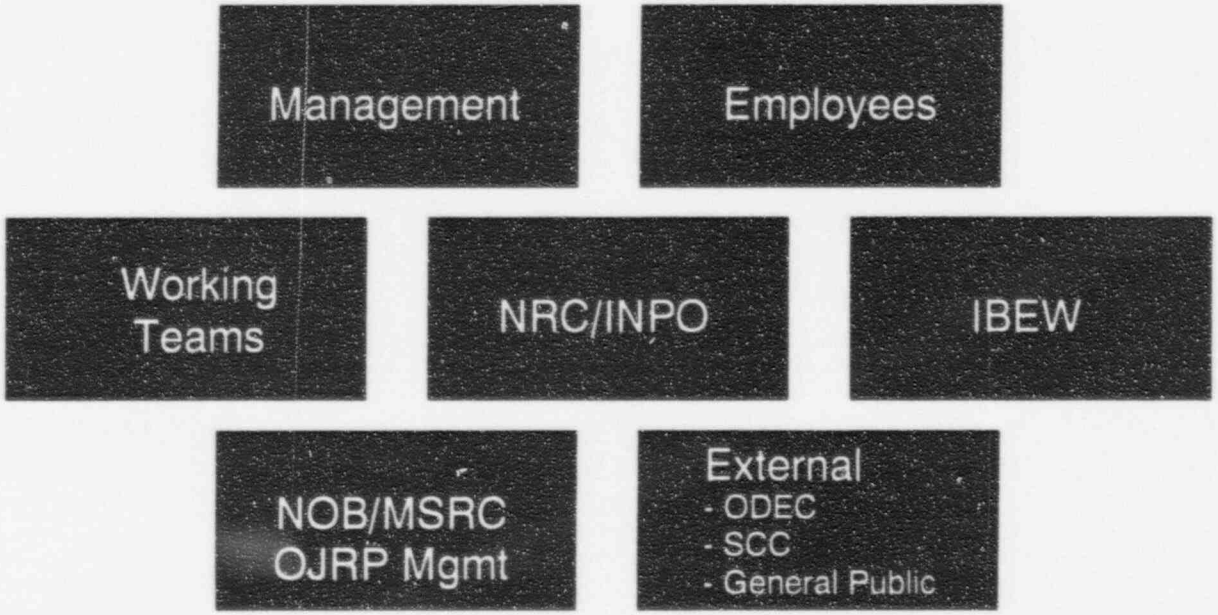
NBU Change Management

- Purpose
  - Facilitate smooth transition of the NBU organization from "Traditional NBU" to "Competitive NBU"
- Role of Change Management Team
  - Develop and update NBU Change Management Communications Plan
  - Monitor and coordinate change activities to assure:
    - timely completion
    - consistent messages are provided
    - appropriate interface between activities
  - Provide a focal point for reengineering change activities
  - Provide management with employee feedback

NBU Change Management Audiences



Nuclear Engineering Services Re-engineering

- Engineering Vision and Mission
- Re-engineering Objectives and Scope
- Task List

Engineering Vision and Mission

- We will maintain the plant design basis and configuration while being the provider of choice of engineering services for our nuclear power stations.
- We will do this by providing responsive, technically sound, cost effective resolution of issues and effective management of engineering resources.

Re-engineering Objectives and Scope

- Current role of design authority does not change.
- Emphasis is on responsiveness and process re-engineering.
- Scope includes all engineering activities except fuel cycle management.

Task List

- Define Engineering Function and Products
  - What should be the role of a nuclear engineering organization?
- Analyze Current State
  - Define current work activities
  - Define in-house expertise
  - Map current processes and decision points

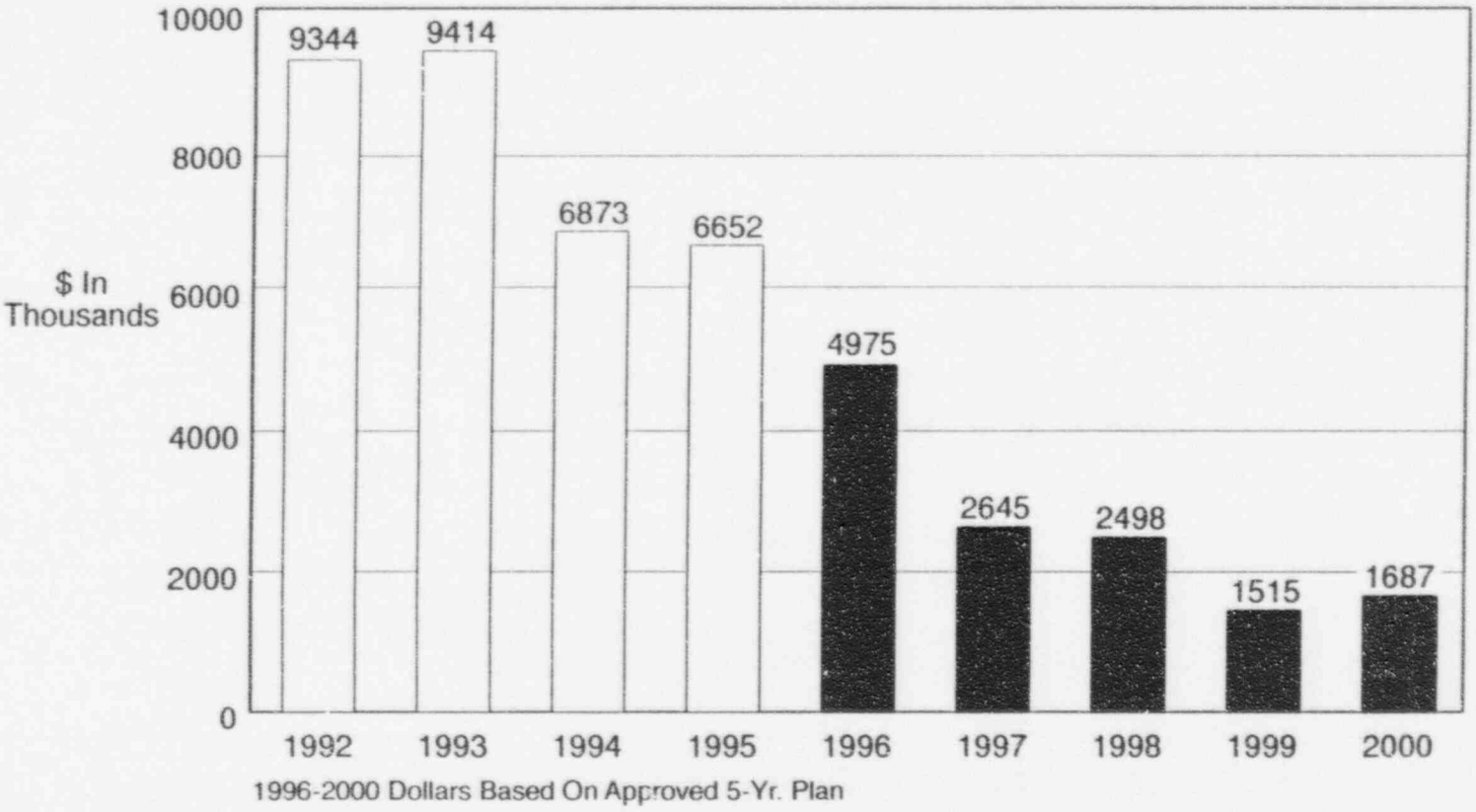
Task List

- Validate and Refine Products and Approach
  - Best practice visits
  - Employee brainstorming sessions
  - Team sessions to synthesize findings
  - Management buy-in

Task List

- Identify Required Changes to Current Approach
  - Process changes
  - Resource requirements
    - skills and qualities
    - in-house vs. outsourcing
- Management Approval
- Implementation

Capital Support for North Anna and Surry



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Engineering Self-Assessment

- Engineering Self-Assessment Components
  - Engineering Management is Responsible for Self-Assessment Program
  - Reviews include Performance and Program Effectiveness
  - Corrective Action Process Incorporated
- Enhancements will be evaluated following the completion of re-engineering

Risk-Based ISI

- Surry 1 ISI Program will be reviewed as part of pilot/ research effort
- Effort is coordinated with WOG, ASME Research, NEI, NRR and NRC Research
- Objective is to focus ISI inspections on risk significant pipe segments
- Result will be more high risk areas inspected with fewer inspections

Conversion to Improved Standardized Technical Specifications

- Scope: Convert North Anna and Surry Technical Specifications to the improved Standard Technical Specifications utilizing NUREG-1431 for Westinghouse plants

- Core Project Team: Licensing, Engineering, Operations

Conversion to Improved Standardized Technical Specifications

- Engineering Emphasis
  - Concurrence on content
  - Verification of technical accuracy
  - Confirmation of supporting documentation
  - Updating of document linkages and cross-references

- Schedule: February 1997 - North Anna submittal to NRC
  February 1998 - Surry submittal to NRC

License Renewal

- NEI Demonstration Program - In Progress
  - Lead Units - Westinghouse
    - Virginia Power - Surry
      - North Anna
    - Wisconsin Electric Power Co.
      - Pt Beach
  - Program Objective - Demonstrate the technical evaluation methodology for a limited number of structures and components using NEI Guideline 95-10

License Renewal

- Schedule

1996	Complete NEI Demonstration Program, initiate remaining evaluations
1998	Westinghouse Owners Group completes generic technical evaluations
1998/99	Submit License Renewal Application

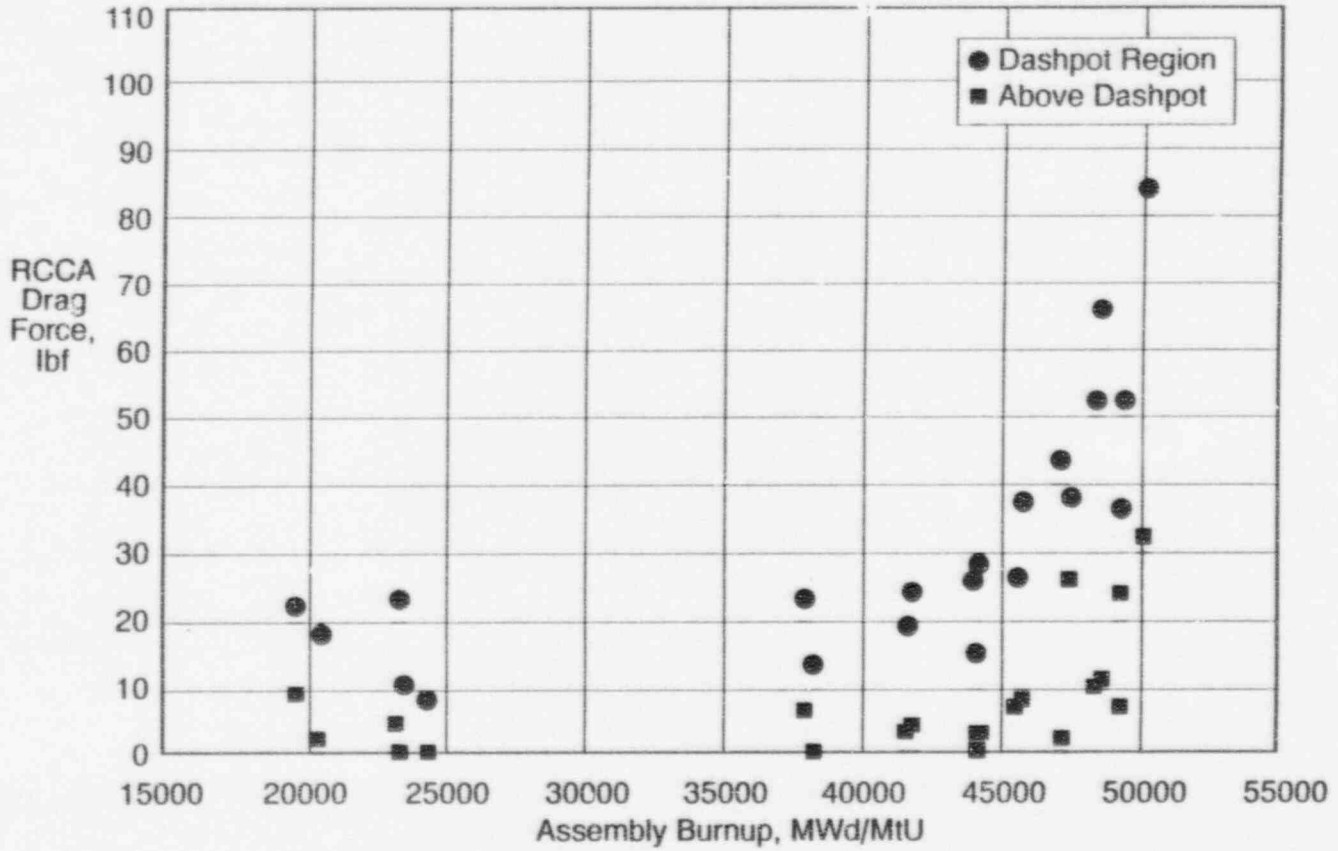
Fuel Defects - Surry Unit 1

- Gas Management Plan
  - Task team - Engineering, health physics, chemistry, operations
  - Developed computer model of various release paths to aid in minimizing operational releases
  - Secured routine venting of VCT
  - Extensive efforts to locate and repair minor leaks in overhead gas and waste gas systems
  - Will develop optimal degas strategy

RCCA Performance

- RCCAs failed to fully insert following reactor trips at Wolf Creek and South Texas
- During insert shuffle in preparation for North Anna 1, Cycle 12 loading, two new RCCAs could not be removed with normal operation of the RCCA handling tool from the fuel assemblies in which they were temporarily stored
- Engineering undertook program to drag test assemblies from N1C11 and from the spent fuel pool to support operation of N1C12
- Engineering is preparing a response to NRC Bulletin 96-01

North Anna RCCA Drag Test Data



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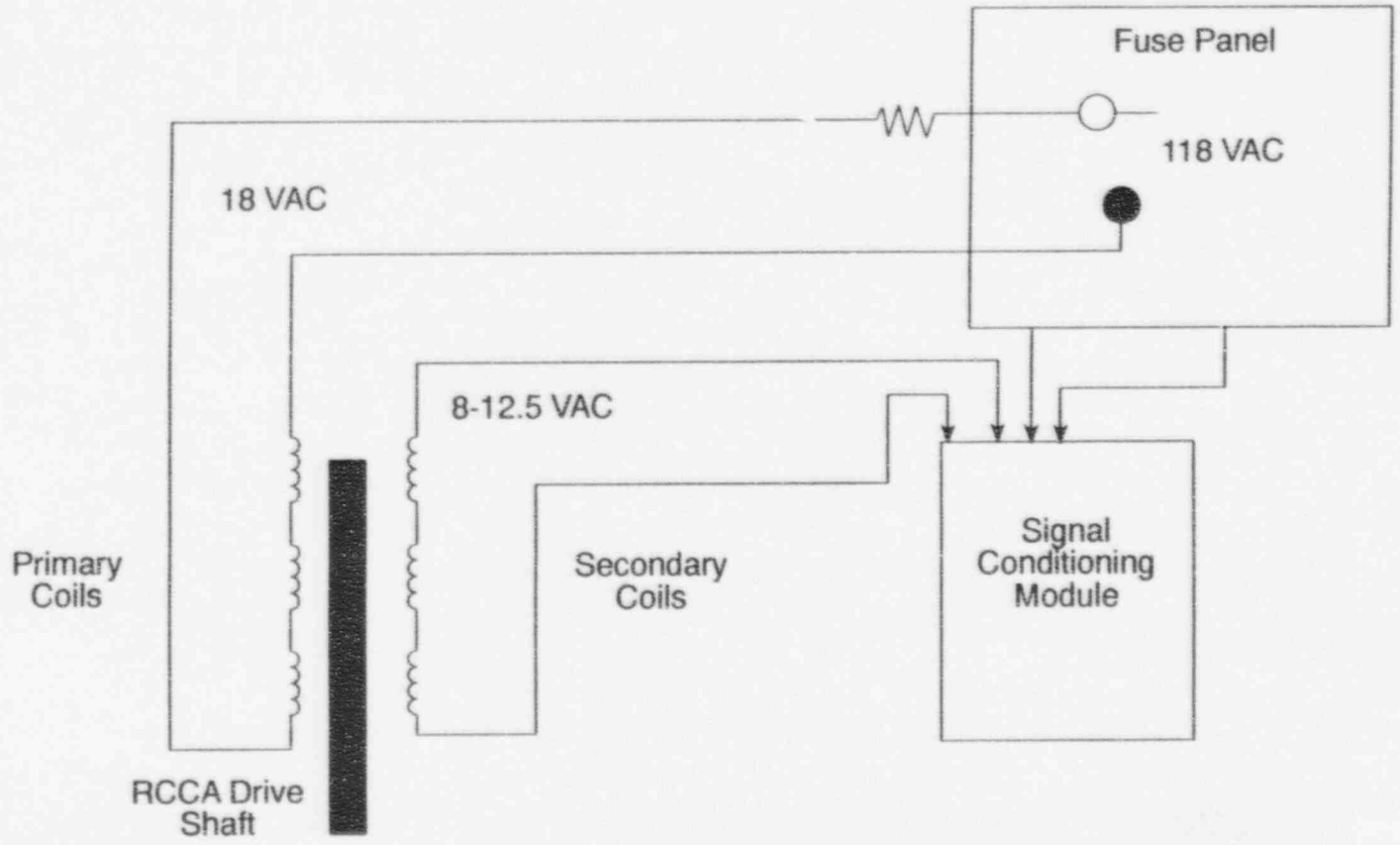
Control Rod M-10, Independent Rod Position Indication - Surry Unit 2

- IRPI M-10 has frequently failed to indicate full insertion following reactor trips.
  - Indicated 20 to 30 steps initially
  - Drops to 0 steps within a few hours
- Testing concurrent with obtaining rod drop traces confirms that the rod is fully inserted

Control Rod M-10, Independent Rod Position Indication - Surry Unit 2

- Possible causes
  - electronics
  - differing material characteristics
- Testing indicates that a difference in drive shaft housing material properties is the probable cause
- The drive shaft housing will be replaced during the upcoming Unit 2 refueling (May/June, 1996)

Rod Position Detection



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Steam Generator Blowdown Upgrade - North Anna

- Original SG Blowdown capacity - 18-20 gpm/gen
- Blowdown system upgrades were completed and placed in service December of 1995. Capacities are now:
  - 40-60 gpm/gen normally
  - 100 gpm/gen maximum
- Chemistry performance which had been slightly below the industry median is now well above the median and continues to improve