



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION IV

611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

SEP - 1 1995

Wolf Creek Nuclear Operating Corporation  
ATTN: Neil S. Carns, President and  
Chief Executive Officer  
P.O. Box 411  
Burlington, Kansas 66839

SUBJECT: ENGINEERING ISSUES (NRC INSPECTION REPORT 50-482/95-07)

This refers to the meeting conducted in the Region IV office on August 21, 1995. This meeting related to engineering issues identified in NRC Inspection Report 50-482/95-07 and related matters. A copy of the Wolf Creek Nuclear Operating Corporation presentation material is provided as Enclosure 1. The attendance list for this meeting is provided in Enclosure 2.

During this meeting, licensee personnel discussed actions being taken to improve overall engineering performance at Wolf Creek Nuclear Operating Corporation, including engineering's use of problem identification reports and self assessments, the performance of safety evaluations and expectations for system engineers. Overall, the meeting was positive and provided a good discussion of engineering performance at Wolf Creek Nuclear Operating Corporation and a better understanding of the measures of engineering performance.

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 will be placed in the NRC's Public Document Room.

Should you have any questions concerning this matter, we will be pleased to discuss them with you.

Sincerely,



Thomas P. Gwynn, Director  
Division of Reactor Safety

Docket: 50-482  
License: NPF-42

Enclosures:  
1. Licensee Presentation  
2. Attendance List

IE45  
///

Wolf Creek Nuclear Operating  
Corporation

-2-

cc w/enclosures:  
Wolf Creek Nuclear Operating Corp.  
ATTN: Vice President Plant Operations  
P.O. Box 411  
Burlington, Kansas 66839

Shaw, Pittman, Potts & Trowbridge  
ATTN: Jay Silberr Esq.  
2300 N Street, NW  
Washington, D.C. 20037

U.S. Nuclear Regulatory Commission  
ATTN: Regional Administrator, Region III  
801 Warrenville Road  
Lisle, Illinois 60532-4351

Wolf Creek Nuclear Operating Corp.  
ATTN: Supervisor Licensing  
P.O. Box 411  
Burlington, Kansas 66839

Wolf Creek Nuclear Operating Corp.  
ATTN: Supervisor Regulatory Compliance  
P.O. Box 411  
Burlington, Kansas 66839

Missouri Public Service Commission  
ATTN: Assistant Manager  
Energy Department  
P.O. Box 360  
Jefferson City, Missouri 65102

Kansas Corporation Commission  
ATTN: Chief Engineer  
Utilities Division  
1500 SW Arrowhead Rd.  
Topeka, Kansas 66604-4027

Office of the Governor  
State of Kansas  
Topeka, Kansas 66612

Attorney General  
Judicial Center  
301 S.W. 10th  
2nd Floor  
Topeka, Kansas 66612-1597

Wolf Creek Nuclear Operating Corporation

-3-

E-Mail report to D. Sullivan (DJS)  
E-Mail report to NRR Event Tracking System (IPAS)

bcc to DMB (IE 45)

bcc distrib. by RIV:

L. J. Callan  
Branch Chief (DRP/B)  
Section Chief (RIII, DRP/3C)  
SRI (Callaway, RIII)  
Project Engineer (DRP/B)  
Branch Chief (DRP/TSS)  
K. E. Perkins, (D/WCFO)

Resident Inspector  
DRSS-FIPB  
RIV File  
MIS System  
Leah Tremper (OC/LFDCB, MS: TWFN 9E10)  
B. Henderson, RIV PAO  
C. Hackney, SLO

DOCUMENT NAME:

To receive copy of document, indicate in box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

RVI:AC:EB	D:DRS	D:DRP	D:DRS	
EECo JMS	TPGwynn	JEDyer	TPGwynn	
08/3/95	08/1/95	08/1/95	08/1/95	08/ /95

OFFICIAL RECORD COPY

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Wolf Creek Nuclear Operating  
Corporation

-3-

County Clerk  
Coffey County Courthouse  
Burlington, Kansas 66839-1798

Kansas Department of Health  
and Environment  
Bureau of Air & Radiation  
ATTN: Public Health Physicist  
Division of Environment  
Forbes Field Building 283  
Topeka, Kansas 66620

Wolf Creek Nuclear Operating Corporation

-3-

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ENCLOSURE 1

Licensee Presentation

"ENGINEERING"

# **Wolf Creek Nuclear Operating Corporation**

## **Engineering**

**August 21, 1995**



# Wolf Creek Engineering

- **Purpose and scope**
  - Address results documented in recent engineering team inspection report
  - Provide update on status of ongoing activities within engineering

**Robert Hagan, Ph.D. - Vice President Engineering**





# Wolf Creek Engineering

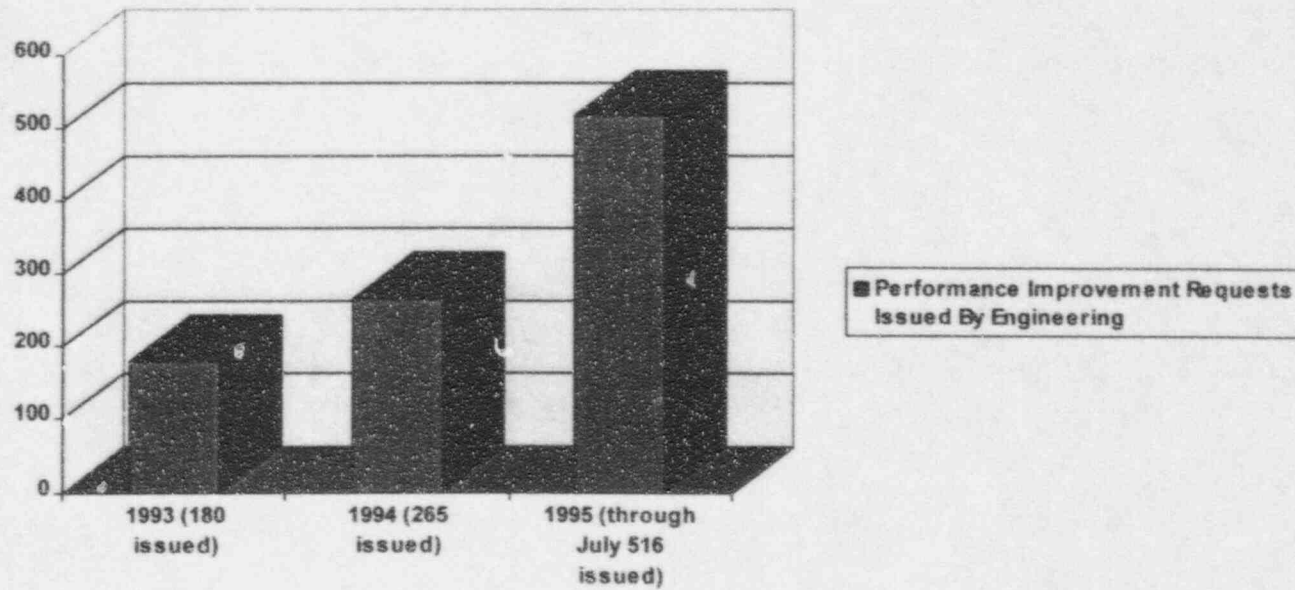
- **Self Assessments**

- Continue to have high priority
- Key vehicle for improvement
- Use of self assessments and PIRs has risen steadily



# Wolf Creek Engineering

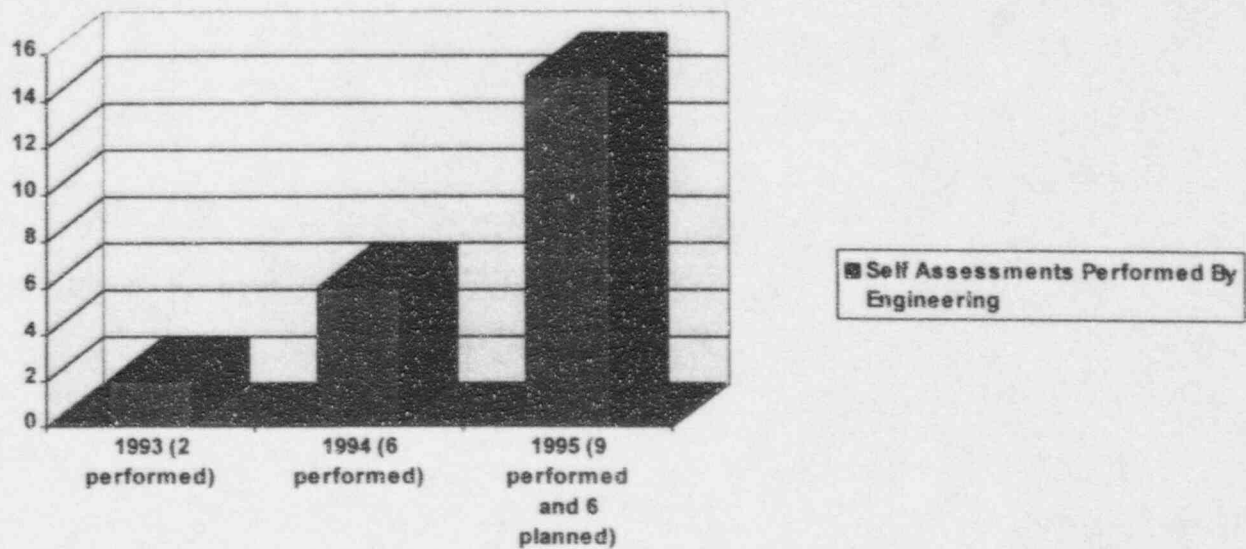
- Engineering's use of PIRs





# Wolf Creek Engineering

- Engineering's use of self assessments





# Wolf Creek Engineering

- **System Engineering**
  - New manager system engineering
  - System engineer exchange program between WCNOC/Callaway
  - Manager and supervisors visiting excellent performers
  - Planned self assessment of system engineering



# Wolf Creek Engineering

- **Violation on inadequate safety evaluations is of concern**
  - WCNOC self assessment performed in March, 1995
  - Engineering team inspection confirmed results of WCNOC's self assessment
  - To be addressed in detail by N. Hoadley



# Wolf Creek Engineering

- **Violation on failure to document technical concerns**
  - Demonstrates a potential lack of faith in WCNOC's corrective action process
  - President and Chief Executive Officer immediately informed
  - President and Chief Executive Officer requested an independent investigation of the concerns
  - The independent investigation "In A Nutshell" showed there was use of and faith in the corrective action program - this issue is an isolated case
  - Results immediately shared with the senior resident inspector and his management
  - Details will be shared with NRC in a followup meeting



# Wolf Creek Engineering

- **System Engineering**

- **Introduction**

- » **Immediate Actions - Defined**

- **Expectations**
      - **Responsibility**
      - **Authority**
      - **Accountability**

- » **Observations and feedback**

- **Reinforce expectations**
      - **Provide follow-up and oversight**

**Brad Norton- Manager System Engineering**



# Wolf Creek Engineering

- **Expectations**

- **Key to establishing**
  - » **Responsibility**
  - » **Accountability**
  
- **Must be communicated clearly and regularly**
  - » **Both written and verbal**
  - » **Through division meetings, supervisory meetings, memos, etc.**
  - » **Must provide necessary tools to be successful (e.g., training)**





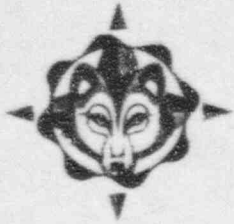
# Wolf Creek Engineering

- **Philosophical expectations**

- Safety - nuclear and personnel risk management
- Performance standards - applies to everything
- Communication
- Professionalism
- Budget

- **Programmatic expectations**

- Supervisors
- Engineers



# Wolf Creek Engineering

- **Oversight**

- Followup on activities and taking actions when necessary
- Supervisory/ management function
  - » Essential for accountability
  - » Expectations not being met - improving
- Manager coach / mentor supervisors
  - » Must be priority



# Wolf Creek Engineering

- **Summary**

- Expectations and oversight
  - » Key to success
- Good program
  - » Not broken
- Implementation and feedback



# Wolf Creek Engineering

- **Attention to detail/ rigor/ thoroughness and documentation**
  - Self assessment of engineering change process - March, 1995
  - Engineering team inspection- May, 1995
  - Summary of corrective action plan

**Nels Hoadley - Manager Support Engineering**



# Wolf Creek Engineering

- **Self Assessment - March, 1995**
  - Two weaknesses identified
    - » Clarity and completeness of
      - Basis section
      - Documentation of equivalency
    - » Technical reviews and supervisors
      - Not enforcing attention to detail
- **Corrective actions implemented**
  - Corrected discrepancies identified by self assessment
  - Increased the scope of review for discrepancies
  - Discrepancies compiled and returned to supervisor for resolution
  - Communicated management's expectations
  - Training issues for enhancing the engineering change process identified



# Wolf Creek Engineering

- **Engineering Team Inspection**
  - Reinforced findings of engineering self assessment
  - Corrective actions implemented
    - » Emergency diesel generator fuel oil transfer pump
    - » Removal of valve actuators



# Wolf Creek Engineering

- **In summary the corrective actions have resulted in**
  - Selecting a focused team of managers and supervisors to provide mentoring
  - Reinforcing management's expectations on performance standards
  - Utilizing the Engineering Review Board to critique selected documents
  - Training on engineering change process
  - Performing a follow-up effectiveness review to the engineering change process self assessment - following Refuel VIII



# Wolf Creek Engineering

- **“Stake planted in ground” for Engineering to be the best in the industry**
  - In some aspects we are well on our way
  - In other aspects we need improvement
  - Organizational changes
    - » Managers, supervisors and staff adjustments
    - » Supervisors selected based on ability to manage
    - » Design Engineering - Modifications merged
    - » System Engineering - essentially unchanged
    - » Nuclear Engineering - Licensing merged
    - » Support Engineering - reinforced programs
    - » Project engineering concept - provides path for meeting scheduling and accountability expectations



ENCLOSURE 2

Wolf Creek Nuclear  
Operating Corporation

Meeting August 21, 1995  
Attendance List

