



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION IV
1600 EAST LAMAR BOULEVARD
ARLINGTON, TEXAS 76011-4511

June 21, 2018

Mr. Richard L. Anderson, Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.
N-TSB-58
1448 S.R. 333
Russellville, AR 72802-0967

**SUBJECT: SUMMARY OF ANNUAL ASSESSMENT MEETING WITH ENTERGY
OPERATIONS, INC., REGARDING 2017 PERFORMANCE OF
ARKANSAS NUCLEAR ONE**

Dear Mr. Anderson:

This refers to the public meeting conducted at the Reeves E. Richie Training Center, Russellville, Arkansas, on May 31, 2018, between the Nuclear Regulatory Commission (NRC) and your staff. Approximately 100 people attended the public meeting, including members of the general public, with representatives from the Arkansas Bureau of Health, the Arkansas Democrat-Gazette, and the Russellville Courier.

During the meeting, the NRC presented the results of the annual assessment of safety performance at Arkansas Nuclear One for the period of January 1 through December 31, 2017, and discussed the completion of the Confirmatory Action Letter follow-up inspections, as well as the decision to return Arkansas Nuclear One to Column 1 of the Reactor Oversight Process Action Matrix. The NRC maintains a Web site to summarize the issues that resulted in the Column 4 assessment and the inspection process while Arkansas Nuclear One remained in Column 4 (<http://www.nrc.gov/info-finder/reactors/ano/special-oversight.html>).

During the meeting, your staff provided a presentation and responded to the NRC's assessment observations and exit meeting comments. During the public comment/question and answer portion of the meeting, the only question was directed to Arkansas Nuclear One and you responded.

Copies of the NRC and Arkansas Nuclear One presentations from the meeting is included as Enclosures 1 and 2, respectively.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

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

Sincerely,



Neil O'Keefe, Chief
Project Branch E
Division of Reactor Projects

Docket No. 50-313 and 50-368
License No. DPR-51 and NPF-6

Enclosures:

1. NRC Presentation
2. ANO Presentation

cc w/encl:

Electronic Distribution for Arkansas Nuclear One

***Meeting to Discuss Arkansas
Nuclear One Performance***

2017 Annual Assessment

May 31, 2018

NRC Staff Introductions

- **Kriss Kennedy**
 - **Regional Administrator, Region IV**
 - **Troy Pruett**
 - **Director, Division of Nuclear Materials Safety, Region IV**
 - **Neil O’Keefe**
 - **Branch Chief, Region IV**
 - **Chris Henderson**
 - **Senior Resident Inspector, ANO**
-

ANO Introductions

Richard Anderson

**Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.**

Opening Remarks

Kriss Kennedy
Regional Administrator,
NRC Region IV

Agenda

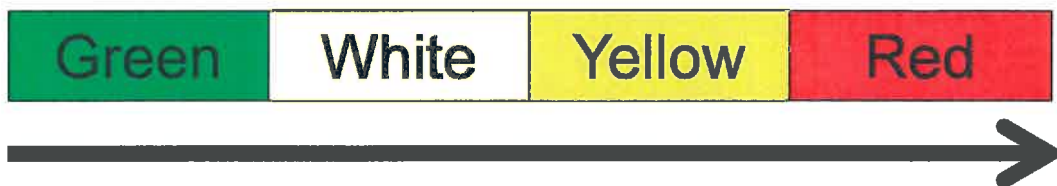
- **NRC Assessment of ANO**
- **Results of NRC inspections**
- **ANO Presentation**
- **NRC Closing Remarks**
- **Public Comments and Questions**

***ANO Performance
Assessment for 2017***

Chris Henderson
Senior Resident Inspector at ANO

Significance Thresholds

Inspection Findings and Performance Indicators

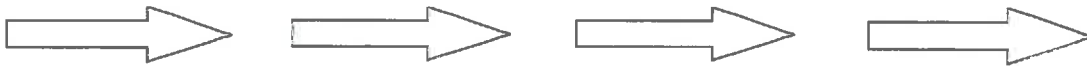


Increasing safety significance

Increasing NRC inspections and oversight

Action Matrix Columns

Column 1 Licensee Response	Column 2 Regulatory Response	Column 3 Degraded Performance	Column 4 Multiple/ Repetitive Degraded Cornerstone	Column 5 Unacceptable Performance
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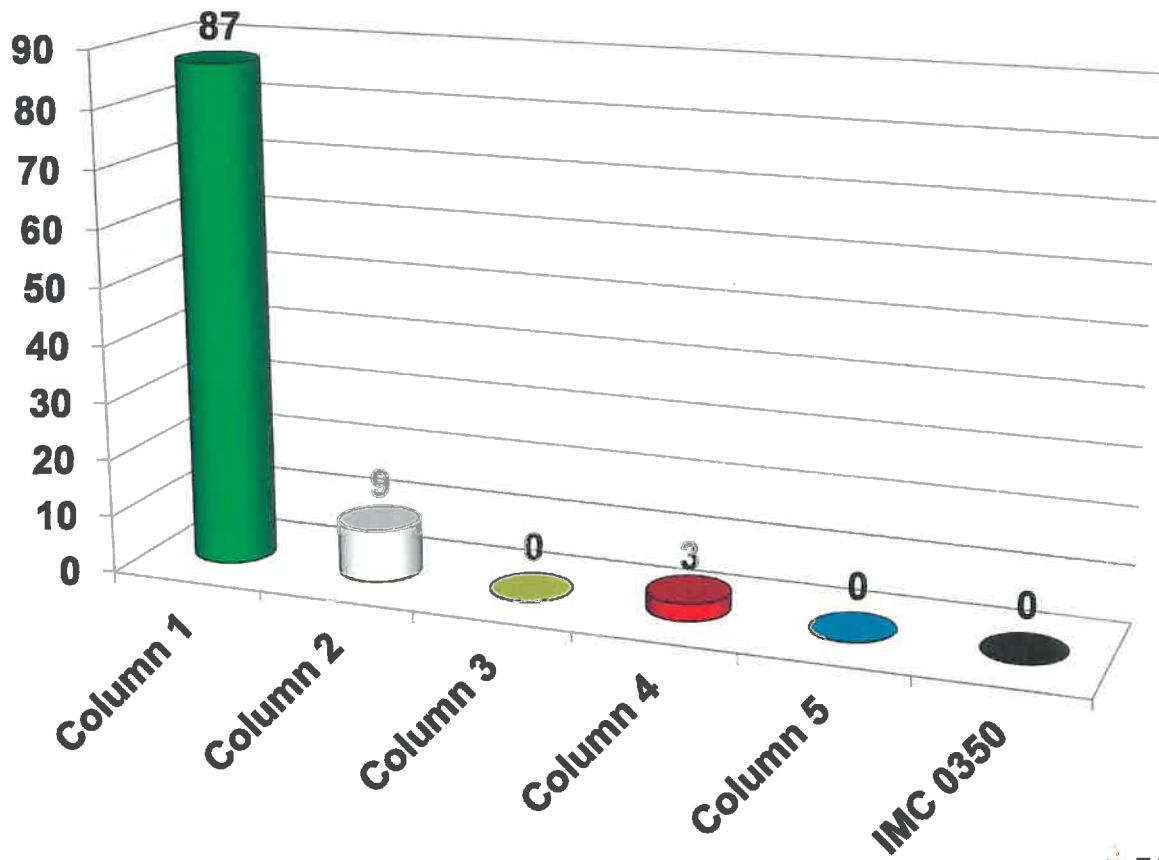


- **Increasing safety significance of inputs**
- **Increasing NRC oversight**

ANO Entered Column 4 in 2015

- **Yellow Findings: Stator drop event**
- **Yellow Findings: Flood protection deficiencies**
- **White Performance Indicator (Unit 2): Unplanned Scrams**

Current Industry Performance



Findings and Performance Indicators

- **All Green performance indicators**
- **14 Green inspection findings**
- **White EDG delayed closure**
- **Progress on corrective actions to address Yellow findings**

***ANO Performance
Improvement Inspection
Results***

**Neil O'Keefe
Branch Chief for ANO**

Confirmatory Action Letter Focused on Six Inspection Areas

Yellow Findings

Corrective Action Program

Human Performance

Equipment and Engineering Programs

Safety Culture

Service Water System Self-Assessment

NRC Independently Verified Improved Performance

Response to Yellow findings

Response to White finding

Equipment reliability

Staffing and training

Corrective action program

NRC Independently Verified Improved Performance (Cont.)

- **Safety culture**
- **Nuclear fundamentals**
- **Procedure adherence and quality**
- **Operations focus**
- **Service water system**

Action to Sustain Performance Improvements

- **Work management**
- **Procedure and work instructions**
- **Service water system**
- **Equipment modifications and upgrades**
- **Staff development**

NRC Actions Performed

- **3600 hours of supplemental inspections**
- **2800 hours of Confirmatory Action Letter (CAL) follow-up inspections**
- **Closed Yellow findings**
- **Closed White finding**

Conclusions

- **Objectives of Confirmatory Action Letter have been met – CAL is closed**
- **Performance at ANO consistent with ROP Action Matrix Column 1 – return to Column 1**
- **ANO continues to implement longer term actions to continue and sustain improvements**

ANO Presentation

Richard Anderson

**Site Vice President
Arkansas Nuclear One
Entergy Operations, Inc.**

NRC Closing Remarks

Kriss Kennedy

Regional Administrator

NRC Region IV

Questions or Comments?

Reference Sources

- **Reactor Oversight Process**
<https://www.nrc.gov/reactors/operating/oversight.html>
- **Public Electronic Reading Room**
– www.nrc.gov/reading-rm.html
- **Public Document Room**
– 1-800-397-4209 (Toll Free)
- **To sign up for NRC news and correspondence**
– www.nrc.gov/public-involve/listserver/plants-by-region.html

NRC Social Media Channels



- **Blog:** public-blog.nrc-gateway.gov/
- **Flickr:** www.flickr.com/photos/nrcgov/
- **Twitter:** twitter.com/#!/nrcgov
- **YouTube:** www.youtube.com/user/NRCgov
- **RSS:** www.nrc.gov/public-involve/listserver.html#rss

Contacting the NRC

- **Report an emergency**
 - (301) 816-5100 (call collect)
- **Report a safety concern**
 - (800) 695-7403
 - Allegation@nrc.gov
- **General information or questions**
 - www.nrc.gov
 - Select “What We Do” for Public Affairs



NRC End of Cycle Meeting Arkansas Nuclear One

May 31, 2018

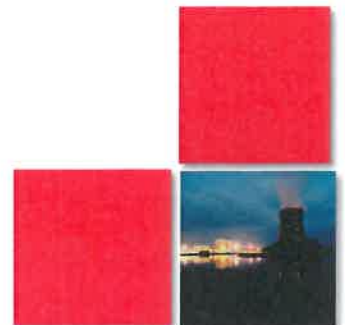
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ANO Status

Transitioned from Recovery to Pursuit of Excellence Plan

- Effective and sustainable actions implemented
- Focus on primary drivers of performance improvement



ANO Closing Remarks

Committed to:

- Long-term safe and reliable operations
- Continue to evolve as we learn
- Sustained improving trajectory



SUMMARY OF ANNUAL ASSESSMENT MEETING WITH ENTERGY OPERATIONS, INC.,
REGARDING 2017 PERFORMANCE OF ARKANSAS NUCLEAR ONE – June 21, 2018

DISTRIBUTION:

KKennedy, RA
 SMorris, DRA
 TPruett, DNMS
 AVegel, DRP
 RLantz, DRP
 MShaffer, DRS
 JClark, DRS
 NO'Keefe, DRP
 JDixon, DRP
 CHenderson, ANO
 MTobin, ANO
 TSullivan, ANO
 AElam, ANO
 JBowen, RIV/OEDO
 SKirkwood, ActingRC
 VDricks, ORA
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By: NFO		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Non-Publicly Available		<input type="checkbox"/> Sensitive	
OFFICE	SPE:DRP/E	BC:DRP/E				
NAME	JDixon	NO'Keefe				
SIGNATURE	/RA/	/RA/				
DATE	6/21/18	6/21/18				

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