Non-Concurrence Process Record for NCP-2011-005

The U.S. Nuclear Regulatory Commission (NRC) strives to establish and maintain an environment that encourages all employees to promptly raise concerns and differing views without fear of reprisal and to promote methods for raising concerns that will enhance a strong safety culture and support the agency's mission.

Individuals are expected to discuss their views and concerns with their immediate supervisors on a regular, ongoing basis. If informal discussions do not resolve concerns, individuals have various mechanisms for expressing and having their concerns and differing views heard and considered by management.


The NCP allows employees to document their differing views and concerns early in the decision-making process, have them responded to, and attach them to proposed documents moving through the management approval chain.

NRC Form 757, Non-Concurrence Process is used to document the process.

Section A of the form includes the personal opinions, views, and concerns of an NRC employee.

Section B of the form includes the personal opinions and views of the NRC employee’s immediate supervisor.

Section C of the form includes the agency's evaluation of the concerns and the agency’s final position and outcome.

NOTE: Content in Sections A and B reflects personal opinions and views and does not represent official factual representation of the issues, nor official rationale for the agency decision. Section C includes the agency’s official position on the facts, issues, and rationale for the final decision.

The agency’s official position (i.e., the document that was the subject of the non-concurrence) is included in ADAMS Accession Number ML110680220.

This record has been redacted prior to discretionary release to the public.
TITLE OF DOCUMENT
2011 LES License Performance Letter and Enclosure

DOCUMENT SPONSOR
Joe Calle Region II DFFI

NAME OF NON-CONCURRING INDIVIDUAL
Dennis Morey

ADAMS ACCESSION NO.
ML110680320

SPONSOR PHONE NO.
404-997-4418

PHONE NO.
301-492-3112

TITLE
Senior Criticality Safety Inspector

ORGANIZATION
NMSS/FCSS/TSB

REASONS FOR NON-CONCURRENCE
Please see attached document.

[Signature]

DATE 2/28/11

CONTINUED IN SECTION D

SUBMIT FORM TO DOCUMENT SPONSOR AND COPY TO YOUR IMMEDIATE SUPERVISOR AND DIFFERING VIEWS PROGRAM MANAGER

Use ADAMS Template NRC-906
Reasons for Dennis Morey Non-Concurrence in 2011 LES Licensee Performance Review

I participated in the Division Director review of the LES Licensee Performance Review (LPR) and after reviewing the draft LES LPR letter, I non-concur for the reasons stated below.

Additional Area Needing Improvement
The LES LPR should contain an Area Needing Improvement (ANI) in Safety Operations that expresses the staff concern that, because the licensee does not appear to understand or maintain the approved margin of subcriticality for safety, including programmatic commitments to technical practices, assurance of subcriticality needs to be improved.

The additional ANI should state: "Consistent implementation of NCS controls, management measures and other NCS program features providing assurance of subcriticality."

Discussion
Inadvertent criticality is considered credible at the LES gas centrifuge facility. Notwithstanding 10 CFR 70, the licensee does not rely primarily on Items Relied on For Safety (IROFS) to maintain criticality safety; instead it relies primarily on safe-by-design, including maintenance of significant safety margin. The safe-by-design approach is heavily dependent on strict NCS and NQA-1 program implementation. The issues identified below are considered risk significant and recurring.

Supporting Findings
The four issues identified below have a common nexus related to maintaining the margin of subcriticality for safety and strict NCS program implementation during construction and operation of the facility.

VIO 70-3103/2010-005-02  Implementation of changes to the approved margin of subcriticality for safety without prior NRC approval.

The licensee failed to request NRC approval prior to implementing changes to the Safety Analysis Report (SAR) that changed the approved margin of subcriticality for safety. The inspectors evaluated the licensee's extent of condition review associated with the 10 CFR 70.72(c) changes to chapter 5 of the SAR. The inspectors identified four examples of changes that the licensee made to the SAR that affected the approved margin of subcriticality for safety. The margin of subcriticality for safety included any administrative margin in k̂ and as well as margin in system parameters provided by conservative technical practices committed to in the original SAR.

The licensee disputed the violation. The licensee stated its belief that only the 0.05 administrative margin in the SAR was part of the approved margin of subcriticality for safety and nothing else. This disputed violation remains unresolved.
The licensee had planned to make changes to the implementation documents for IROFS 14b to make it easier to implement. IROFS 14b is a sole administrative control restricting vessels containing enriched material to a storage array that does not have any other vessel containing enriched material within 180 cm of the storage array.

The licensee provided the inspectors the fourth revision of procedure RW-3-1000-09. The inspectors determined that the licensee had made appropriate changes to the procedure to ensure that 180 cm of separation was maintained between the 55 gallon drum and other enriched material once the licensee staff had determined that the 55 gallon drum had more than 300 grams of U-235. This item is closed.

Tracks licensee determination that bounding upset calculations for unsafe geometry or interacting systems are bounding. This issue concerns conservatism in conduct of NCS analysis. This item is open.

Tracks qualification of ETC NCS engineers in accordance with licensee procedures. Qualification of NCS engineers based in Europe relates to conservatism of technical practices. This item is open.

The two findings discussed below have a common nexus related to conservative management measures and adequate assurance of subcriticality.

Failure to follow procedure and appropriately verify safe-by-design pump volumes.

Failure to conduct the required design activities commensurate with those applied to the original design prior to modifying cascade components designated as IROFS 41.

In addition, 22 Violations of Commercial Grade Dedication were identified during the performance period. Because safe-by-design requires NQA-1 level assurance to maintain both reliability and significant margin, these violations have a common nexus related to assurance of subcriticality.

For the above stated reasons, I respectfully decline to concur on the 2011 LES Licensee Performance Review.

Dennis C. Morey
Senior Criticality Safety Inspector
FYI.

Thanks.

Joe

Sent via Blackberry

This email is being sent from an NRC mobile device.

Dave/Joe,

Attached is my non-concurrence with the LES LPR. I prefer that the non-concurrence be made public.

Thanks,

Dennis Morey
Senior Criticality Safety Inspector
Technical Support Branch/FCSS/NMSS
Office 301-492-3112
Cell 240-888-2351
dennis.morey@nrc.gov
There was agreement at the Division Director LPR meeting that no Area Needing Improvement (ANI) would be included. It was also agreed that the increase in core criticality safety inspection was justified and would be included in the cover letter. Because the NRC will still be able to conduct sufficient inspections to determine the adequacy of safety at LES, I am agreeable to the disposition of the information. However, I also believe that not providing an ANI is a disservice to the licensee. I see the ANI as a means of letting the licensee know what the NRC has concerns with and will be focusing a portion of their inspection on.
## Non-Concurrence Process

### Title of Document
2010 Licensee Performance Review - Louisiana Energy Services

### Section C - To be completed by Document Sponsor

<table>
<thead>
<tr>
<th>Name</th>
<th>Joe Calle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Chief</td>
</tr>
<tr>
<td>Organization</td>
<td>Fuel Facility Inspection Branch 2, Division of Fuel Facility Inspection, Region II</td>
</tr>
</tbody>
</table>

### Actions Taken to Address Non-Concurrence

After conducting a detailed review of the issues referenced in the subject non-concurrence, it was determined that the valid data points to be considered were VIO 70-3103/2010-006-02 and VIO 70-3103/2010-202-01. In both cases, the staff did not make an adequate argument of recurring risk significance to support a conclusion that the area of Safety Operations should be an area needing improvement. In addition, the staff did not make a convincing argument that, in aggregation, the examples contained within the low safety significant violations pointed to a programmatic breakdown.

No changes are recommended to the Licensee Performance Review as a result of this review. Supervisors of inspectors need to clearly explain that safety concerns identified by inspectors should always be followed up as part of the fuel facility inspection program which allows for both core and regional initiative inspection effort. The DFFI management team acknowledges that the additional core inspection effort in the criticality safety area is both necessary and will be implemented. This does not require these safety concerns to be first identified as an “area needing improvement” for follow-on inspections to occur.

Attached: Detailed assessment of the Louisiana Energy Services Licensee Performance Review

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**Signature - Document Sponsor**: [Signature]

**Date**: 3/21/11

**Signature - Document Signer**: [Signature]

**Date**: 3/9/11

**Non-Concurring Individual** (To be completed by document sponsor when process is complete, i.e., after document is signed):

- [x] CONCURS
- [ ] NON-CONCURS
- [ ] WITHDRAWS NON-CONCURRENCE (i.e., discontinues process)

**WANTS NCP FORM PUBLIC**: [ ]

**WANTS NCP FORM NON-PUBLIC**: [x]

Per attached email dated 3/14/2011
I. Licensee Performance Review Guidance

NRC Manual Chapter 2604, "Licensee Performance Review," provides guidance for reviewing fuel cycle licensee performance in maintaining adequate protection of public health and safety, the environment, and common defense and security.

The results of such a review should: Provide an overview of licensee performance to U.S. Nuclear Regulatory Commission (NRC) management; inform licensees and the public how the NRC assesses facility performance; and provide a basis for adjusting the fuel cycle facility inspection program, including such areas as focus, frequency, and resources. Areas needing improvement are defined as risk-significant recurring performance (root causes or events) requiring resolution or corrective action.

Where divergent opinions are expressed, and no clear consensus on a particular issue can be reached, the diverging opinions should be summarized and documented, and presented together with the other results of the review meeting. Emphasis will be on the adequacy of licensee performance, and the results of the review meeting should be expressed in terms of any areas needing improvement important to the safe and secure operation of the facility. Meeting results and conclusions will be limited to safety or safeguards-significant issues, and minor issues will not be aggregated. Furthermore, the discussion of performance should be supported by specific references to the events, licensing reviews, or inspection findings distributed over the review period.

II. Calendar Year 2010 Licensee Performance Reviews

In 2011, the Division of Fuel Facility Inspection modified its' licensee performance process in an effort to improve a number of aspects of the process more clearly delineated below. One central premise for this year's adjustment was that the modified process must still meet the existing guidance contained in MC 2604. Excerpts from MC 2604 are included in the Section I above.

Improvements of the 2011 Division of Fuel Facility Inspection Licensee Performance Review process included the following: (1) clear adherence to the definition of an area needing improvement, (2) consistent implementation of the threshold for an area needed improvement across all sites, (3) implementation of the process consistently within the existing MC 2604 guidance, (4) implement a collaborative process which considers the views of all NRC stakeholders with Licensee Performance Assessment input, (5) provide a forum for differing views of staff to be presented to senior management during the plant specific briefing, and (6) provide an open decision-making forum between FCSS and DFFI management that is inclusive and clear in direction.

III. DFFI Management Observations

A number of key observations were made by the DFFI management team during the 2011 performance review sessions which will be considered during future program improvements. A couple of these observations are discussed below.
DETAILED ASSESSMENT OF LOUISIANA ENERGY SERVICES LICENSEE PERFORMANCE REVIEW AS IT RELATES TO A NON-CONCURRENCE
March 7, 2011

(1) Licensee Performance Data: It was clear that the staff had an unclear understanding of what data should be used in the assessment of licensee performance. The guidance contained in MC 2604 can be partially attributed to this lack of clarity. The guidance in Section 08.02 of MC 2604 clearly limits the discussion of performance to specific references to the events, licensing reviews, or inspection findings distributed over the review period. However, Enclosure 4 of the MC 2604 provides guidance to the staff to provide a bulleted list of open items and inspection follow up items in the review. The staff's initial recommendations regarding whether an area needing improvement should exist or not included open and follow up items. The DFFI management team decided to include this information in the review but not consider open or follow up items in the actual decision-making for an area needing improvement.

(2) Threshold for an Area Needing Improvement: The staff did not have a clear understanding of the threshold for an area needing improvement. The MC 2604 definition of an area needing improvement is risk-significant recurring performance (root causes or events) requiring resolution or corrective action. It was clear during the performance review meetings, that the staff did not consistently apply each of the criteria specified in the definition. Namely: (1) recurring risk-significant performance, and (2) requiring resolution or corrective action. In a number of cases, including the subject of this non-concurrence, the staff's recommendations included a justification of the need to declare an area needing improvement if inspections were needed above the routine core inspection program to address issues currently the subject of open or follow up inspection items. For example, if the licensee had a number of issued violations that remained open because the inspections of the corrective actions are not yet completed, the staff appeared to feel the need to declare an area needing improvement to justify the additional resources needed to address the open items. The DFFI management team does not agree with the premise that the Licensee Performance Review must conclude that a licensee has an area needing improvement based on the knowledge that additional resources are needed to address known open items or issues. Rather, the DFFI management team's philosophy, which we believe is consistent with existing NRC policy, is that the Licensee Performance Review process should identify areas needing improvement when recurring risk-significant performance issues that require resolution or corrective actions exist. The DFFI management team acknowledges that when an area needing improvement is identified using the criteria, it is appropriate to increase or focus inspection resources. With this said, the DFFI management team also acknowledged that additional resources may be needed or increased focus in certain areas may need to occur when open or follow up items exist. In those cases, the resource demands or focusing can be accomplished through the core program or as regional initiative.

IV. The Louisiana Energy Services (LES) Licensee Performance Review (LPR)

The LES LPR assessment period began on December 1, 2009 and ended on December 31, 2010. In the staff assessment one Severity Level IV violation, two unresolved items, and one inspection follow up item was listed that had a common nexus to margin of sub-criticality in the area of Safety Operations. In addition, the staff listed two Severity Level IV violations and 22 additional Severity Level IV violations associated with Commercial Grade Dedication all purportedly with the nexus of adequate assurance of sub-criticality. When these issues were further analyzed in the performance discussion the management team decided that no areas needed improvement at the facility. Details follow.
Detailed Assessment of Louisiana Energy Services Licensee Performance Review as it Relates to a Non-Concurrence
March 7, 2011

(1) VIO 70-3103/2010-008-02 involved four examples where the licensee failed to request NRC approval prior to implementing changes to the Safety Analysis Report (SAR) that changed the approved margin of sub-criticality. NMSS took the position that all margin, including administrative margin, was included in the definition of approved margin of sub-criticality and the licensee thought that administrative margin could be modified using 10 CFR 70.72 (c). To facilitate a start up of the first cascade, the licensee submitted a license amendment that clarified these margins which was approved by the NRC. Once the amendment was approved, the licensee disputed the violation which is currently being reviewed by the Office of General Counsel. The DFFI management team agreed that this violation was a valid data point to be considered in the LPR. The principle focus of the DFFI management was to understand the risk-significance of the finding. Clearly, the inspectors identified multiple examples of this inappropriate threshold for making changes to the facility thus impeding the regulatory process. Ultimately, in each of the four examples, the staff approved the change as it was originally implemented by the licensee, indicating that, in each case, adequate margin to sub-criticality existed. What is perhaps an important point yet to be explored with this issue is whether the issue involved broader implications of the failure of the licensee's change process as it applies to 10 CFR 70.72. If broader implications were involved, the staff should have considered those broader, programmatic aspects in determining the Severity Level of the violation. The staff did not make an adequate argument of risk significance in these examples to support a conclusion that this specific issue was risk-significant.

(2) URI 70-3101/2010-006-04, 203-01, and IFI 70-3103/2010-203-02 all involved a mixture of open and closed follow up items for which the licensee performance assessment should not be based since no performance deficiency was cited. The DFFI management team concluded that these were not valid data points to use in the LPR but also recognized that additional inspection was needed to complete staff assessment of many of these topics.

(3) VIO 70-3103/2010-202-01 involved the licensee's failure to verify the volume of safe-by-design pump volumes prior to authorizing the first cascade. Once these volumes were verified to be acceptable and the licensee incorporated changes to the volume verification process, the staff removed this issue from the authorization restriction list. The DFFI management team agreed that this violation was a valid data point to be considered in the LPR. The principle focus of DFFI management was to understand the risk-significance of the finding. Clearly, the inspectors identified multiple examples of the licensee failing to verify the volume of safe-by-design pump volumes. Ultimately, in each of the examples, the licensee demonstrated that pump volumes were acceptable indicating that the specific examples in the violation were of low safety significance possibly explaining why the violation was determined by the staff to be Severity Level IV. What is perhaps an important point yet to be explored with this issue is whether the issue involved broader implications of the failure of the design control or quality assurance process as it was applied to safe-by-design components. If broader implications were involved, the staff should have considered those broader, programmatic aspects in determining the Severity Level of the violation. A review of the inspection report revealed that the pump volumes were actually verified against a bounding analysis rather than the analysis for the specific pump application. The bottom line of the DFFI management review was that the staff did not make an adequate argument of risk significance in this violation to support a conclusion that this specific issue was risk-significant.

(4) VIO 70-3103/2010-014-02 involved a failure to conduct required design activities for modifying component designated as IROFS 41. This violation involves the licensee's failure to
DETAILED ASSESSMENT OF LOUISIANA ENERGY SERVICES LICENSEE PERFORMANCE REVIEW AS IT RELATES TO A NON-CONCURRENCE
March 7, 2011

conduct required design activities for a modification of cascade piping to remove a foreign material plug left behind during construction. This issue has no nexus with criticality safety and therefore should not be representative of licensee performance in criticality safety but is an indication of design control and configuration management in an operational environment.

(5) 22 Severity Level IV Commercial Grade Dedication Violations were identified during routine construction inspections throughout the period. Each of these non-conformances were reviewed and determined to have low safety significance. Each non-conformance was corrected before additional cascades were authorized by the NRC for operations. For those non-compliances that impacted an operating cascade, the licensee implemented a conservative decision to shutdown the operating cascade to repair the non-conformance. In every case thoroughly reviewed by the inspection staff, the licensee could have resolved the non-conformance as "use-as-is." In no case did the staff make a compelling argument that convinced the management team of a nexus to adequate assurance of sub-criticality. Therefore, these violations were not considered part of the NRC assessment of “Safety Operations.” Nevertheless, these issues were thoroughly evaluated in the Construction Licensee Performance Review under the "Management Measures" area. Since none of the non-compliances were considered risk-significant, the staff recommended that the licensee’s performance history did not meet the threshold for an area needing improvement but asked management to recognize that increased inspection oversight of the quality assurance organizations’ oversight of commercial grade dedication activities continue due to the large number of low safety significant non-compliance issues. The management team did recognize that the identification of this number of non-conformances indicated a potential quality assurance program issue that could result in the introduction of latent issues and as such, included a description of the NRC resource increase in the LPR letter. A causal assessment of these non-conformances revealed the distribution of issues in the following areas: QA recordkeeping, document control, quality assurance audits, program implementation, quality assurance inspections, procedure control, design control, and corrective action program. Again, the staff did not describe any specific example having a direct nexus to adequate assurance of sub-criticality.

V. Recommendations

After conducting a detailed review of the issues referenced in the subject non-concurrence, it was determined that the valid data points to be considered were VIO 70-3103/2010-006-02 and VIO 70-3103/2010-202-01. In both cases, the staff did not make an adequate argument of recurring risk significance to support a conclusion that the area of Safety Operations should be an area needing improvement. In addition, the staff did not make a convincing argument that, in aggregation, the examples contained within the low safety significant violations pointed to a programmatic breakdown.

No changes are recommended to the Licensee Performance Review as a result of this review. Supervisors of inspectors need to clearly explain that safety concerns identified by inspectors should always be followed up as part of the fuel facility inspection program which allows for both core and regional initiative inspection effort. The DFFI management team acknowledges that the additional core inspection effort in the criticality safety area is both necessary and will be implemented. This does not require these safety concerns to be first identified as an "area needing improvement" for follow on inspections to occur.
<table>
<thead>
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<th>Violation Characterization</th>
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<td>Nonconforming Items</td>
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<tr>
<td>QA Records</td>
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**Cross Cutting Issue (Commercial Grade Dedication- CGD)**

- 0: 7-CGD
- 2: 2-CGD
- 1: 1-CGD
- 6: 6-CGD
- 16: 16-CGD
- 7-CGD: LES NEF has not been required to re-construct as a result of these findings. Most of the violations were administrative and document control issues. Violations involving CGD issues were dispositioned with an engineering evaluation concluding "acceptable as is."

**12/1/09 through 12/31/10 LES NEF Findings**
Tony,

Regarding the check blocks on the bottom of NRC Form 757, Section C; after reviewing the write-up and discussing with TSB staff, I would like to check "NON-CONCURS" and "WANTS NCP FORM PUBLIC."

I appreciate your effort reviewing the non-concurrence.

Thanks,

Dennis Morey
Senior Criticality Safety Inspector
Technical Support Branch/FCSS/NMSS
Office 301-492-3112
Cell 240-888-2351
dennis.morey@nrc.gov

Dennis/Patricia

Attached you will find a scanned copy of the subject action. Region II has completed its' review of the non-concurrence and has discussed the outcome of the review verbally with Dennis at a high level. We have just issued the LES LPR letter and attached the ML# of that letter to the non-concurrence. I recognize based on Dennis's original e-mail that he would like the non-concurrence to be made public.

Nevertheless, I ask Dennis to email me his wishes with respect to the check blocks on the bottom of NRC Form 757, Section C, after he has had a chance to review the final package. I will fill out those blocks reflecting his wishes and process the document appropriately. I also want to thank Dennis for his willingness to stand up and speak about what he believes in. I respect that in Dennis and know that he will always speak his mind (a trait I consider incredibly valuable).
Thanks for all your support on this effort and I look forward to a continued dialog on improving both NRC MC 2604 and our finding resolution processes defined the inspection and enforcement guidance.

Tony Gody, Director
Division of Fuel Facility Inspection
USNRC Region II
O: 404.997.4700
E-Mail: tony.gody@nrc.gov

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