

August 26, 2009

Mr. Stephen Cowne
Licensing Director
Louisiana Energy Services, L.P.
P.O. Box 1789
Eunice, NM 88231

SUBJECT: APPROVAL OF LOUISIANA ENERGY SERVICES AMENDMENT REQUEST FOR THE NATIONAL ENRICHMENT FACILITY TO CHANGE THE APPLICABILITY OF ITEMS RELIED ON FOR SAFETY TO THE CYLINDER RECEIPT AND DISPATCH BUILDING FOR DESIGN BASIS EVENTS (LAR 09-07) (TAC NO. L32506)

Dear Mr. Cowne:

On April 3, 2009, Louisiana Energy Services (LES) transmitted a License Amendment Request (LAR-09-07) to authorize changes in the applicability of items relied on for safety to the Cylinder Receipt and Dispatch Building for Design Basis Events. We reviewed the submittal and are enclosing a Safety Evaluation Report of our review. Based on this review, the proposed revisions are acceptable. We request, within 30 days, you provide final page changes for the applicable licensing basis documents as you described in the April 3, 2009, correspondence. Upon receipt of these documents, your license will be amended and a copy forwarded to you.

An environmental assessment for this action is not required, since this action is categorically excluded under Title 10 of the *Code of Federal Regulations* (10 CFR) Section 51.22(c)(11).

This report completes our efforts on TAC No. L32506. Approval of the License Amendment Request does not mean that the staff is in agreement with our understanding of your interpretation of 10 CFR 70.72(d)(1) concerning the implementation of changes requiring U.S. Nuclear Regulatory Commission (NRC) pre-approval. If you have any questions regarding this letter, please contact Mr. Ty Naquin of my staff at (301) 492-3187, or via email at Tyrone.Naquin@nrc.gov.

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 component of NRC's Agency wide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/

Michael D. Tschiltz, Deputy Director
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Docket No.: 70-3103
License No.: SNM-2010

Enclosure: As stated

cc:

William Szymanski/DOE
Gary Don Reagan/Hobbs
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DATE	6/ 26 /2009	6/ 26 /2009	6/ 30 /2009	7/24/2009	8/26/2009

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DOCKET NO.: 70-3103
LICENSE NO.: SNM-2010

LICENSEE: Louisiana Energy Services
National Enrichment Facility
Lea County, New Mexico

SUBJECT: SAFETY EVALUATION REPORT OF LOUISIANA ENERGY SERVICES
AMENDMENT REQUEST FOR THE NATIONAL ENRICHMENT
FACILITY TO CHANGE THE APPLICABILITY OF ITEMS RELIED ON
FOR SAFETY TO THE CYLINDER RECEIPT AND DISPATCH
BUILDING FOR DESIGN BASIS EVENTS (LAR-09-07) (TAC NO.
L32506)

PROPOSED CHANGES

On April 3, 2009, Louisiana Energy Services (LES) submitted a License Amendment Request (LAR) to authorize changes in the applicability of items relied on for safety (IROFS) for the Cylinder Receipt and Dispatch Building (CRDB) for Design Basis Events (DBE). This LAR was based on the redesign of the CRDB and the use of an alternate sole IROFS for minimizing uranium hexafluoride (UF₆) released after a DBE. The methodology follows the rationale for LAR-08-07, submitted and approved for the Separations Building Modules (SBM) on February 4, 2009.

BACKGROUND

The CRDB has been modified from its original design, relocating the Blending and Liquid Sampling Area (BLSA) to the SBM. The Technical Services Building (TSB) has also been modified from its original design, relocating all radiological and chemical rooms from the TSB in their entirety into a structure within the CRDB called the "CRDB Bunkered Area." This Bunkered Area is a separate building with separate footers inside the CRDB and retains IROFS27c to protect radiological and chemical rooms from all natural phenomena hazards. With the relocation of the BLSA to the SBM, the only remaining uranic material inventories outside the CRDB Bunkered Area are contained within feed and product cylinders. IROFS27c has been removed from the CRDB outer structure (or superstructure) and replaced with IROFS27e. IROFS27e ensures the CRDB superstructure withstands the loading associated with natural phenomena events and prevents collapse. With the relocation of all radiological and chemical rooms from the TSB to the CRDB Bunkered Area, the TSB is no longer a Safety Significant Structure and no IROFS are required for this building due to the absence of uranic material.

The design of the CRDB superstructure will meet the same accepted industry seismic and structural standards as specified in LAR 08-07 for the SBMs, with the exception that the additional restriction that primary stresses limited to material yield strength will not be invoked for the CRDB. The CRDB does not contain any process IROFS or Safe-By-Design components within the non-Bunkered portion of the building. The approach uses a Quality Level 1-Graded (QL-1G) program for the superstructure in remaining procurement and construction activities.

The proposed redesign of the CRDB would change the building from a concrete structure that would meet the requirement of the QL-1 program to a steel Butler building designated as a QL-1G structure with an interior QL-1 Bunkered Area. The QL-1 Bunkered Area will be constructed

to protect vital interior Safe-By-Design components/systems and process IROFS to ensure the performance requirements of Title 10 of the *Code of Federal Regulations* (10 CFR) 70.61 are not exceeded. The Bunkered Area will retain the original design basis requirements applicable to the CRDB and be a concrete structure. Consequence modeling and criticality assessments, along with evaluation and credit of UF₆ cylinders for structural integrity demonstrate an acceptable risk category can be achieved with the following proposed changes to the building-related IROFS:

- IROFS27c – This IROFS will be eliminated for the CRDB superstructure and replaced with IROFS27e. IROFS27c will be re-applied to the CRDB Bunkered Area. This design feature protects buildings (excluding the SBMs and CRDB superstructure) containing UF₆ process systems for seismic, tornado, tornado missile, high wind, roof snow load, and for roof ponding and site flooding due to local intense precipitation, to ensure UF₆ process systems integrity. IROFS27c is not required to ensure building leakage integrity and was established to protect housed UF₆ systems and process IROFS from extreme external events.
- IROFS27e – This IROFS ensures the CRDB superstructure will withstand the loading associated with these events and prevents collapse. This design feature for SBMs and the CRDB superstructure (not including the Bunkered Area) is for seismic, tornado, high wind, roof snow load, roof ponding and site flooding due to local intense precipitation, to ensure a chemical release does not exceed the 10 CFR 70.61 performance requirements. This IROFS does not prevent water intrusion into the building, nor does it ensure tornado missiles do not penetrate the building.
- IROFS39d – This IROFS requires worker evacuation from the Centrifuge Test Facility (CTF) in the event of severe weather to protect workers from a chemical release associated with a severe weather event. The proposed change is to apply this IROFS to the CRDB as it already applies to the SBMs for tornado conditions and administratively limit exposure by requiring worker action to evacuate the area(s) of concern in the event of severe weather to ensure worker consequences of inhalation of uranic material and Hydrogen Fluoride (HF) are low.

The technical basis for the elimination of IROFS27c from the CRDB superstructure is based on:

- The application of IROFS27e and IROFS39d (for tornado conditions only). IROFS27e ensures the CRDB superstructure will withstand the loading associated with seismic, tornado, high wind, roof snow load, roof ponding and site flooding due to local intense precipitation events and prevents collapse. This (1) precludes a release in excess of 10 CFR 70.61 limits if the building were to collapse; and (2) ensures that personnel can evacuate the CRDB during a seismic even under IROFS39a. This IROFS does not prevent water intrusion into the building, nor does it ensure tornado missiles do not penetrate the building.
- The material in 30B and 48Y cylinders certified as Department of Transportation (DOT) 7A containers in the CRDB is sufficiently protected by their containers that they do not contribute to material released. These containers are not connected to the system and valves are not opened in this location. Additionally, the worst case tornado (F-3) is insufficient to damage the containers to a degree which could cause a breach and subsequent release of UF₆ or HF.

The application of IROFS27c to the CRDB Bunkered Area is to retain the “Highly Unlikely” design basis required for the original design of the TSB. The safety functions of IROFS27c

remain the same as planned for in the original TSB. The CRDB Bunkered Area houses all the radiological functions formerly planned for the TSB except for the Cylinder Preparation Area. This area has been relocated from the original design to north of the Bunkered Area and this area is designed for working only with incoming new and certified, clean cylinders and does not require IROFS or Safe-By-Design features. This design change deleted any need for connection to the Gaseous Effluent Ventilation System (GEVS) and eliminated associated accident sequences.

The application of IROFS39d to the CRDB is based on the premise that no significant chemical releases are anticipated from inside the CRDB during a Tornado, Tornado Missile, or High Wind Event. However, the CRDB is eventually located between two SBMs on the east and west sides, connected by passageways used for UF₆ transfer that are open where workers in the facility may be impacted by releases of UF₆ during a Tornado, Tornado Missile or High Wind Event. IROFS39d requires worker evacuation from the CTF for severe weather and SBMs in the event of a tornado event to protect the worker from a chemical release associated with the severe weather event. It is applied here to the CRDB for tornado events, due to the proximity of the CRDB to the SBMs.

REGULATORY REQUIREMENTS

Under 10 CFR 70.61, a licensee is required to ensure the risk of nuclear criticality accidents must be limited by assuring that under normal and credible abnormal conditions, all nuclear processes are subcritical.

Under 10 CFR 70.62, a licensee is required to establish and maintain a safety program including management measures that demonstrates compliance with the performance requirements of § 70.61. The licensee's management measures are required to ensure that engineered and administrative controls and control systems that are identified as IROFS are designed, implemented, and maintained, as necessary, to ensure they are available and reliable to perform their function when needed, to comply with the performance requirements of § 70.61.

Under 10 CFR 70.64, an applicant or licensee is required to apply baseline design criteria including quality standards and records to the design of new facilities and new processes, and to develop and implemented the design in accordance with management measures.

Under 10 CFR 50, Appendix B, a licensee is required to establish a quality assurance program to be applied to the design, fabrication, construction, and testing of structures, systems, and components of a facility.

GUIDANCE

The U.S. Nuclear Regulatory Commission (NRC) staff conducted its safety review in accordance with NUREG-1520, "Standard Review Plan for the Review of a License Application (LA) for a Fuel Cycle Facility."

STAFF REVIEW AND EVALUATION

Codes and Standards

The design and construction of the CRDB will be in accordance with the New Mexico Building Code, International Building Code, and accepted industry standards including American Institute

of Steel Construction (AISC) Manual for Steel Construction and American Concrete Institute (ACI) 318. In addition, LES also proposes the following:

- Use the American Society of Civil Engineers (ASCE) 43–05 for seismic design for IROFS27c for the CRDB;
- Adopt load combinations for seismic and extreme wind loads in accordance with AISC N690 and ACI 349, as appropriate; and
- Follow the ASCE 4 and ASCE 7 guidelines to perform seismic and structural analyses of the CRDB and use conservative design inputs in conducting the analyses.

On the basis of the NRC staff's review, the licensee has demonstrated the proposed codes and standards, coupled with the proposed design approach, provide sufficient design margin, making collapse of the CRDB highly unlikely. The staff reviewed design and construction codes and standards and design approaches LES proposes for IROFS27e. The NRC staff finds that the proposal is acceptable because design of the CRDB is in accordance with the proposed codes and standards, and design approaches would ensure sufficient capacity to resist structural collapse. The NRC staff finds the licensee provides reasonable assurance that amended IROFS will ensure compliance with the performance requirements of 10 CFR 70.61 from a structural compliance perspective.

Radiation Protection

The amendment seeks to modify IROFS used to mitigate consequences of an event caused by a DBE such as an earthquake, tornado, or strong winds. The amendment seeks to remove IROFS27c for the CRDB superstructure and be replaced with IROFS27e. Through this amendment, the BLSA is relocated from the CRDB to the SBM. IROFS27c is transferred to an interior structure in the CRDB, called the Bunkered Area. The Bunkered Area is designed to house the radiological and chemical rooms, workshops, and laboratories previously located in the TSB. IROFS27c is applied to the CRDB Bunkered Area and provides for the prevention of a chemical release due to the effects of external events, including seismic, tornado, tornado missile, high wind, roof snow load, and roof ponding and site flooding due to local intense precipitation.

With the relocation of the BLSA to the SBM, the only remaining uranic material inventories outside the CRDB Bunkered Area are contained within feed and product cylinders. The material in 30B and 48Y cylinders, certified as Department of Transportation (DOT) 7A containers in the CRDB, is sufficiently protected by their containers that they do not contribute to material released. These containers are not connected to the system and valves are not opened in the CRDB. As part of the submittal of LAR 08-07 for the SBMs, LES provided analysis of the ability of product cylinders to withstand a tornado generated missile. The staff reviewed this analysis in its Safety Evaluation Report (SER) for this amendment and found it acceptable. The cylinders used in the Cylinder Preparation Area will be new and certified, clean cylinders and do not require IROFS or Safe-By-Design features. This design change deleted any need for connection to the GEVS and eliminated associated accident sequences.

With the relocation of all radiological and chemical rooms from the TSB to the CRDB Bunkered Area, the TSB is no longer a Safety Significant Structure and no IROFS are required for this building due to the absence of uranic material. IROFS27e ensures the CRDB superstructure withstands the loading associated with natural phenomena events and prevents collapse. The

application of IROFS39d requires worker evacuation from the CRDB for severe weather, and to protect the worker from a chemical release associated with the severe weather, in the event of a tornado. It is applied to the CRDB due to proximity to the SBMs.

The NRC staff reviewed the licensee's submittal for modifying the application of IROFS27c, IROFS27e, and IROFS39d to the redesigned CRDB. Based on the evaluation, the NRC staff finds these changes are acceptable and make all credible intermediate consequence accidents unlikely, and all credible high consequence accidents highly unlikely. The NRC finds the licensee provides reasonable assurance that amended IROFS will ensure compliance with the performance requirements of 10 CFR 70.61 and are consistent with the radiation protection program requirements of 10 CFR 19, 20, and 70.

Chemical Safety

LES proposes to relocate all chemical laboratories and workshops from the TSB to the CRDB Bunkered Area, interior to the CRDB superstructure. This CRDB Bunkered Area will retain the original design basis requirements applicable to the CRDB and be a concrete structure. IROFS27c is applied to the Bunkered Area. The BLSA is relocated from the CRDB to the SBM. The only uranic material remaining outside the CRDB Bunkered Area is contained in feed and product cylinders. The CRDB superstructure is designated as IROFS27e and protects the CRDB non-Bunkered Area from external events described above in the Background Section.

IROFS27e is not intended to protect against tornado generated missiles. The NRC staff reviewed the licensee's determination provided in the Revision to LAR 08-07, submitted October 23, 2008, that 48Y and 30B cylinders can withstand the impact from a tornado generated missile. The NRC staff finds the licensee's conclusion acceptable due to the cylinder thickness addressed in the LAR 08-07 amendment and addressed in the previous section. These cylinders are Type A packages certified under the DOT 7A which conform with test requirements of 49 CFR 173 and 10 CFR 71.

Additionally, the NRC staff reviewed the licensee's evaluation of the impact of a tornado generated missile to a 30B cylinder by the valve and agrees that such a breach is not credible due to the cylinder metal skirt that surrounds and protects the valve. Furthermore, the application of IROFS39d gives reasonable assurance that worker consequence is low in the event of a UF₆ release during a severe weather event. IROFS39d requires the worker to evacuate the CRDB (including the Bunkered Area) during a severe weather event, including a tornado event.

The CRDB Bunkered Area contains the process IROFS and these are protected by IROFS27c. IROFS27c is designed to protect against all the external events mentioned above, including tornado generated missiles. Therefore, the NRC staff has reasonable assurance that IROFS27c will protect the public, worker, and the environment from chemical releases associated with external events. The staff finds that these proposed changes to the IROFS satisfy the performance requirements of 10 CFR 70.61.

Criticality Events

The staff reviewed the licensee's description of proposed changes in the amendment to determine the impact on the applicant's ability to meet the performance requirements and the double contingency principle for criticality hazards in the CRDB. The change applied IROFS27c to cover only the Bunkered Area, rather than the whole building, and established IROFS27e to

cover the building superstructure. The safety function of IROFS27c remains unchanged, protecting the integrity of processes from external hazards, including seismic events, tornados, tornado missiles, wind, roof snow, roof ponding, and flooding. The sole safety function of IROFS27e is to protect the superstructure from building collapse in the event of such external events.

For the Bunkered Area of the CRDB, the amendment request stated that the safety function of IROFS27c remains the same as originally proposed when the processes were originally located in the TSB. The integrity of process equipment should not depend on their location in either the TSB or CRDB, since the building will be designed to the same specifications as originally proposed. Under the Codes and Standards Section of this Safety Evaluation Report (SER), the staff's review of IROFS27c to withstand the extreme external events that have been postulated for this site concluded that it is adequate to prevent the release of UF₆ from processes inside the Bunkered Area. If the integrity of process equipment is ensured, the only remaining hazard is from additional reflection resulting from flooding of the building. However, during the processing of the SBM amendment, the staff reviewed licensee document 32-9035369-000, "NEF Criticality Assessment under Flooded Conditions," dated September 28, 2007, which demonstrated subcriticality of NEF processes with up to 60 cm of water flooding, as discussed in the SBM SER. Given the ability of IROFS27c to ensure the integrity of the process, the staff's previous review of flooding calculations, and the fact that the amendment only shifts the safety function from the TSB to the CRDB, the staff has reasonable assurance that processes within the Bunkered Area of the CRDB will be adequately protected against criticality hazards.

For areas outside the Bunkered Area of the CRDB, the amendment request stated that there are no process IROFS or Safe-by-Design components within the non-Bunkered Area. The only fissile material in the non-Bunkered Area consists of UF₆ cylinders whose valves are not open and which are not connected to the process. The Integrated Safety Analysis Summary describes the processes within the non-Bunkered Area as consisting of loading and unloading cylinders, testing new or cleaned cylinders, weighing cylinders, preparation and storage of cylinder overpacks, buffer storage of feed cylinders, and storage of filled cylinders. The structural integrity of the UF₆ cylinders, which must meet rigorous quality assurance standards, protects them against a breach in the event of a natural phenomenon hazard such as an earthquake, a tornado, or a tornado missile and was detailed in the SBM revision submitted October 23, 2008. The building superstructure (IROFS27e) is designed to withstand collapse in the event of severe external events mentioned above. Even in the event that the building collapses, several additional unlikely events would have to occur before criticality is possible, including a breach of the cylinders, the introduction of large amounts of water into the cylinders, and/or release of critical mass quantities of material from the cylinders comingled with sufficient water to allow criticality. Similar reviews performed previously have shown that the amount of water that would have to be introduced into a 10-ton cylinder before criticality is possible is in excess of 80 gallons. The potential for any breach is unlikely and even a small breach would be expected to be self-sealing, allowing only a very small cross section for the entry of water into the cylinder. Even in the event of an unlikely large breach (such as a 6-inch diameter hole), it is not plausible to introduce this quantity of water through rainfall. A sustained torrential rainfall of several days to weeks directly on the breach would be required in order for sufficient water to accumulate. In the event material is released from the cylinders (which is in itself unlikely since the cylinders contain solid UF₆), the tendency would be for such material to disperse in the environment, whereas criticality would require accumulation of a critical mass along with sufficient moderator. Due to the safety function of the building, the inherent integrity of the cylinders, and the unlikelihood of the many additional events that would have to occur, the staff

has reasonable assurance that IROFS27e will be sufficient to prevent criticality in the event of the natural phenomena listed above.

The remaining concern is the possible flooding of cylinders in the non-Bunkered Area of the CRDB. During its review of the SBM amendment, the staff reviewed the document "NEF Criticality Assessment under Flooded Conditions." The current amendment request states that an array of 30B cylinders under flooded conditions has been shown to be subcritical (i.e., with a $k_{\text{eff}} + 3\sigma < 0.95$). The staff had determined during review of the SBM amendment that a 6x6 array of 30B cylinders with a single 48Y cylinder resting on top of the middle of the array is subcritical with up to 60 cm of water flooding (determined to bound the worst case flooding at the site). The staff had determined that the calculations were conservative in that they assumed the maximum allowed quantity of water inside all cylinders, assumed the worst-case geometry and location for the uranium-water spheres, assuming bounding interstitial moderator and reflection by concrete and water, and assuming a bounding enrichment of 6wt% ^{235}U . The staff had performed independent analyses for this array of 30B cylinders. In the CRDB the only restriction on cylinders is that they not be stacked, so they will be stored in a configuration that is bounded by the analysis mentioned above. The licensee did not mention 48Y cylinders, and the staff noted that it had removed several references to 48Y cylinders from the ISA Summary. However, the same analysis document previously reviewed also performed similar calculations that showed that a 6x6 array of 48Y cylinders with a 30B cylinder on top would be subcritical. Therefore, the staff has reasonable assurance that cylinders stored in the CRDB will be subcritical in the event of a worst-case credible flood.

In addition to the above considerations, 30B and 48Y UF_6 cylinders are routinely stored outside at fuel facilities throughout the nuclear industry, and are considered to be very safe and low-risk. Their storage inside a building such as the CRDB would provide even more protection than they would have out in a cylinder yard. The additional IROFS requiring evacuation in the event of severe weather (IROFS39d) is only credited with preventing the consequences of a chemical release, though it does also provide a further reduction in risk to personnel from a radiological dose following a criticality (defense-in-depth).

Therefore, the staff has reasonable assurance of adequate protection against nuclear criticality for processes both within and outside the Bunkered Area of the CRDB. Processes inside the Bunkered Area are protected by IROFS27c, as before; the only change is a relocation of these processes from the TSB to the CRDB. Processes outside the Bunkered Area are protected by the structural integrity of UF_6 cylinders, the safety function of IROFS27e to prevent the building collapse, and the fact that an array of 30B or 48Y cylinders is subcritical under the worst-case flooding conditions. IROFS39d provides further protection against the consequences from a nuclear criticality, but is not needed to demonstrate compliance with regulatory requirements. The staff therefore finds the amendment request acceptable from a criticality safety perspective and meets the performance requirements of 10 CFR Part 70.61.

Quality Assurance

The licensee submitted changes in this amendment to its Quality Assurance Program Description (QAPD) to revise the designation to the CRDB superstructure to QL-1G. The licensee's QL-1G Program is a graded program applied to the design and construction of IROFS27e structures. IROFS27e ensures that the outer structure withstands the loading associated with seismic, tornado, high wind, roof snow load, roof ponding, and site flooding due to intense local precipitation. This QL-1G designation for IROFS27e was approved for application to the SBMs on February 4, 2009, as part of LAR 08-07 and identifies the critical

elements needed to assure the safety function of IROFS27e. These elements are included and controlled throughout design, procurement, and construction phases using appropriate quality requirements. The change does not apply to the CRBD Bunkered Area structure which is designated QL-1.

The NRC staff reviewed the proposed revision to the QAPD using the acceptance criteria outlined in Section 11.4.3 of the "Standard Review Plan for the Review of a License Application for a Fuel Cycle Facility," NUREG-1520 (NRC-2002). The acceptance criterion states that the licensee may apply a graded approach to QA in which measures are implemented consistent with the item's importance to safety.

The licensee proposes to apply the QL-1G designation to the CRDB superstructure, which does not contain any process IROFS or Safe-By-Design components as a result of the relocation of the BLSA from the CRDB to the SBM and the handling of only new and certified clean 30B and 48Y cylinders certified as DOT 7A containers within the CRDB superstructure. The staff finds that application of a graded approach in this area is commensurate with the area's importance to safety since it does not contain IROFS or Safe-By-Design components. The Bunkered Area, which is designated QL-1, will contain all of the radiological and chemical rooms relocated from the TSB and IROFS27c is applied for this structure.

Based on the review of the licensee's submittal to modify the QAPD to apply the QA Level 1 Graded Program to the CRDB superstructure, the staff concludes that there is reasonable assurance of adequate protection against natural phenomena and the consequences of potential accidents, and that the IROFS will be available and reliable to perform their safety function. The NRC staff finds that the proposed revisions to the QAPD are acceptable and consistent with the requirements of 10 CFR Part 50, Appendix B.

Emergency Plan

The NRC staff reviewed the NEF Emergency Plan Revision 9, dated April 16, 2009, to ensure consistency between the ISA Summary and the Emergency Plan. The Emergency Plan states that all workers at the NEF are trained in the characteristics and potential hazards of facility processes and materials. IROFS39d was established as an enhanced administrative control to limit worker exposure under LAR 08-07 for the SBM and is an effective feature applicable to this amendment. Based on the review, the NRC staff finds reasonable assurance is provided that measures to mitigate the consequences of accident sequences identified in the ISA Summary are consistent with actions described in the Emergency Plan.

FINDINGS

The amendment request provides reasonable assurance that all credible intermediate consequences, from radiological or chemical releases, are unlikely; and all credible high consequence accidents are highly unlikely. The NRC finds the licensee provides reasonable assurance that amended IROFS will ensure compliance with the performance requirements of 10 CFR 70.61. The staff concludes that the proposed revisions to the LES license are acceptable, consistent with the requirements of 10 CFR Parts 20, 30, 40, and 70, and should be approved.

ENVIRONMENTAL REVIEW

Issuance of the requested amendment to the LES license is subject to the categorical exclusion provided in 10 CFR 51.22(c)(11) and will not have a significant impact on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required for the proposed action.

CONCLUSIONS

Based on its review and evaluation provided by LES in its LAR dated April 03, 2009, the NRC staff finds that the proposed revisions to the LES license are acceptable, consistent with the requirements of 10 CFR Parts 20, 30, 40, and 70, and should be approved.

PRINICPAL CONTRIBUTORS

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Damaris Arroyo
Jonathan De Jesus-Segarra
Christopher Tripp
Simon Hsuing

References

NUREG-1827, (June 2005), "Safety Evaluation Report for the National Enrichment Facility (NEF) in Lea County, New Mexico, Louisiana Energy Services."