UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
MARQUIS ONE TOWER
245 PEACHTREE CENTER AVENUE, NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

July 21, 2010

David E. Sexton, Chief Nuclear Officer
and Vice President of Operations
National Enrichment Facility
P.O. Box 1789
Eunice, NM 88231

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2010-012 AND NOTICE OF VIOLATION

Dear Mr. Sexton:

The U.S. Nuclear Regulatory Commission (NRC) conducted an inspection associated with the construction activities of the Louisiana Energy Services, L. L. C., National Enrichment Facility (LES NEF). The inspection was conducted in the Region II office on July 6 – 9, 2010. The purpose of the inspection was to verify compliance to Quality Level – 1 (QL-1) criteria for Commercial Grade Dedication (CGD) of the Cascade 2 mechanical components that are part of Items Relied on for Safety (IROFS) 41 described in the LES CGD Plan D-2010-012, Revision 0.

Emphasis was placed on adequate completion of CGD activities associated with the Cascade 2 critical characteristics for the centrifuges, uranium hexafluoride (UF_6) pipework, and upper steelworks located in cascade Minihall 1A of the Separations Building Module (SBM) 1001. The enclosed inspection report, which documents the inspection results, was discussed with you and other members of your staff on July 9, 2010.

Based on the results of this inspection, the NRC has determined that a Severity Level IV violation of NRC requirements occurred. This violation was evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is available on the NRC's Web site at www.nrc.gov/about-nrc/regulatory/enforcement/enforce-pol.html. The violation is cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding it are described in the subject inspection report. The violation is being cited in the Notice because it was identified by the NRC.

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation is already adequately addressed on the docket in the attached report. Therefore, you are not required to respond to this letter unless the description herein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice of Violation.

If you contest this violation or its significance, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to: (1) the Regional Administrator, Region II; and (2) the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the internet at http://www.nrc.gov/readingrm/adams.html.

Should you have any questions concerning this letter, please contact me at (404) 997-4647.

Sincerely,

/RA/

James H. Moorman III, Chief
Construction Inspection Branch 3
Division of Construction Inspection

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

Enclosures:

1. Notice of Violation
2. NRC Inspection Report 70-3103/2010-012 w/attachments

cc w/encls: (See next page)

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," this document may be accessed through the NRC's public electronic reading room, Agency-Wide Document Access and Management System (ADAMS) on the internet at http://www.nrc.gov/readingrm/adams.html.

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cc w/encls: (See next page)

■ PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE ■ NON-SENSITIVE

ADAMS: ■ Yes ACCESSION NUMBER: ML102020385 ■ SUNSI REVIEW COMPLETE

OFFICE	RII:DCI	RII: DCI	RII:DCI	RII:DCP	RII:DCP		
SIGNATURE	Via e-mail	Via e-mail	Via e-mail	Via e-mail	A. Masters		
NAME	J. Calle	J. Heisserer	D. Failla	P. Heher	A. Masters		
DATE	7 / 21 / 10	7 / 21 / 10	7 / 21 / 10	7 / 21 / 10	7 / 21 / 10		
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OFFICIAL RECORD COPY DOCUMENT NAME: G:\CCI\DCI\CIB3\INSPECTION REPORTS - INPUTS\2010\LES NEF REPORT NO 70-3103 2010-012 COVER LETTER.DOC

cc w/encl:
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Affairs Director
National Enrichment Facility
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Eunice, NM 88231

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Santa Fe, NM 87502

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Radiation Program Officer
Bureau of Radiation Control
Department of State Health Services
Division for Regulatory Services
1100 West 49th Street
Austin, TX 78756-3189

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New Mexico Department of Environment
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1190 St. Francis Drive
P. O. Box 26110
Santa Fe, NM 87502-0157

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Eunice, NM 88231

Gary Don Reagan, Mayor
City of Hobbs
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Hobbs, NM 88240

Gary Schubert, Chairman
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Alton Dunn, Mayor of Jal
P.O. Box Drawer 340
Jal, NM 88252

cc email distribution w/encls:
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National Enrichment Facility
Electronic Mail Distribution

Brenda Brooks, Director
Community Affairs and Government
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National Enrichment Facility
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Gary Sanford, Quality & Regulatory
Affairs Director
National Enrichment Facility
Electronic Mail Distribution

Perry Robinson, LES General Counsel
Louisiana Energy Services, L.L.C.
National Enrichment Facility
Electronic Mail Distribution

Letter to David Sexton from James Moorman, dated July 21, 2010

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2010-012 AND NOTICE OF VIOLATION

DISTRIBUTION w/encl:
B. Smith, NMSS
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PUBLIC

NOTICE OF VIOLATION

Louisiana Energy Services, L.L.C. Docket No. 70-3103
Eunice, N.M. License No. SNM-2010

During a Nuclear Regulatory Commission (NRC) inspection conducted on July 6 - 9, 2010, a violation of NRC requirements was identified.

In accordance with the NRC Enforcement Policy, the violation is listed below:

Special Nuclear Material (SNM) License No. 2010 requires, in part, that the licensee shall conduct authorized activities at the Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF) in accordance with statements, representations, and conditions in the approved Quality Assurance Program Description (QAPD), dated April 9, 2004, and supplements thereto. The LES NEF QAPD commits to American Society of Mechanical Engineers (ASME) NQA-1-1994, Quality Assurance Requirements for Nuclear Facility Applications, including supplements as revised by the ASME NQA-1a-1995 Addenda for implementation of 10 CFR 50 Appendix B.

Basic Requirement 10, “Inspection”, of ASME NQA-1-1994 and Section 10, “Inspection”, of the LES NEF QAPD both state, in part, that inspections required to verify conformance of an item or activity to specified requirements shall be planned and executed; that characteristics to be inspected and inspection methods to be employed shall be specified; and, inspection results documented.

Contrary to the above, prior to July 6, 2010, inspections required to verify conformance of items to specified requirements were not adequately planned and executed in that the licensee failed to verify that critical characteristics specified in the commercial grade dedication of items relied on for safety were acceptable. The licensee failed to verify the acceptability of critical characteristics specified for upper steelworks welds associated with the commercial grade dedication of Cascade 2 components designated as Items Relied on for Safety (IROFS) 41.

This is a Severity Level (SL) IV violation (Supplement II).

The NRC has concluded that information regarding the reason for the violation, the corrective actions taken and planned to correct the violation and the date when full compliance was achieved is already adequately addressed on the docket in this letter and as documented in NRC Inspection Report No. 70-3103/2010-012. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation," and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555 with a copy to the Regional Administrator, Region II, within 30 days of the date of the letter transmitting this Notice.

If you contest this enforcement action, you should also provide a copy of your response, with the basis for you denial, to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Web Site at http://www.nrc.gov/reading-rm/adams/html to the extent possible, it should not include any personal privacy, proprietary, classified, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withhold and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days. Dated at Atlanta, Georgia this 21st day of July 2010.

NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.: 70-3103

License No.: SNM-2010

Report No.: 70-3103/2010-012

Licensee: Louisiana Energy Services, L.L.C. (LES)

Location: National Enrichment Facility (NEF)
Eunice, New Mexico

Inspection Dates: July 6 - 9, 2010 in Region II office

Inspectors: J. Calle, Senior Construction Inspector, Construction Inspection Branch 3 (CIB3), Division of Construction Inspection (DCI), Region II (RII)
J. Heisserer, Construction Inspector, CIB3, DCI, RII
D. Failla, Construction Inspector, CIB3, DCI, RII
P. Heher, Construction Project Inspector, Construction Projects Branch 2 (CPB2), Division of Construction Projects (DCP), RII

Accompanying Personnel: None

Approved: James H. Moorman III, Chief, CIB3, DCI, RII

EXECUTIVE SUMMARY

Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF)
Nuclear Regulatory Commission (NRC) Inspection Report No. 70-3103/2010-012

Quality Assurance: Control of Materials, Equipment, and Services (Pre-licensing and Construction) (Inspection Procedure (IP) 88108)

The U.S. Nuclear Regulatory Commission (NRC) conducted an in-office inspection to evaluate the procurement and installation of Items Relied on for Safety (IROFS 41) mechanical components by verifying Quality Level-1 (QL-1) criteria. Emphasis was placed on the applicable commercial grade dedication (CGD) activities for critical characteristics of Cascade 2 centrifuges and header pipework and upper steelworks located in cascade Minihall 1A of the Separations Building Module (SBM) 1001.

The inspectors reviewed the CGD Plan, D-2010-012, Revision 0 (including applicable procedures and various documents) and the applicable Acceptance Method 1, "Special Test/Inspection and Standard Receipt Practices," Acceptance Method 2, "Commercial Grade Survey" (for mostly European suppliers and sub-suppliers), and Acceptance Method 3, "Source Verification" selected by LES NEF for verification of 21 and 38 critical characteristics for the centrifuges and pipework/upper steelworks, respectively.

The inspectors verified that the applicant maintained adequate control of materials, equipment and services related to the QL-1 mechanical components installed for CGD of the centrifuges and pipeworks/upper steelworks associated with Cascade 2 of IROFS 41 mechanical components for SBM-1001.

One Severity Level (SL) IV violation (VIO) of Section 10, "Inspection", of the LES NEF Quality Assurance Program Description (QAPD) and Basic Requirement 10, "Inspection", of American Society of Mechanical Engineers (ASME) NQA-1-1994 was identified for failure to verify the acceptability of critical characteristics specified for upper steelworks welds associated with the commercial grade dedication of Cascade 2 components designated as Items Relied on for Safety (IROFS) 41. This was identified as VIO 70-3103/2010-012-001 (Section 2).

Attachments:

Persons Contacted
Inspection Procedures Used
List of Items Opened, Closed, and Discussed
List of Acronyms Used
List of Documents Reviewed

REPORT DETAILS

1. Summary of Facility Status

The licensee continued to perform on-going construction activities for Separations Building Module (SBM) 1001 and the Cylinder Receipt and Dispatch Building (CRDB), at the Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF).

2. Quality Assurance: Control of Materials, Equipment, and Services (Pre-licensing and Construction) (Inspection Procedure (IP) 88108)

a. Scope and Observations

The inspectors evaluated the procurement and installation of Items Relied on for Safety (IROFS 41) mechanical components by verifying Quality Level-1 (QL-1) criteria. Emphasis was placed on the applicable commercial grade dedication (CGD) activities for critical characteristics associated with the key attributes of Cascade 2 centrifuges and header pipeworks and upper steelworks located in cascade Minihall 1A of SBM-1001. This inspection followed the inspections conducted in December 2009 and March 2010 (Inspection Reports 70-3103/2009-007 (ML101170813) and 70-3103/2010-008 (ML100271177)) that assessed the CGD of the centrifuge, header pipeworks and upper steelworks for Cascade 1. Many of the critical characteristics verified by Nuclear Regulatory Commission (NRC) inspectors for Cascade 1 were also applicable to Cascade 2. Where appropriate, credit was taken for the inspections performed for Cascade 1.

The inspectors reviewed the Cascade 2 CGD Plan, D-2010-012, Revision 0 as well as other implementing procedures to determine if they met the requirements of the LES NEF Quality Assurance Program Description (QAPD). The inspectors reviewed CGD Plan D-2010-012, Revision 0 and applicable procedures and various supporting documents to determine if the plan adequately identified the critical characteristics necessary to ensure that centrifuges and pipeworks/upper steelworks were capable of performing their intended IROFS function. Further, the inspectors reviewed the applicable Acceptance Method 1, “Special Test/Inspection and Standard Receipt Practices,” Acceptance Method 2, “Commercial Grade Survey” (for mostly European suppliers and sub-suppliers), and Acceptance Method 3, “Source Verification” selected by LES NEF for verification of 21 and 38 critical characteristics for the centrifuges and pipeworks/upper steelworks, respectively, to determine if critical characteristics were adequately verified.

(1) Centrifuges (Methods 1 and 2 Verification, Note: Method 3 was not used)

The Cascade CGD Plan listed a total of 21 critical characteristics for centrifuges that included materials, wall thicknesses, tightening torque, weld filler materials, welding and nondestructive examination (NDE) process controls, leak tightness integrity, and correct installation of various parts. The Inspectors reviewed the critical characteristics identified by LES NEF for the CGD of centrifuges for applicability.

Regarding acceptance Method 1, the Inspectors reviewed inspection and test data to confirm verification of critical characteristics. During previous NRC inspections (Inspection Reports 70-3103/2009-007 and 70-3103/2010-008), inspectors reviewed

chemical analysis test results to verify that actual materials used in key centrifuge parts met specified design requirements and were traceable to unique heat numbers. In addition, ultrasonic thickness measurement data was reviewed to ensure that key centrifuge parts met or exceeded specified minimum thickness values to ensure the parts could withstand postulated accidents, such as a centrifuge crash.

The inspectors reviewed chemical test data taken from weld wire heats and weld test samples removed from the top and bottom weld joints to ensure the weld material met design specifications. Rockwell hardness C (HRC) data was reviewed to confirm that centrifuge mounting bolts met physical property specifications including tensile strength. Chemical composition data from destructive testing of centrifuge mounting bolts was reviewed to verify that the bolt material met the required specifications.
Receipt inspection records were reviewed, including the certificate of conformance which stated that critical characteristics were verified and that any deviation related to critical characteristics was addressed appropriately.

Regarding acceptance Method 2, the inspectors reviewed the commercial grade surveys performed by LES NEF verifying the capability of suppliers and sub-suppliers to adequately control the critical characteristics associated with their specific scope of supply. A majority of the surveys reviewed were the same surveys credited in the CGD package for Cascade 1 subject to previous NRC inspections and documented in Inspection Reports 70-3103/2009-007 and 70-3103/2010-008. The inspectors reviewed the documents to verify that the LES NEF surveys adequately evaluated the applicable aspects of the suppliers that pertained to their scope of supply including organization, quality assurance, design control, document control, personnel training and qualifications, procurement controls and purchasing, materials controls, measuring, inspection and testing, chemistry controls, control of physical parameters such as dimensions, calibration controls, shipping, and control of non-conforming items.

(2) Pipework/Upper Steelworks (Methods 1, 2 and 3 Verification, as applicable)

The Cascade CGD Plan listed a total of 38 critical characteristics for the uranium hexafluoride (UF_6) pipework and upper steelworks that included materials, wall thicknesses, tightening torque, weld filler materials, welding and NDE process controls, leak tightness integrity, and correct installation of various parts. The inspectors reviewed the critical characteristics selected by LES NEF for the CGD of UF_6 pipework and upper steelworks for applicability.

The inspectors reviewed the licensee's Method 1 and Method 3 verification of critical characteristics for the header piping and upper steelworks in Cascade 2. Positive material identification (PMI), magnetic inspection and hardness testing results were reviewed to verify that materials used in pipework and upper steelworks met specified design requirements. Ultrasonic thickness measurement data was reviewed to ensure that key parts of pipework and upper steelworks met or exceeded specified minimum thickness values and to ensure the parts could withstand postulated design basis events (DBE), such as seismic loads. Hardness testing data was reviewed to verify that mounting bolts met physical property specifications including tensile strength. Chemical composition data from destructive testing of pipework and upper steelworks mounting bolts were reviewed to ensure bolting material met the required specifications.
Installation records of turnbuckles and fasteners for steelworks were reviewed to verify compliance to specification requirements. The inspectors reviewed work plans and receipt inspection records, including certificates of conformance. The certificates of

conformance stated that critical characteristics were verified and that any deviation related to critical characteristics were addressed appropriately. The inspectors reviewed inspection data contained in work plans to confirm that dimensional measurements for support components, pipework configuration, and component types met specified requirements.

Critical characteristic 10b of the pipeworks and steelworks section of the Cascade 2 CGD package dictated the assessment of specific welds for location and size utilizing the Method 1 verification process. Included among these welds were those associated with the tubular steel section of the upper steelworks per drawing ETC 4052684. When asked by the NRC to provide documented evidence of this specific activity, the licensee determined that the required verification of the welds had not been performed. The CGD package for Cascade 2 had been submitted for NRC review by LES NEF on the basis that all required verification activities had been performed and that Cascade 2 was fully certified as QL-1. This oversight rendered the commercial grade dedication of Cascade 2 incomplete and the QL-1 qualification indeterminate. In response, the licensee generated the required work plan and conducted the required Method 1 verification prior to the completion of the NRC inspection activities. The inspectors subsequently reviewed the completed work plan and inspection data to verify the acceptability of the critical characteristic verification of the subject welds. The inspectors identified the following violation related to this observation:

Special Nuclear Material (SNM) License No. 2010 requires, in part, that the licensee shall conduct authorized activities at the Louisiana Energy Services, L.L C., National Enrichment Facility (LES NEF) in accordance with statements, representations, and conditions in the approved Quality Assurance Program Description (QAPD), dated April 9, 2004, and supplements thereto. The LES NEF QAPD commits to American Society of Mechanical Engineers (ASME) NQA-1-1994, Quality Assurance Requirements for Nuclear Facility Applications, including supplements as revised by the ASME NQA-1a-1995 Addenda for implementation of 10 CFR 50 Appendix B.

Basic Requirement 10, “Inspection”, of ASME NQA-1-1994 and Section 10, “Inspection”, of the LES NEF QAPD both state, in part, that inspections required to verify conformance of an item or activity to specified requirements shall be planned and executed; that characteristics to be inspected and inspection methods to be employed shall be specified; and, inspection results documented.

Contrary to the above, prior to July 6, 2010, inspections required to verify conformance of items to specified requirements were not adequately planned and executed in that the licensee failed to verify that critical characteristics specified in the commercial grade dedication of items relied on for safety were acceptable. The licensee failed to verify the acceptability of critical characteristics specified for upper steelworks welds associated with the commercial grade dedication of Cascade 2 components designated as Items Relied on for Safety (IROFS) 41.

Regarding acceptance Method 2, the inspectors reviewed the commercial grade surveys performed by LES NEF verifying the capability of suppliers and sub-suppliers to adequately control the critical characteristics associated with their specific scope of supply. A majority of the surveys reviewed were the same surveys credited in the CGD package for Cascade 1 subject to previous NRC inspections and documented in Inspection Reports 70-3103/2009-007 (ML100271177) and 70-3103/2010-008 (ML101170813). The inspectors reviewed the documents to verify that the LES NEF surveys adequately evaluated the applicable aspects of the suppliers that pertained to

their scope of supply, including organization, quality assurance, design control, document control, personnel training and qualifications, procurement controls and purchasing, materials controls, measuring, inspection and testing, chemistry controls, controls of physical parameters such as dimensions and physical strengths, calibration controls, shipping, and control of non-conforming items.

As part of previous NRC inspections (Inspection Reports 70-3103/2009-007 and 70-3103/2010-008), several supplier welding procedures and welder qualification records for various welding techniques were reviewed for compliance to the code requirements of American Society of Mechanical Engineers (ASME) Section IX, "Welding and Brazing Qualifications," for the UF_6 pipework. These procedures and qualification records were credited in the CGD of Cascade 1 and were applicable to the CGD of Cascade 2 as well.

During a previous NRC inspection (Inspection Report 70-3103/2010-008), MPR-3389, Revision 0, generated in response to example 3 of VIO 2009-007-001, was reviewed. MPR-3389 was reviewed to verify that commercial grade dedicated cascade hall components, related to IROFS 41 manufactured in Europe and installed using Enrichment Technology Corporation (ETC) specifications, complied with the applicable American codes and standards invoked in the Licensing Basis Documents (LBD).

b. Conclusions

The Inspectors determined that critical characteristics listed in CGD Plan D-2010-012, Revision 0 were applicable and adequately verified. The NRC considered the CGD of the centrifuges, UF_6 pipework and upper steelworks for Cascade 2 as documented in CDG D-2010-012, Revision 0, acceptable.

One SL-IV violation of the LES NEF QAPD, Section 10, and ASME NQA-1-1994, Basic Requirement 10, was identified for failure to verify critical characteristics specified in the commercial grade dedication of items relied on for safety were acceptable. This was identified as VIO 70-3103/2010-012-001, Failure to Verify Acceptability of Critical Characteristics. Prior to issuance of this report, the licensee provided the required objective evidence and was verified acceptable by the inspectors.

3. Exit Meeting / Interviews

Issues identified during the inspection were summarized daily during the inspection period of July 6 through 9, 2010, by the inspection team leader. A formal exit meeting was held on July 9, 2010, with the licensee's management team. The inspectors described the areas inspected and discussed the inspection results in detail with the licensee staff. Although proprietary documents were reviewed during this inspection, the proprietary nature of these documents was not included in this report.

SUPPLEMENTAL INFORMATION

1. List of Personnel Contacted

Louisiana Energy Services, L. L.C., National Enrichment Facility (LES NEF):

Earl Andes, QA
Bob Bare, Deputy VP - Projects
Pete Berry, Configuration Management- Engineering
Carl Caimi, Configuration Management
John Davoren, Configuration Management
Gerald Foster, QC
Dan Lemmon, Engineering Design
James Marchi, QA
Bruce Norton, Configuration Management
Wyatt Padgett, Licensing
Jerome Reed, VP - Projects
Tom Taylor, Licensing

MPR Associates:

Ben Frazier, Commercial Grade Dedication Engineering Consultant

2. Inspection Procedure (IP) Used

IP 88108 Quality Assurance Control of Materials, Equipment, and Services (Pre-licensing and Construction)

3. List of Items Opened, Closed and Discussed

VIO 70-3103/2010-012-001	Opened and Closed	Failure to Verify the Acceptability of Critical Characteristics (Section 2)

4. List of Acronyms Used

ASME	American Society of Mechanical Engineers
CGD	Commercial Grade Dedication
CR	Condition Report
CRDB	Cylinder Receipt and Dispatch Building
DBE	Design Basis Events
DIN	Deutsches Institut für Normung e.V
ETC	Enrichment Technology Company Limited
HRC	Rockwell Hardness C
IP	Inspection Procedure
IR	NRC Inspection Report
IROFS	Items Relied on For Safety
LBD	Licensing Basis Documents
LES NEF	Louisiana Energy Services Nuclear Enrichment Facility
MPR	MPR Associates Inc.
NDE	Non-Destructive Examination

NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
PMI	Positive Material Identification
QA	Quality Assurance
QAPD	Quality Assurance Program Description
QC	Quality Control
QL-1	Quality Level 1
RII	Region 2
SBM	Separations Building Module
SNM	Source and/or Special Nuclear Materials
UF_6	Uranium Hexaflouride
VIO	Violation

5. List of Documents Reviewed

ETC Design Documents

QSC/Kar/10/009, Issue 2, dated 3/24/2010
QSC/Kar/10/019, Issue 1, dated 5/5/2010
QSC/Kar/10/019, Issue 2, dated 7/13/2010
DIN EN 573-3
DIN EN ISO 18273

LES Surveys, Audits and Surveillance Reports

2008-2876-EXT-AUD
CGS-2010-C-01-002
CGS-2010-C-01-003
CGS-2010-C-01-004
CGS-2010-C-01-005
CGS-2010-C-01-006
CGS-2010-C-02-008
CGS-2010-C-02-009
2009-A-04-025
2009-S-04-057
2009-S-07-184
2009-S-10-262
2010-S-01-028, Revision 1
2010-S-02-052
2010-S-06-398
TC/2009-020
TC/2009-050
TC/2009-068
TC/2009-103
2009-A-03-019-EXT-AUD

LES Work Plans

1001-MECH-453-010
1001-MECH-453-019

1001-MECH-453-024
1001-MECH-453-027
1001-MECH-453-057
1001-MECH-457-002
1001-CIVIL-823-018

Condition Reports (CR)

CR-2009-3790
CR-2010-199
CR 2010-1452
CR 2010-2191
CR 2010-2229
CR 2010-2233
CR 2010-2234

ETC Concessions

ETC-4133333
ETUS/Con/09/001
ETUS/Con/10/002
ETUS/Con/10/003
UN-0012-2010
UN-0023-2010
UN-0024-2010
UN-0025-2010
UN-0026-2010
UN-0030-2010

Drawings and Specifications

ETC 4054392-5
ETC 4054393-3
ETC-4052668-2
ETC-4052670-1
ETC-4052678-2
ETC-4052682-1

Miscellaneous Documents

EG-3-21000-05, Revision 6, Commercial Grade Dedication Process
EG-3-2100-05-F-2 CGD Plan, Dedication No.: D-2010-012, Revision 0
EG-3-2100-05-F-3 CGDP Verification Results for CGD Plan D-2010-012 for Cascade 2
RIR 2010-0467
ETC-D-100005307, Issue 2, dated 6/7/2010
LES-GSA-3562
QA-3-3000-17-F-1
QA-3-3000-18-F-1