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

May 28, 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. 70-3103/2010-010

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 primarily in the Region II office on May 11 - 13, 2010. The purpose of the inspection was to conduct an inspection of the procurement and installation of Items Relied on for Safety (IROFS) 41 mechanical components by verifying Quality Level - 1 (QL-1) qualifications. Emphasis was placed on the applicable commercial grade dedication activities associated with the flomels for Cascades 2 and 3, and the procurement and installation of the Cascade 1 upper steelworks square-tubular steel sections. The enclosed inspection report, which documents the inspection results, was discussed with members of your staff on May 13, 2010.

Based on the results of this inspection, no violations or deviations were identified.

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

Enclosure:
NRC Inspection Report 70-3103/2010-010 w/attachments

cc w/encl: (See next page)

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NAME	B. Adkins	A. Artayet	D. Harmon	J. Calle	D. Seymour		
DATE	5/24/10	5/24/10	5/24/10	5/28/10	5/28/10		
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Letter to David E. Sexton from James H. Moorman III, dated May 28, 2010

SUBJECT: NRC INSPECTION REPORT NO. 70-3103/2010-010

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Louisiana Energy Services, L.L.C.
National Enrichment Facility

NUCLEAR REGULATORY COMMISSION

REGION II

Docket No.:	70-3103
License:	SNM-2010
Report No.:	70-3103/2010-010
Licensee:	Louisiana Energy Services, L.L.C. (LES)
Facility:	National Enrichment Facility (NEF)
Location:	Region II office (supported by an Inspector at the LES Facility in Eunice, NM)
Inspection Dates:	May 11 - 13, 2010
Inspectors:	J. Calle, Senior Construction Inspector, Construction Inspection Branch 3 (CIB3), Division of Construction Inspection (DCI), Region II (RII) B. Adkins, Construction Project Inspector, Construction Projects Branch 4 (CPB4), Division of Construction Projects (DCP), RII A. Artayet, Senior Construction Inspector, CIB3, DCI, RII D. Harmon, Construction Inspector, CIB3, DCI, RII (On-site Support in Eunice, NM)
Accompanying Personnel:	D. Failla, Construction Inspector, CIB3, DCI, RII (Trainee)
Approved:	James H. Moorman III, Chief, CIB3, DCI, RII

Enclosure

EXECUTIVE SUMMARY

Louisiana Energy Services, L.L.C., National Enrichment Facility (LES NEF)
Nuclear Regulatory Commission (NRC) Inspection Report No. 70-3103/2010-010

The U.S. Nuclear Regulatory Commission (NRC) conducted a routine team inspection associated with the construction activities of the Louisiana Energy Services, L.L C., National Enrichment Facility (LES NEF) on May 11 - 13, 2010. The purpose of the inspection was to evaluate the procurement and installation of Items Relied on for Safety (IROFS) 41 mechanical components by verifying Quality Level-1 (QL-1) qualifications. Emphasis was placed on the applicable commercial grade dedication (CGD) activities associated with the flomels for Cascades 2 and 3, and the procurement and installation of Cascade 1 upper steelworks square-tubular steel sections.

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

The NRC inspectors reviewed the Flomel CGD Plan, D-2010-006, Revision 0 (including applicable procedures and various documents) and concluded that the Acceptance Method 1, Special Test/Inspection and Standard Receipt Practices, and Acceptance Method 2, Commercial Grade Survey (for mostly European suppliers and sub-suppliers) selected by LES NEF were adequately performed for verification of critical characteristics. The inspectors verified that the applicant maintained adequate control of materials, equipment and services related to the QL-1 mechanical components installed for the CGD of the flomels associated with Cascades 2 and 3 of IROFS 41 mechanical components for SBM-1001. No findings of significance were identified. The licensee's commercial grade dedication of Cascades 2 and 3 flomels, as documented in CGD Plan 2010-006, Revision 0, was acceptable. (Section 2)

Mechanical Components (IP 88136)

The NRC inspectors conducted an inspection to assess the fabrication and installation of the upper steelworks square-tubular steel sections for Cascade 1. The NRC inspectors reviewed procurement and construction documentation (including specifications, drawings, and work procedures) to determine whether specific activities associated with QL-1 mechanical components were controlled and performed in accordance with NRC requirements, license commitments, and the approved Quality Assurance (QA) Plan.

The NRC inspectors reviewed receipt inspection reports and documentation to verify compliance to material specification requirements. The review included, but was not limited to, fabrication drawings, mechanical testing records, and certified material test reports (CMTRs). No findings of significance were identified. (Section 3)

Follow-up of Previously Identified Items

Violation (VIO) 70-3103/2010-007-001, Failure to Verify Conformance to Specified Requirements, was reviewed and closed (Section 4).

VIO 70-3103/2010-007-002, Failure to Control Procurement, was reviewed and closed (Section 4).

VIO 70-3103/2010-009-001, Failure to Verify Conformance to Specified Requirements, was reviewed and closed (Section 4).

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 purpose of this inspection was to assess the LES commercial grade dedication (CGD) activities associated with the flomels for Cascades 2 and 3. This inspection served as a follow-up to the inspection conducted in February 2010 (Inspection Report 70-3103/2010-007) that assessed the CGD of the flomels for Cascade 1. Many of the critical characteristics verified by Nuclear Regulatory Commission (NRC) inspectors for Cascade 1 were also applicable to Cascades 2 and 3. Where appropriate, credit was taken for the inspections performed for Cascade 1.

The NRC inspectors reviewed the Flomel CGD Plan, D-2010-006, Revision 0, as well as other implementing procedures to determine if it met the requirements of Section 3, Design Control, of the LES NEF Quality Assurance Program Description (QAPD). The scope of this CGD Plan covered the fabrication and installation of the flomels for Cascades 2 and 3. The NRC inspectors reviewed CGD Plan D-2010-006, applicable procedures and various supporting documents to determine if the plan adequately identified the critical characteristics necessary to ensure that the flomels were capable of performing their intended Items Relied on for Safety (IROFS) function. The Flomel CGD Plan listed a total of 12 critical characteristics including centrifuge anchor bolt dimensions, anchor bolt material, concrete material, rebar placement, steelworks insert part number, and flomel dimensions.

The NRC inspectors reviewed the acceptance methods selected by LES NEF for verification of critical characteristics. The acceptance methods selected by LES NEF were Acceptance Method 1, Special Tests/Inspections and Standard Receipt Practices, and Acceptance Method 2, Commercial Grade Survey. Regarding Acceptance Method 1, the NRC inspectors reviewed receipt inspection records, test records, and inspection records used for the verification of critical characteristics. Regarding Acceptance Method 2, the NRC inspectors reviewed completed Quality Assurance (QA) audits, surveillances, and CGD survey reports to assess the ability of LES NEF to verify the capability of suppliers and sub-suppliers to control and verify critical characteristics.

To evaluate the critical characteristic associated with anchor bolt internal threads, the NRC inspectors reviewed Civil Work Plans 1001-CIVIL-852-001 and 1001-CIVIL-852-002. This review was conducted to determine if LES NEF completed the necessary inspections to ensure proper threading of the centrifuge mounting bolts and ensure that the anchor bolts were capable of performing their intended safety function to withstand a centrifuge crash.

The NRC inspectors reviewed LES QA-09-0931, “Inspection Report of Flomels for use in SBM1001;” LES Surveillance 2010-S-02-044, “Source Inspection – Voorbij Prefab Beton B.V. for 24 Replacement Flomels;” LES Surveillance 2010-S-02-045, “Surveillance of VOORBIJ Prefab Benton B.V., Amsterdam, Netherlands;” and LES Surveillance 2009-C-05-003, “Commercial Survey Report GQA/LES/Voorbij/5-8-2009” to evaluate the critical characteristics associated with anchor bolt dimensions (outer diameter, shoulder diameter, and length). This review was conducted to determine if LES NEF adequately performed the necessary on-site dimensional inspections and surveillances of flomel production to ensure that flomel anchor bolt dimensions were in compliance with design drawings and dimensional tolerances.

The NRC inspectors reviewed LES Surveillance Report 2010-S-02-054, “MH1A, Cascade 2 and Cascade 3 Flomel Anchor Bolt Hardness,” to verify acceptable material hardness for anchor bolts installed on flomels in Cascades 2 and 3. During the previous NRC inspection for Cascade 1, the inspectors reviewed positive material identification (PMI) test data to verify that the anchor bolt material chemical composition was consistent with the material specifications. The results of the PMI testing and material hardness testing were used to confirm that the anchor bolt material was consistent with the specifications for chemical composition and tensile strength.

To evaluate the critical characteristics associated with centrifuge anchor bolt height above flomel surface and anchor bolt spacing and orientation and ensure that LES has adequately evaluated the ability of the flomel manufacturer to control these critical characteristics, the NRC inspectors reviewed LES Surveillance 2009-C-05-003, “Commercial Survey Report GQA/LES/Voorbij/5-8-2009.” During the conduct of the surveys, LES personnel witnessed flomel mould qualification activities and “ready to pour” checks to confirm that the anchor bolts and rebar were in the correct position and orientation prior to each concrete pour. The NRC inspectors also reviewed results from the dimensional inspections performed by LES (QA-09-0931) to verify that the dimensions met the design drawings and dimensional tolerances. During the previous NRC inspection for Cascade 1 (Inspection Report 70-3103/2010-007), the NRC inspectors performed independent measurements of flomel dimensions, which included flomels for Cascades 2 and 3.

Regarding the critical characteristic associated with the concrete material, the NRC inspectors reviewed concrete test cube compressive strength test reports to verify that the flomel concrete met the required compressive strength requirements to resist pullout failures, pryout failures, blowout failures, or general concrete failures. The test reports showed that the concrete compressive strength met the acceptance criteria identified in the specifications and European standards for concrete quality. During previous NRC inspections (Inspection Reports 70-3103/2009-007 and 70-3103/2010-007), the inspectors reviewed destructive test results on a lot of eight training flomels to ensure that the flomel concrete had adequate strength to withstand a centrifuge crash and a seismic event. Results from the destructive testing showed that the flomel concrete compressive strength met the acceptance criteria established in American Concrete Institute (ACI) 301 and design specifications.

To evaluate the critical characteristic associated with rebar placement, the inspectors reviewed LES surveillances of supplier production activities to confirm that the supplier performed the necessary checks to confirm that the rebar was in the correct position and orientation prior to each concrete pour. During previous NRC inspections (Inspection Reports 70-3103/2009-007 and 70-3103/2010-007), the inspectors reviewed destructive

test results performed on a selected set of training flomels and ground penetrating radar test data to confirm the presence of rebar in the flomel concrete.

The NRC inspectors reviewed LES surveillances of supplier production activities to confirm that the supplier performed the necessary checks to verify that the flomel steelworks inserts were installed and the part number was correct prior to pouring concrete into the flomel moulds.

To evaluate the critical characteristics associated with flomel dimensions (e.g., flomel width and depth), the NRC inspectors reviewed LES surveillances and surveys of the supplier's production activities. Specifically, flomel dimensions were set by the flomel mould. Flomel moulds were required to undergo a mould qualification process, which required a 100% dimensional inspection for the first five flomels produced from a mould. This process also required daily, random inspections on flomels after curing to confirm the repeatability of moulds to produce a consistent product. The measurements performed include flomel width and depth. Results from the inspections were provided in the turnover documentation packages that were provided by the supplier to LES.

Regarding receipt inspection, the NRC inspectors reviewed LES Surveillance 2009-S-06-140 R1, "Surveillance of Flomel Receipt Inspection" and LES Surveillance 2009-S-09-0216, "Review of Flomel Documentation Packages" to determine if LES NEF adequately conducted receipt inspection activities of delivered components.

b. Conclusions

There were no findings of significance identified. The NRC inspectors concluded that the critical characteristics selected by LES for the CGD of flomels were acceptable and verified adequately. The licensee's commercial grade dedication of the flomels for Cascades 2 and 3, as documented in CGD Plan 2010-006, Revision 0, was acceptable.

3. Mechanical Components (IP 88136)

a. Scope and Observations

The NRC inspectors reviewed procurement and construction documentation (including specifications, drawings, work procedures and work plans) to determine whether specific activities associated with QL-1 mechanical components were controlled and performed in accordance with NRC requirements, license commitments, and the approved Quality Assurance (QA) Plan. The NRC inspectors conducted an inspection to assess the procurement and installation of upper steelworks square-tubular steel sections for Cascade 1 as documented in Engineering Change Request (ECR) 5791 and the applicable design drawings and design specifications.

The NRC inspectors reviewed documentation between LES NEF and its suppliers to determine if technical and quality requirements were incorporated into purchase orders and procurement documentation. LES NEF procured stainless steel square-tubular material and plates fabricated into sections via welding processes from one QL-1 supplier and installed at the site using stainless steel fasteners procured from another QL-1 supplier. The NRC inspectors reviewed purchase orders and receipt inspection reports to verify that applicable specification requirements were met.

The NRC inspectors reviewed work travelers, certified material test reports (CMTR), welding procedure specifications (WPS) with supporting procedure qualification records (PQR), welding filler material CMTRs, and welder performance qualification records (WPQ) to verify compliance to the applicable code requirements. The NRC inspectors reviewed the associated weld travelers to determine if the acceptable nondestructive examinations (NDE) had been performed and documented.

b. Conclusions

There were no findings of significance identified. The procurement and installation of the square-tubular steel sections of the Upper Steelworks sections for Cascade 1 was adequate.

4. Follow-up of Previously Identified Items

a. Violation (VIO) 070-3103/2010-007-001

The NRC inspectors reviewed licensee activities to restore compliance with NRC regulations for VIO 70-3103/2010-007-001, Failure to Verify Conformance to Specified Requirements. VIO 70-3103/2010-007-001 involved the failure of the licensee to verify that design requirements were properly implemented during installation of IROFS 41 cascade lower steelworks, as was identified on multiple design and installation drawings.

In response, the licensee directed its lower steelworks erector to (1) verify that the cross bracings for Cascades 1 through 8 were verified “tightened” per design drawings, (2) tighten all identified cross bracings as needed and (3) replace all identified bolted connections as needed. In addition, the applicable work plans and procedures will be revised to incorporate the lessons learned and verify that all bolted connections satisfy the applicable design requirements.

The NRC inspectors performed a walk-down of the lower steelworks for Cascades 1 through 8 to observe corrective actions associated with VIO 70-3103/2010-007-001 and Nonconformance Report (NCR) 2010-0707, Gaps in Bolted Joints. The inspectors examined several corrected joints (in Cascades 1 through 3) to verify that the corrective actions (shimming and re-bolting) were adequate to bring the nonconforming joints into conformance with the design and regulatory requirements.

The NRC inspectors also reviewed the licensee’s reply to the violation and determined that the licensee had appropriately restored compliance with NRC regulations and the conditions of their license. This violation is closed.

b. Violation 070-3103/2010-007-002

The NRC inspectors reviewed licensee activities to restore compliance with NRC regulations for VIO 70-3103/2010-007-002, Failure to Control Procurement. VIO 70-3103/2010-007-002 involved three examples where procurement of items and services were not controlled to assure conformance with specified requirements. The data recorded on multiple Certified Material Test Reports (CMTRs) received and accepted by LES NEF from various suppliers did not meet chemical and/or mechanical properties specified in the applicable requirements or were not available,

Example 1 of VIO 70-3103/2010-007-002 identified the situation where LES NEF accepted CMTRs for four (4) different heats of weld filler metals used to weld structural members of the lower cascade steelworks that did not comply with chemical composition requirements of the American Welding Society (AWS) A5.20, as required by paragraph 5.3.4 of the AWS D1.1-2000 code for welding of structural steel and the applicable purchase order issued by LES NEF.

In response, the licensee contacted the supplier that used the weld filler metals and originally provided the CMTRs. That supplier had additional testing performed and submitted the associated test reports that validated the materials compliance to AWS code requirements. Three of the four different heats were retested. The fourth heat was validated by using test records maintained by the weld filler metal manufacturer. In addition, the licensee conducted lessons learned sessions with Quality Control inspectors. The NRC inspectors reviewed the additional material test reports and verified compliance of the weld filler metals used to the requirements of the AWS code.

Example 2 of VIO 70-3103/2010-007-002 identified that LES NEF had obtained and used Quality Level 1 (QL-1) fasteners (bolts, nuts and washers) with CMTRs that failed to meet the chemical and/or physical property requirements, as specified by the applicable Codes and Standards, including International Organization for Standardization (ISO) 898-1 and ISO 898-2.

In response, the licensee conducted a thorough review of the associated receipt inspection documents and determined that records existed which documented the as-tested results of the fastener materials as compliant to the applicable specifications. The non-compliance to specifications was limited to the listed acceptance criteria. The NRC inspectors reviewed the as-tested results and verified compliance to the applicable material specifications.

Example 3 of VIO 70-3103/2010-007-002 identified that LES NEF could not provide CMTRs for two (2) different lot numbers (3/32” and 1/8” diameters) of carbon steel welding electrodes used to fabricate the seismically designed stools (anchor base) embedded in concrete to secure the Lower Cascade Steelworks with a bolted connection near the floor level. LES indicated that these lot numbers of electrodes were no longer available on the NEF site.

In response, the licensee investigated the finding and determined that the issue identified by the NRC was initially identified by LES NEF during the conduct of a QA audit approximately one year earlier. The licensee extracted the required weld material and conducted the required material testing for the two different lot numbers of welding electrodes. The NRC inspectors reviewed the material test report and verified that the weld material used for the anchor weld base of the Lower Steelworks met the required AWS code.

The NRC inspectors also reviewed the licensee’s reply to the violation and determined that the licensee had appropriately restored compliance with NRC regulations and the conditions of their license. This violation is closed.

c. Violation 070-3103/2010-009-001

The NRC inspectors reviewed licensee activities to restore compliance with NRC regulations for VIO 70-3103/2010-009-001, Failure to Verify Conformance to Specified Requirements. VIO 70-3103/2010-009-001 involved examples of two CGD packages where the licensee conducted less than adequate control of purchased items and service. The data recorded on multiple test results received and accepted by LES NEF from their suppliers did not meet the requirements set forth in their CGD Plans.

The first CGD package (D-2008-045) identified in VIO 70-3103/2010-009-001 involved tests results received and accepted by LES NEF for BETEC 140 grouting material that were not conducted within the acceptable temperature range as specified in the standard test method dictated by the CGD plan. In addition, the compressive strength requirement documented in several test reports received and accepted by LES NEF for BETEC 140 grouting material was less than the required compressive strength specified in the CGD plan.

In response, the licensee determined that the temperature range specified in the standard test method did not apply to the grouting material tested and that the measured compressive strength of the grouting material greatly exceeded the required strength for the intended application. The licensee revised the applicable CGD plan for future use and conducted lessons learned training. This identified weakness in implementation of the licensee's CGD process will be incorporated in the proposed program improvements. The NRC inspectors reviewed the applicable documentation and verified that the subject grouting material compressive strength requirements were met.

The second CGD package (D-2010-002, Revision 0) identified in VIO 70-3103/2010-009-001 involved tests results received and accepted by LES NEF for Chockfast Grey epoxy grout that were conducted under a different ASTM standard test method than the one specified within the CGD plan. In addition, tests results received and accepted by LES NEF for Chockfast Grey epoxy grout showed that tests were not conducted within the acceptable temperature range as specified in the standard test method required by the CGD plan.

In response, the licensee determined that the CGD of the Chockfast Grey epoxy grout was invalid. However, the licensee also determined that the grout in question was not used for any QL-1 application as assumed and was dedicated for QL-1 application unnecessarily. The licensee evaluated the grout for its required application and determined it acceptable to be used as is. Nevertheless, the licensee has included the issues with CGD package D-2010-002 in the CGD program lessons learned. The NRC inspectors reviewed the applicable documentation and verified that the licensee evaluation was acceptable.

The NRC inspectors also reviewed the licensee's reply to the violation and determined that the licensee had appropriately restored compliance with NRC regulations and the conditions of their license. This violation is closed.

5. Exit Meeting / Interviews

Issues identified during the inspection were summarized daily during the inspection period of May 11 through 13, 2010 by the inspection team leader. A formal exit

meeting was held on May 13, 2010 with the licensee's management team. The NRC inspectors described the areas inspected and discussed the inspection results in detail with the licensee staff. The licensee was receptive to the preliminary inspection results discussed. 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):

C. Ball, Construction Project Coordinator
M. Boden, Site Support Manager
P. Berry, Engineering
J. Case, Core Design Supervisor
S. Cowne, Operations
D. Lemons, Engineering
P. McCasland, Licensing Engineer
J. Mathis, Licensing Engineer
W. Padgett, Licensing
J. Reed, Plant Manager
P. Robinson, Compliance
G. Schultz, Commercial Grade Dedication/Core Director
G. Sergent, Assistant Quality Assurance Director
T. Taylor, Licensing
R. Witford, Quality Assurance

MPR Associates:

B. 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)
IP 88136	Mechanical Components

3. List of Items Opened, Closed and Discussed

VIO 70-3103/2010-007-001	Closed	Failure to Verify Conformance to Specified Requirements (Section 4)
VIO 70-3103/2010-007-002	Closed	Failure to Control Procurement (Section 4)
VIO 70-3103/2010-009-001	Closed	Failure to Verify Conformance to Specified Requirements (Section 4)

4. List of Acronyms Used

ACI	American Concrete Institute
AWS	American Welding Society
CGD	Commercial Grade Dedication
CR	Condition Report
CRDB	Cylinder Receipt and Dispatch Building
ECR	Engineering Change Request
ETC	Enrichment Technology Company Limited
IP	Inspection Procedure
IR	NRC Inspection Report
IROFS	Items Relied on For Safety
LES NEF	Louisiana Energy Services Nuclear Enrichment Facility
MPR	MPR Associates Inc.
NCR	Nonconformance Report
NDE	Nondestructive Examination
NOV	Notice of Violation
NRC	Nuclear Regulatory Commission
PMI	Positive Material Identification
PQR	Procedure Qualification Record
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
VIO	Violation
WPQ	Welder Performance Qualification
WPS	Welding Procedure Specifications

5. List of Documents Reviewed

LES NEF Documents

Design Documents
ECR 5791
ECR 2834
ECR2834A
ETC4048255
DWG ETC 4052684-4
DWG ETC 4052582-1
DWG ETC4052605-1
Flomel CGD Plan, D-2010-006

Procurement Documents
Purchase Oder 303162
Purchase Order 303170
Approved Supplier's List (Pertinent Sections)
QC Receipt Inspection Plan Report (PO 303170 dated 4/8/2010)

Construction Documents
Work Plan 1001-CIVIL-823-016
Civil Work Plan 1001-CIVIL-852-001
Civil Work Plan 1001-CIVIL-852-002, "Verify Correct Flomels Pitch Diameter"
QA-09-0931, "LES Inspection Report of Flomels for use in SBM1001," Revision 0

Surveillances
LES QA-09-0931, "Inspection Report of Flomels for use in SBM1001"
LES Surveillance 2010-S-02-044, "Source Inspection – Voorbij Prefab Beton B.V. for 24 Replacement Flomels"
LES Surveillance 2010-S-02-045, "Surveillance of VOORBIJ Prefab Benton B.V., Amsterdam, Netherlands"
LES Surveillance 2009-C-05-003, "Commercial Survey Report GQA/LES/Voorbij/5-8-2009"
LES Surveillance Report 2010-S-02-054, "MH1A, Cascade 2 and Cascade 3 Flomel Anchor Bolt Hardness"
LES Surveillance 2009-S-09-0216, "Review of Flomel Documentation Packages"
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LES Surveillance 2009-S-03-022, "Surveillance of Flomel Manufacture at Voorbij LES Surveillance No.: 2009-S-03-022"

Condition Reports
2010-707-CR, 2/23/2010, Gap in bolted joints of Lower Cascade Steel Identified by NRC Inspector during walkdown in Mini halls 1A/1B

Vendor Documents
URS Certificate of Conformance dated 4/6/2010 (PO 303170)
URS Data Package dated 4/6/2010 (PO 303170 Connectors 139, 154 Assembly 404)
URS Travelers (1233-ASM-139; 1233-ASM-154; 1233-ASM-404)
URS CMTRs (A-500 Grade B; A-572 Grade 50; A-36)
URS Weld Filler CMTRs (SFA 5.20 for Type E71T-1m; SFA 5.18 for Type ER70S-2)
URS WPSs (WPS1-0101S01 rev.3 (SMAW/Manual); WPS1-0101T01 rev.7 (GTAW/Manual); WPS1-0101F01 rev.2 (FCAW/Semiautomatic))
URS WPQs (Welder Stamp W69 for FCAW, GTAW, and SMAW)
URS PQR (Westinghouse EPD PQR-051)
ENEV Anchor Bolt Inspection Records
Voorbij Test Cube Concrete Compressive Strength Test Reports
Voorbij "Ready to Pour" inspection records