

December 18, 2007

Mr. Victor M. Apostolescu, Vice President Quality Assurance  
Velan Inc.  
2125 Ward Avenue  
Montreal, QC H4M 1T6  
Canada

SUBJECT: NRC INSPECTION REPORT 99900061/2007-201, NOTICE OF VIOLATION,  
AND NOTICE OF NONCONFORMANCE

Dear Mr. Apostolescu:

On September 17 - 20, 2007, the U.S. Nuclear Regulatory Commission (NRC) conducted an inspection at the Velan Inc. (Velan) facility in Montreal, Canada. The enclosed report presents the results of that inspection.

This was a limited scope inspection which focused on assessing your compliance with the provisions of Part 21 of Title 10 of the Code of Federal Regulations (10 CFR Part 21), "Reporting of Defects and Noncompliance," and selected portions of Appendix B to 10 CFR Part 50, "Quality Assurance Program Criteria for Nuclear Power Plants and Fuel Reprocessing Plants." This NRC inspection report does not constitute NRC endorsement of your overall quality assurance or Part 21 programs.

During this inspection, it was found that the implementation of your quality assurance program failed to meet certain NRC requirements which are discussed in the enclosed Notice of Violation (NOV), Notice of Nonconformance (NON), and NRC Inspection Report. Specifically, a review of Velan's 10 CFR Part 21 implementation identified that Velan did not adopt appropriate procedures to evaluate deviations and failures to comply associated with substantial safety hazards. The violation of 10 CFR Part 21 is cited in the enclosed NOV and the circumstances surrounding the NOV are discussed in the enclosed report. Please note that you are required to respond to this letter and should follow the instructions in the enclosed NOV when preparing your response. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In addition, the NRC inspectors found that the implementation of your quality assurance program failed to meet certain NRC requirements imposed on you by your customers. Specifically, the NRC inspectors determined that inadequate instructions were contained in Velan's procedures related to the corrective action process, and in the implementation of the Velan quality assurance program requirements in the area of procurement control and control of purchased material, equipment, and services as required by Appendix B to 10 CFR Part 50. These nonconformances are cited in the enclosed NON, and the circumstances surrounding them are described in the enclosed report. You are requested to respond to the nonconformances and should follow the instructions specified in the enclosed NON when

V. Apostolescu

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preparing your response.

In accordance with 10 CFR 2.390 of the NRC's "Public inspections, exemptions, requests for withholding," of 10 CFR Part 2, "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter, its enclosures and any associated correspondence will be placed in the NRC's Public Document Room (PDR) 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, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Sincerely,

Juan Peralta, Chief */RA/*  
Quality and Vendor Branch 1  
Division of Construction Inspection & Operational  
Program  
Office of New Reactors

Docket No.: 99900061

Enclosure: 1. Notice of Violation  
2. Notice of Nonconformance  
3. Inspection Report No. 99900061/2007-201

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## NOTICE OF VIOLATION

Velan, Inc.  
2125 Ward Avenue  
Montreal, QC H4M 1T6  
Canada

Docket Number 99900061  
Inspection Report Number 2007-201

Based on the results of a Nuclear Regulatory Commission (NRC) inspection conducted September 17 - 20, 2007, of activities performed at Velan, Inc. (Velan), a violation of NRC requirements was identified. In accordance with the NRC Enforcement Policy, the violation is listed below:

10 CFR Part 21, Section 21.21, "Notification of failure to comply or existence of a defect and its evaluation," paragraph 21.21(a), requires, in part, each individual, corporation, partnership, or other entity subject to 10 CFR Part 21 shall adopt appropriate procedures to (1) evaluate deviations and failures to comply associated with substantial safety hazards as soon as practicable.

Contrary to the above, as of September 20, 2007:

Velan's 10 CFR Part 21 implementing procedure VEL-QCI-560, "Procedure for the Implementation of Regulations (U.S. NRC 10 CFR Part 21) for Reporting of Defects and Nonconformances," dated September 8, 1997, does not provide procedural guidance for the interface of the corrective action and nonconformance reporting processes with the Part 21 program to ensure effective identification and evaluation of deviations and failures to comply associated with a substantial safety hazard.

This issue has been identified as Violation 99900061/2007-201-01.

This is a Severity Level IV violation (Supplement VII).

Pursuant to the provisions of 10 CFR 2.201, "Notice of Violation," Velan is hereby required to submit a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with a copy to the Chief, Quality and Vendor Branch 1, Division of Construction Inspection and Operational Programs, Office of New Reactors, within 30 days of the date of the letter transmitting this Notice of Violation. This reply should be clearly marked as a "Reply to a Notice of Violation" and should include: (1) the reason for the violation, or, if contested, the basis for disputing the violation; (2) the corrective steps that have been taken and the results achieved; (3) the corrective steps that will be taken to avoid further violations; and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agency-wide Documents Access and Management System (ADAMS), to the extent possible, it should not include any personal privacy, proprietary,

ENCLOSURE 1

or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld 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.

Dated at Rockville, Maryland this 18<sup>th</sup> day of December 2007.

## NOTICE OF NONCONFORMANCE

Velan, Inc.  
2125 Ward Avenue  
Montreal, QC H4M 1T6  
Canada

Docket Number 99900061  
Inspection Report Number 2007-201

Based on the results of a Nuclear Regulatory Commission (NRC) inspection conducted September 17 - 20, 2007, of activities performed at Velan, Inc. (Velan), it appears that certain activities were not conducted in accordance with NRC requirements which were contractually imposed upon Velan by NRC licensees.

- A. Criterion IV, "Procurement Document Control," of Appendix B to 10 CFR Part 50, states, in part that, measures shall be established to assure the applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services.

VEL-QC-900-5, "Purchasing" Revision 6, describes the Velan purchasing process requirements which are implemented to ensure that all procurement documents for materials and parts used in manufacturing of Velan products are adequately prepared, approved, and distributed. The requirements also ensure that materials, parts, and services conform to the technical and quality requirements specified for each of the respective Velan products. This procedure is applicable to all Velan valve parts and services.

Contrary to the above, Purchase order P012-512770-K01, contained a Velan assembly drawing of a safety-related valve P012-512770-K01, Revision B, which mistakenly identifies the valve's limit switch as a nonsafety-related component. The valve was subsequently manufactured using a nonsafety-related limit switch procured from a supplier that was not approved by Velan as an approved vendor. As a result of this procurement deficiency, the affected safety-related valve was therefore not constructed to the requirements necessary to assure adequate quality for such safety-related components. This issue has been identified as Nonconformance 99900061/2007-201-01.

- B. Criterion V, "Instructions, Procedures, and Drawings," of Appendix B to 10 CFR Part 50, states, in part that, activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings. Instructions, procedures, or drawings shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished.

VEL-QCI-560, "Procedure for the Implementation of Regulations (U.S. NRC 10 CFR Part 21) for Reporting of Defects and Nonconformances," dated September 8, 1997, outlines

ENCLOSURE 2

the procedure used at Velan for the reporting of defects and nonconformance discovered at Velan and those reported by suppliers or customers. The procedure provides for Form 82-1-78, "Regulation 10 CFR Part 21 Report Form," to be used to document the evaluation and decision as to whether or not a deviation is a defect or noncompliance.

Contrary to the above, Form 82-1-78 was not used for any of the deviations evaluated under the above procedure. The only documentation and record available for review were the notifications Velan had sent to the NRC.

This issue has been identified as Nonconformance 99900061/2007-201-02.

- C. Criterion VII, "Control of Purchased Material, Equipment, and Services," of Appendix B to 10 CFR Part 50, states, in part that, measures shall be established to assure the purchased material, equipment, and services, whether purchased directly or through contractors and subcontractors, conform to the procurement documents. These measures shall include provisions, as appropriate for source evaluation and selection, objective evidence of quality furnished by the contractor or subcontractor, inspection at the contractor or subcontractor source, and examination of products upon delivery.

Contrary to the above, the Velan vendor survey reports sampled by the NRC inspectors did not include sufficient objective evidence to support the Velan auditor's conclusions with respect to the areas reviewed.

This issue has been identified as Nonconformance 99900061/2007-201-03.

- D. Criterion XVI, "Corrective Action," of Appendix B to 10 CFR Part 50, states, in part that, measures shall be established to assure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment, and nonconformances are promptly identified and corrected.

Procedure VEL-QCI-1316, "Completion of Deviation Reports," Revision 7, dated November 29, 2006, provides instructions for the completion of deviation reports (DRs), the collection of data for vendor annual assessment and analysis of in-process rejections, and monitoring of corrective action closeouts.

VEL-QCI-1317, "Corrective and Preventive Action Procedure," Revision, 6, dated August 7, 2001, provides closed loop corrective and preventive actions on root causes of problems, defects in products, processes and systems related to such processes. VEL-QCI-1317, Section 5.0 "Use of Separate CAR Form" states, that where corrective action is sought, independent of a rejection, the CAR form identified in the Velan Quality Assurance Manual (QAM), Exhibit 67, and as "Appendix B" of the procedure must be used.

Contrary to the above:

1. VEL-QCI-1317 does not include provisions to address corrective action for issues or findings identified as a result of audits or inspections performed by outside

organizations such as the Nuclear Procurement issues Committee (NUPIC), ASME, or the NRC.

2. The actions taken to evaluate the root cause and extent of conditions of the deviations evaluated under the Part 21 program are not performed using the corrective action or deficiency reporting procedures.

These issues have been identified as Nonconformance 99900061/2007-201-04.

Please provide a written statement or explanation to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, D.C. 20555-0001, with a copy to the Chief, Quality and Vendor Branch 1, Division of Construction Inspection and Operational Programs, Office of New Reactors, within 30 days of the date of the letter transmitting this Notice of Nonconformance. This reply should be clearly marked as a "Reply to a Notice of Nonconformance" and should include: (1) a description of steps that have been or will be taken to correct this item; (2) a description of steps that have been or will be taken to prevent recurrence; and (3) the dates your corrective action and preventive measures were or will be completed. Where good cause is shown, consideration will be given to extending the response time.

Because your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agency-wide Documents Access and Management System (ADAMS), to the extent possible, it should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. If personal privacy or proprietary information is necessary to provide an acceptable response, then please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such material, you must specifically identify the portions of your response that you seek to have withheld 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.

Dated at Rockville Maryland this \_\_18th\_\_ day of December 2007.



## 1.0 INSPECTION SUMMARY

The purpose of this inspection was to review selected portions of the quality assurance (QA) and 10 CFR Part 21 (Part 21) controls that Velan, Inc. (Velan) has established and implemented. The inspection was conducted at Velan's facilities in Montreal, Canada. The NRC inspection bases were:

- Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to Part 50 of Title 10 of the Code of Federal Regulations, and
- 10 CFR Part 21, "Reporting of Defects and Noncompliance."

## 1.1 VIOLATIONS

- Violation 99900061/2007-201-01 was identified and is discussed in Section 3.10 of this report.

## 1.2 NONCONFORMANCES

- Nonconformance 99900061/2007-201-01 was identified and is discussed in Section 3.2 of this report.
- Nonconformance 99900061/2007-201-02 was identified and is discussed in Section 3.10 of this report.
- Nonconformance 99900061/2007-201-03 was identified and is discussed in Section 3.3 of this report.
- Nonconformance 99900061/2007-201-04 was identified and is discussed in Sections 3.8 and 3.10 of this report.

## 2.0 STATUS OF PREVIOUS INSPECTION FINDINGS

There were no previous NRC inspections performed at Velan's facility in Montreal, Canada, prior to this inspection.

## 3.0 INSPECTION FINDINGS AND OTHER COMMENTS

### 3.1 DESIGN CONTROL

#### a. Inspection Scope

The NRC inspectors reviewed Velan's Quality Assurance Manual (QAM), "Velan Inc. Corporate Quality Assurance Manual for Nuclear Line Valves, Valve Parts and as a Material Organization Class 1, 2 and 3 of the ASME Section III, Division 1 Boiler and Pressure Vessel Code," Revision 11, dated January 31, 2007, and implementing policies

and procedures that govern the design control process. The NRC inspectors also evaluated a limited sample of design packages for valves fabricated by the vendor for safety-related applications to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

The NRC Inspectors reviewed a sample of purchase orders (PO) for compliance with the program requirements documented in Section QAM-03, "Design Control," of Velan QAM. Specifically, the inspection team reviewed Velan PO P012-586510-D for a 14"-150# Bolted Cover Swing Check Valve (14" swing check valve) and PO P012-460850-N for a 6"-150# Split-body Ball Valve Cast (6" ball valve) with an air actuator.

b.1 Purchase Order P012-586510-D

The purchaser's design specification for the 14" swing check valve is documented in Entergy Specification No. SPEC-06-00002-V, "SW 14" Swing Check Valve," Revision 0, dated 09/20/06. As noted on the cover sheet of the design specification, the 14" swing check valve is designated as a Safety Class 3, Seismic Class 1 valve. Section 3.0 of the design specification, "Codes, Standards and References," references in part ANSI B16.34 -1988, "Valves Flanged Threaded and Welding End," and IEEE 344-1975, "Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations." Section 5.0 of the design specification, "Technical Requirements," lists the design requirements, environmental conditions, seismic requirements and qualification requirements for the 14" swing check valve. The valve is required to be sized for a minimum flow rate of 1000 gallons per minute (gpm) and a maximum flow rate of 6000 gpm for an average temperature of 100° Fahrenheit (F) and a pressure of 14.7 pounds per square inch atmospheric (psia). The valve is required to be seismically qualified for horizontal and vertical accelerations of 3.0 g. Section 6.0 of the purchaser's design specification, "Documentation Requirements," requires certificates of compliance for the referenced codes and standards, for the design specification, and for the seismic analysis. Velan Certificate # 10140398, "14"-150# Bolted Cover Swing Check Valve (Figure: B19-0114C-02TS), Item No. #00000000514131," documents certificates of compliance with ASME B16.34 and the purchaser's design specification. Velan's certificate of compliance documents a "Certificate of Seismic Conformity" to the seismic requirements of the purchaser's design specification.

Sub-section 7.2.a.1, "Input," of Section QAM-03 of Velan's QAM requires the preparation of an approved design assembly drawing that is referenced in Velan's Specification Reconciliation for the PO Velan's Specification Reconciliation, "Velan Order No. PO12-586510-D, Customer Spec: 06-00002-V," Revision 0, dated 10/20/06, specifies Velan Drawing No. 7499-761, "ASSEMBLY / CS.BC.SWING CHECK," Revision 0, dated 11/12/97, as the fabrication drawing for the 14" swing check valve.

Sub-section 7.2.a.2, "Output," of Section QAM-03 of Velan's QAM requires the subsequent preparation of a Customer Engineering Project drawing. The 14" swing check valve is depicted on Velan Drawing No. P012-586510-D01, "14" (DN350) Bolted Cover Swing Check Valve (Cast)," Revision C, dated 03/22/07. The NRC inspectors

noted that the project drawings could be improved with respect to the level of detail provided regarding weld information. Specifically, the project document depicts welds at the valve stopper and body (“WELD”) and at the valve seat and body (“WELDED SEAT”), but does not show the standard weld symbols for these welds. The assembly drawing used to fabricate the valve depicts a standard weld symbol for the weld between the valve stopper and body, but does not depict a standard weld symbol for the weld between the valve seat and body.

b.2 Purchase Order P012-460850-N

The purchaser’s design specification for the 6” ball valve is documented in Framatome ANP, Inc. Technical Document, “Equipment Specification / ICW Strainer Discharge Valves for Florida Power and Light St. Lucie Plant Units 1 & 2,” 08-5056934-02, and AREVA “Hardware Data Sheet,” Serial 34, 5056935, Revision 03, dated 08/18/05. The purchaser’s hardware data sheet designates the 6” ball valve as an ASME III, Class 3, Seismic Class I valve. The purchaser’s data sheet also specifies a Bettis pneumatic actuator for the valve. The design requirements for the actuator are documented in Velan, “Actuator Ordering Documents,” PO12-460850-N, Revision 1, dated 06/01/05. Section 3.2 of the purchaser’s design specification, “Industry Codes and Standards,” references in part ASME Section III, Nuclear Power Plant Components, Division I, ANSI B16.34, “Valves - Flanged and Buttwelding End,” and IEEE 344, “Recommended Practice for Seismic Qualification of Class 1E Equipment for Nuclear Power Generating Stations.” Section 4.0 of the design specification, “Technical Requirements,” lists the environmental conditions, general design requirements, and seismic requirements for the 6” ball valve. The purchaser’s hardware data sheet, as referenced in Section 4.2.3 of the purchaser’s design specification, lists the specific design requirements for the valve. The valve is required to be sized for a normal flow rate of 0-3300 gpm for a design pressure of 150 pounds per square inch gage (psig) and a design temperature of 125° F. Section 4.5 of the design specification requires that the valve be seismically qualified for an acceleration of 3.5 g applied simultaneously in three orthogonal directions. The valve is also required to exhibit a fundamental frequency greater than 33 cycles per second (Hz).

Section 6.0, “Documentation,” of the purchaser’s design specification requires that Velan submit an ASME design report and a seismic analysis report. Sub-section 7.2.b, “Preparation of Design Reports,” of Section QAM-03 of Velan’s QAM separately requires the preparation of a Design Report for all Code components. ASME Code Data Report Form NPV-1 is documented in Velan, “ASME Section III Valve Data Package Index,” #052022, Cert. # ECB52356, dated 01/11/06. The Velan valve data package also documents Velan Design/Seismic Report, “6” Class 150 Cast Steel Ball Valve Nuclear Class 3 Split Body Full Port with Bettis Actuator NHD722-SR80-M3HW / Seismic Category Class 1, Non-Active,” Revision 1, dated 09/12/05. The design/seismic report certifies that the valve assembly meets the requirements of the purchaser’s design specification for ASME Section III-ND, 1995 Edition including 1996 Addenda, and ASME/ANSI B16.34-1988.

Sub-section 7.2.a, “Preparation of Customer Project Engineering Drawings,” of Section QAM-03 of Velan’s QAM requires that a Specification Reconciliation be prepared for a standard design. The Specification Reconciliation is subsequently used to complete

Specification Review Checklist Exhibit 8 or 10 as applicable. Velan's "Specification Reconciliation," P012-460850-N, Revision 0, dated 04/08/05, documents the required Exhibit 10, "Specification Review Checklist for Quarter Turn Valves," Customer Spec. # 08-5056934-00, Velan Order P012-460850-N. However, the NRC inspectors noted that the exhibit did not identify the air actuator as part of the 6" ball valve assembly. As a result of the NRC inspector's observation, the vendor prepared a Deviation Report (DR 70310) on 09/19/07 to document this omission and complete the exhibit. The NRC inspectors confirmed that the documentation omission did not adversely impact the actual fabrication and qualification of the valve assembly.

c. Conclusions

The inspectors concluded that Velan's design control program requirements are consistent with the regulatory requirements of Criterion III of Appendix B to 10 CFR Part 50. Based on the limited sample reviewed, the NRC inspectors also determined that Velan's QAM and associated design control procedures were being effectively implemented. However, the NRC inspectors did document two observations regarding attention to detail on design and fabrication documentation which should be addressed by the vendor.

3.2 PROCUREMENT CONTROL

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the procurement process. The NRC inspectors also evaluated a limited sample of procurement packages for safety-related components to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

b.1 Policies and Procedures Governing Procurement

Section QAM-04, "Procurement Controls and Receiving Inspection of Items and Services," Revision 9, of Velan's QAM describes the process for pre-release of purchase orders, requisition forms and listing of required items, process for evaluating approved vendors, description of source and receipt inspections, and disposition of non-conforming materials.

VEL-QC-900-5, "Purchasing" Revision 6, describes the Velan purchasing process requirements which are implemented to ensure that all procurement documents for materials and parts used in manufacturing of Velan products are adequately prepared, approved, and distributed. The requirements also ensure that materials, parts, and services conform to the technical and quality requirements specified for each of the respective Velan products. This procedure is applicable to all Velan valve parts and services.

VEL-QCI-1299, "Supplier Approval ISO 9000," Revision 4, dated 1/30/2001, defines the methods to approve and assess performance of suppliers to maintain their approved

vendor status. The procedure is applicable to all suppliers of products that become valves and or sub-contractors whose services can impact valve quality.

## b.2 Implementation of the Procurement Process

The NRC inspectors reviewed a limited sample of purchase order packages to verify the packages were developed in accordance with the vendors administrative requirements and to ensure that vendor personnel responsible for their preparation were knowledgeable of the procurement process requirements and adequately implemented those requirements. The inspectors identified a concern with one of the purchase order packages reviewed, which is described below.

### Purchase Order P012-512770-K01 – 2.5 NPS class 150 Bolted Bonnet Gate Valve N Class 2 Casting with Limit Switch Honeywell LSQ052.

The NRC inspectors reviewed the order write-up verifying technical and quality information including: identification of the engineering requirements for the component; Drawing in package was the approved version and contained appropriate signatures of the planner, reviewer, and approving authorities; and description of the QA and manufacturing requirements per instruction VEL-QCI-3689 (specific to TVA valve). VEL-QCI-3689 specifies an approved procedure to be used for manufacturing in accordance with the Record of Approved Status (RAS). The purchaser (TVA) reviewed and approved the procedure for use, and includes the following activities: materials, welding, dedication requirements, NDE, cleanliness, hydro testing, tagging, and documentation.

The NRC inspectors verified that the PO contained adequate information identifying the required parts as Class 2-Nuclear, and that the supplier was currently and approved vendor. The NRC inspectors reviewed two manufacturing travelers for the bonnet and valve keys as part of the package. The inspectors verified that required signatures, and requisite hold-points were identified, and that testing requirements were appropriately specified. The inspector confirmed that the incoming Request for Quotation (RFQ) and material data sheet referenced the ASME Section III requirements including specific seismic criteria BFN-50-7105 from TVA.

The NRC inspectors did identify an issue with the implementation of the PO and fabrication of this safety-related valve. The PO contained a Velan assembly drawing of a safety-related valve P012-512770-K01, Revision B, which mistakenly identifies the valve's limit switch as a nonsafety-related component. The valve was subsequently manufactured using a nonsafety-related limit switch (Honeywell LSQ052) purchased from Honeywell as a commercial grade product. Because the component was misidentified as nonsafety-related, Velan did not perform a dedication of the component in accordance with the requirements in CQI-155 to upgrade the part for safety-related use. As a result of this procurement deficiency, the affected safety-related valve, was therefore not constructed to the requirements necessary to assure adequate quality for such safety-related components. As a result of the NRC inspector's finding the vendor issued a CAR to determine the cause(s) of the error and to evaluate the extent of condition. This issue has been identified as Nonconformance 99900061/2007-201-01.

c. Conclusions

Except for the issue identified in Nonconformance 99900061/2007-201-01, the NRC inspectors concluded that Velan's procurement control program requirements are consistent with the regulatory requirements of Criterion IV of Appendix B to 10 CFR Part 50. Based on the limited sample reviewed, the NRC inspectors also determined that Velan's QAM and associated procurement control procedures were being effectively implemented.

3.3 CONTROL OF PURCHASED MATERIAL EQUIPMENT AND SERVICES

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the purchase of material, equipment, and services. The NRC inspectors also evaluated a limited sample of vendor survey reports to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

b.1 Policies and Procedures Governing Purchased Material Equipment and Services

The inspectors reviewed Sub-sections QAM-13, "Performance of Vendor Surveys," and QAM-15, "Audits Surveys," of Velan's QAM. QAM-15 describes the methods and responsibilities for planning and conducting both internal audits and vendor surveys, the frequency of audits and surveys, the responsibilities for corrective actions and verification of the actions taken, and the filing of audit reports.

QAM-13 requires that Velan maintain an AVL for approved vendors and material organizations. Material organizations are qualified to the requirements of NCA-3800. Suppliers are qualified to the requirements specific to the services performed. The procedure outlines the activities for planning, scheduling, reporting and control of supplier survey activities. Velan is made aware of changes to their supplier's QAMs through procurement requirements imposed on the suppliers and maintains controlled copies of each vendors QAM on its AVL.

During the review of QAM-13 and QAM-15, the inspectors determined that Velan is not required programmatically to perform a triennial survey of suppliers who possess a valid ASME Quality System Certificate or a Section III Nuclear type Certification. Sub-section 9.4 of QAM-04, of Velan's QAM, allows for test data furnished by these vendors to be verified on a sampling basis by means of chemical check analysis and a hardness test. Test data verification for these ASME certificate holders is performed on two separate heats of material as a minimum on a yearly basis. However, Velan does not verify mechanical properties as part of the test data verification process. Velan stated that mechanical properties are correlated with the results from the hardness tests. However, this may not be appropriate for all situations where material yield strength would typically be tested and verified.

## b.2 Review of Vendor Survey Reports

The inspectors selected a sample of vendors from Velan's AVL for review of Vendor Survey Reports. The inspectors reviewed the sample survey reports to verify they had been performed in accordance with procedural guidance and provided adequate oversight for items and materials procured by Velan. Some of the vendors reviewed included: Wyman Gordon, West Lothian Scotland (forgings); Elwood Texas Forge: Rotork Controls, Rochester NY (pneumatic, hydraulic and electro-hydraulic actuators and control systems); Patriot Forge, Ontario Canada; Bettis Corporation, Waller TX (actuators); and Techalloy Co., Baltimore MD (weld material).

All of the sampled vendor survey reports reviewed consisted of only one day reviews and their scope did not appear to include sufficient objective evidence of the basis to support the auditor's conclusions with respect to the areas reviewed. The inspectors also noted that none of the survey reports identified any findings related to program implementation at any of the suppliers surveyed. The lack of detailed, documented objective evidence providing a basis for the conclusions reached in the vendor audit survey reports has been identified as Nonconformance 99900061/2007-201-03.

## c. Conclusions

Except for the issue identified in Nonconformance 99900061/2007-201-03, where none of the vendor survey audit reports included sufficient documented objective evidence to support the auditor's conclusions with respect to the areas reviewed, the NRC inspectors concluded that Velan's control of purchased equipment, material and services program requirements are consistent with the regulatory requirements of Criterion VII of Appendix B to 10 CFR Part 50. Based on the limited sample reviewed, the NRC inspectors also determined that Velan's QAM and associated procurement control procedures were being effectively implemented.

## 3.4 CONTROL OF SPECIAL PROCESSES

### a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the control of special processes. The NRC inspectors also evaluated a limited sample of design packages for safety-related components to verify compliance with program requirements and adequate implementation of those requirements.

### b. Observations and Findings

The inspectors reviewed Velan PO P012-586510-D for a 14" swing check valve and PO P012-460850-N for a 6" ball valve with an air actuator for adherence with program requirements documented in sub-section QAM-06, "Control of Fabrication Processes for Valves and Parts for Valves Larger than 2", of Velan's QAM. As noted in sub-section 4, "Quality Planning," of QAM-06, each step in the valve fabrication process is documented on a Nuclear Assembly Routing Sheet (routing sheet). The routing sheet documents the procedure(s) for each activity and the inspection hold points and signoffs.

The inspectors verified that the welds were performed in accordance with welding procedures GT-1166, Revision 5, and FC-1164, Revision 1, and documented on the routing sheet. The inspectors also verified that penetrant (PT) and magnetic particle (MT) examinations were performed in accordance with Velan procedures. The inspectors confirmed that the results of these tests were documented on the component routing sheets. The non-destructive examinations (NDT) for each valve were performed and documented in Velan NDT reports.

The inspectors noted that for the 6" ball valve a hydro test performed to procedure VEL-NDT-648, Revision 1, identified a leak path in the valve body that was documented and dispositioned in Deviation Report 29609. As documented on Routing Sheet 801321, subsequent visual, PT, and wall thickness inspections, and additional hydro testing, was performed on the valve body. The PT to the valve body was also documented in the Velan NDT Report for the component.

c. Conclusions

The inspectors concluded that Velan's control of special processes requirements are consistent with the regulatory requirements of Criterion IX of Appendix B to 10 CFR Part 50. Based on the limited sample of design packages reviewed, the NRC inspectors also determined that Velan's QAM and associated special processes procedures were being effectively implemented. The NRC inspectors did not identify and issues in this area.

3.5 INSPECTIONS

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the inspection process. The NRC inspectors also evaluated a limited sample of design packages for safety-related components to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

The inspectors reviewed Velan PO P012-586510-D for a 14" swing check valve and PO P012-460850-N for a 6" ball valve with an air actuator for the program requirements documented in sub-section QAM-06, "Control of Fabrication Processes for Valves and Parts for Valves Larger than 2", of Velan's QAM. As noted in sub-section 4, "Quality Planning," QAM-06, quality control (QC) inspection points on each routing sheet document release of materials by the Receiving Inspector, visual and dimensional inspection of pressure boundary parts, non-destructive testing and examination, process heat treatment, verification of transfer of traceability marking, and final inspection prior to sub-assembly of final assembly. Routing sheets are forwarded to the authorized nuclear inspector (ANI) for review and selection of hold points.

For the 14" swing check valve body, Routing Sheet 286764 documents QC inspections for materials issued from the stockroom, and PT, MT, dimensional, wall thickness, and visual inspections to verify that all shop operations on the valve body have been

completed. The MT inspection documented on the routing sheet identified linear indications on the valve body that were documented and dispositioned in Deviation Report 30796. Routing Sheet 407442 documents subsequent QC inspections performed for the swing check valve during assembly, including QC visual inspection of parts, hydro test inspection, PT inspection, and inspection prior to shipping.

c. Conclusions

The inspectors concluded that Velan's inspection program requirements are consistent with the regulatory requirements of Criterion X of Appendix B to 10 CFR Part 50. Based on the limited sample of design packages reviewed, the NRC inspectors also determined that Velan's QAM and associated inspection procedures were being effectively implemented. The NRC inspectors did not identify and issues in this area.

3.6 TEST CONTROL

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the test control process. The NRC inspectors also evaluated a limited sample of design packages and observed the performance of several tests on safety-related components to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

The inspectors reviewed Velan PO P012-586510-D for a 14" swing check valve and PO P012-460850-N for a 6" ball valve with an air actuator for adherence with program requirements documented in sub-section QAM-06, "Control of Fabrication Processes for Valves and Parts for Valves Larger than 2", of Velan's QAM. As noted in Sub-section 6, "Shop Inspection and Test Requirements," of QAM-06, each valve is hydrostatically tested according to the procedure referenced on the Nuclear Assembly Routing Sheet. Test records identify the item tested, date of test, tester or data recorder, type of observation, results and acceptability, action taken in connection with any deviations noted and the person evaluating the test results.

As documented in Operation 885 of Routing Sheet 801321, a hydro test of 14" swing check valve SW V70-1A was performed in accordance with procedure VEL-NDT-648, Revision 1. The hydro test for the valve is also documented in Velan, "Hydrostatic Test Report," which is contained in Velan, "Certificate of Compliance," # 10140398, for the 14" swing check valve.

The hydro test of the 6" ball valve with air actuator was performed in accordance with procedure VEL-NDT-648, Revision 1, as documented on Routing Sheet 406634. The hydro test for the valve is also documented on Velan, "Hydrostatic Test Report," which is contained in Velan, "ASME Section III Valve Data Package Index," #052022, Cert. # ECB52356, for the 6" ball valve.

The inspectors witnessed the performance of a hydrostatic test on a standard globe valve and verified that the test was performed using adequate calibrated equipment, and written instructions for the performance of the test. The inspectors verified that the test was performed in a controlled manner, and confirmed that data taken during the testing was appropriately recorded.

c. Conclusions

The inspectors concluded that Velan's test control program requirements are consistent with the regulatory requirements of Criterion XI of Appendix B to 10 CFR Part 50. Based on the limited sample of design packages reviewed and tests observed, the NRC inspectors also determined that Velan's QAM and associated test control procedures were being effectively implemented. The NRC inspectors did not identify and issues in this area.

3.7 MEASUREMENT AND TESTING EQUIPMENT

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the control of the measurement and testing equipment (M&TE) process. The NRC inspectors also evaluated a limited sample of calibration records and reviewed the controls established within the vendor's calibration laboratory. Additionally, the team observed a sample of testing activities performed by Velan to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observation and Findings

VEL-QC-900-10, "Calibration of Measurement and Test Equipment," Revision 7, dated April 03, 2006, defines the methods used to calibrate, identify and control measurement and test equipment (M&TE) at Velan. The procedure is applicable to all equipment used for acceptance of tests and inspections or the verification of special process.

Only M&TE with valid calibration are released for use. Non-calibrated, new, or repaired M&TE are calibrated prior to release for use. When an M&TE is found out of calibration during the regular calibration cycle, the item is taken out of service and a Calibration Report of Defective Gauge is developed by the Metrologist. The report is reviewed by the Velan QA Manager to determine what additional actions should be taken.

As noted above, the inspectors observed the performance of a hydrostatic test on a standard globe valve. The inspectors noted that the pressure gauge that was used for the test was adequately labeled with the equipment number, date of the last calibration, and due date for the next calibration. The label provided the number of the calibration technician that performed the calibration. The hydrostatic test also required the use of a torque wrench. The inspectors verified the calibration performed to this equipment and noted adequate calibration information, as required by the procedure, was attached.

The inspectors visited the calibration laboratory at Velan. The inspectors reviewed calibration records for the equipment used during a hydrostatic test. For this equipment

the inspectors verified the traceability of the calibration back to the national laboratory standards. The inspectors also verified that appropriate environment controls are maintained at the laboratory.

c. Conclusions

The inspectors concluded that Velan's M&TE program requirements are consistent with the regulatory requirements of Criterion XII of Appendix B to 10 CFR Part 50. Based on the limited sample of calibration records reviewed, evaluation of controls established within the vendor's calibration laboratory, and observation of a sample of testing activities performed by the vendor, the NRC inspectors also determined that Velan's QAM and associated M&TE procedures were being effectively implemented. The NRC inspectors did not identify and issues in this area.

3.8 CORRECTIVE ACTIONS

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the corrective action process. The NRC inspectors also evaluated a limited sample of deviation reports (DRs) and corrective action reports (CARs) initiated during the past 24 months to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

b.1 Control of Nonconformances

Sub-section QAM-07, "Control of Non-Conformance," of Velan's QAM, defines the methods used by Velan to control non-conformances. QAM-07 is applicable to all nonconforming items, services, documents, procedures or activities. QAM-07 describes activities such as repair, rework, use as Is, non-conformance, corrective action, significant non-conformances, technical justification, and DRs. DRs are used to report and describe a nonconformance found during receiving, in-process, or final inspection.

Procedure VEL-QCI-1316, "Completion of Deviation Reports," Revision 7, dated November 29, 2006, states that its purpose is to provide instructions for the completion of DRs, the collection of data for vendor annual assessment, analysis of in-process rejections, and monitoring of completed corrective action activities. DRs are to be used for reporting deviations found during receiving and in-process inspections and are applicable to Velan's nuclear and ISO 9001 quality assurance programs. DRs provide the mechanism to document review of deviations identified during the manufacturing process.

b.2 Review of Deviation Reports

Velan's process for identifying and documenting nonconformances is implemented via DRs. The inspectors reviewed the excel spreadsheet log of DRs for 2006 and 2007 and

sampled several DRs concerning suppliers that supplied materials for the manufacture of Velan safety related and ASME valves. The inspectors noted that a large majority of the DRs are identified by the Velan root cause defect codes C5 - faulty material (defective material dimensional errors, cracks porosity, missing paperwork, and improper markings) and C9 - minor defects (associated with forgings, castings, NDT related). The inspectors verified that the DRs included the appropriate review and signoff and, when applicable, verified that corrective action were identified and signed as completed. The inspectors focused on DRs related to nuclear ASME Section III and safety related valves.

### b.3 Corrective Action Program

VEL-QCI-1317 states that its purpose is to provide closed loop corrective and preventive actions on root causes of problems, defects in products, processes and systems related to such processes. Corrective and preventive actions in this procedure pertain to vendors of products and services to Velan, as well as in-process operations within Velan. The system used to trigger such corrective action is the Velan DR, which has two separate entries (i.e., one for disposition and one for corrective action).

VEL-QCI-1317, Section 5.0 "Use of Separate CAR Form" states that where corrective action is sought, independent of a rejection, the CAR form identified in the QAM (as Exhibit 67 and as "Appendix B" of the procedure) must be used. This request for corrective action can be used both for Velan internal processes and for action on vendors. However, the inspectors found that the corrective action form referenced in VEL-QCI-1317 as part of this corrective action process had been rarely used at Velan.

The inspectors also determined that neither the QAM nor the associated procedures contained any provisions for addressing corrective actions for issues identified by outside reviews/audits such as ASME surveys, NUPIC audits, NIAC audits, or NRC inspections. The procedural processes as written pertain only to vendors of products and services to Velan, as well as in-process operations within Velan. This issue has been identified as an example of Nonconformance 99900061/2007-201-04.

### b.4 Implementation of Corrective Action Program

The inspectors attempted to review the documented corrective actions by Velan for audit findings identified in an October 10, 2005, NUPIC Audit Report issued by Constellation Energy. This report identified 11 findings requiring Velan response. The inspectors determined that the 11 NUPIC audit findings identified during the August 2005 audit were not addressed and processed using Velan's corrective action process. The CAR form was not used to document, review and evaluate the root cause and ultimately document the suggested corrective action. However, the inspectors did verify that Velan had formally replied to the 11 NUPIC audit findings and those replies had been accepted by the lead utility, Constellation Energy, in May 2007.

As noted above, the inspectors concluded that neither VEL-QCI-1316 nor VEL-QCI-1317 included any documented measures for issues or findings identified in audits or inspections performed by outside sources such as NUPIC, ASME, or the NRC. In addition, the NRC inspectors concluded that neither VEL-QCI-1316 nor VEL-QCI-1317

included any documented interface with the Part 21 program or the evaluation process described in the Part 21 procedure, VEL-QCI-560, "Procedure for the Implementation of Regulations (U.S. NRC 10 CFR Part 21) for Reporting of Defects and Nonconformances." This issue is discussed further in Section 3.10, "10 CFR Part 21 Program," of this report.

The inspectors also noted that Section 4.15 of Sub-section QAM-07, of the Velan QAM, is in conflict with the requirements in VEL-QCI-1317. QAM-07 allows alternate notification methods, such as, email, fax, memo, letter, as opposed to the CAR form required by VEL-QCI-1317.

c. Conclusions

Except for the example identified in Nonconformance 99900061/2007-201-04, the NRC inspectors concluded that Velan's control of nonconformance and corrective action program requirements are consistent with the regulatory requirements of Criterion XV and Criterion XVI of Appendix B to 10 CFR Part 50. Based on the limited sample reviewed, the NRC inspectors determined that Velan's QAM and associated nonconformance and corrective action procedures were being effectively implemented.

3.9 AUDITS

a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the audit process. The NRC inspectors also evaluated a limited sample of internal audit reports and audit training and qualification records to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

b.1 Procedures and Policies Governing the Audit Process

Sub-section 15, "Audit Surveys," of Velan's QAM, provides a description of the process and requirements for performing internal and external audits and surveys. This procedure further discusses schedules for audit activities, standardized audit techniques, standardized audit reports, and control of the audit process. System audits, applied to a complete sector of the manufacturing process (e.g., procurement, quality assurance, purchasing and inspection) are performed for each sector on an annual basis, not to exceed 14 months, at the discretion of the Quality Audit Manager.

Sub-section 12, "Performance of Internal Audits," of Velan's QAM, controls the frequency of internal audits, describes the preparation and content of the audit report, identification and resolution of corrective actions, and closeout of audit findings. Within audit reports, findings are captured on an internal audit finding report which describes the deficiencies, recommended solutions, and assigns responsibility for finding follow-up and dates for resolution completion. A corrective action form is also completed to identify actions to correct the deficiencies.

VEL-QC-900-15, "Internal Audits," Revision 6, dated April 4, 2003, describes the process for documenting findings and assigning corrective actions to the responsible department head. All reports are to be closed out within 30 days unless the lead auditor allows for an extension with justification. This procedure requires the lead auditor to verify implementation and effectiveness of each corrective action by re-audit.

#### b.2 Implementation of the Audit Process

The NRC Inspectors reviewed a selected a sample of audit reports from 2006 and 2007 to determine if the audits were being performed in accordance with program requirements. The NRC Inspectors learned that Velan had developed a series of 19 templates that corresponded to the quality assurance areas of interest which were used by the audit team leads to review supplier and internal programs. These templates were developed to promote consistent evaluation of supplier and internal programs by all lead auditors. The audit team lead is responsible for developing findings, proposed corrective actions, and tracking and collecting responses to those corrective actions prior to closeout of the report. Audit team lead and quality audit manager review the corrective actions and determine if the actions are acceptable.

The NRC Inspectors reviewed the sample audit reports, associated corrective actions identified, and resolution of those actions completed at the time of the NRC inspection. The corrective actions appeared to have been taken in a timely manner to respond to any identified findings. The Quality Audit Manager was cognizant of the findings and of the proposed or completed corrective actions associated with them.

The NRC Inspectors reviewed the qualification records for a sample of lead auditors and auditors. The inspection team verified all auditors and audit team lead requirements had been met, and that all audit team leads performed at least one audit in the last 12 months to maintain their qualification in accordance with program requirements.

#### c. Conclusions

The inspectors concluded that Velan's audit program requirements are consistent with the regulatory requirements of Criterion XVIII of Appendix B to 10 CFR Part 50. Based on the limited sample reviewed, the NRC inspectors also determined that Velan's QAM and associated audit procedures were being effectively implemented. The NRC inspectors did not identify and issues in this area.

### 3.10 10 CFR PART 21 PROGRAM

#### a. Inspection Scope

The NRC inspectors reviewed Velan's QAM and implementing policies and procedures that govern the 10 CFR Part 21 process. The NRC inspectors also evaluated a limited sample of the vendor's Part 21 program implementation activities to verify compliance with the program requirements and adequate implementation of those requirements.

b. Observations and Findings

b.1 10 CFR Part 21 Procedure

VEL-QCI-560, "Procedure for the Implementation of Regulations (U.S. NRC 10 CFR Part 21) for Reporting of Defects and Nonconformances," dated September 8, 1997, outlines the procedure used at Velan for the reporting of defects and nonconformance discovered at Velan and for those reported by suppliers or customers.

The procedure provides for the evaluation of such deviations by an Evaluation Committee made up of the Vice President, Quality Assurance, Vice President, Engineering, the Plant Manager, and the President. The Evaluation Committee decides whether or not the deviation is a defect or noncompliance. Form 82-1-78, "Regulation 10 CFR Part 21 Report Form," is used to document the evaluation and decision as to whether or not the deviation is a defect or noncompliance, along with the supporting documentation to substantiate the decision.

b.2 10 CFR Part 21 Implementation

The inspectors reviewed Velan's 10 CFR Part 21 notification regarding discrepancies on the flow coefficient value on Piston Check valves, dated March 07, 2007. This notification was provided to the NRC and all affected licensees. Velan provided the inspectors with a discussion of the actions taken to evaluate the extent of condition associated with this Part 21 notification. The Velan representative stated that tests were being performed on different types of valves to verify that the previous calculations were adequately performed with no discrepancy in value. However, the NRC inspectors found that the actions taken by Velan as a result of the evaluation of the root cause(s) and extent of condition evaluation were not adequately documented nor was this evaluation performed under the corrective action or deficiency reporting processes. This issue has been identified as an example of Nonconformance 99900061/2007-201-04.

Additionally, the inspectors requested a copy of the Form 82-1-78, used to document the evaluation of the issue. However, Velan was unable to produce the form and the inspectors verified that no form was developed for this evaluation and that the only documentation available was the actual notification itself. This failure to document the evaluation on Form 82-1-78 has been identified as Nonconformance 99900061/2007-201-02.

The inspectors discussed Velan's Part 21 program with the Vice President, Quality Assurance, and inquired as to how a nonconformance identified as a condition adverse to quality in a DR or a CAR would be evaluated under the Part 21 program. The inspectors determined that VEL-QCI-560 did not contain adequate provisions for the evaluation of deviations and failures to comply associated with substantial safety hazards for issues identified in Velan's quality processes such as CARs. In addition, the inspectors could not find guidance to determine if a significant condition adverse to quality identified in the CAR system would warrant a Part 21 evaluation. Therefore, the inspectors found that Velan's Part 21 program did not adopt appropriate procedures pursuant to 10 CFR 21.21(a) for evaluating deviations and failures to comply to

determine if they could be associated with a substantial safety hazard. This issue has been identified as Violation 99900061/2007-201-01.

c. Conclusions

Except for the issue identified in Nonconformance 99900061/2007-201-02, the example of an issue identified in Nonconformance 99900061/2007-201-04, and the issue identified in Violation 99900061/2007-201-01, the NRC inspectors concluded that Velan's 10 CFR Part 21 program requirements are consistent with the regulatory requirements.

4.0 MANAGEMENT MEETINGS AND PERSONNEL CONTACTED

4.1 ENTRANCE AND EXIT MEETINGS

In the entrance meeting on September 17, 2007, the inspectors discussed the scope of the inspection, outlined the areas to be inspected, and established interfaces with Velan's Chief Executive Officer and several staff personnel. During the exit meeting on September 20, 2007, the inspectors discussed the inspection findings and observations with Velan's Chief Executive Officer and staff.

4.2 PERSONNEL CONTACTED

A.K. Velan	Founder and CEO, Velan
Tom Velan	President, Velan
Victor M. Apostolescu	Vice-President, Quality Assurance, Velan
Carl Correa	Manager, Quality Audit, Velan
Bert Nilsson	Manager Nuclear Div., Velan
Nicole Asselin	Contracts Administrator, Velan
Richard Zarembo	Senior QC Inspector, Velan
Corneliu Pop	Calibration Technician, Velan
Marc Bouchard	Corporate Manager, Project Engineering, Velan
Zoltan Palko	Quality Assurance Manager, Plant 2, Velan
Rejean Rene	Corporate Welding Engineer, Velan
Arnaud Clement Tam	Planner, Velan

4.3 OBSERVERS

Pascal Mutin, Project Manager, a member of the French Autorité de Sûreté Nucléaire (ASN), Directorate for Nuclear Pressure Vessels requested and was allowed to participate as an observer on the Velan inspection. Mr. Mutin also attended the entrance and exit meetings.