



October 7, 2009
John A. Nakoski, Chief
Quality and Vendor Branch 2
Division of Construction Inspection
& Operational Programs
Office of New Reactors
7F3 Washington
District of Columbia 20555

**SUBJECT: CORRECTION TO DRESSER RESPONSE DATED SEPTEMBER 30, 2009
REGARDING NRC INSPECTION REPORT NO. 99900054/2009-201, NOTICE OF VIOLATION AND
NOTICE OF NONCONFORMANCE TO DRESSER INDUSTRIES INCORPORATED**

Dear Mr. Nakoski:

This letter is in response to the U.S. Nuclear Regulatory Commission (NRC) letter dated August 7, 2009 (and the extension granted in the NRC email dated September 8, 2009) in which Dresser was asked to provide further detail on certain NOV and NON that the NRC deemed not responsive to their concerns, and address correction to a response dated September 30, 2009.

It has come to my attention that the reply I had sent to the NRC in a letter dated September 30, 2009, contained information that could be incorrectly interpreted to mean that Dresser had suspended its Approved Nuclear Supplier List (ANSL). This is certainly not the case. Enclosed you will find a clarified response correctly pointing to Enhanced Receiving Inspection as an additional safeguard Dresser has implemented as it works through its improvement plans. See response to Violation 99900054/2009-201-02.

Thank you for your time and attention. If you have any questions or concerns, please do not hesitate to contact me by phone: (318) 640-6232, by email: richard.budzinski@dresser.com, or at the address listed below. A signed copy of this document will be sent to you and the NRC Public Document Room

Sincerely,


Richard F. Budzinski
Director of Operational Excellence and Quality Systems
P.O. Box 1430
Alexandria, Louisiana 71309 U.S.A.

Enclosures: 1) Response to NRC letter dated August 7, 2009
2) Heise Model 901A Digital Pressure Indicator

cc: Daniel Pasquale (daniel.pasquale@nrc.gov)
Francis X. Talbot P. E. (frank.talbot@nrc.gov)
NRC Public Document Room

IE09

Richard Budzinski, Director
Operational Excellence & Quality Systems
Dresser, Inc.
Alexandria, Louisiana 71309

SUBJECT: Response to NRC Inspection Report No. 99900054/2009-201, Notice of Violation and Notice of Nonconformance to Dresser Industries Incorporated, letter dated August 7, 2009

Violation 99900054/2009-201-02 related to Dresser's failure to provide instructions for determining when 10 CFR Part 21 requirements are applicable and must be included in Dresser's procurement documents to suppliers on its Approved Nuclear Supplier List (ANSL). Your response indicated the following corrective actions to prevent recurrence:

Dresser's QSM and QSP-6 will have the requirements added to specify the provisions of 10 CFR Part 21 that apply to Class A and B parts. The corrective steps include plans to revise QSP-6 in July 2009 and the QSM in September 2009.

These 10 CFR Part 21 requirements should also apply to Dresser Quality Class C parts, "Essential items, non-pressure boundary that are outside the scope of the code." Please provide further details on Dresser plans to revise QSP-6 and the QSM to meet 10 CFR 21.31, "Procurement documents," related to imposing procurement document requirements on Dresser suppliers listed on the ANSL.

10 CFR 21.31, states, in part, that "each individual, corporation, partnership or other entity shall ensure that each procurement document for a facility, or basic component, specifies, when applicable, that the provisions of Part 21 apply." Additionally, 10 CFR Part 50, Appendix B, Criterion IV, "Procurement Document Control," states, in part, that "measures shall be established to assure adequate quality are included in the documents for procurement of material, equipment and services, whether purchased by the applicant or by its contractors or subcontractors." Since procurement documents for basic components are essential Quality elements related to Dresser's scope of supply, it must address the QA procurement documents in 10 CFR 21.31. Furthermore, ANSI/ASME NQA-1, Basic Requirement 18, "Audits," states "Planned and schedule audits shall be performed to verify compliance with all aspects of the quality assurance program." RG 1.28, Regulatory Position 3.2, "External Audits," states "the applicant or licensee should either audit its supplier's quality assurance program on a triennial basis or arrange for such audit." In either case, the audits should be implemented in accordance with Supplement 18S-1 of ANSI/ASME NQA-1." This includes external audits of QA procurement documents meeting the requirements in 10 CFR 50, Appendix B, Criterion IV and 10 CFR 21.31.



Based on the above, please provide details on Dresser plans to conduct external audits of the Dresser supplier's (ANSL suppliers) compliance to 10 CFR 21.31. These external audit plans should include Dresser's evaluation of extent of condition of active or closed Dresser purchase orders to verify compliance with 10 CFR 21.31. Dresser needs to address revising active purchase orders to impose 10 CFR Part 21 requirements on the ANSL suppliers.

Further corrective steps that will be taken and the expected results to be achieved:

- 1) 10 CFR Part 21 and 10 CFR Part 50, Appendix B will be imposed when purchasing a Basic Component. The Commercial Grade Dedication process will be invoked where Dresser dedicates a commercial grade item.
- 2) Dresser has submitted a revised Quality Policy Manual to its ANIS for review. The revised QPM directly references the following:
 - a. NRC 10 CFR Part 50 Appendix B
 - b. NRC 10 CFR Part 21
 - c. NCA 4000
 - d. NQA-1 (Part 1, 1994)
 - e. EPRI 5652
 - f. NRC Generic Letter (GL) 91-05

The ANIS has responded with requests for additional changes and details, including to the Level 2 document that replaces QSP 06 (QSCP 2006).

- 3) As an additional safeguard, and until as these documents are finalized, Dresser has implemented measures to have each new purchase order (for items designated as Safety Related) reviewed by a Quality Engineer and the Dedication Engineer to determine whether 10 CFR Part 21 and 10 CFR Part 50, Appendix B apply. The ANSL suppliers that are accepting compliance to 10CFR part 21 and 10CFR Part 50, Appendix B, as required by 10 CFR 21.31. New purchase orders for material or parts purchased from suppliers not accepting 10CFR Part 21 or 10CFR Part 50, Appendix B, will not contain requirements of these NRC regulations.

Records are available for review

- 4) As stated in item 1) above, Dresser understands that all suppliers of material or parts for Safety Related products (Basic Components) will be treated as 10CFR Part 50, Appendix B suppliers



(10CFR Part 21 applies), or the material and/or parts will be dedicated by Dresser. Dresser has completed desk reviews of all suppliers on the ANSL, and is in process of conducting external audits on these suppliers.

- 5) Dresser has implemented Enhanced Receiving Inspection as an additional safeguard as it works through the improvement program.
- 6) As already noted above, Dresser will write and release QSCP-2006, to replace QSP-06. The new Level 2 procedures will impose the requirements of 10CFR Part 21 and 10CFR Part 50, Appendix B on suppliers of material, parts, or services to be used as basic components in safety related parts or valves. Additionally, the new Level 2 procedures will provide for material and parts to be purchased from suppliers not accepting 10CFR Part 21 and 10CFR Part 50, Appendix B. These parts and material will be dedicated, and ultimately accepted as basic components by Dresser. Where technical data are provided by suppliers for use in Dresser's dedication program, the guidelines of EPRI 5652 will be invoked.
- 7) Audit checklist will be revised to include evaluation of active or closed Dresser purchase orders to verify compliance with 10 CFR 21.31. (The requirement of 10 CFR 21.31, Procurement Documents is: Each individual, corporation, partnership, dedicating entity, or other entity subject to the regulations in this part shall ensure that each procurement document for a facility, or a basic component issued by him, her or it on or after January 6, 1978, specifies, when applicable, that the provisions of 10 CFR Part 21 apply.)

Dates when full compliance will be achieved:

- 1) NA
- 2) Approval by ANIS by 12/31/2009
- 3) On-going
- 4) On-going
- 5) On-going thru April, 2010
- 6) December 4, 2009
- 7) December 4, 2009

Nonconformance 99900054/2009-201-05 related to Dresser's failure to implement an adequate commercial grade dedication (CGD) program as noted by six examples of inadequate guidance for dedicating commercial grade item (CGI) as basic components in safety related relief valves.

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The Dresser corrective steps included: (1) updating engineering guidelines; (2) release a new Dresser Quality System Manual (QSM); (3) attend Nuclear Utility Procurement Committee (NUPIC)/NRC June meeting on approach to CGD; (4) use Advanced Product Quality Planning (APQP) approach (i.e., Failure Modes and Effects Analysis (FMEA)), and (5) implement a web based Quality Document System. Dresser also stated that full compliance will be achieved in December 2009. Dresser is also planning to release updates to Engineering Guidelines EG- 037, EG-059, EG-490, EG-368 in July 2009 and a new QSM in September 2009.

The NRC staff also noted that Dresser references PPAP 4th edition that implements the APQP approach (i.e., FMEA) from the automobile industry. Dresser states that this document deals with topics relevant to CGD process. The NRC staff has not endorsed this standard for CGD in the nuclear industry. Please provide further details on how Dresser intends to implement a CGD program consistent with guidance in the following:

- NRC Generic Letter (GL) 91-05, "Licensee Commercial-Grade Procurement and Dedication Programs," dated April 9, 1991
- EPRI NP-5652, "Guideline for the Utilization of Commercial Grade Items in Nuclear Safety-Related Applications (NCIG-07)"

Further Corrective Steps that will be taken and the expected results to be achieved:

- 1) This issue has largely been addressed in the response to Violation 99900054/2009-201-02 above.
- 2) Dresser will release a new version of the QSM, and new versions of Level 2 documents, including revisions of existing Level 2 documents to reflect the guidelines of EPRI NP-5652, and NRC Generic Letter (GL) 91-05. The controls will be driven down into the Level 2 documents through the use of control plans, Design FMEA, and Process FMEA. NQA-1-2008 controls have been added, unless there is a conflict with NQA-1-1994, and then the latter will prevail.



Dates when full compliance will be achieved:

- 1) NA
- 2) December 31, 2009

Nonconformance 99900054/2009-201-07 related to Dressers' failure to include a requirement in its purchase orders to suppliers on its ANSL to have a QA program that meets the applicable requirements of Appendix B to 10 CFR Part 50.

Dresser stated in the May 27, 2009, response that "Quality Control Program Requirement (QCPR)-1 will be updated to add 10 CFR Part 50, Appendix B to the requirements of the supplier's quality programs. Suppliers will need to determine that their quality programs comply with these requirements." Dresser planned to update QCPR-1 in June, 2009. Dresser also stated that it will issue Quality Alert (survey) to the appropriate suppliers requesting them to provide a statement showing that they are in compliance with the requirements in 10 CFR Part 50, Appendix B.

The use of "Quality Alert" surveys is not an acceptable method for conducting audits of suppliers listed on an ANSL. 10 CFR Part 50, Appendix B provides the requirements for the authority and duties of persons and organizations performing activities affecting safety-related functions of structures, systems and components. It is Dresser's responsibility to determine whether its suppliers have adequate QA programs that meet these requirements, prior to Dresser's placement and retention of suppliers of basic components on its ANSL. In accordance with 10 CFR Part 50, Appendix B, Criterion XVIII, "Audits," please provide further details on Dresser's plans to complete external audits of suppliers QA programs for suppliers on the Dresser ANSL. Dresser also needs to address revising active purchase orders to impose 10 CFR Part 50, Appendix B requirements on the ANSL suppliers.

Further corrective steps that will be taken and the expected results to be achieved:

- 1) Dresser will only use "Quality Alert" surveys as a means to guide suppliers. Dresser has completed desk reviews of all suppliers on the ANSL. Dresser is in the process of determining which suppliers listed on the ANSL will accept purchase orders invoking 10CFR Part 50

Appendix B and 10CFR Part 21. Dresser will audit suppliers that accept compliance to 10CFR Part 50 Appendix B and 10CFR Part 21 to determine if the supplier has an adequate program to meet the requirements. Dresser is in the process of planning and performing audits on suppliers listed on the ANSL, where applicable. AFG Acquisition Group (American Foundry Group) was audited in April 2009, with a follow up conducted in August 2009. Tools used for audits will be 10 CFR Part 50 Appendix B, 10 CFR Part 21, NQA-1, and NCA-3800, as appropriate. Technical Surveys as described in EPRI 5652 will be carried out for suppliers that provide material, parts, or services used in Dressers CGD process.

- 2) Dresser is reviewing all new purchase orders for parts or materials that are intended for use in safety related components. Purchase orders to suppliers that accept 10CFR Part 50 Appendix B and 10CFR Part 21, that have been audited by Dresser and determined that their quality program is adequate to meet the requirements, are being reviewed to ensure the requirements of the NRC Regulations are specified. Purchase orders to suppliers **not** providing basic components or materials will not have 10CFR Part 21 or 10CFR Part 50 Appendix B specified on the purchase orders. Purchase orders are being revised to specify the appropriate controls for the procurement of parts or materials intended for use in safety related components. At present Dresser is performing Enhanced Receiving Inspection on all parts to be used in Safety Related Valves, or sold as spare parts for use in Safety Related Valves.

Dates when full compliance will be achieved:

- 1) On-going thru April, 2010
- 2) On going.

Nonconformance 99900054/2009-201-08 related to Dresser's failure to place copies of Non-

Conformances Reports (NCRs) into Supplier Audit Files as required by Section 5.2 of Dresser procedure QSP-17 as objective evidence of corrective action being taken. Dresser's corrective action response does not include any specifics regarding the review of other Supplier's Audit Files associated with all its other nuclear approved suppliers. Please provide a summary of Dresser's extent of condition evaluation that included the reviews of other nuclear approved supplier's audit files and associated findings.

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Further corrective steps that will be taken and the expected results to be achieved:

None required.

The NCR's that were noted in the American Foundry Group (AFG) audit report were not written as a result of audit findings. They were product nonconformances issued outside of the audit, and reviewed during the on site Quality System Audit of AFG.

Dates when full compliance will be achieved:

- 1) Full compliance was achieved on September 18, 2009.

Nonconformance 99900054/2009-201-09 related to Dresser's use of a very large range (0- 20,000 psi) digital pressure gauge for conducting hydro testing at test pressures of 750 psi. Dresser's calibration procedure CAL-009 stated that test gauges used for hydrostatic testing would be accurate to +/- 0.1% of range with a Dead Weight Tester and +/- 0.5% of range with a Test Gauge. The corrective action steps listed in the Dresser response refer to how it determines the hydrostatic testing pressure and how this complies with the ASME Code; however, this response did not address the issue identified in the nonconformance.

Please provide a response that addresses the issue identified in NON 99900054/2009-201-9 related to the use of a pressure gauge that had a range and accuracy that were inappropriate for measuring the test pressure during hydrostatic testing.

Further corrective steps that will be taken and the expected results to be achieved:

- 1) Dresser Procedure CAL009 does not clearly address the use of a digital gauge as a working test gauge for in-process hydrostatic testing. Dresser will revise procedure CAL009 "CALIBRATION OF PRESSURE GAUGES (DIGITAL AND DIAL TYPE)" to add requirements for use of digital gauges in In-Process Hydrostatic Testing. Details of the use of digital gauges

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along their full range and the accuracy will be added. The 0-20,000 psi digital pressure gauge was appropriate for its use, as it is accurate throughout its full range. A product specification sheet is attached for the gauge in question, Heise Model 901A, showing it to be accurate throughout its full range, 0-20,000 psi, at a tolerance of + or - 0.07%. See attachment on the Heise gauge.

Dates when full compliance will be achieved:

- 1) December 4, 2009

Comment:

Digital pressure gauges are accurate throughout the full scale range of the gauge. Using a digital pressure gauge with a range of 0 to 20,000 pounds and at the gauge accuracies shown, the pressure tolerance would be as shown.

Test Pressure psig	Tolerance @ + or - 0.5% psig	ASME B&PV Code Section III Tolerance @ + or - 1% psig
750	3.75	7.5
3750	18.75	37.5
20,000	1000	2000

Nonconformance 99900054/2009-201-12 was related to Dresser's failure to provide adequate and consistent procedural guidance for interfaces among its 10 CFR Part 21 reporting, corrective action, nonconforming items, and repair/replacement processes. While the Dresser response indicated that various QSPs were being updated, the Dresser response did not include sufficient information for the NRC to conclude that the changes being made addressed integration of these procedures. Please provide additional information that addresses this integration. The NRC staff requests that Dresser provide details on corrective actions, extent of condition, and scheduling of completion of actions.

Further corrective steps that will be taken and the expected results to be achieved:

- 1) The following actions have been taken:
 - a. The Non-Conformance Report (NCR) form has been revised to add a statement to be checked for indicating a potential safety issue. Statement is as follows:
"Does defect present potential safety issue? 10 CFR PART 21".
 - b. The Effective Problem Solving (EPS) form used for all Internal / External Corrective Actions has been revised to add a statement to be checked for indicating a potential safety issue. Statement is as follows:
"Does defect present potential safety issue? 10 CFR PART 21".

Dates when full compliance will be achieved:

- 2) Full compliance was achieved on June 22, 2009.
- 3) Full compliance was achieved on January 9, 2009.

Sincerely,



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HEISE® MODELS 901A AND 901B DIGITAL PRESSURE INDICATORS



The models 901A and 901B digital pressure indicators offer unique features including ranges to 30,000 PSI, LED display, remote sensor and analog output options. Other available features include engineering unit select, mix/max recall, Hi/Lo set point, tare and digital outputs. With full span accuracies of $\pm 0.07\%$ (901A) and $\pm 0.035\%$ (901B), the 901 provides precise, reliable pressure measurement combined with a customized set of optional features.

Standard Features

- ▣ LED display
- ▣ Accuracies: $\pm 0.07\%$ and $\pm 0.035\%$ F.S.
- ▣ Broad media compatibility: any liquid or gas compatible with 316 SS and 718 Inconel
- ▣ Ranges: 0-50 in. H₂O through 0-30,000 psi
- ▣ Gauge, vacuum, compound, absolute and barometric
- ▣ Welded sensor construction
- ▣ Rugged, ABS housing
- ▣ NIST traceable certificate of calibration

Optional Features

- ▣ 4-20 mA, 0-5 Vdc or 0-10 Vdc analog output
- ▣ RS-232 or BCD digital output
- ▣ Remote sensor (up to 20 feet)
- ▣ Min/Max recall
- ▣ Engineering unit select
- ▣ Tare
- ▣ Hi/Lo set point
- ▣ Display hold
- ▣ 20°F to 120°F temperature compensation (standard is 45°F to 95°F)
- ▣ 9/16-18 UNF-2B female connection (for 1/4" O.D. high pressure tubing) (standard above 5,000 psi)
- ▣ Handle with Potentiometer Adjusting Tool
- ▣ Panel mounting brackets

Product Information

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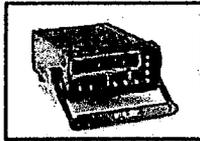
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