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A. Edward Scherer
Manager of
Nuclear Regulatory Affairs

February 9, 2004

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Subject: **Response to NRC Request for Additional Information Regarding Relaxation Requests 1 and 2 for Reactor Pressure Vessel Head Penetration Inspection Requirements in Nuclear Regulatory Commission Order EA-03-009 for San Onofre Nuclear Generating Station (SONGS) Units 2 and 3 (TAC Nos. MC1540, MC1541, MC1542, and MC1543)**

Reference: Letter from A. E. Scherer (SCE) to the Document Control Desk (NRC) Dated December 9, 2003; Subject: Docket Nos. 50-361 and 50-362 Request For Relaxation Of Reactor Pressure Vessel Head Penetration Inspection Requirements In Nuclear Regulatory Commission Order EA-03-009 San Onofre Nuclear Generating Station Units 2 and 3

Dear Sir or Madam,

This letter transmits Southern California Edison (SCE) Company's responses to the NRC questions regarding Relaxation Requests 1 and 2. These relaxation requests were submitted to the NRC by the referenced letter dated December 9, 2003. Relaxation Request 1 addresses relaxation from the requirements of NRC Order EA-03-009 to allow a combination of non-destructive examination techniques to fulfill the inspection requirements. Relaxation Request 2 addresses inaccessible areas with respect to non-destructive examinations.

A summary table in Enclosure 1 provides an overview of the total scope of both Relaxation Requests 1 and 2. Please note that Attachments 1 and 2 provide proprietary information and the required affidavit to withhold information from public disclosure. Enclosure 2 contains SCE responses to NRC questions regarding Relaxation Request 1 and Enclosure 3 contains the SCE responses to NRC questions regarding Relaxation Request 2.

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Although the technical aspects of the requests are addressed separately in each Relaxation Request, approval of both Relaxation Requests is requested for SCE to meet the requirements of NRC Order EA-03-009 at SONGS Units 2 and 3.

SCE requests approval of Relaxation Requests 1 and 2 as soon as possible. The Reactor Vessel Head inspections are currently scheduled to begin on February 17, 2004 and to end on February 27, 2004.

Should you have any questions, please contact Mr. Jack Rainsberry at (949) 368-7420.

Sincerely,

Enclosures

cc: B. S. Mallett, Regional Administrator, NRC Region IV
B. M. Pham, NRC Project Manager, San Onofre Units 2, and 3
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3

LIST OF ENCLOSURES

1. SCE Responses to NRC Request for Additional Information Summary Information Regarding Relaxation Requests 1 and 2 (TAC Nos MC1540, MC1541, MC1542, and MC1543)

2. SCE Responses to NRC Request for Additional Information Regarding Relaxation Request 1 (TAC Nos MC1540 and MC1541)

3. SCE Responses to NRC Request for Additional Information Regarding Relaxation Request 2 (TAC Nos MC1542 and MC1543)

LIST OF ATTACHMENTS

1) Westinghouse Affidavit declaring that WCAP 15819-P, Revision 1 is a proprietary document.

2) WCAP 15819-P, Revision 1: "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operations: San Onofre Units 2 and 3" Proprietary version

3) WCAP 15819-NP, Revision 1: "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operations: San Onofre Units 2 and 3" Non-Proprietary version

4) SCE Drawing SO23-901-89

5) SCE Drawing SO23-901-225

Enclosure 1

SCE Responses to NRC
Request for Additional Information
Summary Information Regarding
Relaxation Requests 1 and 2
(TAC Nos MC1540, MC1541, MC1542, and MC1543)

The following table provides an overview of the total scope of both Relaxation Requests 1 and 2:

SUMMARY TABLE			
Penetration Type (Penetration Number)	**Primary Inspection approach[1]**	**Relaxation Request #1**	**Relaxation Request #2**
Vent	Surface Examination part IV.C(1)(b)(ii)	Relaxation requested to apply either part IV.C(1)(b)(i) or IV.C(1)(b)(ii) to any individual nozzle	No additional Relaxation of Order requirements are requested for the head vent line
CEDM (1 - 91)	UT Examination part IV.C(1)(b)(i)		1. Relaxation is requested from the requirement to inspect to the bottom of the nozzle (see "Minimum Inspection Distance Below J-groove Weld" table in the Response to Question 2 in Enclosure 3). 2. Relaxation is requested to permit use of surface examination on local areas of the Outside Diameter surfaces where UT is inconclusive.
ICI (92 - 101)	Surface Examination part IV.C(1)(b)(ii)		Relaxation is requested from the requirement to inspect to the bottom of the nozzle and the bottom face of the nozzle. (see "Minimum Inspection Distance Below J-groove Weld" table in the Response to Question 2 in Enclosure 3).

[1] The primary inspection approach describes the technique intended to be used. Should the primary inspection approach be unsuccessful in achieving a complete inspection, SCE seeks relaxation to make use of the alternate inspection method described in either part IV.C(1)(b)(i) or (ii).

Enclosure 2

SCE Responses to NRC Request for Additional Information Regarding Relaxation Request 1 (TAC Nos MC1540 and MC1541)

SCE Responses
To NRC Request for Additional Information
Regarding: Relaxation Request 1

Questions and Responses Regarding Relaxation Request 1: Request for Relaxation from the Requirements of NRC Order EA-03-009 to Allow a Combination of Non-Destructive Examination Techniques to Fulfill the Inspection Requirements (TAC Nos. MC1540 and MC1541)

NRC Question:

1. Provide the total number of vent line penetrations, incore instrumentation (ICI) nozzles, and control element drive mechanism penetrations in the reactor Pressure Vessel (RPV) for Unit 2 and Unit 3.

SCE Response:

Each SONGS Unit 2 and Unit 3 reactor pressure vessel head (RPVH) contains 102 penetrations; one (1) head vent penetration, ten (10) In-Core Instrumentation (ICI) penetrations, and 91 control element drive mechanism (CEDM) penetrations.

NRC Question:

2. Please identify the specific paragraph of the Order that the licensee is seeking relaxation from.

SCE Response:

Paragraph IV.C (1)(b) requires that:

> "Either:
>
> (i) Ultrasonic testing of **each** RPV head penetration nozzle (i.e., nozzle base material) from two (2) inches above the J-groove weld to the bottom of the nozzle and an assessment to determine if leakage has occurred into the interference fit zone, or
>
> (ii) Eddy current testing or dye penetrant testing of the wetted surface of **each** J-Groove weld and RPV head penetration nozzle base material to at least two (2) inches above the J-groove weld."

In Relaxation Request 1, SCE is requesting relaxation to permit use of either inspection method described in paragraphs IV.C(1)(b)(i) or IV.C(1)(b)(ii) for any individual head penetration, rather than use a single approach for all penetrations.

NRC Question:

3. Provide a sketch of the RPV head to show which penetration may require relaxation from the requirements of the Order. Describe what relaxation is required for each affected nozzle.

SCE Response:

All 102 penetrations (shown in Figure 1-2 of Attachment 2, WCAP 15819-P Revision 1) require some extent of relaxation. The summary table in Enclosure 1 provides the planned inspection technique for each head penetration type, and describes associated relaxation requested to enable SCE to meet the requirements of NRC Order EA-03-009.

A review of statements made in Relaxation Request 1 revealed a need to replace two sentences from Section 4 "Basis for Relaxation". The first sentence reads:

"SCE intends to meet the requirements of EA-03-009 for CEDM penetrations by performing examinations using UT in accordance with the requirements of part IV.C(1)(b)(i)."

The second sentence reads:

"SCE intends to meet the inspection requirements of EA-03-009 for ICI and vent line penetrations using ET, or dye penetrant testing if necessary, in accordance with the requirements of part IV.C(1)(b)(ii)."

These statements should have been clarified to state that the requirements of EA-03-009 would be met as modified by Relaxation Request 2. The first sentence should be replaced with:

"SCE intends to meet the requirements of EA-03-009 for CEDM penetrations by performing examinations using UT in accordance with the requirements of part IV.C(1)(b)(i) as modified by Relaxation Request 2."

The second sentence should be replaced with:

"SCE intends to meet the inspection requirements of EA-03-009 for ICI and vent line penetrations using ET, or dye penetrant testing if necessary, in accordance with the requirements of part IV.C(1)(b)(ii) as modified by Relaxation Request 2."

The alternative to requirements of EA-03-009 proposed by Relaxation Requests 1 and 2 together, provide an acceptable level of quality and safety.

NRC Question:

4. Please clarify the third bullet statement concerning the geometry of the ICI penetrations that cannot be completely examined using UT. Provide a sketch to show the UT coverage on the ICI nozzle. It is stated that ET will be used to inspect the ICI penetrations and thereby allow a more complete examination. It is not clear if the use of ET will provide complete coverage as required in the Order. The licensee is requested to provide clarification.

SCE Response:

a) *Please clarify the third bullet statement concerning the geometry of the ICI penetrations that cannot be completely examined using UT.*

The inspection equipment to be employed for the SONGS Units 2 and 3 Cycle 13 refueling outages is limited in that some areas of the ICI nozzles are outside the capability of the inspection equipment to perform a complete inspection. The inspection will employ Westinghouse designed UT examination technology. The Westinghouse inspection tool delivers two channels of time of flight tip diffraction (TOFT) for detecting PWSCC. Each TOFT channel uses a pair of transducers, one oriented vertically and the other oriented horizontally, to scan the penetration tube volume from the ID surface. Each TOFT pair must couple both UT transducers to the penetration tube for an adequate inspection. Flaws connected to the ID surface can be detected anywhere between the UT transducer pair.

Flaws residing near the penetration OD surface are detected by a reflected signal when the transducer pair is approximately centered across from the flaw location. It is not possible to detect OD cracks residing beyond the scan range of transducer pair mid point. The extension of ICI penetrations below the attachment weld is small. As a result, it is expected that there will be weld induced distortion of the nozzle wall, which prevents adequate UT transducer coupling, and may result in insufficient UT scan range below the J-groove weld to ensure UT detection of OD flaws.

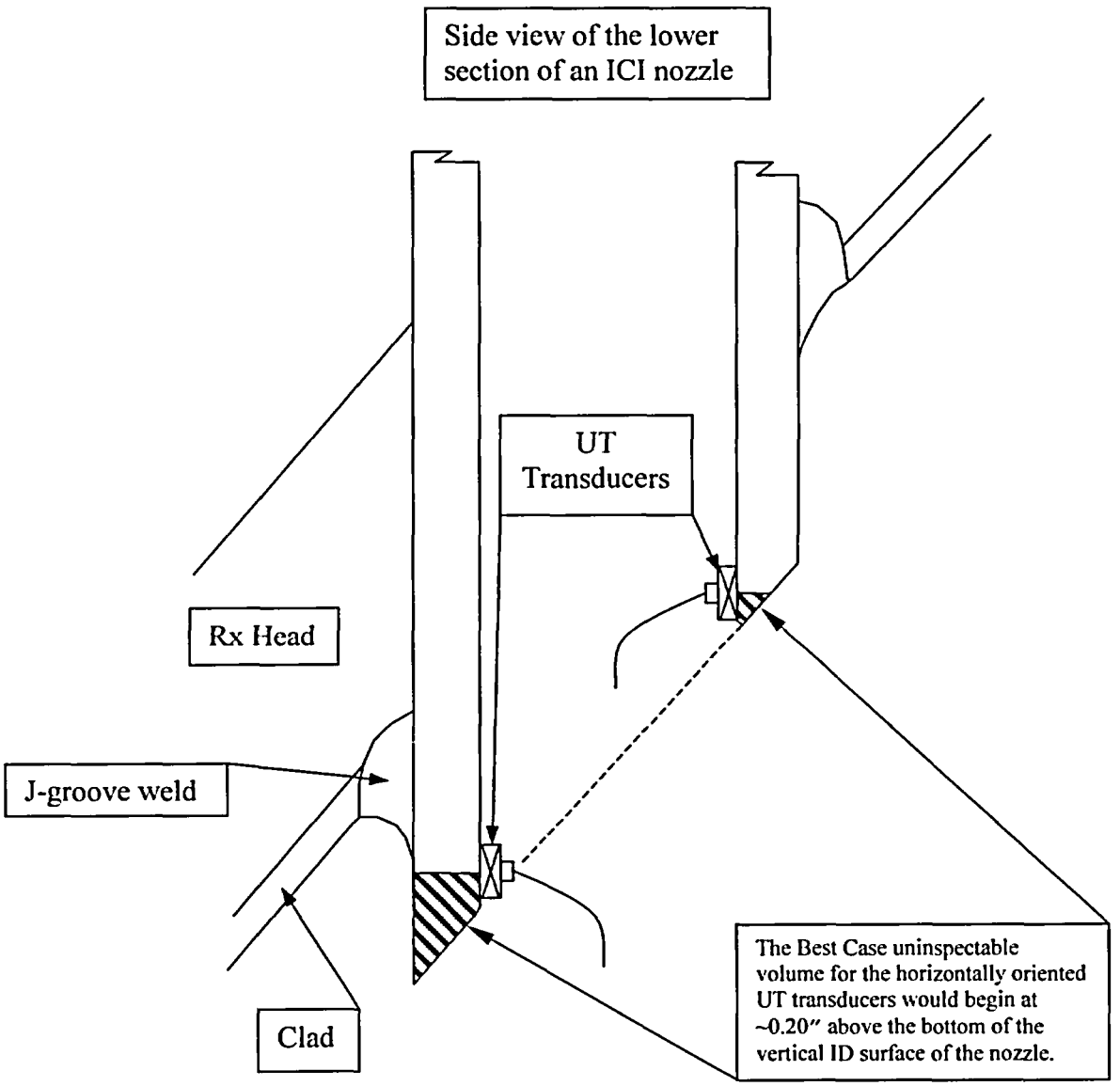
b) *Provide a sketch to show the UT coverage on the ICI nozzle.*

A design drawing (SO23-901-89) providing detailed dimensions of the ICI nozzle is provided as Attachment 4. The sketches provided below are intended to aid in visualizing the location of the uninspectable volume using UT examinations, and

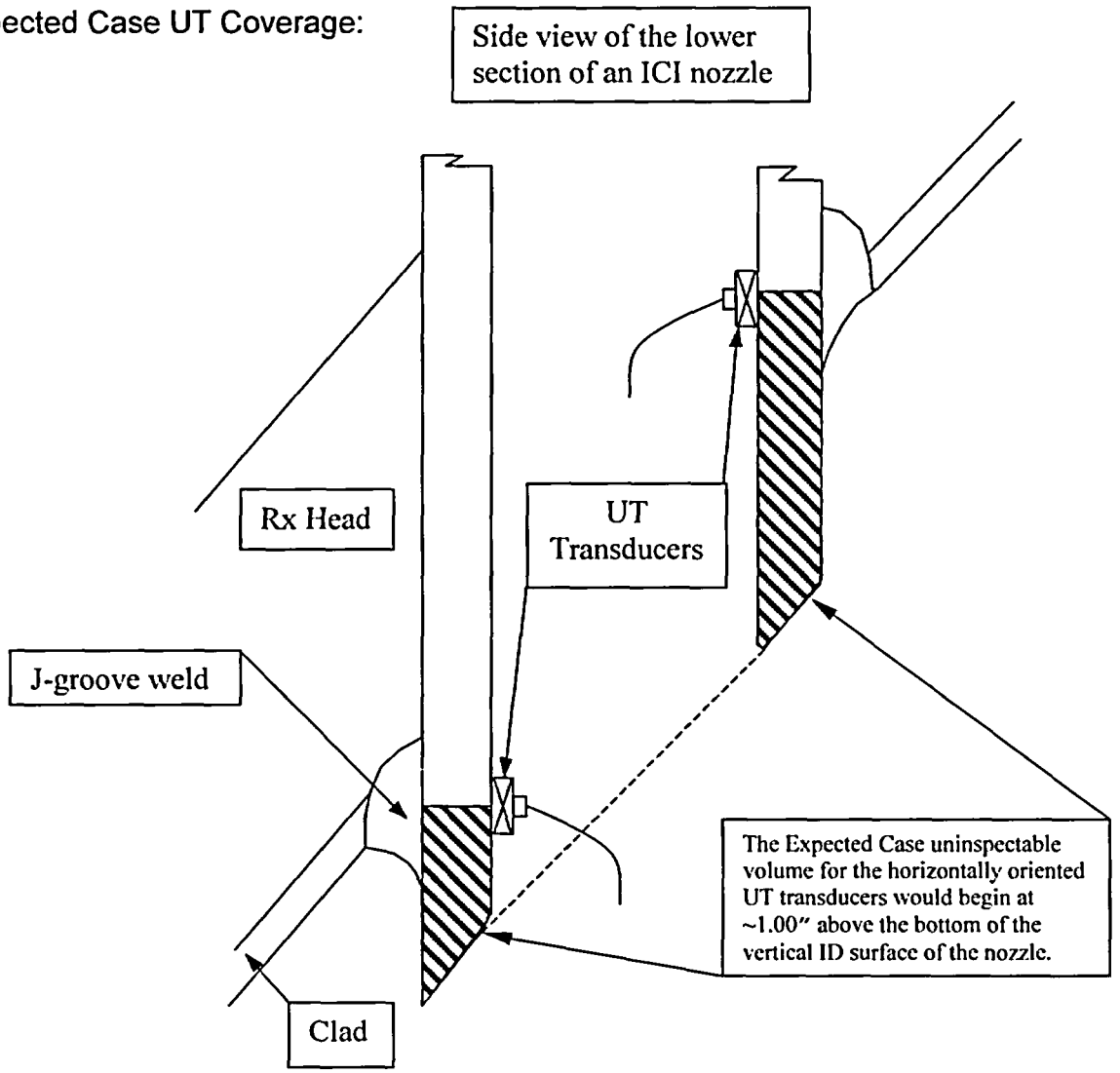
are not meant to be taken as accurate depictions of the nozzle geometry. The sketches are not to scale.

The best case sketch shows the uninspectable volume at the bottom tip of the ICI nozzles that results from the nozzle shape. The expected case sketch shows the uninspectable volume due to loss of coupling to the nozzle which is likely a result of nozzle distortion which occurred during installation.

Best Case UT Coverage:



Expected Case UT Coverage:



c) *It is stated that ET will be used to inspect the ICI penetrations and thereby allow a more complete examination. It is not clear if the use of ET will provide complete coverage as required in the Order. The licensee is requested to provide clarification.*

Due to the limitations of the UT inspection technique described above, SCE has selected ET as the primary inspection technique for the ICI nozzles. Surface examination techniques (ET and/or PT) are not affected by the transducer geometry limitation described above. For ICI nozzles, SCE proposes to use surface examinations to meet the requirements of the order per part IV.C (1)(b)(ii) as modified by Relaxation Request 2.

NRC Question:

5. The licensee stated that some CEDM's may exhibit geometric interference that prevents complete coverage using UT. Please identify the interference on the nozzle by a drawing including its location with respect to the J-groove weld and the quantity of CEDM's that are affected.

SCE Response:

The geometric interference discussed in Relaxation Request 1 is caused by distortion of the penetration tube introduced during the J-groove welding process and may result in local areas of inadequate UT transducer coupling. There are no design interferences that would prevent CEDM nozzle examinations by UT, with the exception of threads in the bottom of the CEDM nozzles for the guide cones as discussed in Relaxation Request 2. The areas affected by this distortion are adjacent to the J-groove weld as shown in Figure 1-1 of Attachment 2. All CEDM nozzles are potentially affected.

Enclosure 3

SCE Responses to NRC Request for Additional Information Regarding Relaxation Request 2 (TAC Nos MC1542 and MC1543)

SCE Responses
To NRC Request for Additional Information
Regarding: Relaxation Request 2

Questions and Responses Regarding Relaxation Request 2: Request for Relaxation from the Requirements of NRC Order EA-03-009 to Address Inaccessible Areas Respective to Non-Destructive Examinations (TAC Nos. MC1542 and MC1543)

NRC Question:

1. Please provide the number of CEDM penetrations that require relaxation in Units 2 and 3.

SCE Response:

Relaxation is requested for all 91 CEDM penetrations per unit, because the CEDM guide cones prevent access to the bottom of all CEDM penetration nozzles. This access limitation prevents inspection to the bottom of each CEDM nozzle using either ultrasonic or surface examination techniques.

NRC Question:

2. Has WCAP-15819, dated May 2002 been previously reviewed by the NRC. If so, please provide the approval date. If not, please provide a copy for NRC staff review.

SCE Response:

No, WCAP-15819 has not been reviewed by the NRC. The subject document is used to determine the minimum distance which must be inspected below each J-groove weld in order to detect PWSCC that has the potential to propagate to the bottom of the J-groove attachment weld during the next cycle of operation. In the time interval since SCE's submittal of Requests for Relaxation, this document has been revised. The revised document, WCAP-15819, Revision 1, dated January 2004 has been used to update the minimum required inspection distance below the J-groove weld. WCAP-15819, Revision 1, is provided as Attachment 2 for NRC staff review.

As a result of the revision of WCAP-15819, the requested relaxation for minimum inspection distance below the bottom of the weld is amended from the original Relaxation Request 2. The revised minimum inspection distances below the bottom of the weld were extracted from Figures 6-12 through 6-17 of WCAP-

15819, Revision 1. The original and revised minimum inspection distances below the bottom of the weld are provided in the following table:

Minimum inspection distance below J-groove weld		
Penetration(s)	Original Relaxation WCAP-15819, Rev. 0	Revised Relaxation WCAP-15819, Rev. 1
Head Vent	No Relaxation Requested	No Relaxation Requested
CEDM # 1	0.30 inches	0.44 inches
CEDM #'s 2 - 35	0.30 inches	0.41 inches
CEDM #'s 36 - 87	0.30 inches	0.30 inches
CEDM #'s 88 - 91	0.30 inches	0.24 inches
ICI #'s 92 - 101	0.30 inches	0.32 inches

NRC Question:

3. The licensee is requested to explain why the crack growth rate curve that was used to develop the SONGS specific curves in WCAP-15819 is considered conservative relative to the accepted curve in MRP-55, Revision 1.

Revision 1 to WCAP-15819, provided as Attachment 2, employs the MRP-55, Revision 1 crack growth rate curve. This crack growth rate curve was incorporated in the NRC flaw evaluation guidelines issued April 11, 2003 (Accession No.: ML030980333).

Some of the inspection distances in the table above are more conservative than the 0.30 inches originally requested. This additional conservatism did not result from employing the MRP-55, Revision 1, curve. Other factors, such as the original flaw size assumption used in the fracture mechanics evaluation, were modified in WCAP-15819, Revision 1 which contributed to the changes in the minimum inspection distances.

NRC Question:

4. The licensee stated that the CEDM penetrations would be examined from 2 inches above the J-groove weld to at least 0.30 inches below the bottom of the J-groove weld. The licensee stated that if data could not be provided to at least 0.30 inches below the J-groove weld, a supplemental surface examination of the outside diameter of the affected penetration would be performed. The licensee clarified that the OD surface examination would cover the area of the penetration that data could not be collected from the inside diameter surface. The licensee is requested to provide justification that cracks will not be initiated from the ID surface of the area that is not covered by UT examination. Please identify why the surface examination would not be performed to the bottom of the nozzle or to the bottom area of the nozzle where the shaft guide cone is threaded into the ID surface. If there is a shaft guide cone at the bottom of the CEDM nozzle, explain the hardship of removing the cones from each guide and possible dose implications.

SCE Response:

a) *Provide justification that cracks will not be initiated from the ID surface of the area that is not covered by UT examination.*

PWSCC can be initiated from the ID surface below the area covered by UT examination. SCE plans to perform both UT and ET examinations from two inches above the top of the weld down to the position where the threaded guide cone obscures the ID surface below the weld. This represents the maximum inspection extent possible for a non-destructive ID examination below the weld and is expected to meet minimum inspection distances specified in the table provided in response to Question 2.

SCE requested relaxation to permit use of surface examination as a means of extending the examination range when UT examination alone is unable to meet minimum inspection requirements. SCE is no longer seeking relaxation from meeting the minimum ID inspection distances provided in response to Question 2.

b) *Please identify why the surface examination would not be performed to the bottom of the nozzle or to the bottom area of the nozzle where the shaft guide cone is threaded into the ID surface.*

UT and supplemental ET examinations will be performed down to the bottom area of the nozzle where the shaft guide cone is threaded into the ID surface. Neither NDE technique specified in the order is capable of examining to the bottom of the nozzle from the ID surface.

c) *If there is a shaft guide cone at the bottom of the CEDM nozzle, explain the hardship of removing the cones from each guide and possible dose implications.*

Guide cones are threaded into the ID of all 91 CEDM penetrations. The guide cone threads are staked with a set screw which is plug welded to preclude unthreading of the cone during operation. In addition, there are two 1" long fillet welds between the top of the tapered portion of the guide cone and the bottom of the CEDM nozzles (see drawing SO23-901-225, Attachment 5, for installation details). Removal of each guide cone would require destructive removal of three welds and the stake, then unthreading the guide cone. This work would require substantial manual labor (estimated to be at least one hour per guide cone) in a radiation field of approximately 4 R/hr. The dose is estimated to be 4 person-rem per nozzle to remove the guide cones. Additional dose and time would be required to replace the guide cones. Furthermore, the grinding and drilling operations required to remove the guide cones would degrade the CEDM penetrations with respect to PWSCC resistance.

In addition, neither the UT nor the surface examination methods specified in Order EA-03-009 would effectively examine the threaded penetration surface that would be exposed as a result of guide cone removal.

NRC Question:

5. The licensee stated that ICI penetrations wetted surfaces will be examined in accordance with part IV.C.(1)(b)(ii) of the Order. The exam will include the ID surface, the OD surface, and the surface of the J-groove welds. The licensee stated the examination will not include the bottom face of the ICI nozzle. The licensee will perform a surface examination on the bottom face only when the bottom face is within 0.30 inches of the J-groove weld. Please explain why a surface examination is not currently planned on all the bottom faces of the ICI penetrations regardless of the locations with respect to the J-groove weld. Please provide the quantity of ICI nozzles that are affected for Units 2 and 3.

SCE Response:

SCE seeks relaxation from the requirement to inspect ICI surfaces to the bottom of the nozzle and the bottom face of the nozzle because the impact on the principle of ALARA constitutes a hardship without a compensating increase in the level of quality and safety provided that the inspection coverage is sufficient to ensure crack propagation to the J-groove weld will not occur during the next cycle of operation.

As discussed in the response to NRC Question 2 above, the minimum inspection distances below the J-groove weld have been revised. For the ICIs the minimum inspection distance below the J-groove weld has been changed from 0.30 inches to 0.32 inches. SONGS specific crack propagation analyses (Attachment 2) have shown that PWSCC further than 0.32 inches below the ICI attachment weld will not propagate to the bottom of the J-groove attachment weld prior to the next inspection interval. Therefore, it is not necessary to inspect the ICI penetration to the bottom of the nozzle or the bottom face when that surface is more than 0.32 inches below the J-groove attachment weld.

The dose estimate for the inspection to the bottom of the nozzle and the bottom face of each ICI nozzle using PT examinations is 5 person-rem. Westinghouse has initiated an effort to provide manually delivered ET inspection capability for the bottom face of the ICI nozzles. It is estimated that the manual ET inspection would result in 2 person-rem of exposure.

There are 10 ICI penetrations in each of the SONGS Units 2 and 3 RPV heads. All 10 ICI penetrations at each unit are subject to this relaxation request.

Attachment 1

SCE Responses to NRC Request for Additional Information Summary Information Regarding Relaxation Requests 1 and 2

Westinghouse Affidavit declaring that WCAP 15819-P, Revision 1 is a proprietary document.

PROPRIETARY INFORMATION NOTICE

Transmitted herewith are proprietary and/or non-proprietary versions of documents furnished to the NRC in connection with requests for generic and/or plant-specific review and approval.

In order to conform to the requirements of 10 CFR 2.790 of the Commission's regulations concerning the protection of proprietary information so submitted to the NRC, the information which is proprietary in the proprietary versions is contained within brackets, and where the proprietary information has been deleted in the non-proprietary versions, only the brackets remain (the information that was contained within the brackets in the proprietary versions having been deleted). The justification for claiming the information so designated as proprietary is indicated in both versions by means of lower case letters (a) through (f) located as a superscript immediately following the brackets enclosing each item of information being identified as proprietary or in the margin opposite such information. These lower case letters refer to the types of information Westinghouse customarily holds in confidence identified in Sections (4)(ii)(a) through (4)(ii)(f) of the affidavit accompanying this transmittal pursuant to 10 CFR 2.790(b)(1).

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Our ref: CAW-04-1783

January 29, 2004

APPLICATION FOR WITHHOLDING PROPRIETARY INFORMATION FROM PUBLIC DISCLOSURE

Subject: WCAP-15819-P, Rev. 1, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation: San Onofre Units 2 and 3," dated January 2004 (Proprietary)

The proprietary information for which withholding is being requested in the above-referenced report is further identified in Affidavit CAW-04-1783 signed by the owner of the proprietary information, Westinghouse Electric Company LLC. The affidavit, which accompanies this letter, sets forth the basis on which the information may be withheld from public disclosure by the Commission and addresses with specificity the considerations listed in paragraph (b)(4) of 10 CFR Section 2.790 of the Commission's regulations.

Accordingly, this letter authorizes the utilization of the accompanying affidavit by Southern California Edison Company.

Correspondence with respect to the proprietary aspects of the application for withholding or the Westinghouse affidavit should reference this letter, CAW-04-1783, and should be addressed to J. A. Gresham, Manager, Regulatory Compliance and Plant Licensing, Westinghouse Electric Company LLC, P.O. Box 355, Pittsburgh, Pennsylvania 15230-0355.

Very truly yours,

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Enclosures

cc: D. Holland
B. Benney
E. Peyton

bcc: J. A. Gresham (ECE 4-7A) 1L
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C. Brinkman, 1L, 1A (Westinghouse Electric Co., 12300 Twinbrook Parkway, Suite 330, Rockville, MD 20852)
RCPL Administrative Aide (ECE 4-7A) 1L, 1A (letter and affidavit only)

CAW-04-1783

AFFIDAVIT

COMMONWEALTH OF PENNSYLVANIA:

ss

COUNTY OF ALLEGHENY:

Before me, the undersigned authority, personally appeared J. A. Gresham, who, being by me duly sworn according to law, deposes and says that he is authorized to execute this Affidavit on behalf of Westinghouse Electric Company LLC (Westinghouse), and that the averments of fact set forth in this Affidavit are true and correct to the best of his knowledge, information, and belief:

J. A. Gresham, Manager
Regulatory Compliance and Plant Licensing

Sworn to and subscribed
before me this 29th day
of January, 2004

Sharon L. Fiori
Notary Public

Notarial Seal
Sharon L. Fiori, Notary Public
Monroeville Boro, Allegheny County
My Commission Expires January 29, 2007
Member, Pennsylvania Association Of Notaries

(1) I am Manager, Regulatory Compliance and Plant Licensing, in Nuclear Services, Westinghouse Electric Company LLC (Westinghouse), and as such, I have been specifically delegated the function of reviewing the proprietary information sought to be withheld from public disclosure in connection with nuclear power plant licensing and rule making proceedings, and am authorized to apply for its withholding on behalf of Westinghouse.

(2) I am making this Affidavit in conformance with the provisions of 10 CFR Section 2.790 of the Commission's regulations and in conjunction with the Westinghouse "Application for Withholding" accompanying this Affidavit.

(3) I have personal knowledge of the criteria and procedures utilized by Westinghouse in designating information as a trade secret, privileged or as confidential commercial or financial information.

(4) Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure should be withheld.

(i) The information sought to be withheld from public disclosure is owned and has been held in confidence by Westinghouse.

(ii) The information is of a type customarily held in confidence by Westinghouse and not customarily disclosed to the public. Westinghouse has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The application of that system and the substance of that system constitutes Westinghouse policy and provides the rational basis required.

Under that system, information is held in confidence if it falls in one or more of several types, the release of which might result in the loss of an existing or potential competitive advantage, as follows:

(a) The information reveals the distinguishing aspects of a process (or component, structure, tool, method, etc.) where prevention of its use by any of

Westinghouse's competitors without license from Westinghouse constitutes a competitive economic advantage over other companies.

(b) It consists of supporting data, including test data, relative to a process (or component, structure, tool, method, etc.), the application of which data secures a competitive economic advantage, e.g., by optimization or improved marketability.

(c) Its use by a competitor would reduce his expenditure of resources or improve his competitive position in the design, manufacture, shipment, installation, assurance of quality, or licensing a similar product.

(d) It reveals cost or price information, production capacities, budget levels, or commercial strategies of Westinghouse, its customers or suppliers.

(e) It reveals aspects of past, present, or future Westinghouse or customer funded development plans and programs of potential commercial value to Westinghouse.

(f) It contains patentable ideas, for which patent protection may be desirable.

There are sound policy reasons behind the Westinghouse system which include the following:

(a) The use of such information by Westinghouse gives Westinghouse a competitive advantage over its competitors. It is, therefore, withheld from disclosure to protect the Westinghouse competitive position.

(b) It is information that is marketable in many ways. The extent to which such information is available to competitors diminishes the Westinghouse ability to sell products and services involving the use of the information.

(c) Use by our competitor would put Westinghouse at a competitive disadvantage by reducing his expenditure of resources at our expense.

(d) Each component of proprietary information pertinent to a particular competitive advantage is potentially as valuable as the total competitive advantage. If competitors acquire components of proprietary information, any one component may be the key to the entire puzzle, thereby depriving Westinghouse of a competitive advantage.

(e) Unrestricted disclosure would jeopardize the position of prominence of Westinghouse in the world market, and thereby give a market advantage to the competition of those countries.

(f) The Westinghouse capacity to invest corporate assets in research and development depends upon the success in obtaining and maintaining a competitive advantage.

(iii) The information is being transmitted to the Commission in confidence and, under the provisions of 10 CFR Section 2.790, it is to be received in confidence by the Commission.

(iv) The information sought to be protected is not available in public sources or available information has not been previously employed in the same original manner or method to the best of our knowledge and belief.

(v) The proprietary information sought to be withheld in this submittal is that which is appropriately marked in WCAP-15819-P, Rev. 1, "Structural Integrity Evaluation of Reactor Vessel Upper Head Penetrations to Support Continued Operation: San Onofre Units 2 and 3," dated January 2004 (Proprietary) being transmitted by Southern California Edison Company letter and Application for Withholding Proprietary Information from Public Disclosure, to the Document Control Desk. The proprietary information as submitted for use by Westinghouse for San Onofre Units 2 and 3 is expected to be applicable for other licensee submittals in response to certain NRC requirements for justification of the use of fracture mechanics analyses to support continued safe operation of San Onofre Units 2 and 3 with the presence of a crack in a control element drive mechanism head penetration.

This information is part of that which will enable Westinghouse to:

(a) Determine the allowable time of safe operation if cracks are found.

(b) Assist the customer to obtain NRC approval.

Further this information has substantial commercial value as follows:

(a) Westinghouse plans to sell the use of similar information to its customers for purposes of meeting NRC requirements for licensing documentation.

(b) Westinghouse can sell support and defense of continued safe operation with the presence of cracks in a control rod drive head penetration.

Public disclosure of this proprietary information is likely to cause substantial harm to the competitive position of Westinghouse because it would enhance the ability of competitors to provide similar support documentation and licensing defense services for commercial power reactors without commensurate expenses. Also, public disclosure of the information would enable others to use the information to meet NRC requirements for licensing documentation without purchasing the right to use the information.

The development of the technology described in part by the information is the result of applying the results of many years of experience in an intensive Westinghouse effort and the expenditure of a considerable sum of money.

In order for competitors of Westinghouse to duplicate this information, similar technical programs would have to be performed and a significant manpower effort, having the requisite talent and experience, would have to be expended.

Further the deponent sayeth not.