UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

February 14, 2008

Randall K. Edington
Executive Vice President, Nuclear
Mail Station 7602
Arizona Public Service Company
P.O. Box 52034
Phoenix, AZ 85072-2034

SUBJECT: PALO VERDE NUCLEAR GENERATION STATION, UNITS 1, 2, AND 3 - NOTIFICATION OF INSPECTION (NRC INSPECTION REPORT 05000528/2008003; 05000529/2008003; AND 05000530/2008003) AND REQUEST FOR INFORMATION

Dear Mr. Edington:

From April 6 to May 2, 2008, reactor inspectors from the Nuclear Regulatory Commission's (NRC) Region IV office will perform the baseline inservice inspection at Palo Verde Nuclear Generation Station, Unit 2, using NRC Inspection Procedure 71111.08. Experience has shown that this inspection is resource intensive both for the NRC inspectors and your staff. In order to minimize the impact to your onsite resources and to ensure a productive inspection, we have enclosed a request for documents needed for this inspection. These documents have been divided into two groups. The first group (Section A of the enclosure) identifies information to be provided prior to the inspection to ensure that the inspectors are adequately prepared. The second group (Section B of the enclosure) identifies the information the inspectors will need upon arrival at the site. It is important that all of these documents are up to date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection

We have discussed the schedule for these inspection activities with your staff and understand that our regulatory contact for this inspection will be Mr. Delbert Elkinton of your licensing organization. Our inspection dates are subject to change based on your updated schedule of outage activities. If there are any questions about this inspection or the material requested, please contact the lead inspector J. Adams at (817) 860-8294 (jpa@nrc.gov).

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Sincerely,

/RA/

Russell L. Bywater, Chief
Engineering Branch 1
Division of Reactor Safety

Dockets: 50-528; 50-529; 50-530
Licenses: NPF-41; NPF-51; NPF-74

Enclosure:
Inservice Inspection Document Request

cc w/enclosure:
Steve Olea
Arizona Corporation Commission
1200 W. Washington Street
Phoenix, AZ 85007

Douglas K. Porter, Senior Counsel
Southern California Edison Company
Law Department, Generation Resources
P.O. Box 800
Rosemead, CA 91770

Chairman
Maricopa County Board of Supervisors
301 W. Jefferson, 10th Floor
Phoenix, AZ 85003

Aubrey V. Godwin, Director
Arizona Radiation Regulatory Agency
4814 South 40 Street
Phoenix, AZ 85040

Scott Bauer, Director
Regulatory Affairs
Palo Verde Nuclear Generating Station
Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

Mr. Dwight C. Mims
Vice President, Regulatory Affairs and
Performance Improvement
Palo Verde Nuclear Generating Station
Mail Station 7636
P.O. Box 52034
Phoenix, AZ 85072-2034

Jeffrey T. Weikert
Assistant General Counsel
El Paso Electric Company
Mail Location 167
123 W. Mills
El Paso, TX 79901

Eric J. Tharp
Director of Generation
Los Angeles Department of Water & Power
Southern California Public Power Authority
P.O. Box 51111, Room 1255
Los Angeles, CA 90051-5700

John Taylor
Public Service Company of New Mexico
2401 Aztec NE, MS Z110
Albuquerque, NM 87107-4224

Geoffrey M. Cook
Southern California Edison Company
5000 Pacific Coast Hwy, Bldg. D21
San Clemente, CA 92672

Robert Henry
Salt River Project
6504 East Thomas Road
Scottsdale, AZ 85251

Brian Almon
Public Utility Commission
William B. Travis Building
P.O. Box 13326
1701 North Congress Avenue
Austin, TX 78701-3326

Karen O' Regan
Environmental Program Manager
City of Phoenix
Office of Environmental Programs
200 West Washington Street
Phoenix, AZ 85003

Matthew Benac
Assistant Vice President
Nuclear & Generation Services
El Paso Electric Company
340 East Palm Lane, Suite 310
Phoenix, AZ 85004

Chief, Radiological Emergency Preparedness Section
National Preparedness Directorate
Technological Hazards Division
Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

Electronic distribution by RIV:
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DRS STA **(DAP)**
V. Dricks, PAO **(VLD)**
D. Pelton, OEDO RIV Coordinator **(DLP1)**
ROPreports
PV Site Secretary **(PRC)**

SUNSI Review Completed: __Yes____ADAMS: ☐ Yes ☐ No Initials: __RLB____
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RI:EB1	RI:EB1	C:EB1		
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INSERVICE INSPECTION DOCUMENT REQUEST

Inspection Dates: April 6, 2008 – May 2, 2008

Inspection Procedures: IP 71111.08 "Inservice Inspection (ISI) Activities"
TI 2515/166 "Pressurized Water Reactor Containment Sump Blockage"
TI 2515/172 "Reactor Coolant System Dissimilar Metal Butt Welds"

Inspectors: J. Adams, Reactor Inspector (Lead Inspector)
G. George, Reactor Inspector

A. Information Requested for the In-Office Preparation Week

The following information should be sent to the Region IV office in hard copy or electronic format (ims.certrec.com preferred), in care of J. Adams, by March 24, 2008, to facilitate the selection of specific items that will be reviewed during the onsite inspection week. The inspector will select specific items from the information requested below and then request from your staff additional documents needed during the onsite inspection week (Section B of this enclosure). We ask that the specific items selected from the lists be available and ready for review on the first day of inspection. *Please provide requested documentation electronically if possible. If requested documents are large and only hard copy formats are available, please inform the inspector(s), and provide subject documentation during the first day of the onsite inspection. If you have any questions regarding this information request, please call the inspector as soon as possible.

A.1 ISI/Welding Programs and Schedule Information

a) A detailed schedule (including preliminary dates) of:

i) Nondestructive examinations (NDEs) planned for Class 1 & 2 systems and containment, performed as part of your ASME Section XI, Risk Informed (if applicable), and augmented ISI programs during the upcoming outage.

Provide a status summary of the NDE inspection activities vs. the required inspection period percentages for this Interval by category per ASME Section XI, IWX-2400 (Do not provide separately if other documentation requested contains this information)

ii) Reactor pressure vessel head (RPVH) examinations planned for the upcoming outage.

iii) Examinations planned for Alloy 82/182/600 components that are not included in the Section XI scope. (If applicable)

iv) Examinations planned as part of your Boric Acid Corrosion Control Program (Mode 3 walkdowns, bolted connection walkdowns, etc.)

v) Welding activities that are scheduled to be completed during the upcoming outage (ASME Class 1, 2, or 3 structures, systems, or components (SSCs))

b) A copy of ASME Section XI Code Relief Requests and associated NRC Safety Evaluations applicable to the examinations identified above.

c) A list of NDE reports (ultrasonic, radiography, magnetic particle, dye penetrate, Visual VT-1, VT-2, and VT-3), which have identified relevant conditions on Code Class 1 & 2 systems since the beginning of the last refueling outage. This should include the previous Section XI pressure test(s) conducted during start up and any evaluations associated with the results of the pressure tests. Also, include in the list the NDE reports with relevant conditions in the RPVH penetration nozzles which have been accepted for continued service. The list of NDE reports should include a brief description of the SSC where the relevant condition was identified.

d) A list with a brief description (e.g., system, material, pipe size, weld number, and NDE performed) of the welds in Code Class 1 and 2 systems which have been fabricated due to component repair/replacement activities since the beginning of the last refueling outage, or are planned to be fabricated this refueling outage.

e) If reactor vessel weld examinations required by the ASME Code are scheduled to occur during the upcoming outage, provide a detailed description of the welds to be examined and the extent of the planned examination. Please also provide reference numbers for applicable procedures that will be used to conduct these examinations.

f) Copy of any 10 CFR Part 21 reports applicable to your SSCs within the scope of Section XI of the ASME Code that have been identified since the beginning of the last refueling outage.

g) A list of any temporary non-code repairs in service (e.g., pinhole leaks).

h) Please provide copies of the most recent self assessments for the ISI, Welding, and Alloy 600 Programs.

A.2 Reactor Pressure Vessel Head (RPVH)

a) Provide the detailed scope of the planned NDE of the reactor vessel head which identifies the types of NDE methods to be used on each specific part of the vessel head to fulfill commitments made in response to NRC Bulletin 2002-02 and NRC Order EA-03-009. Also, include examination scope expansion criteria and planned expansion sample sizes if relevant conditions are identified. (If applicable)

b) A list of the standards and/or requirements that will be used to evaluate indications identified during NDE of the reactor vessel head (e.g., the specific industry or procedural standards which will be used to evaluate potential leakage and/or flaw indications).

A.3 Boric Acid Corrosion Control Program (BACCP)

a) Copy of the procedures that govern the scope, equipment and implementation of the inspections required to identify boric acid leakage and the procedures for boric acid leakage/corrosion evaluation.

b) Please provide a list of leaks (including Code class of the components) that have been identified since the last refueling outage and associated corrective action documentation. If during the last cycle, the Unit was shutdown, please provide documentation of containment walkdown inspections performed as part of the BACCP.

c) Please provide a copy of the most recent self-assessment performed for the BACCP.

A.4 Steam Generator Tube (SGT) Inspections

a) A detailed schedule of:

i) SGT inspection, data analyses, and repair activities for the upcoming outage. (If occurring)

ii) SG secondary side inspection activities for the upcoming outage. (If occurring)

b) Please provide a copy of your SG ISI Inspection Program and Plan. Please include a copy of the Operational Assessment from last outage and a copy of the following documents as they become available:

i) Degradation Assessment
ii) Condition Monitoring Assessment

c) If you are planning on modifying your Technical Specifications such that they are consistent with TSTF-449, please provide copies of your correspondence with the NRC regarding deviations from the STS.

d) Copy of SG history documentation given to vendors performing eddy current (ET) testing of the SGs during the upcoming outage.

e) Copy of SG Eddy Current Data Analyst Guidelines and Site Validated Eddy Current Technique Specification Sheets (ETSS). Additionally, please provide a copy of EPRI Appendix H ETSS Qualification Records.

f) Identify and quantify any SGT leakage experienced during the previous operating cycle. Also provide documentation identifying which SG was leaking and corrective actions completed or planned for this condition (If applicable).

g) Provide past history of the condition and issues pertaining to the secondary side of the steam generators (including items such as loose parts, fouling, top of tube sheet condition, crud removal amounts, etc.)

h) Please provide copies of your most recent self assessments of the SG monitoring, loose parts monitoring, and secondary side water chemistry control programs.

i) Please also indicate where the primary, secondary, and resolution analyses are scheduled to take place.

j) Please provide a summary of the scope of the SGT examinations, including examination methods such as Bobbin, Rotating Pancake, or Plus Point, and the percentage of tubes to be examined. **Do not provide these documents separately if already included in other information requested*.

A.5 Materials Reliability (MRP-139) Program Activities

a) A list of, with verification, that the baseline inspections of all applicable Dissimilar Metal Butt Welds (DMBWs) have been completed by December 31, 2007.

b) Verification that baseline inspection of hot leg and cold leg temperature DMBWs have been included in the inspection program and that the schedules for the baseline inspections are consistent with the baseline schedules in MRP-139.

c) A list and schedule (examination dates) of all DMBW examinations planned for the upcoming refueling outage. If none are scheduled, then data from previous examinations should be available for review.

d) A list and schedule for any welding to be performed on DMBWs in the upcoming outage. If no welding will be performed then records of previous welding on DMBWs and postweld NDE documentation.

e) A list and schedule of any stress improvement (SI) activities planned for the upcoming refueling outage. If none are scheduled then have qualification reports for any SIs previously performed.

f) Documentation and description of how the baseline and inservice inspection specifications in MRP-139 are satisfied at your facility.

A.6 Additional information related to all ISI activities

a) A list with a brief description of ISI, BACCP, and SGT inspection related issues (e.g., condition reports) entered into your corrective action program since the

beginning of the last refueling outage (for Unit 2). For example, a list based upon data base searches using key words related to piping or SG tube degradation such as: ISI, ASME Code, Section XI, NDE, cracks, wear, thinning, leakage, rust, corrosion, boric acid, or errors in piping/SGT examinations.

b) Please provide names and phone numbers for the following program leads:

ISI contacts (Examination, planning)
Containment Exams
RPVH Exams
Snubbers and Supports
Repair and Replacement Program Manager
Licensing Contact
Site Welding Engineer
Boric Acid Corrosion Control Program
SG Inspection Activities (site lead and vendor contact)
Reactor Vessel NDE

B. Information to be provided onsite to the inspector(s) at the entrance meeting (April 7, 2008):

B.1 ISI / Welding Programs and Schedule Information

a) Updated schedules for ISI/NDE activities, including SGT inspections, planned welding activities, and schedule showing contingency repair plans, if available.

b) For ASME Code Class 1 and 2 welds selected by the inspector from the lists provided from section A of this enclosure, please provide copies of the following documentation for each subject weld:

i) Weld data sheet (traveler)
ii) Weld configuration and system location
iii) Applicable Code Edition and Addenda for weldment
iv) Applicable Code Edition and Addenda for welding procedures
v) Applicable weld procedures (WPS) used to fabricate the welds
vi) Copies of procedure qualification records (PQRs) supporting the WPS from B.1.b.v
vii) Copies of mechanical test reports identified in the PQRs above
viii) Copies of the nonconformance reports for the selected welds (If applicable)
ix) Radiographs of the selected welds and access to equipment to allow viewing radiographs (If RT was performed)
x) Copies of the preservice examination records for the selected welds.
xi) Copies of welder performance qualifications records applicable to the selected welds, including documentation that welder maintained proficiency in the applicable welding processes specified in the WPS (at least six months prior to the date of subject work)

xii) Copies of NDE personnel qualifications (VT, PT, UT, RT), as applicable

c) For the ISI related corrective action issues selected by the inspector(s) from section A of this enclosure, provide a copy of the corrective actions and supporting documentation.

d) For the NDE reports with relevant conditions on Code Class 1 & 2 systems selected by the inspector from section A above, provide a copy of the examination records, examiner qualification records, and associated corrective action documents.

e) A copy of (or ready access to) most current revision of the ISI Program Manual and Plan for the current Interval.

f) For the NDEs selected by the inspector from section A of this enclosure, provide copy of the NDE procedures used to perform the examinations (including calibration and flaw characterization/sizing procedures). For ultrasonic examination procedures qualified in accordance with ASME Code, Section XI, Appendix VIII, provide documentation supporting the procedure qualification (e.g., the EPRI performance demonstration qualification summary sheets). Also, include qualification documentation of the specific equipment to be used (e.g., ultrasonic unit, cables, and transducers including serial numbers) and NDE personnel qualification records.

B.2 Reactor Pressure Vessel Head (RPVH)

a) Provide the NDE personnel qualification records for the examiners who will perform examinations of the RPVH.

b) Provide drawings showing the following: (If a visual examination is planned for the upcoming refueling outage)

i) RPVH and CRDM nozzle configurations
ii) RPVH insulation configuration

The drawings listed above should include fabrication drawings for the nozzle attachment welds as applicable.

c) Copy of NDE reports from the last RPVH examination.

d) Copy of evaluation or calculation demonstrating that the scope of the visual examination of the upper head will meet the 95% minimum coverage required by NRC Order EA-03-009 (If a visual examination is planned for the upcoming refueling outage).

e) Provide a copy of the procedures that will be used to identify the source of any boric acid deposits identified on the RPVH. If no explicit procedures exist which

govern this activity, provide a description of the process to be followed including personnel responsibilities and expectations.

f) Provide a copy of the updated calculation of effective degradation years (EDY) for the RPVH susceptibility ranking.

g) Provide copy of the vendor qualification report(s) that demonstrates the detection capability of the NDE equipment used for the RPVH examinations. Also, identify any changes in equipment configurations used for the RPVH examinations which differ from that used in the vendor qualification report(s).

B.3 Boric Acid Corrosion Control Program (BACCP)

a) Please provide boric acid walkdown inspection results, an updated list of boric acid leaks identified so far this outage, associated corrective action documentation, and overall status of planned boric acid inspections.

b) Please provide any engineering evaluations completed for boric acid leaks identified since the end of the last refueling outage. Please include a status of corrective actions to repair and/or clean these boric acid leaks. Please identify specifically which known leaks, if any, have remained in service or will remain in service as active leaks.

B.4 Steam Generator Tube (SGT) Inspections

a) Copies of the Examination Technique Specification Sheets (ETSS) and associated justification for any revisions.

b) Copy of the guidance to be followed if a loose part or foreign material is identified in the SGs.

c) Please provide a copy of the ET procedures used to perform the SGT inspections (specifically calibration and flaw characterization/sizing procedures, etc.). Also include documentation for the specific equipment to be used.

d) Please provide copies of your responses to NRC and industry operating experience communications such as Generic Letters, Information Notices, etc. (as applicable to SGT inspections) **Do not provide these documents separately if already included in other information requested such as the degradation assessment*.

e) List of corrective action documents generated by the vendor and/or site with respect to SG inspection activities.

B.5 Codes and Standards

a) Ready access to (i.e., copies provided to the inspector(s) for use during the inspection at the onsite inspection location, or room number and location where available):

i) Applicable Editions of the ASME Code (Sections V, IX and XI) for the inservice inspection program and the repair/replacement program.

ii) EPRI and industry standards referenced in the procedures used to perform the SGT eddy current examination.

Inspector Contact Information:

J. P. Adams
Reactor Inspector
817-860-8294
jpa@nrc.gov

G. George
Reactor Inspector
817-276-6562
gag@nrc.gov

Mailing Address:
US NRC Region IV
Attn: R. A. Kopriva
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011