



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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March 3, 2010

Randall K. Edington  
Executive vice President, Nuclear  
and Chief Nuclear Officer  
Arizona Public Service Company  
P.O. Box 52034  
Phoenix, AZ 85072-2034

SUBJECT: ANNUAL ASSESSMENT LETTER – PALO VERDE NUCLEAR GENERATING  
STATION (NRC INSPECTION REPORTS 05000528/2010001,  
05000529/2010001, 05000530/2010001)

Dear Mr. Edington,

On February 17, 2010, the NRC staff completed its performance review of Palo Verde Nuclear Generating Station (PVNGS). Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2009. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only--Security Information" will include the security cornerstone review and resultant inspection plan.

Overall, PVNGS Units 1, 2, and 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter was within the Licensee Response column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all performance indicators indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility.

Plant performance for the most recent three quarters was within the Licensee Response column of the Action Matrix. PVNGS Unit 3 was in the Multiple/Repetitive Degraded Cornerstone column during the first quarter of the assessment cycle. PVNGS undertook a site wide performance improvement initiative and your significant improvement efforts resulted in PVNGS returning to the licensee response column of the action matrix in the second quarter. The NRC plans to conduct additional inspection activities over a two year period to monitor your continuing improvement.

The staff identified that there were 5 green inspection findings for the current 12-month assessment period with documented cross-cutting aspects in the area of problem identification and resolution, and there is a cross-cutting theme associated with these findings in the aspect of

thorough problem evaluation within the corrective action program. In evaluating the scope of efforts and progress in addressing this cross-cutting theme, the staff determined that PVNGS appropriately identified/recognized the cross-cutting theme and took actions to address it. Therefore, the staff has concluded that a substantive cross-cutting issue in problem identification and resolution does not exist at this time.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2011. In addition to baseline inspection there will be a follow-up inspection in late 2010 or early 2011 to monitor your improvement initiatives. The NRC will also be performing inspection procedure 71007, "Reactor Vessel Head Replacement Inspection", concurrent with head replacement outages for units 1 and 3 in the spring and fall of 2010. The inspection plan is provided to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Ryan Lantz at 817-860-8173 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

***/RA/ R. Caniano for***

Elmo E. Collins  
Regional Administrator

Docket Nos. 50-528, 50-529, 50-530  
License Nos. NPF-41, NPF-51, NPF-74

Enclosure: Palo Verde Nuclear Generating Station Inspection / Activity Plan

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|------------------|---|---------------|---|---------------------|----|
| SUNSI Rev Compl. | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | ADAMS         | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Reviewer Initials   | RL |
| Publicly Avail   | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Sensitive     | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Sens. Type Initials | RL |
| C:DRP/D          | D:DRS   | D:DRP         | RA  |                     |    |
| RLantz           | RJCaniano   | DDChamberlain | ECollins  |                     |    |
| <b>/RA/</b>      | <b>/RA/</b>   | <b>/RA/</b>   | <b>/RA/R Caniano<br/>for</b>  |                     |    |
| 2/26/10          | 2/26/10   | 3/1/10        | 3/3/ 10   |                     |    |

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**Palo Verde**  
**Inspection / Activity Plan**  
**04/01/2010 - 06/30/2011**

| Unit Number                                     | Planned Dates |            | Inspection Activity | Title   | No. of Staff on Site |
|---|---------------|------------|---------------------|---|----------------------|
|   | Start         | End        |                     |   |                      |
| <b>PSB2-08P - INSERVICE INSPECTION - U1</b>     |               |            |                     |   | <b>2</b>             |
| 1   | 04/12/2010    | 05/07/2010 | IP 2515/172         | Reactor Coolant System Dissimilar Metal Butt Welds  |                      |
| 1   | 04/12/2010    | 05/07/2010 | IP 7111108P         | Inservice Inspection Activities - PWR   |                      |
| <b>RS123MCA - OCCUPATIONAL RADIATION SAFETY</b> |               |            |                     |   | <b>2</b>             |
| 1, 2, 3   | 04/19/2010    | 04/23/2010 | IP 71124.01         | Radiological Hazard Assessment and Exposure Controls  |                      |
| 1, 2, 3   | 04/19/2010    | 04/23/2010 | IP 71124.02         | Occupational ALARA Planning and Controls  |                      |
| 1, 2, 3   | 04/19/2010    | 04/23/2010 | IP 71124.03         | In-Plant Airborne Radioactivity Control and Mitigation  |                      |
| 3   | 04/19/2010    | 04/23/2010 | IP 7113011          | Material Control and Accounting (MC&A)  |                      |
| 2   | 04/19/2010    | 04/23/2010 | IP 71151-OR01       | Occupational Exposure Control Effectiveness   |                      |
| 2   | 04/19/2010    | 04/23/2010 | IP 71151-PR01       | RETS/ODCM Radiological Effluent   |                      |
| <b>BRQ - OPERATOR REQUAL INSP</b>               |               |            |                     |   | <b>3</b>             |
| 1, 2, 3   | 09/06/2010    | 09/10/2010 | IP 7111111B         | Licensed Operator Requalification Program   |                      |
| <b>PSB2-08P - INSERVICE INSPECTION - U3</b>     |               |            |                     |   | <b>3</b>             |
| 3   | 10/04/2010    | 11/19/2010 | IP 2515/172         | Reactor Coolant System Dissimilar Metal Butt Welds  |                      |
| 3   | 10/04/2010    | 11/19/2010 | IP 7111108P         | Inservice Inspection Activities - PWR   |                      |
| <b>EXAM - INITIAL EXAM</b>                      |               |            |                     |   | <b>6</b>             |
| 1   | 10/04/2010    | 10/08/2010 | X02448              | INITIAL EXAM UNIT 1-PV (11/2010)  |                      |
| 2   | 10/04/2010    | 10/08/2010 | X02449              | INITIAL EXAM UNIT 2 - PV (11/2010)  |                      |
| 3   | 10/04/2010    | 10/08/2010 | X02450              | INITIAL EXAM UNIT 3- PV(11/2010)  |                      |
| 1   | 11/08/2010    | 11/19/2010 | X02448              | INITIAL EXAM UNIT 1-PV (11/2010)  |                      |
| 2   | 11/08/2010    | 11/19/2010 | X02449              | INITIAL EXAM UNIT 2 - PV (11/2010)  |                      |
| 3   | 11/08/2010    | 11/19/2010 | X02450              | INITIAL EXAM UNIT 3- PV(11/2010)  |                      |
| <b>TSB-52B - BIENNIAL PI&amp;R</b>              |               |            |                     |   | <b>5</b>             |
| 1, 2, 3   | 11/29/2010    | 12/03/2010 | IP 71152B           | Identification and Resolution of Problems   |                      |
| 1, 2, 3   | 12/13/2010    | 12/17/2010 | IP 71152B           | Identification and Resolution of Problems   |                      |
| <b>EP1 - BIENNIAL EP EXERCISE INSPECTION</b>    |               |            |                     |   | <b>3</b>             |
| 1, 2, 3   | 02/28/2011    | 03/04/2011 | IP 7111401          | Exercise Evaluation   |                      |
| 1, 2, 3   | 02/28/2011    | 03/04/2011 | IP 7111404          | Emergency Action Level and Emergency Plan Changes   |                      |
| 1, 2, 3   | 02/28/2011    | 03/04/2011 | IP 71151-EP01       | Drill/Exercise Performance  |                      |
| 1, 2, 3   | 02/28/2011    | 03/04/2011 | IP 71151-EP02       | ERO Drill Participation   |                      |
| 1, 2, 3   | 02/28/2011    | 03/04/2011 | IP 71151-EP03       | Alert & Notification System   |                      |
| <b>RP678 - RADIATION SAFETY TEAM</b>            |               |            |                     |   | <b>3</b>             |
| 1, 2, 3   | 01/24/2011    | 01/28/2011 | IP 71124.06         | Radioactive Gaseous and Liquid Effluent Treatment   |                      |
| 1, 2, 3   | 01/24/2011    | 01/28/2011 | IP 71124.07         | Public Radiation Safety   |                      |
| 1, 2, 3   | 01/24/2011    | 01/28/2011 | IP 71124.08         | Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation |                      |

This report does not include INPO and OUTAGE activities.  
 This report shows only on-site and announced inspection procedures.

Palo Verde  
Inspection / Activity Plan  
04/01/2010 - 06/30/2011

| Unit Number | Planned Dates |            | Inspection Activity                         | Title   | No. of Staff on Site |
|-------------|---------------|------------|---|---|----------------------|
|             | Start         | End        |   |   |                      |
|             |               |            | <b>EB1-17 - 50.59 AND MODS</b>              |   | <b>1</b>             |
| 1, 2, 3     | 01/31/2011    | 02/11/2011 | IP 7111117T                                 | Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications |                      |
|             |               |            | <b>PSB2-08P - INSERVICE INSPECTION - U2</b> |   | <b>3</b>             |
| 2           | 04/04/2011    | 04/29/2011 | IP 7111108P                                 | Inservice Inspection Activities - PWR   |                      |

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This report does not include INPO and OUTAGE activities.  
This report shows only on-site and announced inspection procedures.