



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

March 3, 2008

Mr. Britt T. McKinney
Senior Vice-President and Chief Nuclear Officer
PPL Susquehanna, LLC
769 Salem Blvd. - NUCSB3
Berwick, PA 18603-0467

**SUBJECT: ANNUAL ASSESSMENT LETTER - SUSQUEHANNA STEAM ELECTRIC
STATION**

Dear Mr. McKinney:

On February 13, 2008, the NRC staff completed its performance review of Susquehanna Steam Electric Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2007. 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, Susquehanna Steam Electric Station Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, 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 PIs 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. We also plan on conducting several non-ROP inspections related to extended power uprate activities.

The staff identified seven green inspection findings for the current 12-month assessment period with documented cross-cutting aspects in the area of human performance, and there is a cross-cutting theme regarding supervisory and management oversight of work activities (H.4(c)) associated with five of these findings. In evaluating the scope of efforts and progress in addressing the cross-cutting theme, the staff determined that the licensee appropriately identified the cross-cutting theme; recognized the impacts of the cross-cutting theme in multiple departments; and took a range of corrective actions which have been implemented and are judged, at this time, to be effective in mitigating the cross-cutting theme. Therefore, the staff has concluded that a substantive cross-cutting issue in human performance does not exist at this time.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through June 30, 2009. We also plan to conduct inspections related to Extended Power Uprate activities. 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 me at 610-337-5120 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Paul G. Krohn, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos. 50-387; 50-388
License Nos. NPF-14, NPF-22

Enclosure: Susquehanna Inspection/ Activity Plan

cc w/encl:

C. Gannon, Vice President, Nuclear Operations
R. Paley, General Manager, Plant Support
R. Pagodin, General Manager, Nuclear Engineering
R. Sgarro, Manager, Nuclear Regulatory Affairs
Supervisor, Nuclear Regulatory Affairs
M. Crowthers, Supervising Engineer, Nuclear Regulatory Affairs
Manager, Quality Assurance
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B. Snapp, Esq., Associate General Counsel, PPL Services Corporation
Supervisor - Document Control Services
R. Osborne, Allegheny Electric Cooperative, Inc.
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Board of Supervisors, Salem Township
J. Johnsrud, National Energy Committee, Sierra Club
E. Epstein, TMI-Alert (TMIA)
J. Powers, Dir, PA Office of Homeland Security
R. French, Dir, PA Emergency Management Agency
Institute of Nuclear Power Operations (INPO)

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Sincerely,
/RA/
Paul G. Krohn, Chief
Reactor Projects Branch 4
Division of Reactor Projects

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|--------|------------|----------------------|------------|
| OFFICE | RI/DRP | RI/DRP | RI/DRP |
| NAME | TSetzer/TS | RFuhrmeister/PGK for | PKrohn/PGK |
| DATE | 02/27/08 | 02 /27/08 | 02/27/08 |

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Susquehanna
Inspection / Activity Plan
01/01/2008 - 06/30/2009

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates Start | Planned Dates End | Inspection Type |
|-------------|---|---|----------------------|---------------------|-------------------|-------------------------|
| | 71152B - PI&R | | 5 | | | |
| 1,2 | IP 71152B | Identification and Resolution of Problems | | 01/14/2008 | 01/18/2008 | Baseline Inspections |
| 1,2 | IP 71152B | Identification and Resolution of Problems | | 01/28/2008 | 02/01/2008 | Baseline Inspections |
| | P UPRATE - FLOW ACCELERATED CORROSION PROGRAM INSP | | 1 | | | |
| 1,2 | IP 71004 | Power Uprate | | 02/04/2008 | 02/08/2008 | Other Routine |
| | 7112201 - PUB RAD SAFETY - RETS | | 1 | | | |
| 1,2 | IP 7112201 | Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems | | 02/11/2008 | 02/15/2008 | Baseline Inspections |
| | 7111108G - U1 INSERVICE INSPECTION | | 1 | | | |
| 1 | IP 7111108G | Inservice Inspection Activities - BWR | | 03/10/2008 | 03/14/2008 | Baseline Inspections |
| | 71121 - OCC RAD SAFETY | | 1 | | | |
| 1,2 | IP 7112101 | Access Control to Radiologically Significant Areas | | 03/10/2008 | 03/14/2008 | Baseline Inspections |
| 1,2 | IP 7112102 | ALARA Planning and Controls | | 03/10/2008 | 03/14/2008 | Baseline Inspections |
| 1,2 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 03/10/2008 | 03/14/2008 | Baseline Inspections |
| | 7111117 - EPU-MODS&50.59 | | 1 | | | |
| 1 | IP 7111117A | Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications | | 03/10/2008 | 03/14/2008 | Baseline Inspections |
| | 71121 - OCC RAD SAFETY | | 1 | | | |
| 1,2 | IP 7112101 | Access Control to Radiologically Significant Areas | | 06/02/2008 | 06/06/2008 | Baseline Inspections |
| 1,2 | IP 7112102 | ALARA Planning and Controls | | 06/02/2008 | 06/06/2008 | Baseline Inspections |
| 1,2 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 06/02/2008 | 06/06/2008 | Baseline Inspections |
| | 71002 - LICENSE RENEWAL INSPECTION | | 7 | | | |
| 1,2 | IP 71002 | License Renewal Inspection | | 08/11/2008 | 08/15/2008 | License Renewal Inspe |
| 1,2 | IP 71002 | License Renewal Inspection | | 08/25/2008 | 08/29/2008 | License Renewal Inspe |
| | 71121 - OCC RAD SAFETY | | 1 | | | |
| 1,2 | IP 7112101 | Access Control to Radiologically Significant Areas | | 08/25/2008 | 08/29/2008 | Baseline Inspections |
| 1,2 | IP 7112102 | ALARA Planning and Controls | | 08/25/2008 | 08/29/2008 | Baseline Inspections |
| 1,2 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 08/25/2008 | 08/29/2008 | Baseline Inspections |
| 1,2 | IP 71151-OR01 | Occupational Exposure Control Effectiveness | | 08/25/2008 | 08/29/2008 | Baseline Inspections |
| 1,2 | IP 71151-PR01 | RETS/ODCM Radiological Effluent | | 08/25/2008 | 08/29/2008 | Baseline Inspections |
| | ISFSI - ISFSI INSPECTION - ANNUAL SAMPLE | | 1 | | | |
| 1 | IP 60855 | Operation Of An ISFSI | | 08/25/2008 | 08/29/2008 | Other Routine |
| | TI 171 - TI 171 | | 3 | | | |
| 1,2 | IP 2515/171 | Verification of Site Specific Implementation Of B.5.b Phase 2 & 3 Mitigating Strategies | | 09/08/2008 | 09/12/2008 | Generic Safety Inspecti |
| | TRI FIRE - TRIENNIAL FIRE PROTECTION INSPECTION | | 3 | | | |
| 1,2 | IP 7111105T | Fire Protection [Triennial] | | 10/20/2008 | 10/24/2008 | Baseline Inspections |
| 1,2 | IP 7111105T | Fire Protection [Triennial] | | 11/03/2008 | 11/07/2008 | Baseline Inspections |

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

Susquehanna
Inspection / Activity Plan
01/01/2008 - 06/30/2009

| Unit Number | Inspection Activity | Title | No. of Staff on Site | Planned Dates Start | Planned Dates End | Inspection Type |
|---|---------------------|---|----------------------|---------------------|-------------------|------------------------|
| EP - EP EXERCISE EVALUATION | | | 4 | | | |
| 1,2 | IP 7111401 | Exercise Evaluation | | 10/20/2008 | 10/24/2008 | EP Baseline Inspection |
| 1,2 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 10/20/2008 | 10/24/2008 | EP Baseline Inspection |
| 1,2 | IP 71151-EP01 | Drill/Exercise Performance | | 10/20/2008 | 10/24/2008 | Baseline Inspections |
| 1,2 | IP 71151-EP02 | ERO Drill Participation | | 10/20/2008 | 10/24/2008 | Baseline Inspections |
| 1,2 | IP 71151-EP03 | Alert & Notification System | | 10/20/2008 | 10/24/2008 | Baseline Inspections |
| 7112202 - PUB RAD SAFETY - RADWASTE | | | 1 | | | |
| 1,2 | IP 7112202 | Radioactive Material Processing and Transportation | | 12/01/2008 | 12/05/2008 | Baseline Inspections |
| 71121 - OCC RAD SAFETY | | | 1 | | | |
| 2 | IP 7112101 | Access Control to Radiologically Significant Areas | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| 2 | IP 7112102 | ALARA Planning and Controls | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| 2 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| 71121 - OCC RAD SAFETY | | | 1 | | | |
| 2 | IP 7112101 | Access Control to Radiologically Significant Areas | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| 2 | IP 7112102 | ALARA Planning and Controls | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| 2 | IP 7112103 | Radiation Monitoring Instrumentation and Protective Equipment | | 03/09/2009 | 03/13/2009 | Baseline Inspections |
| DNMS - ISFSI LOADING CAMPAIGN INSPECTION | | | 1 | | | |
| 1 | IP 60855 | Operation Of An ISFSI | | 04/01/2009 | 06/30/2009 | Other Routine |
| MODS - PERMANENT PLANT MODIFICATIONS | | | 3 | | | |
| 1,2 | IP 7111117B | Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications | | 06/01/2009 | 06/05/2009 | Baseline Inspections |
| 1,2 | IP 7111117B | Evaluations of Changes, Tests, or Experiments & Permanent Plant Modifications | | 06/15/2009 | 06/19/2009 | Baseline Inspections |
| EP PROGR - EP PROGRAM INSPECTION | | | 2 | | | |
| 1,2 | IP 7111402 | Alert and Notification System Testing | | 06/21/2009 | 06/27/2009 | EP Baseline Inspection |
| 1,2 | IP 7111403 | Emergency Response Organization Augmentation Testing | | 06/21/2009 | 06/27/2009 | EP Baseline Inspection |
| 1,2 | IP 7111404 | Emergency Action Level and Emergency Plan Changes | | 06/21/2009 | 06/27/2009 | EP Baseline Inspection |
| 1,2 | IP 7111405 | Correction of Emergency Preparedness Weaknesses and Deficiencies | | 06/21/2009 | 06/27/2009 | EP Baseline Inspection |
| 1,2 | IP 71151-EP01 | Drill/Exercise Performance | | 06/21/2009 | 06/27/2009 | Baseline Inspections |
| 1,2 | IP 71151-EP02 | ERO Drill Participation | | 06/21/2009 | 06/27/2009 | Baseline Inspections |
| 1,2 | IP 71151-EP03 | Alert & Notification System | | 06/21/2009 | 06/27/2009 | Baseline Inspections |
| 7112203 - PUB RAD SAFETY - REMP | | | 1 | | | |
| 1,2 | IP 7112203 | Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program | | 06/22/2009 | 06/26/2009 | Baseline Inspections |

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