



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

March 2, 2006

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

SUBJECT: ANNUAL ASSESSMENT LETTER - SUSQUEHANNA STEAM ELECTRIC  
STATION (REPORT 05000387/2006001 AND 05000388/2006001)

Dear Mr. McKinney:

On February 6, 2006, 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, 2005. 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 physical protection information. A separate letter designated and marked as "Official Use Only - Security-Related Information" will include the physical protection review and resultant inspection plan.

Overall, Susquehanna 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.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through September 30, 2007. Planned inspections include an independent spent fuel storage installation inspection. 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).

B. McKinney

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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 610-337-5186 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

James M. Trapp, 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:

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B. McKinney

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**SISP Review Complete: ALB (Reviewer's Initials)**

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|--------|-----------------|--------------|------------|
| NAME   | ABlamey/ALB for | ABurritt/ALB | JTrapp/JMT |
| DATE   | 02/21/06        | 02/21/06     | 02/28/06   |

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**Susquehanna**  
**Inspection / Activity Plan**  
**03/01/2006 - 09/30/2007**

| Unit Number | Inspection Activity  | Title   | No. of Staff on Site | Planned Dates Start | Planned Dates End | Inspection Type      |
|-------------|--|---|----------------------|---------------------|-------------------|----------------------|
|             | <b>7111108G - INSERVICE INSPECTION - UNIT 1</b>            |   | <b>1</b>             |                     |                   |                      |
| 1           | IP 7111108G  | Inservice Inspection Activities - BWR   |                      | 03/13/2006          | 03/17/2006        | Baseline Inspections |
|             | <b>ISI - ISI AT UNIT 1</b>                                 |   | <b>2</b>             |                     |                   |                      |
| 1           | IP 7111108G  | Inservice Inspection Activities - BWR   |                      | 03/06/2006          | 03/17/2006        | Baseline Inspections |
|             | <b>71121 - OCC RAD SAFETY</b>                              |   | <b>1</b>             |                     |                   |                      |
| 1,2         | IP 7112101   | Access Control to Radiologically Significant Areas                              |                      | 03/13/2006          | 03/17/2006        | Baseline Inspections |
| 1,2         | IP 7112102   | ALARA Planning and Controls   |                      | 03/13/2006          | 03/17/2006        | Baseline Inspections |
| 1,2         | IP 7112103   | Radiation Monitoring Instrumentation and Protective Equipment                   |                      | 03/13/2006          | 03/17/2006        | Baseline Inspections |
|             | <b>ISFSI - ISFSI</b>                                       |   | <b>2</b>             |                     |                   |                      |
| 1,2         | IP 60855.1   | Operation of an Independent Spent Fuel Storage Installation at Operating Plants |                      | 05/01/2006          | 07/15/2006        | Other Routine        |
|             | <b>71121 - OCC RAD SAFETY</b>                              |   | <b>1</b>             |                     |                   |                      |
| 1,2         | IP 7112101   | Access Control to Radiologically Significant Areas                              |                      | 06/12/2006          | 06/16/2006        | Baseline Inspections |
| 1,2         | IP 7112102   | ALARA Planning and Controls   |                      | 06/12/2006          | 06/16/2006        | Baseline Inspections |
| 1,2         | IP 7112103   | Radiation Monitoring Instrumentation and Protective Equipment                   |                      | 06/12/2006          | 06/16/2006        | Baseline Inspections |
|             | <b>MODS - MODS AND 50.59</b>                               |   | <b>3</b>             |                     |                   |                      |
| 1,2         | IP 7111102   | Evaluation of Changes, Tests, or Experiments                                    |                      | 06/12/2006          | 06/16/2006        | Baseline Inspections |
| 1,2         | IP 7111117B  | Permanent Plant Modifications   |                      | 06/12/2006          | 06/16/2006        | Baseline Inspections |
|             | <b>7111111B - L.O. REQUAL. PROG. + P/F REVIEW</b>          |   | <b>4</b>             |                     |                   |                      |
| 1,2         | IP 7111111B  | Licensed Operator Requalification Program                                       |                      | 09/25/2006          | 09/29/2006        | Baseline Inspections |
| 1,2         | IP 7111111B  | Licensed Operator Requalification Program                                       |                      | 10/09/2006          | 10/13/2006        | Baseline Inspections |
|             | <b>71121 - OCC RAD SAFETY</b>                              |   | <b>1</b>             |                     |                   |                      |
| 1,2         | IP 7112101   | Access Control to Radiologically Significant Areas                              |                      | 08/14/2006          | 08/18/2006        | Baseline Inspections |
| 1,2         | IP 7112102   | ALARA Planning and Controls   |                      | 08/14/2006          | 08/18/2006        | Baseline Inspections |
| 1,2         | IP 7112103   | Radiation Monitoring Instrumentation and Protective Equipment                   |                      | 08/14/2006          | 08/18/2006        | Baseline Inspections |
| 1,2         | IP 71151   | Performance Indicator Verification  |                      | 08/14/2006          | 08/18/2006        | Baseline Inspections |
|             | <b>7111401 - EXERCISE EVALUATION &amp; PI VERIFICATION</b> |   | <b>4</b>             |                     |                   |                      |
| 1,2         | IP 7111401   | Exercise Evaluation   |                      | 09/18/2006          | 09/22/2006        | Baseline Inspections |
| 1,2         | IP 71151   | Performance Indicator Verification  |                      | 09/18/2006          | 09/22/2006        | Baseline Inspections |
|             | <b>7112202 - PUB RAD SAFETY - RADWASTE</b>                 |   | <b>1</b>             |                     |                   |                      |
| 1,2         | IP 7112202   | Radioactive Material Processing and Transportation                              |                      | 11/27/2006          | 12/01/2006        | Baseline Inspections |
|             | <b>71114 - EP PRGM INSP</b>                                |   | <b>1</b>             |                     |                   |                      |
| 1,2         | IP 7111402   | Alert and Notification System Testing   |                      | 02/05/2007          | 02/09/2007        | Baseline Inspections |
| 1,2         | IP 7111403   | Emergency Response Organization Augmentation Testing                            |                      | 02/05/2007          | 02/09/2007        | Baseline Inspections |
| 1,2         | IP 7111404   | Emergency Action Level and Emergency Plan Changes                               |                      | 02/05/2007          | 02/09/2007        | Baseline Inspections |
| 1,2         | IP 7111405   | Correction of Emergency Preparedness Weaknesses and Deficiencies                |                      | 02/05/2007          | 02/09/2007        | 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**  
**03/01/2006 - 09/30/2007**

| Unit<br>Number | Inspection Activity                                       | Title   | No. of Staff<br>on Site | Planned Dates |            | Inspection<br>Type   |
|----------------|---|---|-------------------------|---------------|------------|----------------------|
|                |   |   |                         | Start         | End        |                      |
|                | <b>7111107 - HEAT SINK INSP</b>                           |   | <b>1</b>                |               |            |                      |
| 1,2            | IP 7111107B   | Heat Sink Performance   |                         | 03/05/2007    | 03/09/2007 | Baseline Inspections |
|                | <b>71121 - OCC RAD SAFETY</b>                             |   | <b>1</b>                |               |            |                      |
| 2              | IP 7112101  | Access Control to Radiologically Significant Areas                                      |                         | 03/12/2007    | 03/16/2007 | Baseline Inspections |
| 2              | IP 7112102  | ALARA Planning and Controls   |                         | 03/12/2007    | 03/16/2007 | Baseline Inspections |
| 2              | IP 7112103  | Radiation Monitoring Instrumentation and Protective Equipment                           |                         | 03/12/2007    | 03/16/2007 | Baseline Inspections |
|                | <b>7111108G - IN SERVICE INSPECTION</b>                   |   | <b>1</b>                |               |            |                      |
| 2              | IP 7111108G   | Inservice Inspection Activities - BWR   |                         | 03/19/2007    | 03/23/2007 | Baseline Inspections |
|                | <b>71121 - OCC RAD SAFETY</b>                             |   | <b>1</b>                |               |            |                      |
| 1,2            | IP 7112101  | Access Control to Radiologically Significant Areas                                      |                         | 05/07/2007    | 05/11/2007 | Baseline Inspections |
| 1,2            | IP 7112102  | ALARA Planning and Controls   |                         | 05/07/2007    | 05/11/2007 | Baseline Inspections |
| 1,2            | IP 7112103  | Radiation Monitoring Instrumentation and Protective Equipment                           |                         | 05/07/2007    | 05/11/2007 | Baseline Inspections |
|                | <b>7111121 - CDBI (COMPONENT DESIGN BASES INSPECTION)</b> |   | <b>7</b>                |               |            |                      |
| 1              | IP 7111121  | Component Design Bases Inspection   |                         | 05/21/2007    | 05/25/2007 | Baseline Inspections |
| 1,2            | IP 7111121  | Component Design Bases Inspection   |                         | 06/04/2007    | 06/08/2007 | Baseline Inspections |
| 1,2            | IP 7111121  | Component Design Bases Inspection   |                         | 06/18/2007    | 06/22/2007 | Baseline Inspections |
| 1,2            | IP 7111121  | Component Design Bases Inspection   |                         | 06/25/2007    | 06/29/2007 | Baseline Inspections |
|                | <b>7112203 - PUB RAD SAFETY - REMP</b>                    |   | <b>1</b>                |               |            |                      |
| 1,2            | IP 7112203  | Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control F |                         | 06/18/2007    | 06/22/2007 | Baseline Inspections |