



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

September 2, 2008

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

**SUBJECT: MID-CYCLE PERFORMANCE ASSESSMENT LETTER –  
SUSQUEHANNA STEAM ELECTRIC STATION**

Dear Mr. McKinney:

On August 7, 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 July 1, 2007 through June 30, 2008. 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 to conduct an independent spent fuel storage installation inspection and inspections related to Extended Power Uprate activities.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through December 31, 2009. The inspection plan also details inspections of your independent spent fuel storage installation and 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 end-of-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  
Division of Reactor Projects  
Projects Branch 4

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  
M. Crowthers, Manager, Nuclear Regulatory Affairs  
R. Smith, General Manager, Site Preparedness and Services  
D. Brophy, Supervisor, Nuclear Regulatory Affairs  
J. Helsel, Manager, Training  
M. Rose, Manager, Quality Assurance  
J. Scopelliti, Community Relations Manager  
B. Snapp, Esq., Associate General Counsel, PPL Services Corp  
Supervisor, Document Control Services  
R. Osborne, Allegheny Electric Cooperative, Inc.  
D. Allard, Director, PA Dept of Environmental Protection  
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

**Susquehanna**  
**Inspection / Activity Plan**  
**08/01/2008 - 12/31/2009**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>71002</b>	<b>- LICENSE RENEWAL INSPECTION</b>	<b>7</b>			
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
	<b>71121</b>	<b>- OCC RAD SAFETY &amp; ISFSI</b>	<b>1</b>			
1,2	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		08/25/2008	08/29/2008	Other Routine
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
	<b>TI 171</b>	<b>- TI 171</b>	<b>4</b>			
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
	<b>TI 176</b>	<b>- TI 176</b>	<b>2</b>			
1,2	IP 2515/176	Emergency Diesel Generator Tech Spec Surveillance Requirements Re: Endurance & Margin		09/29/2008	10/03/2008	Generic Safety Inspecti
	<b>EP</b>	<b>- EP EXERCISE EVALUATION</b>	<b>5</b>			
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
	<b>TRI FIRE</b>	<b>- TRIENNIAL FIRE PROTECTION INSPECTION</b>	<b>3</b>			
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
	<b>71152</b>	<b>- REVIEW OF 3RD QUARTER SCWE SURVEY</b>	<b>2</b>			
1	IP 71152-Trends	Semi-annual Trends		11/03/2008	11/07/2008	Baseline Inspections
	<b>7112202</b>	<b>- PUB RAD SAFETY - RADWASTE</b>	<b>1</b>			
1,2	IP 7112202	Radioactive Material Processing and Transportation		12/01/2008	12/05/2008	Baseline Inspections
	<b>7111108G</b>	<b>- U2 INSERVICE INSPECTION</b>	<b>1</b>			
2	IP 7111108G	Inservice Inspection Activities - BWR		04/06/2009	04/10/2009	Baseline Inspections
	<b>DNMS</b>	<b>- ISFSI LOADING CAMPAIGN INSPECTION</b>	<b>1</b>			
1	IP 60855	Operation Of An ISFSI		04/01/2009	06/30/2009	Other Routine
	<b>71121</b>	<b>- OCC RAD SAFETY</b>	<b>1</b>			
2	IP 7112101	Access Control to Radiologically Significant Areas		04/13/2009	04/17/2009	Baseline Inspections
2	IP 7112102	ALARA Planning and Controls		04/13/2009	04/17/2009	Baseline Inspections
2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/13/2009	04/17/2009	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**  
**08/01/2008 - 12/31/2009**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates		Inspection Type
				Start	End	
<b>MODS - PERMANENT PLANT MODIFICATIONS</b>			<b>3</b>			
1,2	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications		06/01/2009	06/05/2009	Baseline Inspections
1,2	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications		06/15/2009	06/19/2009	Baseline Inspections
<b>EP PROGR - EP PROGRAM INSPECTION</b>			<b>2</b>			
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
<b>7112203 - PUB RAD SAFETY - REMP</b>			<b>1</b>			
1,2	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program		06/22/2009	06/26/2009	Baseline Inspections
<b>11/02EXM - OPERATOR LICENSING INITIAL EXAMS</b>			<b>4</b>			
1	U01696	FY09 - SUSQUEHANNA UNITS 1&2 INITIAL OPERATOR EXAM		09/28/2009	10/02/2009	Not Applicable
1	U01696	FY09 - SUSQUEHANNA UNITS 1&2 INITIAL OPERATOR EXAM		11/02/2009	11/06/2009	Not Applicable
<b>7111111B - BIENNIAL REQUAL INSP WITH P/F RESULTS</b>			<b>3</b>			
1,2	IP 7111111B	Licensed Operator Requalification Program		10/14/2009	10/18/2009	Baseline Inspections
<b>71121 - OCC RAD SAFETY</b>			<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		08/10/2009	08/14/2009	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		08/10/2009	08/14/2009	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		08/10/2009	08/14/2009	Baseline Inspections
<b>7111107T - HEAT SINK INSP</b>			<b>1</b>			
1,2	IP 7111107T	Heat Sink Performance		09/21/2009	09/25/2009	Baseline Inspections
<b>71121 - OCC RAD SAFETY</b>			<b>1</b>			
1,2	IP 7112101	Access Control to Radiologically Significant Areas		11/30/2009	12/04/2009	Baseline Inspections
1,2	IP 7112102	ALARA Planning and Controls		11/30/2009	12/04/2009	Baseline Inspections
1,2	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		11/30/2009	12/04/2009	Baseline Inspections
1,2	IP 71151-OR01	Occupational Exposure Control Effectiveness		11/30/2009	12/04/2009	Baseline Inspections
1,2	IP 71151-PR01	RETS/ODCM Radiological Effluent		11/30/2009	12/04/2009	Baseline Inspections