



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PA 19406-1415

March 4, 2009

Mr. William H. Spence
Executive Vice President
Chief Operating Officer/Chief Nuclear Officer
PPL Corporation
Two North Ninth Street, GENTW16
Allentown, PA 18101-1179

**SUBJECT: ANNUAL ASSESSMENT LETTER – SUSQUEHANNA STEAM ELECTRIC
STATION (REPORT 05000387/2009001 and 05000388/2009001)**

Dear Mr. Spence:

On February 10, 2009, 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, 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.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through June 30, 2010. In addition to the baseline inspections, we plan on conducting inspections concerning your independent spent fuel storage installation and power uprates. 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.

The NRC also issued a potential chilling effect letter (CEL) to Susquehanna on January 28, 2009, regarding the safety conscious work environment (SCWE) at the site (ML090280115).¹ The NRC expressed concern with the progress and effectiveness of PPL actions during 2008 to address indications of a declining SCWE and negative employee perceptions, as it may impact

¹ Designation in parentheses refers to an ADAMS ascension number. Documents referenced in this letter are publicly available using the ascension number in ADAMS.

employee willingness to raise safety concerns and lead to a chilling effect at the site. PPL subsequently responded to the potential CEL on February 27, 2009 (ML090620124). The NRC is evaluating the adequacy of PPL's response, and will schedule a meeting to discuss the progress and results of PPL's work environment improvement activities. NRC will continue to monitor PPL's progress through the ROP baseline inspection program. Although not included in the current assessment period, the CEL will be a formal input to our upcoming assessment of plant performance for the period ending June 30, 2009, as described in Inspection Manual Chapter 0305, "Operating Reactor Assessment Program" (ML082770835).

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 changes 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, 50-338
License Nos. NPF-14, NPF-22

Enclosure: Susquehanna Inspection/Activity Plan

cc w/encl:

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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
Division of Reactor Projects
Projects Branch 4

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DATE	02/26 /09		03/03/09		03/03/09	

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Susquehanna
Inspection / Activity Plan
01/01/2009 - 06/30/2010

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			71002 - LICENSE RENEWAL INSPECTION		1
1,2	01/01/2009	01/12/2009	IP 71002	License Renewal Inspection	
			71004 - POWER UPRATE		6
1,2	03/01/2009	12/31/2009	IP 71004	Power Uprate	
			7111108G - U2 INSERVICE INSPECTION		1
2	04/13/2009	04/17/2009	IP 7111108G	Inservice Inspection Activities - BWR	
			71121 - OCC RAD SAFETY		1
2	04/13/2009	04/17/2009	IP 7112101	Access Control to Radiologically Significant Areas	
2	04/13/2009	04/17/2009	IP 7112102	ALARA Planning and Controls	
2	04/13/2009	04/17/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			MODS - PERMANENT PLANT MODIFICATIONS		4
1,2	06/01/2009	06/05/2009	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
1,2	06/15/2009	06/19/2009	IP 7111117T	Evaluations of Changes, Tests, or Experiments and Permanent Plant Modifications	
			EP PROGR - EP PROGRAM INSPECTION		2
1,2	06/21/2009	06/27/2009	IP 7111402	Alert and Notification System Testing	
1,2	06/21/2009	06/27/2009	IP 7111403	Emergency Response Organization Augmentation Testing	
1,2	06/21/2009	06/27/2009	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	06/21/2009	06/27/2009	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	06/21/2009	06/27/2009	IP 71151-EP01	Drill/Exercise Performance	
1,2	06/21/2009	06/27/2009	IP 71151-EP02	ERO Drill Participation	
1,2	06/21/2009	06/27/2009	IP 71151-EP03	Alert & Notification System	
			7112203 - PUB RAD SAFETY - REMP		1
1,2	06/22/2009	06/26/2009	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	
			7111111B - BIENNIAL REQUAL INSP WITH P/F RESULTS		3
1,2	09/28/2009	10/02/2009	IP 7111111B	Licensed Operator Requalification Program	
			71121 - OCC RAD SAFETY		1
1,2	08/10/2009	08/14/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	08/10/2009	08/14/2009	IP 7112102	ALARA Planning and Controls	
1,2	08/10/2009	08/14/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
			ISFSI - ISFSI LOADING CAMPAING INSPECTION		2
1	08/17/2009	08/21/2009	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			7111107T - HEAT SINK INSP		1
1,2	09/21/2009	09/25/2009	IP 7111107T	Heat Sink Performance	
			71121 - OCC RAD SAFETY		1
1,2	11/30/2009	12/04/2009	IP 7112101	Access Control to Radiologically Significant Areas	

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

Susquehanna
Inspection / Activity Plan
01/01/2009 - 06/30/2010

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
71121 - OCC RAD SAFETY					1
1,2	11/30/2009	12/04/2009	IP 7112102	ALARA Planning and Controls	
1,2	11/30/2009	12/04/2009	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
1,2	11/30/2009	12/04/2009	IP 71151-OR01	Occupational Exposure Control Effectiveness	
1,2	11/30/2009	12/04/2009	IP 71151-PR01	RETS/ODCM Radiological Effluent	
71152B - PI&R					4
1,2	01/11/2010	01/15/2010	IP 71152B	Identification and Resolution of Problems	
1,2	01/25/2010	01/29/2010	IP 71152B	Identification and Resolution of Problems	
ISFSI - ANNUAL SAMPLE - ISFSI INSPECTION					1
1	01/01/2010	12/31/2010	IP 60855	Operation Of An ISFSI	
2515/173 - GROUNDWATER TI					1
1,2	02/08/2010	02/12/2010	IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
7111108G - U1 INSERVICE INSPECTION					1
1	03/15/2010	03/19/2010	IP 7111108G	Inservice Inspection Activities - BWR	
71121 - OCC RAD SAFETY					1
1	03/15/2010	03/19/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1	03/15/2010	03/19/2010	IP 7112102-7112102R	ALARA - Required	
1	03/15/2010	03/19/2010	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
7112201 - PUB RAD SAFETY - RETS					1
1,2	05/10/2010	05/14/2010	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
71121 - OCC RAD SAFETY					1
1,2	06/07/2010	06/11/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1,2	06/07/2010	06/11/2010	IP 7112102-7112102R	ALARA - Required	
1,2	06/07/2010	06/11/2010	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	

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