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APR 23 2007

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Mail Stop OP1-17
Washington, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
PROPOSED LICENSE AMENDMENT NO. 285
FOR UNIT 1 OPERATING LICENSE NO. NPF-14
AND PROPOSED LICENSE AMENDMENT NO. 253
FOR UNIT 2 OPERATING LICENSE NO. NPF-22
CONSTANT PRESSURE POWER UPRATE –
ENVIRONMENTAL – REQUEST FOR
ADDITIONAL INFORMATION RESPONSES
PLA-6187**

**Docket Nos. 50-387
and 50-388**

*Reference: 1) PPL Letter PLA-6076, B. T. McKinney (PPL) to USNRC,
"Proposed License Amendment Numbers 285 for Unit 1 Operating
License No. NPF-14 and 253 for Unit 2 Operating License No. NPF-22
Constant Pressure Power Uprate," dated October 11, 2006.*

Pursuant to 10 CFR 50.90, PPL Susquehanna LLC (PPL) requested in Reference 1 approval of amendments to the Susquehanna Steam Electric Station (SSES) Unit 1 and Unit 2 Operating Licenses (OLs) and Technical Specifications (TS) to increase the maximum power level authorized from 3489 megawatts thermal (MWt) to 3952 MWt, an approximate 13% increase in thermal power. The proposed Constant Pressure Power Uprate (CPPU) represents an increase of approximately 20% above the Original Licensed Thermal Power (OLTP).

The purpose of this letter is to provide supplemental information discussed in a teleconference held April 5, 2007.

The Enclosure contains the PPL responses.

There are no new regulatory commitments associated with this submittal.

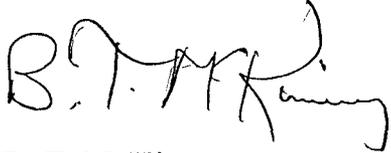
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PPL has reviewed the "No Significant Hazards Consideration" and the "Environmental Consideration" submitted with Reference 1 relative to the Enclosure. We have determined that there are no changes required to either of these documents.

If you have any questions or require additional information, please contact Mr. Michael H. Crowthers at (610) 774-7766.

I declare under perjury that the foregoing is true and correct.

Executed on: 4-23-07

A handwritten signature in black ink, appearing to read "B. T. McKinney". The signature is written in a cursive style with a large initial "B" and a long, sweeping underline.

B. T. McKinney

Enclosure: Request for Additional Information Responses

Copy: NRC Region I
Mr. A. J. Blamey, NRC Sr. Resident Inspector
Mr. R. V. Guzman, NRC Project Manager
Mr. R. R. Janati, DEP/BRP

PPL EPU

Request for Additional Information Responses

NRC Question 1:

The Environmental Report (ER) reported a generation of solid waste, specifically with an irradiated component, for the year 2000 and 2003, at 190000 Ci and 107000 Ci, respectively. We'd like to understand if this is a regular occurrence and how often it occurs

PPL Response:

The high activity levels of irradiated components for years 2000 and 2003 listed in the ER were mainly from disposal of radioactive solid wastes generated from activities that were not regular occurrences. These included control rod blades, fuel pool cleanout wastes, and reactor water filter resins. These wastes are usually stored onsite until enough is present to fill a container for transport to a disposal site. It should also be noted that "Table 8-1, SSES Low-Level Radioactive Waste Generation by Waste Type, 2000 – 2004" is incorrectly labelled. The table lists annual solid radioactive waste disposal data and not generation data as stated in the table's title. The data contained therein is consistent with the Final Environmental Statement (FES), Construction Permit Stage, 1973 referenced in the EPU ER (Section 8.1.1).

NRC Question 2:

The ER did not estimate the amount of activity (Ci) of solid waste due to the Power Uprate (EPU). Please provide an estimate.

PPL Response:

The Final Environmental Statement (FES), Construction Permit Stage, 1973 lists activity for solid radioactive wastes shipped offsite to be approximately 5,500 Ci per year. At the completion of EPU implementation, the rated power from the Susquehanna units will have been increased by 20 % over the licensed power proposed at the time of the 1973 FES. PPL, therefore, estimates 6,600 Ci ($5,500 \text{ Ci} \times 1.2$) as the annual amount of activity to be disposed offsite after implementation of the EPU.

Section 8.1.1 of the ER identifies that PPL estimates an approximate 11 percent increase in generation of Low-Level Radioactive Waste (LLRW). Correspondingly, PPL estimates an 11% increase in the amount of activity of disposed solid waste due to the EPU.