

From: Alicia Mullins
To: Frederick A. Monette; Halil I. Avci; Kirk E. LaGory
Date: 03/01/2007 1:55:04 PM
Subject: SSES Comments and Report

Fred,

I have attached all the documents regarding the SSES binning of comments from the Nov 15, 2006 meeting. There is an attachment for the Scoping Summary Report which needs to be reviewed by your team and resubmitted to me by March 12, 2007. I am going to fedex hard copies of all the attachments along with a CD. If you have any questions contact me or Jeffrey Rikhoff.

Thanks
Alicia Mullins, Project Manager
NRR/DLR/REBB

CC: axm7; Jennifer Davis

Mail Envelope Properties (45E72188.9BA : 14 : 10060)

Subject: SSES Comments and Report
Creation Date 03/01/2007 1:55:04 PM
From: Alicia Mullins
Created By: AXM7@nrc.gov

Recipients	Action	Date & Time
anl.gov avci (Halil I. Avci) fmonette (Frederick A. Monette) lagory (Kirk E. LaGory)		
nrc.gov OWGWPO03.HQGWDO01 JXD10 CC (Jennifer Davis)		
nrc.gov TWGWPO01.HQGWDO01 PM	Delivered	03/01/2007 1:55:04
AXM7 CC (Alicia Mullins) PM	Opened	03/01/2007 1:55:09
Post Office	Delivered	Route
OWGWPO03.HQGWDO01	Pending	anl.gov
TWGWPO01.HQGWDO01	Pending	nrc.gov
	03/01/2007 1:55:04 PM	nrc.gov
Files	Size	Date & Time
MESSAGE	906	03/01/2007 1:55:04 PM
Susquehanna Comment Tracking2.doc PM	158720	02/28/2007 3:30:02
Susquehanna Comment Bins.doc PM	67072	02/21/2007 6:53:42
Susquehanna Comment Response Summary.doc PM	141312	02/28/2007 3:30:06
Scoping Summary Report-Susquehanna.doc AM	276480	03/01/2007 8:13:04
Options		
Auto Delete:	No	
Expiration Date:	None	
Notify Recipients:	Yes	

Priority:	High
ReplyRequested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard
To Be Delivered:	Immediate
Status Tracking:	Delivered & Opened

April XX, 2007

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

SUBJECT: ISSUANCE OF ENVIRONMENTAL SCOPING SUMMARY
REPORT ASSOCIATED WITH THE STAFF'S REVIEW OF THE
APPLICATION BY PPL SUSQUEHANNA, LLC, FOR RENEWAL
OF THE OPERATING LICENSE FOR SUSQUEHANNA STEAM
ELECTRIC STATION, UNITS 1 AND 2 (SSES)
(TAC NOS. MD3021 AND MD3022)

Dear Mr. McKinney:

The Nuclear Regulatory Commission (NRC) conducted a scoping process, from November 15, 2006 through January 2, 2007, to determine the scope of the NRC staff's environmental review of the application for renewal of the operating license for the SSES. As part of the scoping process, the NRC staff held two public environmental scoping meetings in Berwick, Pennsylvania on November 15, 2006, to solicit public input regarding the scope of the review. The scoping process is the first step in the development of a plant-specific supplement to NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS)," for the SSES.

The NRC staff has prepared the enclosed environmental scoping summary report identifying comments received at the November 15, 2006 license renewal environmental scoping meetings, by letter and by electronic mail. In accordance with 10 CFR 51.29(b), all participants of the scoping process will be provided with a copy of the scoping summary report. The transcripts of the scoping meetings are publicly available at the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS).

The ADAMS Public Electronic Reading Room is accessible at <http://adamswebsearch.nrc.gov/dologin.htm>. The transcripts for the afternoon and evening meetings are listed under Accession Nos. ML063330279 and ML063330281, respectively. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail at pdrr@nrc.gov.

The next step in the environmental review process is the issuance of a draft supplement to the GEIS scheduled for February 2008. Notice of the availability of the draft supplement to the GEIS and the procedures for providing comments will be published in an upcoming *Federal Register* notice.

If you have any questions concerning the NRC staff review of this license renewal application, please contact Mrs. Alicia Mullins, project manager at 301-415-1224 or axm7@nrc.gov.

Sincerely,

Rani Franovich, Branch Chief
Environmental Branch B
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos: 50-387 and 50-388

Enclosure:

1. Scoping Summary Report

cc w/encl: see next page

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If you have any questions concerning the NRC staff review of this license renewal application, please contact Mrs. Alicia Mullins, project manager at 301-415-1224 or axm7@nrc.gov.

Sincerely,

Rani Franovich, Branch Chief
Environmental Branch B
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket Nos: 50-387 and 50-388

Enclosure:

1. Scoping Summary Report

cc w/encl: see next page

Distribution: w/encl. See next page

ADAMS Accession no.: **ML#####**

Document Name: G:\ADRO\DLR\REBB\Susquehanna\Scoping\post meeting\Scoping Summary Report-Susquehanna.wpd

OFFICE	LA:DLR	GS:DLR:REBB	PM:DLR:REBB	OGC	BC:DLR:REBB
NAME		J.Davis	A.Mullins	J.Martin	R.Franovich
DATE	/ /	/ /	/ /	/ /	/ /

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A. Mullins

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C. Dorsey, NRR Technical Communications Assistant

J. Martin (OGC)

S. Uttal (OGC)

**Environmental Impact Statement
Scoping Process**

Summary Report

**Susquehanna Steam
Electric Station
Units 1 & 2
Berwick, Pennsylvania**

April 2007



**U.S. Nuclear Regulatory Commission
Rockville, MD**

Enclosure 1

Introduction

On September 15, 2006, the Nuclear Regulatory Commission (NRC) received an application from PPL Susquehanna, LLC (PPL) dated September 13, 2006, for renewal of the operating licenses of Susquehanna Steam Electric Station, Units 1 and 2 (SSES). The SSES units are located in Luzerne County, Pennsylvania. As part of the application, PPL submitted an environmental report (ER) prepared in accordance with the requirements of 10 CFR Part 51. 10 CFR Part 51 contains the NRC requirements for implementing the National Environmental Policy Act (NEPA) of 1969 and the implementing regulations promulgated by the Council on Environmental Quality (CEQ). Section 51.53 outlines requirements for preparation and submittal of environmental reports to the NRC.

Section 51.53(c)(3) was based upon the findings documented in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," (GEIS). The GEIS, in which the staff identified and evaluated the environmental impacts associated with license renewal, was first issued as a draft for public comment. The staff received input from Federal and State agencies, public organizations, and private citizens before developing the final document. As a result of the assessments in the GEIS, a number of impacts were determined to be small and to be generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts, absent new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be evaluated in the applicant's ER. The Commission determined that the NRC does not have a role in energy planning decision-making for existing plants, which should be left to State regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power, or the economic costs and economic benefits of the proposed action. Additionally, the Commission determined that the ER need not discuss any aspect of storage of spent fuel for the facility that is within the scope of the generic determination in 10 CFR 51.23(a) and in accordance with 10 CFR 51.23(b). This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Rule, 10 CFR 51.23.

On November 2, 2006, the NRC published a Notice of Intent in the *Federal Register* (71 FR 64566), to notify the public of the staff's intent to prepare a plant-specific supplement to the GEIS regarding the renewal application for the Susquehanna operating licenses. The plant-specific supplement to the GEIS will be prepared in accordance with NEPA, CEQ guidelines, and 10 CFR Part 51. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* Notice. The NRC invited the applicant, Federal, State, and local government agencies, local organizations, and individuals to participate in the scoping process by providing oral comments at the scheduled public meetings and/or submitting written suggestions and comments no later than January 2, 2007. The scoping process included two public scoping meetings, which were held at the Eagles Building, 107 South Market Street, Berwick, Pennsylvania, on November 15, 2006. The NRC issued press releases, and distributed flyers locally. Approximately 28 people attended the meetings. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. Following the NRC's prepared statements, the meetings were open for public comments. Two (2) attendees provided either oral comments or written statements that were recorded and transcribed by a certified court reporter. The transcripts of the meetings can be found as an attachment to the meeting summary, which was issued on December 29, 2006.

The meeting summary is available for public inspection in the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is accessible at <http://www.nrc.gov/reading-rm/adams/web-based.html>. The accession number for the meeting summary is ML063470573. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's Public Document Room Reference staff by telephone at 1-800-397-4209, or 301-415- 4737, or by e-mail at pdr@nrc.gov. <http://www.nrc.govmailto:pdr@nrc.gov>.

The scoping process provides an opportunity for public participation to identify issues to be addressed in the plant-specific supplement to the GEIS and highlight public concerns and issues. The Notice of Intent identified the following objectives of the scoping process:

- Define the proposed action
- Determine the scope of the supplement to the GEIS and identify significant issues to be analyzed in depth
- Identify and eliminate peripheral issues
- Identify any environmental assessments and other environmental impact statements being prepared that are related to the supplement to the GEIS
- Identify other environmental review and consultation requirements
- Indicate the schedule for preparation of the supplement to the GEIS
- Identify any cooperating agencies
- Describe how the supplement to the GEIS will be prepared

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and all written material received, and identified individual comments. All comments and suggestions received orally during the scoping meetings or in writing were considered. Each set of comments from a given commenter was given a unique alpha identifier (Commenter ID letter), allowing each set of comments from a commenter to be traced back to the transcript, letter, or email in which the comments were submitted. Comments were consolidated and categorized according to the topic within the proposed supplement to the GEIS or according to the general topic if outside the scope of the GEIS. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for the comment.

Table 1 identifies the individuals providing comments and the Commenter ID letter associated with each person's set(s) of comments. The Commenter ID letter is preceded by MC (short for Meeting Comments). For oral comments, the individuals are listed in the order in which they spoke at the public meeting. Accession numbers indicate the location of the written comments

in ADAMS.

TABLE 1 - Individuals Providing Comments During Scoping Comment Period

#	Comment ID	Issue Category	Comment Source and Adams Accession Number ^(a)
Sue Fracke, Sugarloaf, PA			
1	MC-1-1, D-1-1	A.3 General Radiological Health Effects (Luu)	Evening Scoping Meeting
2	MC-1-2, D-1-2	A.5 Alternatives (Stuyvenberg)	Evening Scoping Meeting
3	MC-1-3, D-1-3	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
4	MC-1-4, D-1-4	A.6 High-Level Radioactive Waste	Evening Scoping Meeting
Eric Epstein, TMI-Alert			
5	MC-2-1	A.2 Purpose and Need for the Proposed Action	Evening Scoping Meeting
6	MC-2-2	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
7	MC-2-3	A.2 Purpose and Need for the Proposed Action	Evening Scoping Meeting
8	MC-2-4	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
9	MC-2-5	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
10	MC-2-6	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
11	MC-2-7	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
12	MC-2-8	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
13	MC-2-9	A.4 Surface Water Quality, Hydrology, and Use (Beissel)	Evening Scoping Meeting
14	MC-2-10	A.1 the License Renewal Process	Evening Scoping Meeting
15	MC-2-11	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
16	MC-2-12	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
17	D-2-1	A.2 Purpose and Need for the Proposed Action	Evening Scoping Meeting
18	D-2-2	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
19	D-2-3	A.6 High-Level Radioactive Waste	Evening Scoping Meeting
20	D-2-4	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
21	D-2-5	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
22	D-2-6	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
23	D-2-7	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
24	D-2-8	A.4 Surface Water Quality, Hydrology, and Use (Beissel)	Evening Scoping Meeting
25	D-2-9	A.7 Issues outside the Environmental Scope of License Renewal	Evening Scoping Meeting
26	D-2-10	A.1 the License Renewal Process	Evening Scoping Meeting

(a) The accession number for the afternoon transcript is ML063330279.
 The accession number for the evening transcripts is ML063330281.
 The accession number for the attachments to the evening transcript is ML070380454.

The comments and suggestions received as part of the scoping process are documented in this section and the disposition of each comment is discussed. Comments are grouped by category. The categories are as follows: **(CONTRACTOR PROVIDES INPUT)**

- A.1 Comments Regarding the License Renewal Process
- A.2 Comments Concerning Purpose and Need for the Proposed Action
- A.3 Comments Concerning General Radiological Health Effects (Luu)
- A.4 Comments Concerning Surface Water Quality, Hydrology, and Use (Beissel)

- A.5 Comments Concerning Alternatives (Stuyvenberg)
- A.6 Comments Concerning High-Level Radioactive Waste.
- A.7 Comments Concerning Issues outside the Environmental Scope of License Renewal:
Operations Safety, Emergency Preparedness; Safeguards and Security; Aging
Management; Need for Power; and Cost of Power; Payment in Lieu of Taxes

Each comment is summarized in the following pages. For reference, the unique identifier for each comment (Commenter ID letter listed in Table 1 plus the comment number) is provided. In those cases where no new environmental information was provided by the commenter, no further evaluation will be performed.

The preparation of the plant-specific supplement to the GEIS (which is the SEIS) will take into account all the relevant issues raised during the scoping process. The SEIS will address both Category 1 and 2 issues, along with any new information identified as a result of scoping. The SEIS will rely on conclusions supported by information in the GEIS for Category 1 issues, and will include the analysis of Category 2 issues and any new and significant information. The draft plant-specific supplement to the GEIS will be made available for public comment. The comment period will offer the next opportunity for the applicant, interested Federal, State, and local government agencies, local organizations, and members of the public to provide input to the NRC's environmental review process. The comments received on the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with the staff's Safety Evaluation Report (SER), will provide much of the basis for the NRC's decision on the PPL Susquehanna, LLC license renewal application.

**Susquehanna Steam Electric Station (SSES), Units 1 and 2
Public Scoping Meeting
Comments and Responses**

(CONTRACTOR PROVIDES INPUT)

[INSERT ENVIRONMENTAL SERVICE LIST-Short list]

Comments by Issue Category

#	Comment ID	Issue Category
Sue Fracke, Sugarloaf, PA		
1	MC-1-1, D-1-1	A.3 General Radiological Health Effects (Luu)
2	MC-1-2, D-1-2	A.5 Alternatives (Stuyvenberg)
3	MC-1-3, D-1-3	A.7 Issues outside the Environmental Scope of License Renewal
4	MC-1-4, D-1-4	A.6 High-Level Radioactive Waste
Eric Epstein, TMI-Alert		
5	MC-2-1	A.2 Purpose and Need for the Proposed Action
6	MC-2-2	A.7 Issues outside the Environmental Scope of License Renewal
7	MC-2-3	A.2 Purpose and Need for the Proposed Action
8	MC-2-4	A.7 Issues outside the Environmental Scope of License Renewal
9	MC-2-5	A.7 Issues outside the Environmental Scope of License Renewal
10	MC-2-6	A.7 Issues outside the Environmental Scope of License Renewal
11	MC-2-7	A.7 Issues outside the Environmental Scope of License Renewal
12	MC-2-8	A.7 Issues outside the Environmental Scope of License Renewal
13	MC-2-9	A.4 Surface Water Quality, Hydrology, and Use (Beissel)
14	MC-2-10	A.1 the License Renewal Process
15	MC-2-11	A.7 Issues outside the Environmental Scope of License Renewal
16	MC-2-12	A.7 Issues outside the Environmental Scope of License Renewal
17	D-2-1	A.2 Purpose and Need for the Proposed Action
18	D-2-2	A.7 Issues outside the Environmental Scope of License Renewal
19	D-2-3	A.6 High-Level Radioactive Waste
20	D-2-4	A.7 Issues outside the Environmental Scope of License Renewal
21	D-2-5	A.7 Issues outside the Environmental Scope of License Renewal
22	D-2-6	A.7 Issues outside the Environmental Scope of License Renewal
23	D-2-7	A.7 Issues outside the Environmental Scope of License Renewal
24	D-2-8	A.4 Surface Water Quality, Hydrology, and Use (Beissel)
25	D-2-9	A.7 Issues outside the Environmental Scope of License Renewal
26	D-2-10	A.1 the License Renewal Process

Number of Comments

Method	Number of comments
Public meeting comments (MC)	16
Written (D)	14
Total	30

Note: Four written comments were submitted by the same person and are identical to comments made in the transcript; **actual total number of comments is 26.**

Draft Susquehanna Scoping Comment Response Summary
February 28, 2007

A.1 Comments Regarding the License Renewal Process

Comment: And finally, we don't really have a lot of confidence in this process. As an organization we were founded in '77. We have been to the Supreme Court twice. We have litigated before the NRC almost nonstop for 30 years in just about every other venue. And as I told some of the NRC employees before, we have no confidence in the Commission or the adjudicatory process. I think the last three relicensing the first three were licensing contentions that were admitted. So that we will participate and we will be involved to the end. But I'm letting you know from the outset really since the implementation of the reactor oversight process we've seen a precipitous decline in the NRC's relationship with the communities, reactor communities. It's a shame. Because we worked hard at Peach Bottom and TMI. Against Susquehanna not as much. (MC-2-10)

Comment:

NRC's industry-driven relicensing process limits public involvement, and disallows debate over factors involving a plant's safety and security record.

PPL is applying for the license renewal so early due to the rubber-stamp approach by the Bush administration's NRC. PPL wants to secure an extension to preempt public challenges over additional safety problems, which tend to increase as plant's age. (D-2-10)

Comment: I really oppose the license extensions for a couple of reasons. Number one is we think it's premature. There's 17 years left on this license. You know, this is a very strange scenario where a license has that much time and you're going to relicense it before some of the aging and safety issues manifest, which happens in an industrial application. That's reality.

Just look at Three Mile Island which obviously came on line ten years earlier. We replaced the reactor vessel head there two years ago and we're going to change out the steam generators. So there are industrial applications that are going to age that we're not going to evaluate, and I think that's a shame. I think we should wait until we get closer to the end of its initial life span.

(Page 22, Lines 9-14) Obviously, and I've raised this before, I think there's age related problems. I would really hope that Susquehanna PPL would think about postponing their relicensing until the plant is closer to the end of its initial useful period. I mean 17 years in my mind makes no sense and it's premature. (MC-2-3)

Comment: Three Mile Island Alert, Inc. (TMIA) announced its decision to oppose PPL's premature request to relicense the Susquehanna Steam Electric Station (SSES) to operate for 20 more years.

TMIA-Alert believes PPL's application is premature. "It would be irresponsible for federal regulators to begin a relicensing process 17 years before the original license expires. PPL wants to secure an extension to preempt public challenges over additional safety problems, which tend to increase as plants age." (D-2-1)

Response: *These comments concern the license renewal process in general. The Nuclear Regulatory Commission is an independent agency, headed by five Commissioners who are*

appointed by the President and confirmed by the Senate. The purpose of the NRC Staff's environmental review is to carefully consider the environmental consequences of renewing an operating license. Additionally, the NRC has a safety review which focuses on managing the aging of structures, systems and components during the renewal term.

The NRC's environmental review process provides many avenues for public participation. As part of the scoping process, the staff held two public meetings seeking comments on the scope of the Environmental Impact Statement (EIS) on (November 15, 2006). Additionally, comments regarding the environmental review and this Draft EIS can be sent by email to SusquehannaEIS@nrc.gov, by phone to the Environmental Project Manager, Alicia Mullins, at 301-415-1224, or by mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001. Additionally, two public meetings will be held regarding the Draft EIS where members of the public can submit comments on the Draft EIS and the environmental review process.

The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license. Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many years in advance of the extended period of operation.

A.2 Comments Concerning Purpose and Need for the Proposed Action

(Moved to A.1 above)

A.3 Comments Concerning General Radiological Health Effects

Comment: Every year 20,000 people die of cancer from naturally occurring background radiation. You would think that this fact alone would be enough to say let us not produce anymore radiation as it will kill more people. With all our other means of making energy, especially all the various kinds of solar energy that we now have the technology to do, it makes no sense to me to use a source of energy that is dangerous and will cause more people to die of cancer and other degenerative diseases.

In the Federal Register December 15, 1982 Part 2 by the Environmental Protection Agency, 40 CFR Part 61 on national emission standards for hazardous air pollutants, radionuclides final rule and notice of reconsideration stated "On December 27, 1979 the EPA listed radionuclides as a hazardous air pollutant. EPA determined that radionuclides are a known cause of cancer and genetic damage and that radionuclides cause or contribute to air pollution that may reasonably be incapacitating and anticipated to result in an increase in mortality or an increase in serious irreversible or incapacitating reversible illness and therefore, constitute a hazardous air pollutant within the meaning of section 112(a)(1). There are three major types of long term health impacts from exposure to radiation. Cancer, hereditary effects and developmental effects on fetus such as mental retardation. In addition, risk distribution from radiation from most of the sources considered for regulation show that fatal cancers occur much more frequently than nonfatal cancers and cancers generally occur more often than genetic or developmental effects." It also states that "numerous studies have demonstrated that radiation is a carcinogen.

It has assumed that there is no completely risk-free level of exposure to radiation to cause cancer." Radiation corrodes metals such as in the pipes of nuclear power plants causing holes that constantly emit radiation in our air under the routine operation of the plants. Radiation is cumulative in our bodies and the effects of exposure can sometimes take many years before showing up. And we were worried that Saddam Hussein had weapons of mass destruction.

Along with radioactive air pollutants, the Environmental Protection Agency reports that in 2002 24,379 U.S. non-nuclear facilities released 4.79 billion pounds toxins into the atmosphere. Of these pollutants, 72 million pounds were known carcinogens. We have no concept of the synergistic effects of these toxins when they are mixed with radioactive pollutants. These toxins impinge on health during your entire life, even before birth. A study in New York City shows that the genetic material in fetuses still in their mother's womb is damaged by air pollution.

From the Radiation and Public Health Project in Norristown, Pennsylvania they have found that current rates of infant deaths, childhood cancer and thyroid cancer all known to be effected by emissions in nuclear reactors are elevated in Luzerne County, the site of the Susquehanna Nuclear Plant.

These findings and other data on local disease rates should be part of the federal decision on whether the U.S. Nuclear Regulatory Commission should approve the application of PPL Susquehanna LLC to operate the plant until 2044. The current license only allows operations until 2024. This information was presented at a federal hearing today in Berwick on the application.

"These high disease rates should shock all Luzerne County residents and they should demand a thorough study of the health risk posed by the Susquehanna plant," said Joseph Mangano, MPH MBA of the Radiation and Public Health Project who presented the data. "If radioactive emissions from the plant have been harmful, people should know this before the government decides whether or not to extend the license."

The 2000-2004 [2003] county rate of white infants who died in their first month was 23 percent above the U.S. rate based on 55 deaths. In that same period 43 Luzerne children under age 15 were diagnosed with cancer, a rate 38 percent above the nation. Data are taken from the National Center for Health Statistics and the Pennsylvania Cancer Registry. (3) (4)

Thyroid cancer statistics may be most alarming. In the late 1980s as the two reactors at Susquehanna were starting the Luzerne rate was 20 percent below the United States. However, in 2000 to 2003 the Luzerne rate was a 100 percent above, double the nation. Radioactive iodine found only in nuclear weapons and reactors seeks the thyroid gland where it kills and impairs cells leading to cancer. (5)

Two large nuclear reactors have operated at Susquehanna beginning in 1982 and 1984 respectively. Virtually all of the 312,000 residents of Luzerne County live within 15 miles of the plant and would be most likely to receive the greatest radiation exposures. Like all reactors, Susquehanna routinely emits gases and particles into the air and water which enters human bodies by breathing and the food chain. There are over 100 radioactive chemicals in this mix, each causes cancer and is especially harmful to fetuses, infants and children.

INFORMATION ON SUSQUEHANNA NUCLEAR PLANT AND LOCAL HEALTH (submitted by commentor, 11/15/06)

1. Susquehanna reactors 1 / 2 went critical (began producing radioactivity) on September 10, 1982 and May 8, 1984, respectively. Source: U.S. Nuclear Regulatory Commission. www.nrc.gov.
2. From January 1, 1999 to September 30, 2006, Susquehanna 1 / 2 operated 91.8% and 93.0% of the time, an all time high. Source: U.S. Nuclear Regulatory Commission, www.nrc.gov. Reactors operated 62345 and 63193 hours out of a maximum 67919.
3. From 2000-2003, 55 Luzerne county whites under 28 days old died out of 11601 live births, a rate of 4.74 per 1000. This rate was 23% greater than the U.S. rate of 3.84. Source: National Center for Health Statistics, <http://wonder.cdc.gov>, underlying cause of death.
4. From 2000-2003, 43 Luzerne county children under age fifteen were diagnosed with cancer. Based on an annual average population of 52,567, the cancer incidence rate was 20.45 per 100,000, which was 38% greater than the U.S. average of 14.78. Sources: PA Cancer Registry (www.state.pa.us) and U.S. Centers for Disease Control (<http://wonder.cdc.gov>, National Association of Cancer Registries – represents 39 states).
5. From 1985-1988 the Luzerne county thyroid cancer incidence rate was 3.54 per 100,000, based on 86 cases, or 20% below the U.S. rate of 4.40. From 2000-2003, the county rate was 16.41, based on 229 cases or 100% above the U.S. rate of 8.20. Sources: PA Cancer registry (www.state.pa.us) and Surveillance Epidemiology and End Results (www.seer.cancer.gov), representing 9 states and cities. (MC-1-1, D-1-1)

Response: *The Nuclear Regulatory Commission's (NRC's) primary mission is to protect the public health and safety and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful health effects of radiation on humans and can be found in 10 CFR Part 20 (Standards for Protection Against Radiation). The limits are based on the recommendations of standards-setting organizations. Radiation standards reflect extensive scientific study by national and international organizations (International Commission on Radiological Protection [ICRP], National Council on Radiation Protection and Measurements [NCRP], United Nations Scientific Committee on the Effects of Atomic Radiation [UNSCEAR], and the National Academy of Sciences [NAS]) and are conservative to ensure that the public and workers at nuclear power plants are protected.*

Health effects from exposure to radiation are dose-dependent, ranging from no effect at all to death. Above certain doses, radiation can be responsible for inducing diseases such as leukemia, breast cancer, and lung cancer. Very high (hundreds of times higher than a rem), short-term doses of radiation have been known to cause prompt (or early, also called "acute") effects, such as vomiting and diarrhea, skin burns, cataracts, and even death.

Although radiation may cause cancers at high doses and high dose rates, currently there are no scientifically conclusive data that unequivocally establish the occurrence of cancer following exposure to low doses and dose rates, below about 0.1 Sv (10 rem). However, radiation protection experts conservatively assume that any amount of radiation may pose some risk of causing cancer or a severe hereditary effect and that the risk is higher for higher radiation

exposures. Therefore, a linear, no-threshold dose response relationship is used to describe the relationship between radiation dose and detriments such as cancer induction. Simply stated, any increase in dose, no matter how small, results in an incremental increase in health risk. This theory is accepted by the NRC as a conservative model for estimating health risks from radiation exposure, recognizing that the model probably over-estimates those risks. Based on this theory, the NRC conservatively establishes limits for radioactive effluents and radiation exposures for workers and members of the public, as found in 10 CFR Part 20.

The amount of radioactive material released from Susquehanna Steam Electric Stations (SSES) is well measured, well monitored, and known to be very small. The total whole body dose from both, ingested radionuclides due to liquid and gaseous releases and direct radiation from SSES, is negligible compared to the public's exposure from natural background radiation, medical irradiation, and radiation from consumer products, of more than 300 millirem per year. The annual radioactive offsite doses, since operational in 1982, from SSES has always been well below the limits as bounded by 10 CFR Part 20. These doses are so low that resulting cancers have not been observed and would not be expected.

Although a number of studies of cancer incidence in the vicinity of nuclear power facilities have been conducted, there are no studies to date that are accepted by the scientific community that show a correlation between radiation dose from nuclear power facilities and cancer incidence in the general public. Specific studies that have been conducted include:

- In 1990, at the request of Congress, the National Cancer Institute conducted a study of cancer mortality rates around 52 nuclear power plants and 10 other nuclear facilities. The study covered the period from 1950 to 1984, and evaluated the change in mortality rates before and during facility operations. The study concluded there was no evidence that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby.
- In June 2000, investigators from the University of Pittsburgh found no link between radiation released during the 1979 accident at Three Mile Island power plant and cancer deaths among nearby residents. Their study followed 32,000 people who lived within five miles of the plant at the time of the accident.
- The Connecticut Academy of Sciences and Engineering, in January 2001, issued a report on a study around the Haddam Neck nuclear power plant in Connecticut and concluded radiation emissions were so low as to be negligible.
- The American Cancer Society in 2001 concluded that although reports about cancer clusters in some communities have raised public concern, studies show that clusters do not occur more often near nuclear plants than they do by chance elsewhere in the population. Likewise, there is no evidence that links Sr-90 with increases in breast cancer, prostate cancer, or childhood cancer rates. Radiation emissions from nuclear power plants are closely controlled and involve negligible levels of exposure for nearby communities.
- Also in 2001, the Florida Bureau of Environmental Epidemiology reviewed claims that there are striking increases in cancer rates in southeastern Florida counties caused by increased radiation exposures from nuclear power plants. However, using the same data to reconstruct the calculations on which the claims were based, Florida officials were not

able to identify unusually high rates of cancers in these counties compared with the rest of the state of Florida and the nation.

- In 2000, the Illinois Public Health Department compared childhood cancer statistics for counties with nuclear power plants to similar counties without nuclear plants and found no statistically significant difference.

The NRC has noted the comment. The NRC has found that the comment is general in nature, provides no new and significant information and, therefore, no further actions will be taken for this comment.

A.4 Comments Concerning Surface Water Quality, Hydrology, and Use

Comment: Water supplies. I did talk to a gentleman from PPL. In the interest of open disclosure, we met with the Susquehanna River Basin Commission in Pennsylvania and especially the DEP is going through a statewide exercise in water use management. So a lot of what we do tonight may be moot in terms of FERC and also the Susquehanna River Basin Commission may rule. Again, in terms of open disclosure I've already stated to the Basin Commission we're going to oppose the license extension until in our view you view water as a commodity. It doesn't just evaporate. It comes from somewhere.

Everyday about 30 million gallons are taken from the river and not returned. That's even during a drought. That's not being a good neighbor. You know, when we're being asked to conserve water and the plant keeps churning the water, there has to be a balance. We're not saying you can't use the water, but you have to moderate your use and pay your fair share. So I think that's an issue that may not even be relevant to this particular venue, but an issue we will raise. (MC-2-9)

Comment: The magnitude of the amount of water used at a nuclear power plant is readily evidenced at the SSES every day. The Susquehanna Steam Electric Station loses 14.93 million gallons of water per unit daily as vapor out of the cooling tower stack. Eleven million gallons per day are returned to the river as cooling-tower basin blow down. On average, 29.86 million gallons per day are taken from the river and not returned; even during periods of drought! (PPL, Pennsylvania Environmental Permit Report.) (D-2-8)

Response: The amount of consumptive water used by the plant is regulated through the Susquehanna River Basin Commission (SRBC), which manages water usage along the entire length of the river. The current permit granted to SSES is for consumptive usage of up to 40 MGD (permit # 19950301 EPUL-0578). SSES has submitted an application to the SRBC to increase the amount of consumptive water usage to 44 MGD. The SRBC is reviewing the application and will make a decision independent of the NRC with regard to the modification of their current permit to reflect the increased consumptive water usage. SSES is required to adhere to the water usage limits set by the permit and any mitigative measures set by the SRBC for continued operation of the facility.

A.5 Comments Concerning Alternatives

Comment: California closed down the Diablo County Nuclear Plant many years ago. Through conservation solar and other forms of energy they created over 800 new jobs and lowered their rates. Nuclear power is only 19 percent of our energy in the United States. Through conservation and solar we could close down all the nuclear power plants in our country and

save thousands of lives. I know those little candlelights look cute at night in your windows. But they aren't really necessary. Turning them off may help save someone's life, maybe your child's.

Anyway who wants nuclear power plants, and our President wants 55 more in this country, should be considered a terrorist. (MC-1-2, D-1-2)

Response: *Decisions regarding energy policy and energy planning, including whether to implement energy options like solar power, conservation, or even nuclear power, are made by State and utility-level decisionmakers, as well as some other Federal decisionmakers. These decisions are based on economics, energy reliability goals, and other objectives over which the other entities may have jurisdiction. The NRC does not have authority to make these decisions. During license renewal, the NRC does, however, conduct an environmental review that compares the potential environmental impacts of a nuclear plant during the period of extended operation to the environmental impacts of energy alternatives as part of the National Environmental Policy Act process. This alternatives analysis may include consideration of conservation or solar power when reasonable, often in combination with other alternatives. If NRC decides to renew a plant's license, the decision of whether to operate the nuclear power plant or an alternative is left up to the appropriate State, utility, or Federal entity. In addition to an environmental review, NRC staff also evaluates nuclear plant safety and aging management in the course of license renewal.*

The staff notes that Diablo Canyon Units 1 and 2 are currently still in operation, as are San Onofre Units 2 and 3. In California, the Santa Susana SRE (Sodium Reactor Experimental), Vallecitos Nuclear Power Plant, Humboldt Bay Nuclear Power Plant, Rancho Seco Nuclear Power Plant, and San Onofre Unit 1 are no longer operating.

Comment: I'm saying that because Pennsylvania is primarily a coal and nuclear state. And I think we made a mistake before when we became so dependent on two sources of energy. So my plea is that we rationally evaluate relicensing and then think how we're going to meet future energy demand as we move forward. (MC-2-1)

Response: *Decisions about energy policy and energy planning, including choosing an energy generation mix (sometimes referred to as a generation "portfolio"), fall under the authority of State or utility-level decisionmakers, and, in some places, other Federal decisionmakers aside from the NRC. These entities may also decide which energy generation options to implement in order to meet future energy demand. The NRC does not have authority or jurisdiction in energy policy, planning, or deciding whether to implement particular energy generation options.*

A.6 Comments Concerning High-Level Radioactive Waste

Comment: Does everyone realize that our new plants are also becoming high level waste sites? Everyone's life is at stake here. Do what's right. Shut them down. (MC-1-4, D-1-4)

Comment: TMI-Alert will vigorously oppose relicensing until PPL...secures radioactive waste...
7. No permanent storage of waste:

The Susquehanna nuclear power plant produces approximately 30 metric tons of high-level radioactive waste per year per reactor. The nuclear garbage has no forwarding address. In reality, the SSES is a *de facto* high-level radioactive waste site on the Susquehanna River. There is no solution in sight for disposal of highly radioactive "spent" fuel rods, although the National Academy of Sciences and other technical experts argue that moving all radioactive

waste into hardened, dry storage would reduce the risks associated with current high-density cooling ponds at each plant. Susquehanna is one of 21 nuclear power plants where used reactor fuel pools have reached capacity. (D-2-3)

Response: *Onsite storage of spent nuclear fuel was reviewed in depth and found to be a Category 1 issue, meaning that the environmental impacts for any facility applying for license renewal would be SMALL. The safety and environmental effects of long-term storage of spent fuel onsite have been evaluated by the NRC and, as set forth in the Waste Confidence Rule (10 CFR 51.23), the NRC generically determined that such storage could be accomplished without significant environmental impact. In the Waste Confidence Rule, the Commission determined that spent fuel can be stored onsite for at least 30 years beyond the plants life, including license renewal. At or before the end of that period, the fuel would be moved to a permanent repository. The GEIS, NUREG-1437 is based upon the assumption that storage of the spent fuel onsite is not permanent. The plant-specific supplement to the GEIS that will be prepared regarding license renewal for SSES will be based on the same assumption.*

A.7 Comments Concerning Issues outside the Environmental Scope of License Renewal: Operations Safety, Emergency Preparedness; Safeguards and Security; Aging Management; Need for Power; and Cost of Power; Payment in Lieu of Taxes

Comment: We are also using depleted uranium bombs in Iraq. Both our soldiers and the Iraqis are being exposed. Many of the Iraqi children are getting leukemia. Remember the Gulf War Syndrome? Our soldiers were exposed then, too, and many of their children had birth defects and many of the soldiers got very sick and our government didn't want to tell them why. Who is the terrorist? (MC-1-3, D-1-3)

Response: This comment is related to the effects of radiation from the use of depleted uranium munitions by U.S. Armed forces overseas, which is not subject to NRC regulation. The NRC's mission is to protect people and the environment from radiological releases for facilities under its jurisdiction. The NRC's role in reviewing an application for license renewal is to determine if a nuclear power facility can be operated in a manner which does not pose a threat to public health and safety during the renewal term.

Comment: In addition, I look forward to the site specific environmental impact statement. I think that's a real healthy tool, and I applaud the NRC for doing it. It really is. Because when you get shoved in some generic cookie cutter process, some individual elements get left out. For example, at TMI when we do emergency planning, we have to include the Amish. It's pretty hard to contact people that don't use phones.

So this community is also, you know, interesting with ~~litter~~ water use, which is a big issue here given acid mine drainage. So I applaud the NRC for doing that and look forward to a transcript.

There are nine issues that we have relicensing, we'll be frank. We have been in court for four years with the Commonwealth and with PIMA regarding emergency planning for special needs populations. We have not found any evidence that remotely indicates that any of the nuclear utilities have adequate emergency planning in place for day care and nursery school.

And let me jump back. We lived through Three Mile Island. My sister was evacuated. It was a nightmare. It didn't work. The reason I'm telling you this is when we really took emergency planning seriously in the '80s, there really weren't a lot of day care or nursery school or elder

hostel, or older facilities. So what we did at TMI was file a petition five years ago, we're still working on it but it's clear that this plant neither has the adequate resources to plan for day care and nursery school, which are a significant population. Alzheimer's homes, prison populations, essentially non-ambulatory populations.

And we've kind of known each other through this litigation. The Pennsylvania Attorney General has put suit at the GAO. And I think we'll win. However, I think this is a solvable problem. I've extended myself to PPL. And I think the issue for special needs populations having a transportation contract, a transportation route and a place to take the kids. Neither of those exist. That's scandalous. Scandalous.

The same thing exists with the hospitals. Any hospital that is within ten miles, if you ask them what is your plan in the event of an accident. Well, they're not going to move the entire population. And these are things that we can work on together to solve. But we're not going to let them go, and this is an opportunity to flush them out.

(Pages 23 & 24, Lines 25 and 1-5) In addition to that we supply free of charge KI, potassium iodine to anybody in the community. We don't believe there's an invisible lead curtain ten miles from a plant. That's bizarre, to say the least.

We assist people with emergency planning. (MC-2-4)

Comment: Mr. Epstein has sued the NRC, FEMA and the Department of Justice, "to compel PPL to provide radiological emergency plans that include nursery schools, day care facilities, and senior citizen residences."

1. PPL has failed to provide workable emergency plans for "special needs" populations living within ten miles of the SSES.

Mr. Epstein, Chairman of TMI-Alert, sued FEMA, the NRC and the Department of Justice to compel all Pennsylvania nuclear utilities to provide emergency planning for the most vulnerable populations living near reactors. The Pennsylvania Attorney General referred the case to the United States Government Accountability Office on Sept. 14, 2006. (D-2-5)

Response: *The Commission considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR Part 54, which included public notice and comment. As discussed in the Statement of Considerations for rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. Requirements related to emergency planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to plants with renewed licenses. Through its standards and required exercises, the Commission reviews existing emergency preparedness plans throughout the life of any plant, keeping up with changing demographics and other site-related factors. Therefore, the Commission has determined that there is no need for a special review of emergency planning issues in the context of an environmental review for license renewal. The NRC's environmental review is limited to environmental matters relevant to the extended period of operation requested by the applicant.*

Comment: 4. Safeguards and terrorism:

Since 9-11, nuclear plants have been recognized as terrorist targets, but Susquehanna is unprepared. There are measures that could mitigate risks of various attacks by air, water and ground, but the industry has lobbied NRC not to adopt them, in order to keep costs down. (D-2-6)

Comment: Safeguards and terrorism, there's not much we can do. We have a petition before the NRC for five years. Talk about lightening quick reception. At TMI we were the only plant that had a real security threat, I would say, in terms of an intruder challenge in '93. We also had a terrorist training ground in Perry County. So I think there's a lot more that can be done with safeguards and terrorism.

To PPL's credit I think they probably have one of the better protocols of the five plants in the state. But I would just say this: Your training force or your security is only as good as your training force. And if you continue to lay people off, force them to work overtime, it's hard to be alert. (MC-2-7)

Response: *Security issues such as safeguards planning are not tied to license renewal, but are considered to be issues that need to be dealt with constantly as a part of the current operating licenses. Security issues are periodically reviewed and updated (and extended) at every operating plant. These reviews will continue throughout the period of any extended license. If issues related to security are discovered during the review process, they would be addressed immediately, and any necessary changes reviewed and incorporated under the operating license, rather than waiting for the period of extended operation. The NRC's environmental review is limited to environmental matters relevant to the extended period of operation requested by the applicant. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans. Any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed under the operating license.*

Comment: By the way, the group I'm representing tonight is Three Mile Island Alert. Just to show you our ability to be flexible, we have settlement negotiations with PPL, with FirstEnergy, with PECO, and with Exelon. We've established radiation monitoring networks around TMI. In fact, we're the only entity, not the federal government, not the state government, the FMR, my business which is nonprofit, is the only entity in the state that does real time monitoring, gamma monitoring 24/7/365. My staff, yes, it's pro-nuclear. I got a lot of crap for that, but if you want to know how to monitor a nuclear plant, you need people who used to work there.

So we're willing to monitor it. We're willing to deal. But we're not willing to have something shoved down our throats.

We have the same program in place at Peach Bottom. I've told executives at PPL we're more than willing to do it here. It takes money. Again, it would be real time gamma monitoring. (MC-2-11)

Response: *The radiological impacts of license renewal are addressed in Section 4.3. As part of NRC's requirements for operating a nuclear power plant, licensees must keep releases of radioactive material to unrestricted areas during normal operation as low as reasonably achievable (as described in the Commission's regulations in 10 CFR Part 50.36a), and comply with radiation dose limits for the public (10 CFR Part 20).*

In addition, NRC regulations require licensees to have effluent and environmental monitoring programs in place to ensure that the impacts from plant operations are minimized. The permitted effluent releases result in very small doses to members of the public living around nuclear power plants.

The NRC requires licensees to report plant discharges and results of environmental monitoring around their plants to ensure that potential impacts are detected and reviewed. Licensees must also participate in an interlaboratory comparison program which provides an independent check of the accuracy and precision of environmental measurements.

In annual reports, licensees identify the amount of liquid and airborne radioactive effluents discharged from plants and the associated doses. Licensees also must report environmental radioactivity levels around their plants annually. These reports, available to the public, cover sampling from thermoluminescent dosimeters (TLDs); airborne radioiodine and particulate samplers; samples of surface, groundwater, and drinking water and downstream shoreline sediment from existing or potential recreational facilities; and samples of ingestion sources such as milk, fish, invertebrates, and broad leaf vegetation.

The NRC conducts periodic onsite inspections of each licensee's effluent and environmental monitoring programs to ensure compliance with NRC requirements. The NRC documents licensee effluent releases and the results of their environmental monitoring and assessment effort in inspection reports that are available to the public.

The NRC staff believes that these monitoring programs would be sufficient to ensure the protection of people and the environment during the renewal term. Agreements between the applicant and other organizations to engage in additional monitoring programs are outside of the scope of the NRC's environmental review process.

Comment: I think the people that work at the plant are your best asset. I know at TMI and Peach Bottom we're losing them. Everybody's 50 and out. I hope that doesn't happen here. I think each plant has its own historical memory, that workers are valuable. More than happy to see you hire more people, frankly. (MC-2-12)

Response: *In the environmental review process, the socioeconomic effects of employment are addressed only as they relate to impacts to the environment and the ability of public services to meet user needs. The economic costs and benefits of license are outside the scope of environmental review as stated in 10 CFR 51.95(c)(2), and are not required to be addressed in the SEIS.*

Comment: 8. Age-related safety problems will increase:

Susquehanna was designed to last for 40 years, but many systems and components are already being stressed by radiation, high heat and pressures, and other factors. U.S. plants are suffering from corrosion, large component failures, original design flaws and other unresolved safety issues. At least a dozen U.S. plants have recently discovered radioactive tritium leakage into groundwater from pipes or cooling pools. (D-2-9)

Response: *Operational safety, reactor operator and other employee qualifications, training, security and emergency preparedness are important elements of the NRC's regulatory program, but are*

outside the scope of this environmental review. An NRC safety review for the license renewal period is conducted separately. Although a topic may not be within the scope of the environmental review for license renewal, the NRC is always concerned with protecting public health and safety. Any matter potentially affecting safety, including the capability to respond to unusual events or malevolent acts and including operational safety, will be addressed under processes currently available for existing operating licenses regardless of whether a license renewal application has been submitted.

Comment: Financial stability is another issue we're going after. I have been involved with nuclear decommissioning with this company since its inception. It's a farce. It's a farce.

I'm going to tell you right now nuclear decommissioning costs have escalated by 553 percent from 1981 to 2003. I've cross examined your witnesses. I've done the math. Everybody knows it's a farce. In fact, you have an agreement with me right now that for every dollar over, 4 cents has to come from the shareholder. Now that's a reasonable start.

The problem is, and I tried to address this earlier, is 10 percent of your decommissioning comes from the Rural Electric Cooperative. You want to talk about a joke? When I cross examined their financial officer I said -- his name is Lawrence Bladen. I said "How are you planning for decommissioning?" He said "Greenfield." Greenfield is the site -- I mean, it's criminal. And that's what I'm saying, what's this other 10 percent, what's this partner doing it? It's a Rural Electric Cooperative. They have grossly under funded. So even if PPL does the right thing, it's fully funded, their partner's not even remotely close to bringing their share into play.

Right now -- and remember, when we first got involved with this the cost kept going up and up and up. Right now the company is estimating nuclear decommissioning at about a billion dollars. Now that's not factoring the rad waste, which is the main issue, which is going to come into play with 20 more years.

Again what I'm saying to you as the nuclear economists, let's think this through. Should people who didn't derive a benefit pay for the garbage? I'm a big person of equity. If you buy something, you pay for it now. If you build something, if you benefitted, you're responsible. Well, let's just be risk reward about it. (MC-2-6)

Comment: TMI-Alert will vigorously oppose relicensing until PPL ...proves it has the financial resources to decommission the plant.

3. Financial stability:

PPL can not predict with any degree of confidence how much it will cost to clean up the rad waste site after the plant closes. Projected costs for nuclear decommissioning of Susquehanna have increased by at least 553% between 1981 and 2003.

In 1981 PP&L predicted that its share to decommission SSES was between \$135 and \$191 million. By 1985 the cost estimate had climbed to \$285 million. And by 1991, the cost in 1988 dollars for the "radioactive portion" of decommissioning was \$350 million.

The company's contractor conducted a site-specific study which projected that the cost of decommissioning would be \$725 million in 1993 dollars. The 1994 cost estimate remained steady at \$724 million, but the market value of securities held and accrued in income in the trust funds declined, and thus the estimate reflected another increase in decommissioning costs (PP&L Base Rate Case, Page, 1016, Lines 7-27 and Page 1017, Lines 1-24).

By 2006 PPL projected costs to decommission Susquehanna to be almost \$1 billion. (D-2-4)

Comment: My main participation with Susquehanna since the early '80s has been rate cases. I'm an expert witness on nuclear decommissioning, and I want to get to that in a minute. But probably the thing that concerns me more than anything about nuclear power has been the economics. Part of the settlement we had with PPL allowed for the company to recover 2.97 billion in stranded costs, on economical costs associated with nuclear power production.

I'm an economist. And whether it's nuclear power, solar or wind I've always dreamed for the day that the merits would be judged by the marketplace. We're not there yet. MC-2-2

Response: *As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because these comments are not within the scope of license renewal and provide no new information, it will not be evaluated in this SEIS.*

Comment: Two of the issues are environmental justice issues, and I feel really strongly about this. Susquehanna used to be appraised at up to \$2 billion. They have basically taken tax money out of this community. The plant now is appraised at \$56 million, which is \$18 million less than the Columbia Hospital. That's scandalous.

When we had a handshake deal in '99 we were told, and this is what I was told, "Eric, we're going to pay less and your communities are going to get more." The old formula was ridiculous. It was PERDA. And as soon as that occurred, and this happened at Burr Island, too, where they didn't pay their taxes for two years. The same thing has happened in this community. And I think this is an environmental justice issue.

All I'm asking for is a risk reward formula. If you're going to operate the plant, you're going to be profitable. Pay your fair share of taxes. (MC-2-5)

Comment: Number five, and I'll leave a copy of this here, is another social issue, a social justice issue. I believe PPL's planning to uprate capacity, which has all kinds of economic impacts. They did it the last time. I think it was back in 2001 with \$120 million investment. I get their annual report. I'm a shareholder. I'm doing okay.

It said the 120 million in improvements to Susquehanna are expected to add earnings as soon as they go into operation. This was the same year that PPL devalued their plants and started paying less. Again, it's a risk reward formula. If you're going to operate a nuclear power plant, and we do need the energy, pay your fair share of taxes, all right. (MC-2-8)

Comment: TMI-Alert will vigorously oppose relicensing until PPL pays its back taxes...

2. Tax break for the rich:

PPL pledged that tax revenues would increase for local communities after deregulation. In fact, the opposite has occurred. The "old version" of the plant was valued at \$800 million in 1998 and 1999. The "new" SSES valuation in 2001 was approximately \$160 million. The actual valuation of the plant, or the amount PPL is paying taxes on, is \$56 million. Yet, PPL is collecting \$2.97 billion in rate recoveries for cost overruns associated with the construction of Susquehanna. There is no replacement revenue for local governmental bodies and schools, and local property owners are paying for PPL's tax breaks. (D-2-2)

Comment: 5. Uprates for shareholders:

PPL has requested permission to amp up the capacity of the plant, even though they believe it's worth only \$56 million. Last time PPL announced it was planning to increase capacity, shareholders hit the jackpot. In a Petition to the NRC to increase capacity by 100 megawatts PPL said "The \$120 million in improvements at the Susquehanna plant are expected to add earnings as soon as they go into operation" (PPL, April 23, 2001). (D-2-7)

Response: *As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because these comments are not within the scope of license renewal and provide no new information, they will not be evaluated in this SEIS.*

Key:

MC-1-1: MC – Meeting Comment, Commentor 1, Comment 1

D-1-1: D – Document, Commentor 1, Comment 1

Comments by Issue Category

#	Comment ID	Issue Category
Sue Fracke, Sugarloaf, PA		
1	MC-1-1, D-1-1	A.3 General Radiological Health Effects (Luu)
2	MC-1-2, D-1-2	A.5 Alternatives (Stuyvenberg)
3	MC-1-3, D-1-3	A.7 Issues outside the Environmental Scope of License Renewal
4	MC-1-4, D-1-4	A.6 High-Level Radioactive Waste
Eric Epstein, TMI-Alert		
5	MC-2-1	A.2 Purpose and Need for the Proposed Action
6	MC-2-2	A.7 Issues outside the Environmental Scope of License Renewal
7	MC-2-3	A.2 Purpose and Need for the Proposed Action
8	MC-2-4	A.7 Issues outside the Environmental Scope of License Renewal
9	MC-2-5	A.7 Issues outside the Environmental Scope of License Renewal
10	MC-2-6	A.7 Issues outside the Environmental Scope of License Renewal
11	MC-2-7	A.7 Issues outside the Environmental Scope of License Renewal
12	MC-2-8	A.7 Issues outside the Environmental Scope of License Renewal
13	MC-2-9	A.4 Surface Water Quality, Hydrology, and Use (Beissel)
14	MC-2-10	A.1 the License Renewal Process
15	MC-2-11	A.7 Issues outside the Environmental Scope of License Renewal
16	MC-2-12	A.7 Issues outside the Environmental Scope of License Renewal
17	D-2-1	A.2 Purpose and Need for the Proposed Action
18	D-2-2	A.7 Issues outside the Environmental Scope of License Renewal
19	D-2-3	A.6 High-Level Radioactive Waste
20	D-2-4	A.7 Issues outside the Environmental Scope of License Renewal
21	D-2-5	A.7 Issues outside the Environmental Scope of License Renewal
22	D-2-6	A.7 Issues outside the Environmental Scope of License Renewal
23	D-2-7	A.7 Issues outside the Environmental Scope of License Renewal
24	D-2-8	A.4 Surface Water Quality, Hydrology, and Use (Beissel)
25	D-2-9	A.7 Issues outside the Environmental Scope of License Renewal
26	D-2-10	A.1 the License Renewal Process

Number of Comments

Method	Number of comments
Public meeting comments (MC)	16
Written (D)	14
Total	30

Note: Four written comments were submitted by the same person and are identical to comments made in the transcript; **actual total number of comments is 26.**

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MC-1-1 (1)	D-1-1	A.3 Radiological Health Effects	<p>Every year 20,000 people die of cancer from naturally occurring background radiation. You would think that this fact alone would be enough to say let us not produce anymore radiation as it will kill more people. With all our other means of making energy, especially all the various kinds of solar energy that we now have the technology to do, it makes no sense to me to use a source of energy that is dangerous and will cause more people to die of cancer and other degenerative diseases.</p> <p>In the <u>Federal Register</u> December 15, 1982 Part 2 by the Environmental Protection Agency, 40 CFR Part 61 on national emission standards for hazardous air pollutants, radionuclides final rule and notice of reconsideration stated "On December 27, 1979 the EPA listed radionuclides as a hazardous air pollutant. EPA determined that radionuclides are a known cause of cancer and genetic damage and that radionuclides cause or contribute to air pollution that may reasonably be incapacitating and anticipated to result in an increase in mortality or an increase in serious irreversible or incapacitating reversible illness and therefore, constitute a hazardous air pollutant within the meaning of section 112(a)(1). There are three major types of long term health impacts from exposure to radiation. Cancer, hereditary effects and developmental effects on fetus such as mental retardation. In addition, risk distribution from radiation from most of the sources considered for regulation show that fatal cancers occur much more frequently than nonfatal cancers and cancers generally occur more often than genetic or developmental effects." It also states that "numerous studies have demonstrated that radiation is a carcinogen. It has assumed that there is no completely risk-free level of exposure to radiation to cause cancer." Radiation corrodes metals such as in the pipes of nuclear power plants causing holes that constantly emit radiation in our air under the routine operation of the plants. Radiation is cumulative in our bodies and the effects of exposure can sometimes take many years before showing up. And we were worried that Saddam Hussein had weapons of mass destruction.</p> <p>Along with radioactive air pollutants, the Environmental Protection Agency reports that in 2002 24,379 U.S. non-nuclear facilities released 4.79 billion pounds toxins into the atmosphere. Of these pollutants, 72 million pounds were known carcinogens. We have no concept of the synergistic effects of these toxins when they are mixed with radioactive pollutants. These toxins impinge on health during your entire life, even before birth. A study in New York City shows that the genetic material in fetuses still in their mother's womb is damaged by air pollution.</p>	<p><i>The Nuclear Regulatory Commission's (NRC's) primary mission is to protect the public health and safety and the environment from the effects of radiation from nuclear reactors, materials, and waste facilities. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful health effects of radiation on humans and can be found in 10 CFR Part 20 (Standards for Protection Against Radiation). The limits are based on the recommendations of standards-setting organizations. Radiation standards reflect extensive scientific study by national and international organizations (International Commission on Radiological Protection [ICRP], National Council on Radiation Protection and Measurements [NCRP], United Nations Scientific Committee on the Effects of Atomic Radiation [UNSCEAR], and the National Academy of Sciences [NAS]) and are conservative to ensure that the public and workers at nuclear power plants are protected.</i></p> <p><i>Health effects from exposure to radiation are dose-dependent, ranging from no effect at all to death. Above certain doses, radiation can be responsible for inducing diseases such as leukemia, breast cancer, and lung cancer. Very high (hundreds of times higher than a rem), short-term doses of radiation have been known to cause prompt (or early, also called "acute") effects, such as vomiting and diarrhea, skin burns, cataracts, and even death.</i></p> <p><i>Although radiation may cause cancers at high doses and high dose rates, currently there are no scientifically conclusive data that unequivocally establish the occurrence of cancer following exposure to low doses and dose rates, below about 0.1 Sv (10 rem). However, radiation protection experts conservatively assume that any amount of radiation may pose some risk of causing cancer or a severe hereditary effect and that the risk is higher for higher radiation exposures. Therefore, a linear, no-threshold dose response relationship is used to describe the relationship between radiation dose and detriments such as cancer induction. Simply stated, any</i></p>

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			<p>From the Radiation and Public Health Project in Norristown, Pennsylvania they have found that current rates of infant deaths, childhood cancer and thyroid cancer all known to be effected by emissions in nuclear reactors are elevated in Luzerne County, the site of the Susquehanna Nuclear Plant.</p> <p>These findings and other data on local disease rates should be part of the federal decision on whether the U.S. Nuclear Regulatory Commission should approve the application of PPL Susquehanna LLC to operate the plant until 2044. The current license only allows operations until 2024. This information was presented at a federal hearing today in Berwick on the application.</p> <p>"These high disease rates should shock all Luzerne County residents and they should demand a thorough study of the health risk posed by the Susquehanna plant," said Joseph Mangano, MPH MBA of the Radiation and Public Health Project who presented the data. "If radioactive emissions from the plant have been harmful, people should know this before the government decides whether or not to extend the license."</p> <p>The 2000-2004 [2003] county rate of white infants who died in their first month was 23 percent above the U.S. rate based on 55 deaths. In that same period 43 Luzerne children under age 15 were diagnosed with cancer, a rate 38 percent above the nation. Data are taken from the National Center for Health Statistics and the Pennsylvania Cancer Registry. (3) (4)</p> <p>Thyroid cancer statistics may be most alarming. In the late 1980s as the two reactors at Susquehanna were starting the Luzerne rate was 20 percent below the United States. However, in 2000 to 2003 the Luzerne rate was a 100 percent above, double the nation. Radioactive iodine found only in nuclear weapons and reactors seeks the thyroid gland where it kills and impairs cells leading to cancer. (5)</p> <p>Two large nuclear reactors have operated at Susquehanna beginning in 1982 and 1984 respectively. Virtually all of the 312,000 residents of Luzerne County live within 15 miles of the plant and would be most likely to receive the greatest radiation exposures. Like all reactors, Susquehanna routinely emits gases and particles into the air and water which enters human bodies by breathing and the food chain. There are over 100 radioactive chemicals in this mix, each causes cancer and is especially harmful to fetuses, infants and children.</p>	<p><i>increase in dose, no matter how small, results in an incremental increase in health risk. This theory is accepted by the NRC as a conservative model for estimating health risks from radiation exposure, recognizing that the model probably over-estimates those risks. Based on this theory, the NRC conservatively establishes limits for radioactive effluents and radiation exposures for workers and members of the public, as found in 10 CFR Part 20.</i></p> <p><i>The amount of radioactive material released from Susquehanna Steam Electric Stations (SSES) is well measured, well monitored, and known to be very small. The total whole body dose from both, ingested radionuclides due to liquid and gaseous releases and direct radiation from SSES, is negligible compared to the public's exposure from natural background radiation, medical irradiation, and radiation from consumer products, of more than 300 millirem per year. The annual radioactive offsite doses, since operational in 1982, from SSES has always been well below the limits as bounded by 10 CFR Part 20. These doses are so low that resulting cancers have not been observed and would not be expected.</i></p> <p><i>Although a number of studies of cancer incidence in the vicinity of nuclear power facilities have been conducted, there are no studies to date that are accepted by the scientific community that show a correlation between radiation dose from nuclear power facilities and cancer incidence in the general public. Specific studies that have been conducted include:</i></p> <ul style="list-style-type: none"> <i>In 1990, at the request of Congress, the National Cancer Institute conducted a study of cancer mortality rates around 52 nuclear power plants and 10 other nuclear facilities. The study covered the period from 1950 to 1984, and evaluated the change in mortality rates before and during facility operations. The study concluded there was no evidence that nuclear facilities may be linked causally with excess deaths from leukemia or</i>

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			<p>INFORMATION ON SUSQUEHANNA NUCLEAR PLANT AND LOCAL HEALTH (submitted by commentor, 11/15/06)</p> <p>1. Susquehanna reactors 1 / 2 went critical (began producing radioactivity) on September 10, 1982 and May 8, 1984, respectively. Source: U.S. Nuclear Regulatory Commission. www.nrc.gov.</p> <p>2. From January 1, 1999 to September 30, 2006, Susquehanna 1 / 2 operated 91.8% and 93.0% of the time, an all time high. Source: U.S. Nuclear Regulatory Commission, www.nrc.gov. Reactors operated 62345 and 63193 hours out of a maximum 67919.</p> <p>3. From 2000-2003, 55 Luzerne county whites under 28 days old died out of 11601 live births, a rate of 4.74 per 1000. This rate was 23% greater than the U.S. rate of 3.84. Source: National Center for Health Statistics, http://wonder.cdc.gov, underlying cause of death.</p> <p>4. From 2000-2003, 43 Luzerne county children under age fifteen were diagnosed with cancer. Based on an annual average population of 52,567, the cancer incidence rate was 20.45 per 100,000, which was 38% greater than the U.S. average of 14.78. Sources: PA Cancer Registry (www.state.pa.us) and U.S. Centers for Disease Control (http://wonder.cdc.gov, National Association of Cancer Registries – represents 39 states).</p> <p>5. From 1985-1988 the Luzerne county thyroid cancer incidence rate was 3.54 per 100,000, based on 86 cases, or 20% below the U.S. rate of 4.40. From 2000-2003, the county rate was 16.41, based on 229 cases or 100% above the U.S. rate of 8.20. Sources: PA Cancer registry (www.state.pa.us) and Surveillance Epidemiology and End Results (www.seer.cancer.gov), representing 9 states and cities.</p>	<p>from other cancers in populations living nearby.</p> <ul style="list-style-type: none"> In June 2000, investigators from the University of Pittsburgh found no link between radiation released during the 1979 accident at Three Mile Island power plant and cancer deaths among nearby residents. Their study followed 32,000 people who lived within five miles of the plant at the time of the accident. The Connecticut Academy of Sciences and Engineering, in January 2001, issued a report on a study around the Haddam Neck nuclear power plant in Connecticut and concluded radiation emissions were so low as to be negligible. The American Cancer Society in 2001 concluded that although reports about cancer clusters in some communities have raised public concern, studies show that clusters do not occur more often near nuclear plants than they do by chance elsewhere in the population. Likewise, there is no evidence that links Sr-90 with increases in breast cancer, prostate cancer, or childhood cancer rates. Radiation emissions from nuclear power plants are closely controlled and involve negligible levels of exposure for nearby communities. Also in 2001, the Florida Bureau of Environmental Epidemiology reviewed claims that there are striking increases in cancer rates in southeastern Florida counties caused by increased radiation exposures from nuclear power plants. However, using the same data to reconstruct the calculations on which the claims were based, Florida officials were not able to identify unusually high rates of cancers in these counties compared with the rest of the state of Florida and the nation. In 2000, the Illinois Public Health Department

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				<p>compared childhood cancer statistics for counties with nuclear power plants to similar counties without nuclear plants and found no statistically significant difference.</p> <p>The NRC has noted the comment. The NRC has found that the comment is general in nature, provides no new and significant information and, therefore, no further actions will be taken for this comment.</p>
MC-1-2 (2)	D-1-2	A.5 Alternatives	<p>California closed down the Diablo County Nuclear Plant many years ago. Through conservation solar and other forms of energy they created over 800 new jobs and lowered their rates. Nuclear power is only 19 percent of our energy in the United States. Through conservation and solar we could close down all the nuclear power plants in our country and save thousands of lives. I know those little candlelights look cute at night in your windows. But they aren't really necessary. Turning them off may help save someone's life, maybe your child's.</p> <p>Anyway who wants nuclear power plants, and our President wants 55 more in this country, should be considered a terrorist.</p>	<p>Decisions regarding energy policy and energy planning, including whether to implement energy options like solar power, conservation, or even nuclear power, are made by State and utility-level decisionmakers, as well as some other Federal decisionmakers. These decisions are based on economics, energy reliability goals, and other objectives over which the other entities may have jurisdiction. The NRC does not have authority to make these decisions. During license renewal, the NRC does, however, conduct an environmental review that compares the potential environmental impacts of a nuclear plant during the period of extended operation to the environmental impacts of energy alternatives as part of the National Environmental Policy Act process. This alternatives analysis may include consideration of conservation or solar power when reasonable, often in combination with other alternatives. If NRC decides to renew a plant's license, the decision of whether to operate the nuclear power plant or an alternative is left up to the appropriate State, utility, or Federal entity. In addition to an environmental review, NRC staff also evaluates nuclear plant safety and aging management in the course of license renewal.</p> <p>The staff notes that Diablo Canyon Units 1 and 2 are currently still in operation, as are San Onofre Units 2 and 3. In California, the Santa Susana SRE (Sodium Reactor Experimental), Vallecitos Nuclear Power Plant, Humboldt Bay Nuclear Power Plant, Rancho Seco Nuclear Power Plant, and San Onofre Unit 1 are no longer operating.</p>

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MC-1-3 (3)	D-1-3	A.7 Out of Scope	We are also using depleted uranium bombs in Iraq. Both our soldiers and the Iraqis are being exposed. Many of the Iraqi children are getting leukemia. Remember the Gulf War Syndrome? Our soldiers were exposed then, too, and many of their children had birth defects and many of the soldiers got very sick and our government didn't want to tell them why. Who is the terrorist?	<i>This comment is related to the effects of radiation from the use of depleted uranium munitions by U.S. Armed forces overseas, which is not subject to NRC regulation. The NRC's mission is to protect people and the environment from radiological releases for facilities under its jurisdiction. The NRC's role in reviewing an application for license renewal is to determine if a nuclear power facility can be operated in a manner which does not pose a threat to public health and safety during the renewal term.</i>
MC-1-4 (4)	D-1-4	A.6 High-Level Radioactive Waste	Does everyone realize that our new plants are also becoming high level waste sites? Everyone's life is at stake here. Do what's right. Shut them down.	<i>Onsite storage of spent nuclear fuel was reviewed in depth and found to be a Category 1 issue, meaning that the environmental impacts for any facility applying for license renewal would be SMALL. The safety and environmental effects of long-term storage of spent fuel onsite have been evaluated by the NRC and, as set forth in the Waste Confidence Rule (10 CFR 51.23), the NRC generically determined that such storage could be accomplished without significant environmental impact. In the Waste Confidence Rule, the Commission determined that spent fuel can be stored onsite for at least 30 years beyond the plants life, including license renewal. At or before the end of that period, the fuel would be moved to a permanent repository. The GEIS, NUREG-1437 is based upon the assumption that storage of the spent fuel onsite is not permanent. The plant-specific supplement to the GEIS that will be prepared regarding license renewal for SSES will be based on the same assumption.</i>
MC-2-1 (5)		A.5 Alternatives	I'm saying that because Pennsylvania is primarily a coal and nuclear state. And I think we made a mistake before when we became so dependent on two sources of energy. So my plea is that we rationally evaluate relicensing and then think how we're going to meet future energy demand as we move forward.	<i>Decisions about energy policy and energy planning, including choosing an energy generation mix (sometimes referred to as a generation "portfolio"), fall under the authority of State or utility-level decisionmakers, and, in some places, other Federal decisionmakers aside from the NRC. These entities may also decide which energy generation options to implement in order to meet future energy demand. The NRC does not have authority or jurisdiction in energy policy, planning, or deciding whether to implement particular energy generation options.</i>
MC-2-2 (6)	See also D-2-2 below	A.7 Out of Scope – Cost of Power	My main participation with Susquehanna since the early '80s has been rate cases. I'm an expert witness on nuclear decommissioning, and I want to get to that in a minute. But probably the thing that concerns me more than	<i>As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues</i>

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			<p>anything about nuclear power has been the economics. Part of the settlement we had with PPL allowed for the company to recover 2.97 billion in stranded costs, on economical costs associated with nuclear power production.</p> <p>I'm an economist. And whether it's nuclear power, solar or wind I've always dreamed for the day that the merits would be judged by the marketplace. We're not there yet.</p>	<p><i>raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, it will not be evaluated in this SEIS.</i></p>
MC-2-3 (7)	See also D-2-1 below	A.2 Purpose and Need for the Proposed Action	<p>I really oppose the license extensions for a couple of reasons. Number one is we think it's premature. There's 17 years left on this license. You know, this is a very strange scenario where a license has that much time and you're going to relicense it before some of the aging and safety issues manifest, which happens in an industrial application. That's reality.</p> <p>Just look at Three Mile Island which obviously came on line ten years earlier. We replaced the reactor vessel head there two years ago and we're going to change out the steam generators. So there are industrial applications that are going to age that we're not going to evaluate, and I think that's a shame. I think we should wait until we get closer to the end of its initial life span.</p> <p>(Page 22, Lines 9-14) Obviously, and I've raised this before, I think there's age related problems. I would really hope that Susquehanna PPL would think about postponing their relicensing until the plant is closer to the end of its initial useful period. I mean 17 years in my mind makes no sense and it's premature.</p>	<p><i>These comments concern the license renewal process in general. The Nuclear Regulatory Commission is an independent agency, headed by five Commissioners who are appointed by the President and confirmed by the Senate. The purpose of the NRC Staff's environmental review is to carefully consider the environmental consequences of renewing an operating license. Additionally, the NRC has a safety review which focuses on managing the aging of structures, systems and components during the renewal term.</i></p> <p><i>The NRC's environmental review process provides many avenues for public participation. As part of the scoping process, the staff held two public meetings seeking comments on the scope of the Environmental Impact Statement (EIS) on November 15, 2006. Additionally, comments regarding the environmental review and this Draft EIS can be sent by email to SusquehannaEIS@nrc.gov, by phone to the Environmental Project Manager, Alicia Mullins, at 301-415-1224, or by mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001. Additionally, two public meetings will be held regarding the Draft EIS where members of the public can submit comments on the Draft EIS and the environmental review process.</i></p>

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				<p>The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license. Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many years in advance of the extended period of operation.</p>
MC-2-4 (8)	See also D-2-5 below	A.7 Out of Scope – Emergency Preparedness	<p>In addition, I look forward to the site specific environmental impact statement. I think that's a real healthy tool, and I applaud the NRC for doing it. It really is. Because when you get shoved in some generic cookie cutter process, some individual elements get left out. For example, at TMI when we do emergency planning, we have to include the Amish. It's pretty hard to contact people that don't use phones.</p> <p>So this community is also, you know, interesting with litter use, which is a big issue here given acid mine drainage. So I applaud the NRC for doing that and look forward to a transcript.</p> <p>There are nine issues that we have relicensing, we'll be frank. We have been in court for four years with the Commonwealth and with PIMA regarding emergency planning for special needs populations. We have not found any evidence that remotely indicates that any of the nuclear utilities have adequate emergency planning in place for day care and nursery school.</p> <p>And let me jump back. We lived through Three Mile Island. My sister was evacuated. It was a nightmare. It didn't work. The reason I'm telling you this is when we really took emergency planning seriously in the '80s, there really weren't a lot of day care or nursery school or elder-hostel, or older facilities. So what we did at TMI was file a petition five years ago, we're still working on it but it's clear that this plant neither has the adequate resources to plan for day care and nursery school, which are a significant</p>	<p>The Commission considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR Part 54, which included public notice and comment. As discussed in the Statement of Considerations for rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. Requirements related to emergency planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to plants with renewed licenses. Through its standards and required exercises, the Commission reviews existing emergency preparedness plans throughout the life of any plant, keeping up with changing demographics and other site-related factors. Therefore, the Commission has determined that there is no need for a special review of emergency planning issues in the context of an environmental review for license renewal. The NRC's environmental review is limited to environmental matters relevant to the extended period of operation requested by the applicant.</p>

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			<p>population. Alzheimer's homes, prison populations, essentially non-ambulatory populations.</p> <p>And we've kind of known each other through this litigation. The Pennsylvania Attorney General has put suit at the GAO. And I think we'll win. However, I think this is a solvable problem. I've extended myself to PPL. And I think the issue for special needs populations having a transportation contract, a transportation route and a place to take the kids. Neither of those exist. That's scandalous. Scandalous.</p> <p>The same thing exists with the hospitals. Any hospital that is within ten miles, if you ask them what is your plan in the event of an accident. Well, they're not going to move the entire population. And these are things that we can work on together to solve. But we're not going to let them go, and this is an opportunity to flush them out.</p> <p>(Pages 23 & 24, Lines 25 and 1-5) In addition to that we supply free of charge KI, potassium iodine to anybody in the community. We don't believe there's an invisible lead curtain ten miles from a plant. That's bizarre, to say the least.</p> <p>We assist people with emergency planning.</p>	
MC-2-5 (9)	See also D-2-2 below	A.7 Out of Scope – Payment in Lieu of Taxes	<p>Two of the issues are environmental justice issues, and I feel really strongly about this. Susquehanna used to be appraised at up to \$2 billion. They have basically taken tax money out of this community. The plant now is appraised at \$56 million, which is \$18 million less than the Columbia Hospital. That's scandalous.</p> <p>When we had a handshake deal in '99 we were told, and this is what I was told, "Eric, we're going to pay less and your communities are going to get more." The old formula was ridiculous. It was PERDA. And as soon as that occurred, and this happened at Burr Island, too, where they didn't pay their taxes for two years. The same thing has happened in this community. And I think this is an environmental justice issue.</p> <p>All I'm asking for is a risk reward formula. If you're going to operate the plant, you're going to be profitable. Pay your fair share of taxes.</p>	<i>As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, they will not be evaluated in this SEIS.</i>
MC-2-6 (10)	See also D-2-4 below	A.7 Out of Scope – Cost of Power	<p>Financial stability is another issue we're going after. I have been involved with nuclear decommission with this company since its inception. It's a farce. It's a farce.</p>	<i>As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues</i>

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			<p>I'm going to tell you right now nuclear decommissioning costs have escalated by 553 percent from 1981 to 2003. I've cross examined your witnesses. I've done the math. Everybody knows it's a farce. In fact, you have an agreement with me right now that for every dollar over, 4 cents has to come from the shareholder. Now that's a reasonable start.</p> <p>The problem is, and I tried to address this earlier, is 10 percent of your decommissioning comes from the Rural Electric Cooperative. You want to talk about a joke? When I cross examined their financial officer I said -- his name is Lawrence Bladen. I said "How are you planning for decommissioning?" He said "Greenfield." Greenfield is the site -- I mean, it's criminal. And that's what I'm saying, what's this other 10 percent, what's this partner doing it? It's a Rural Electric Cooperative. They have grossly under funded. So even if PPL does the right thing, it's fully funded, their partner's not even remotely close to bringing their share into play.</p> <p>Right now -- and remember, when we first got involved with this the cost kept going up and up and up. Right now the company is estimating nuclear decommissioning at about a billion dollars. Now that's not factoring the rad waste, which is the main issue, which is going to come into play with 20 more years.</p> <p>Again what I'm saying to you as the nuclear economists, let's think this through. Should people who didn't derive a benefit pay for the garbage? I'm a big person of equity. If you buy something, you pay for it now. If you build something, if you benefitted, you're responsible. Well, let's just be risk reward about it.</p>	<p><i>raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, it will not be evaluated in this SEIS.</i></p>
MC-2-7 (11)	See also D-2-6 below	A.7 Out of Scope – Safeguards and Security	<p>Safeguards and terrorism, there's not much we can do. We have a petition before the NRC for five years. Talk about lightening quick reception. At TMI we were the only plant that had a real security threat. I would say, in terms of an intruder challenge in '93. We also had a terrorist training ground in Perry County. So I think there's a lot more that can be done with safeguards and terrorism.</p> <p>To PPL's credit I think they probably have one of the better protocols of the five plants in the state. But I would just say this: Your training force or your security is only as good as your training force. And if you continue to lay people off, force them to work overtime, it's hard to be alert.</p>	<p><i>Security issues such as safeguards planning are not tied to license renewal, but are considered to be issues that need to be dealt with constantly as a part of the current operating licenses. Security issues are periodically reviewed and updated (and extended) at every operating plant. These reviews will continue throughout the period of any extended license. If issues related to security are discovered during the review process, they would be addressed immediately, and any necessary changes reviewed and incorporated under the operating license, rather than waiting for the period of extended operation. The NRC's environmental review is limited to</i></p>

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				environmental matters relevant to the extended period of operation requested by the applicant. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans. Any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed under the operating license.
MC-2-8 (12)	See also D-2-7 Below	A.7 Out of Scope – Payment in Lieu of Taxes	<p>Number five, and I'll leave a copy of this here, is another social issue, a social justice issue. I believe PPL's planning to uprate capacity, which has all kinds of economic impacts. They did it the last time. I think it was back in 2001 with \$120 million investment. I get their annual report. I'm a shareholder. I'm doing okay.</p> <p>It said the 120 million in improvements to Susquehanna are expected to add earnings as soon as they go into operation. This was the same year that PPL devalued their plants and started paying less. Again, it's a risk reward formula. If you're going to operate a nuclear power plant, and we do need the energy, pay your fair share of taxes, all right.</p>	As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, they will not be evaluated in this SEIS.
MC-2-9 (13)	See also D-2-8 below	A.4 Surface Water Quality, Hydrology, and Use	<p>Water supplies. I did talk to a gentleman from PPL. In the interest of open disclosure, we met with the Susquehanna River Basin Commission in Pennsylvania and especially the DEP is going through a statewide exercise in water use management. So a lot of what we do tonight may be moot in terms of FERC and also the Susquehanna River Basin Commission may rule. Again, in terms of open disclosure I've already stated to the Basin Commission we're going to oppose the license extension until in our view you view water as a commodity. It doesn't just evaporate. It comes from somewhere.</p> <p>Everyday about 30 million gallons are taken from the river and not returned. That's even during a drought. That's not being a good neighbor. You know, when we're being asked to conserve water and the plant keeps churning the water, there has to be a balance. We're not saying you can't use the water, but you have to moderate your use and pay your fair share. So I think that's an issue that may not even be relevant to this particular venue, but an issue we will raise.</p>	The amount of consumptive water used by the plant is regulated through the Susquehanna River Basin Commission (SRBC), which manages water usage along the entire length of the river. The current permit granted to SSES is for consumptive usage of up to 40 million gallons per day (permit # 19950301 EPUL-0578). SSES has submitted an application to the SRBC to increase the amount of consumptive water usage to 44 million gallons per day. The SRBC is reviewing the application and will make a decision independent of the NRC with regard to the modification of their current permit to reflect the increased consumptive water usage. SSES is required to adhere to the water usage limits set by the permit and any mitigative measures set by the SRBC for continued operation of the facility.

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MC-2-10 (14)	See also D-2-10 below	A.1 License Renewal Process	<p>And finally, we don't really have a lot of confidence in this process. As an organization we were founded in '77. We have been to the Supreme Court twice. We have litigated before the NRC almost nonstop for 30 years in just about every other venue. And as I told some of the NRC employees before, we have no confidence in the Commission or the adjudicatory process. I think the last three relicensing the first three were licensing contentions that were admitted. So that we will participate and we will be involved to the end. But I'm letting you know from the outset really since the implementation of the reactor oversight process we've seen a precipitous decline in the NRC's relationship with the communities, reactor communities. It's a shame. Because we worked hard at Peach Bottom and TMI. Against Susquehanna not as much.</p> <p>(Page 24, Lines 6-18) So we're here to extend ourselves. I would encourage you to go to our website. It's efmr.org. It's highly technical. It's a private business. It's not nonpartisan. We actually have people from both Peach Bottom and Three Mile Island that participate. We have good buy-in.</p> <p>Let me conclude by saying this doesn't have to be contentious and it doesn't have to be litigious. In all likelihood it will be, and that's a shame. Because as someone who has been through TMI, I've seen the arc where it was absolutely adversarial and ugly and acrimonious. Things got better and now we're falling off again. And that's sad, it really is.</p> <p>(Pages 24 & 25, Lines 25 & 1-6) And again, I'll avail myself to any settlement negotiation that we can work out that's in the best interest of everybody. If not, and I think one of the speakers said it before, you put eight months onto this as soon as there's a hearing. And this may be the first relicensing that gets heard in another venue, I'm pretty confident of that.</p>	<p><i>These comments concern the license renewal process in general. The Nuclear Regulatory Commission is an independent agency, headed by five Commissioners who are appointed by the President and confirmed by the Senate. The purpose of the NRC Staff's environmental review is to carefully consider the environmental consequences of renewing an operating license. Additionally, the NRC has a safety review which focuses on managing the aging of structures, systems and components during the renewal term.</i></p> <p><i>The NRC's environmental review process provides many avenues for public participation. As part of the scoping process, the staff held two public meetings seeking comments on the scope of the Environmental Impact Statement (EIS) on November 15, 2006. Additionally, comments regarding the environmental review and this Draft EIS can be sent by email to SusquehannaEIS@nrc.gov, by phone to the Environmental Project Manager, Alicia Mullins, at 301-415-1224, or by mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001. Additionally, two public meetings will be held regarding the Draft EIS where members of the public can submit comments on the Draft EIS and the environmental review process.</i></p> <p><i>The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license. Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many</i></p>

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MC-2-11 (15)		A.7 Out of Scope – Independent Radiological Monitoring	<p>By the way, the group I'm representing tonight is Three Mile Island Alert. Just to show you our ability to be flexible, we have settlement negotiations with PPL, with FirstEnergy, with PECO, and with Exelon. We've established radiation monitoring networks around TMI. In fact, we're the only entity, not the federal government, not the state government, the FMR, my business which is nonprofit, is the only entity in the state that does real time monitoring, gamma monitoring 24/7/365. My staff, yes, it's pro-nuclear. I got a lot of crap for that, but if you want to know how to monitor a nuclear plant, you need people who used to work there.</p> <p>So we're willing to monitor it. We're willing to deal. But we're not willing to have something shoved down our throats.</p> <p>We have the same program in place at Peach Bottom. I've told executives at PPL we're more than willing to do it here. It takes money. Again, it would be real time gamma monitoring.</p>	<p><i>years in advance of the extended period of operation.</i></p> <p><i>The radiological impacts of license renewal are addressed in Section 4.3. As part of NRC's requirements for operating a nuclear power plant, licensees must keep releases of radioactive material to unrestricted areas during normal operation as low as reasonably achievable (as described in the Commission's regulations in 10 CFR Part 50.36a), and comply with radiation dose limits for the public (10 CFR Part 20).</i></p> <p><i>In addition, NRC regulations require licensees to have effluent and environmental monitoring programs in place to ensure that the impacts from plant operations are minimized. The permitted effluent releases result in very small doses to members of the public living around nuclear power plants.</i></p> <p><i>The NRC requires licensees to report plant discharges and results of environmental monitoring around their plants to ensure that potential impacts are detected and reviewed. Licensees must also participate in an interlaboratory comparison program which provides an independent check of the accuracy and precision of environmental measurements.</i></p> <p><i>In annual reports, licensees identify the amount of liquid and airborne radioactive effluents discharged from plants and the associated doses. Licensees also must report environmental radioactivity levels around their plants annually. These reports, available to the public, cover sampling from thermoluminescent dosimeters (TLDs); airborne radioiodine and particulate samplers; samples of surface, groundwater, and drinking water and downstream shoreline sediment from existing or potential recreational facilities; and samples of ingestion sources such as milk, fish, invertebrates, and broad leaf vegetation.</i></p> <p><i>The NRC conducts periodic onsite inspections of each licensee's effluent and environmental monitoring programs</i></p>

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				<p><i>to ensure compliance with NRC requirements. The NRC documents licensee effluent releases and the results of their environmental monitoring and assessment effort in inspection reports that are available to the public.</i></p> <p><i>The NRC staff believes that these monitoring programs would be sufficient to ensure the protection of people and the environment during the renewal term. Agreements between the applicant and other organizations to engage in additional monitoring programs are outside of the scope of the NRC's environmental review process.</i></p>
MC-2-12 (16)		A.7 Out of Scope – Operations Safety	I think the people that work at the plant are your best asset. I know at TMI and Peach Bottom we're losing them. Everybody's 50 and out. I hope that doesn't happen here. I think each plant has its own historical memory, that workers are valuable. More than happy to see you hire more people, frankly.	<i>In the environmental review process, the socioeconomic effects of employment are addressed only as they relate to impacts to the environment and the ability of public services to meet user needs. The economic costs and benefits of license are outside the scope of environmental review as stated in 10 CFR 51.95(c)(2), and are not required to be addressed in the SEIS.</i>
	D-2-1 (1)	A.2 Purpose and Need for the Proposed Action	<p>Three Mile Island Alert, Inc. (TMIA) announced its decision to oppose PPL's premature request to relicense the Susquehanna Steam Electric Station (SSES) to operate for 20 more years.</p> <p>TMI-Alert believes PPL's application is premature. "It would be irresponsible for federal regulators to begin a relicensing process 17 years before the original license expires. PPL wants to secure an extension to preempt public challenges over additional safety problems, which tend to increase as plants age."</p>	<p><i>These comments concern the license renewal process in general. The Nuclear Regulatory Commission is an independent agency, headed by five Commissioners who are appointed by the President and confirmed by the Senate. The purpose of the NRC Staff's environmental review is to carefully consider the environmental consequences of renewing an operating license. Additionally, the NRC has a safety review which focuses on managing the aging of structures, systems and components during the renewal term.</i></p> <p><i>The NRC's environmental review process provides many avenues for public participation. As part of the scoping process, the staff held two public meetings seeking comments on the scope of the Environmental Impact Statement (EIS) on November 15, 2006. Additionally, comments regarding the environmental review and this Draft EIS can be sent by email to SusquehannaEIS@nrc.gov, by phone to the Environmental Project Manager, Alicia Mullins, at 301-415-1224, or by mail to: Chief, Rules and Directives Branch, Division of</i></p>

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				<p><i>Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001. Additionally, two public meetings will be held regarding the Draft EIS where members of the public can submit comments on the Draft EIS and the environmental review process.</i></p> <p><i>The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license. Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many years in advance of the extended period of operation.</i></p>
	D-2-2 (2)	A.7 Out of Scope – Payment in Lieu of Taxes	<p>TMI-Alert will vigorously oppose relicensing until PPL pays its back taxes...</p> <p>2. Tax break for the rich:</p> <p>PPL pledged that tax revenues would increase for local communities after deregulation. In fact, the opposite has occurred. The “old version” of the plant was valued at \$800 million in 1998 and 1999. The “new” SSES valuation in 2001 was approximately \$160 million. The actual valuation of the plant, or the amount PPL is paying taxes on, is \$56 million. Yet, PPL is collecting \$2.97 billion in rate recoveries for cost overruns associated with the construction of Susquehanna. There is no replacement revenue for local governmental bodies and schools, and local property owners are paying for PPL’s tax breaks.</p>	<p><i>As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant’s current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, they will not be evaluated in this SEIS.</i></p>
	D-2-3 (3)	A.6 High-Level Radioactive Waste	<p>TMI-Alert will vigorously oppose relicensing until PPL...secures radioactive waste...</p> <p>7. No permanent storage of waste:</p>	<p><i>Onsite storage of spent nuclear fuel was reviewed in depth and found to be a Category 1 issue, meaning that the environmental impacts for any facility applying for license</i></p>

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			<p>The Susquehanna nuclear power plant produces approximately 30 metric tons of high-level radioactive waste per year per reactor. The nuclear garbage has no forwarding address. In reality, the SSES is a <i>de facto</i> high-level radioactive waste site on the Susquehanna River. There is no solution in sight for disposal of highly radioactive "spent" fuel rods, although the National Academy of Sciences and other technical experts argue that moving all radioactive waste into hardened, dry storage would reduce the risks associated with current high-density cooling ponds at each plant. Susquehanna is one of 21 nuclear power plants where used reactor fuel pools have reached capacity.</p>	<p><i>renewal would be SMALL. The safety and environmental effects of long-term storage of spent fuel onsite have been evaluated by the NRC and, as set forth in the Waste Confidence Rule (10 CFR 51.23), the NRC generically determined that such storage could be accomplished without significant environmental impact. In the Waste Confidence Rule, the Commission determined that spent fuel can be stored onsite for at least 30 years beyond the plants life, including license renewal. At or before the end of that period, the fuel would be moved to a permanent repository. The GEIS, NUREG-1437 is based upon the assumption that storage of the spent fuel onsite is not permanent. The plant-specific supplement to the GEIS that will be prepared regarding license renewal for SSES will be based on the same assumption.</i></p>
	D-2-4 (4)	A.7 Out of Scope – Cost of Power	<p>TMI-Alert will vigorously oppose relicensing until PPL ...proves it has the financial resources to decommission the plant.</p> <p>3. Financial stability:</p> <p>PPL can not predict with any degree of confidence how much it will cost to clean up the rad waste site after the plant closes. Projected costs for nuclear decommissioning of Susquehanna have increased by at least 553% between 1981 and 2003.</p> <p>In 1981 PP&L predicted that its share to decommission SSES was between \$135 and \$191 million. By 1985 the cost estimate had climbed to \$285 million. And by 1991, the cost in 1988 dollars for the "radioactive portion" of decommissioning was \$350 million.</p> <p>The company's contractor conducted a site-specific study which projected that the cost of decommissioning would be \$725 million in 1993 dollars. The 1994 cost estimate remained steady at \$724 million, but the market value of securities held and accrued in income in the trust funds declined, and thus the estimate reflected another increase in decommissioning costs (PP&L Base Rate Case, Page, 1016, Lines 7-27 and Page 1017, Lines 1-24).</p> <p>By 2006 PPL projected costs to decommission Susquehanna to be almost \$1 billion.</p>	<p><i>As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, it will not be evaluated in this SEIS.</i></p>

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	D-2-5 (5)	A.7 Out of Scope – Emergency Preparedness	<p>Mr. Epstein has sued the NRC, FEMA and the Department of Justice, "to compel PPL to provide radiological emergency plans that include nursery schools, day care facilities, and senior citizen residences."</p> <p>1. PPL has failed to provide workable emergency plans for "special needs" populations living within ten miles of the SSES.</p> <p>Mr. Epstein, Chairman of TMI-Alert, sued FEMA, the NRC and the Department of Justice to compel all Pennsylvania nuclear utilities to provide emergency planning for the most vulnerable populations living near reactors. The Pennsylvania Attorney General referred the case to the United States Government Accountability Office on Sept. 14, 2006.</p>	<p><i>The Commission considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR Part 54, which included public notice and comment. As discussed in the Statement of Considerations for rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. Requirements related to emergency planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to plants with renewed licenses. Through its standards and required exercises, the Commission reviews existing emergency preparedness plans throughout the life of any plant, keeping up with changing demographics and other site-related factors. Therefore, the Commission has determined that there is no need for a special review of emergency planning issues in the context of an environmental review for license renewal. The NRC's environmental review is limited to environmental matters relevant to the extended period of operation requested by the applicant.</i></p>
	D-2-6 (6)	A.7 Out of Scope – Safeguards and Security	<p>4. Safeguards and terrorism:</p> <p>Since 9-11, nuclear plants have been recognized as terrorist targets, but Susquehanna is unprepared. There are measures that could mitigate risks of various attacks by air, water and ground, but the industry has lobbied NRC not to adopt them, in order to keep costs down.</p>	<p><i>Security issues such as safeguards planning are not tied to license renewal, but are considered to be issues that need to be dealt with constantly as a part of the current operating licenses. Security issues are periodically reviewed and updated (and extended) at every operating plant. These reviews will continue throughout the period of any extended license. If issues related to security are discovered during the review process, they would be addressed immediately, and any necessary changes reviewed and incorporated under the operating license, rather than waiting for the period of extended operation. The NRC's environmental review is limited to environmental matters relevant to the extended period of operation requested by the applicant. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans.</i></p>

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				Any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed under the operating license.
	D-2-7 (7)	A.7 Out of Scope – Payment in Lieu of Taxes	<p>5. Uprates for shareholders:</p> <p>PPL has requested permission to amp up the capacity of the plant, even though they believe it's worth only \$56 million. Last time PPL announced it was planning to increase capacity, shareholders hit the jackpot. In a Petition to the NRC to increase capacity by 100 megawatts PPL said "The \$120 million in improvements at the Susquehanna plant are expected to add earnings as soon as they go into operation" (PPL, April 23, 2001).</p>	As stated in 10 CFR 51.95(c)(2), the economic costs and benefits of renewing an operating license are not required to be addressed in the SEIS, primarily because the issues raised by these comments involve energy planning decisions that are made by State regulators and utility officials. The NRC has no role in these energy planning decisions. From the perspective of the licensee and the State regulatory authority, the purpose of renewing an operating license is to maintain the availability of the nuclear plant to meet system energy requirements beyond the terms of the plant's current license. Therefore, because this comment is not within the scope of license renewal and provides no new information, they will not be evaluated in this SEIS.
	D-2-8 (8)	A.4 Surface Water Quality, Hydrology, and Use	<p>6. Water supplies:</p> <p>The magnitude of the amount of water used at a nuclear power plant is readily evidenced at the SSES every day. The Susquehanna Steam Electric Station loses 14.93 million gallons of water per unit daily as vapor out of the cooling tower stack. Eleven million gallons per day are returned to the river as cooling-tower basin blow down. On average, 29.86 million gallons per day are taken from the river and not returned; even during periods of drought! (PPL, Pennsylvania Environmental Permit Report.)</p>	The amount of consumptive water used by the plant is regulated through the Susquehanna River Basin Commission (SRBC), which manages water usage along the entire length of the river. The current permit granted to SSES is for consumptive usage of up to 40 million gallons per day (permit # 19950301 EPUL-0578). SSES has submitted an application to the SRBC to increase the amount of consumptive water usage to 44 million gallons per day. The SRBC is reviewing the application and will make a decision independent of the NRC with regard to the modification of their current permit to reflect the increased consumptive water usage. SSES is required to adhere to the water usage limits set by the permit and any mitigative measures set by the SRBC for continued operation of the facility.
	D-2-9 (9)	A.7 Out of Scope – Operations Safety	<p>8. Age-related safety problems will increase:</p> <p>Susquehanna was designed to last for 40 years, but many systems and components are already being stressed by radiation, high heat and pressures, and other factors. U.S. plants are suffering from corrosion, large component failures, original design flaws and other unresolved safety issues. At least a dozen U.S. plants have recently discovered radioactive tritium leakage into groundwater from pipes or cooling pools.</p>	Operational safety, reactor operator and other employee qualifications, training, security and emergency preparedness are important elements of the NRC's regulatory program, but are outside the scope of this environmental review. An NRC safety review for the license renewal period is conducted separately. Although a topic may not be within the scope of the environmental review for license renewal, the NRC is always concerned

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				with protecting public health and safety. Any matter potentially affecting safety, including the capability to respond to unusual events or malevolent acts and including operational safety, will be addressed under processes currently available for existing operating licenses regardless of whether a license renewal application has been submitted.
	D-2-10 (10)	A.1 License Renewal Process	<p>9. NRC's industry-driven relicensing process limits public involvement, and disallows debate over factors involving a plant's safety and security record.</p> <p>PPL is applying for the license renewal so early due to the rubber-stamp approach by the Bush administration's NRC. PPL wants to secure an extension to preempt public challenges over additional safety problems, which tend to increase as plant's age.</p>	<p>These comments concern the license renewal process in general. The Nuclear Regulatory Commission is an independent agency, headed by five Commissioners who are appointed by the President and confirmed by the Senate. The purpose of the NRC Staff's environmental review is to carefully consider the environmental consequences of renewing an operating license. Additionally, the NRC has a safety review which focuses on managing the aging of structures, systems and components during the renewal term.</p> <p>The NRC's environmental review process provides many avenues for public participation. As part of the scoping process, the staff held two public meetings seeking comments on the scope of the Environmental Impact Statement (EIS) on November 15, 2006. Additionally, comments regarding the environmental review and this Draft EIS can be sent by email to SusquehannaEIS@nrc.gov, by phone to the Environmental Project Manager, Alicia Mullins, at 301-415-1224, or by mail to: Chief, Rules and Directives Branch, Division of Administrative Services, Office of Administration, Mailstop T-6D59, U.S. Nuclear Regulatory Commission, Washington, D.C., 20555-0001. Additionally, two public meetings will be held regarding the Draft EIS where members of the public can submit comments on the Draft EIS and the environmental review process.</p> <p>The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license.</p>

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				<p>Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many years in advance of the extended period of operation.</p> <p>The Commission has established rules for the environmental and safety reviews to be conducted regarding a license renewal application. 10 CFR 54.17(c) allows licensees to submit license renewal applications up to 20 years before the expiration of the current license. Applications for license renewal are submitted years in advance, for several reasons. If a utility decides to replace a nuclear power plant, it could take up to 10 years to design and construct new generating capacity to replace that nuclear power plant if license renewal is not granted. In addition, decisions to replace or recondition major components can involve significant capital investment. As such, these decisions may involve financial planning many years in advance of the extended period of operation.</p>