# Appendix A

# Discussion of Comments Received on the Environmental Review

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This Appendix contains comments received from the public scoping period (Part I) and comments received on the draft SEIS (Part II).

# Part I - Comments Received During Scoping

On October 24, 2000, the U.S. Nuclear Regulatory Commission (NRC) published a Notice of Intent in the Federal Register (65 FR 63636), to notify the public of the staff's intent to prepare a plant-specific supplement to the Generic Environmental Impact Statement for License Renewal of Nuclear Plants (GEIS), NUREG-1437, Volumes 1 and 2, to support the renewal application for the Turkey Point operating licenses and to conduct scoping. The plant-specific supplement to the GEIS was to be prepared in accordance with the National Environmental Policy Act (NEPA), Council on Environmental Quality (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 December 22, 2000. The scoping process included two public scoping meetings, which were held at the Harris Field Complex - Homestead YMCA in Homestead, Florida on December 6, 2000. Approximately 50 members of the public attended the meetings. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. After the NRC's prepared statements, the meetings were open for public comments. Forty-five attendees provided either oral or written statements that were recorded and transcribed by a certified court reporter. The corrected meeting transcripts are available as an attachment to the January 10, 2001, Scoping Meeting Summary and supplement dated January 30, 2001. In addition to the comments provided during the public meetings, five comment letters and three e-mail messages were received by the NRC in response to the Notice of Intent.

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 identifier (Commenter ID number), allowing each set of comments from a commenter to be traced back to the transcript, letter, or e-mail in which the comments were submitted. Several commenters submitted comments through multiple sources (e.g., afternoon and evening scoping meetings).

Table A.1 identifies the individuals who provided comments and the Commenter ID number associated with each person's set(s) of comments. The individuals are listed in the order in which they spoke at the public meeting, and in alphabetical order for the comments received by letter or e-mail.

 Table A.1. Individuals Providing Comments During Scoping Comment Period

Commente	er		Comment
ID	Commenter	Affiliation (If Stated)	Source
01	Dr. Roy Phillips	Miami-Dade Community College	Scoping Meeting
02	Curtis Ivey	City of Homestead	Scoping Meeting
03	Mark Oncavage		Scoping Meeting
04	Bob Hovey	Turkey Point Nuclear Plant	Scoping Meeting
05	Liz Thompson	FPL-Turkey Point Nuclear Plant	Scoping Meeting
06	Dennis Moss	Miami-Dade County	Scoping Meeting
07	Chuck Wallace		Scoping Meeting
80	Chuck Lanza	Dade County Emergency Management	Scoping Meeting
09	Steve Shiver	City of Homestead	Scoping Meeting
10	Robert Epling	Community Bank of Florida	Scoping Meeting
11	Joette Lorion		Scoping Meeting
12	Joe Wasilewski	Natural Selections	Scoping Meeting
13	Ginny O'Shaben	Audubon of Florida	Scoping Meeting
14	Angie Howard	Nuclear Energy Institute	Scoping Meeting
15	Reverend Ted Greer	Goulds Coalition of Ministers/ Lay Peoples	Scoping Meeting
16	Dick Bauer	TIP Bank of the Keys	Scoping Meeting
17	David Balch	United Way of Miami-Dade	Scoping Meeting
18	Jerry Brown	Florida International University	Scoping Meeting
19	Ruben Rothschild	Scout Leader and FPL	Scoping Meeting
20	William Weaver		Scoping Meeting
21	William Comber	Homestead Air Reserve Station	Scoping Meeting
22	Mario Signorello	Homestead Challenge	Scoping Meeting
23	Joe Brennan	International Brotherhood of Electrical Workers (IBEW), Local 359	Scoping Meeting
24	Debra Vase	Florida Power and Light	Scoping Meeting
25	Charles Munz	Redland Company	Scoping Meeting
26	Thomas Cullen	Monroe County Emergency  Management	Scoping Meeting
27	Linda Canzanelli	Biscayne National Park–National Park Service	Email comments
28	Joette Lorion		Email comments
29	Mark Oncavage		Email comments
30	Bo Bollinger	Homestead Hospital	Scoping Meeting
31	George DeFazio	The Earth's Cure Informer	Scoping Meeting
32	David Balch	United Way of Miami-Dade	Scoping Meeting
33	Irene Toner	Monroe County Department of	Scoping Meeting
		Emergency Management	

Table A-1. (contd)

Comment	ter		Comment
ID	Commenter	Affiliation (If Stated)	Source
34	Paige Latterner	Keys Gate Development	Scoping Meeting
35	Tim Williams		Scoping Meeting
36	Ruben Rothschild	Scout Leader and FPL	Scoping Meeting
37	Len Anthony	Condominium Association Naranja Lakes Condo #5	Scoping Meeting
38	Mike Pedrianes	IBEW Local 359	Scoping Meeting
39	Mike Richardson	First National Bank of Homestead	Scoping Meeting
40	Allen Bennett	Mutineer Restaurant	Letter
41	Eric S. Johnson	Community Bank of Florida	Letter
42	Robert L. Epling	Community Bank of Florida	Letter
43	Board of Directors	Greater Homestead/Florida City Chamber of Commerce	Letter
44	Betty Thomas	Dade County Public School	Scoping Meeting
45	Captain Bowe	Homestead Police Department	Scoping Meeting
46	William Comber	Homestead Air Reserve Station	Scoping Meeting
47	Steve Garrison	Florida Nurserymen and Growers Association	Scoping Meeting
48	Walter L. Campbell	First Baptist Church of Florida City	Scoping Meeting
49	Mary Finlan	Greater Homestead/Florida City Chamber of Commerce	Scoping Meeting
50	Katy Olesen		Scoping Meeting
51	Buddy Howamitz	IBEW Local 349	Scoping Meeting
52	Hayden Blaylock	Blaylock Oil Company	Scoping Meeting
53	Alex Penelas	Miami-Dade County	Scoping Meeting
54	Liz Thompson	FPL-Turkey Point Nuclear Plant	Scoping Meeting
55	Bob Hovey	Turkey Point Nuclear Plant	Scoping Meeting
56	Angie Howard	Nuclear Energy Institute	Scoping Meeting
57	Joette Lorion		Letter

While developing this plant-specific supplement to the GEIS, the staff and its contractor considered all of the relevant issues raised during the scoping process. Table A-1 identifies the individuals who provided comments that were applicable to the environmental review. The individuals are listed in the order in which they spoke or provided written comments at the meetings. To maintain consistency with the scoping summary, we have retained the same unique identifier that was used for that person in the report. The accession number is provided for the written comments to facilitate access to the document through the Public Electronic Reading Room (ADAMS) <a href="http://www.nrc.gov/NRC/ADAMS/index.html">http://www.nrc.gov/NRC/ADAMS/index.html</a>.

### Appendix A

#### Accession Nos.:

- 1. ML010880454 Letter & mailing list
- 2. ML010880464 Environmental Impact Statement Scoping Process Summary Report
- 3. ML010880478 Package

Comments were consolidated and categorized according to the topic within the proposed supplement to the GEIS, or according to the general topic if the topic was outside the scope of the GEIS.

Each comment that was applicable to this environmental review is summarized in this section. This information was extracted from the Turkey Point Scoping Summary Report, dated March 29, 2001, and is being provided in this report for the convenience of those interested in the scoping comments applicable to this environmental review. The comments that were determined to be general or outside the scope of the environmental review for Turkey Point are not included in this report. More detail regarding the disposition of general or nonapplicable comments can be found in the Turkey Point Scoping Summary Report. Commenters whose comments are not discussed in this section will find the disposition of their concerns addressed in that report.

The following pages summarize the comments and suggestions received as part of the scoping process, and discuss their disposition. Parenthetical numbers after each comment refer to the Commenter ID number and the comment number. Comments can be tracked to the commenter and the source document through the ID number listed in Table A.1. Comments are grouped by category. The categories are as follows:

- 1. Comments Concerning Category 1 Groundwater-Use and Quality Issues
- 2. Comments Concerning Category 1 Socioeconomic Issues
- 3. Comments Concerning Category 1 Air-Quality Issues
- 4. Comments Concerning Category 1 Land-Use Issues
- 5. Comments Concerning Category 1 Human Health Issues
- 6. Comments Concerning Category 1 Terrestrial Resource Issues
- 7. Comments Concerning Category 1 Postulated Accident Issues

- 8. Comments Concerning Category 1 Uranium Fuel Cycle and Waste Management Issues
- 9. Comments Concerning Category 2 Aquatic Ecology and Threatened and Endangered Species Issues
- 10 Comments Concerning Category 2 Socioeconomic Issues
- 11. Comments Concerning Environmental Justice
- 12. Comments Concerning Related Federal Projects
- 13. Comments Concerning Alternative Energy Sources
- 14. Comments Concerning Safety Issues Within the Scope of License Renewal
- 15. Questions: Water Quality and Postulated Accidents

#### Comments

# 1. Comments Concerning Category 1 Groundwater Use and Quality Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 water quality issues include:

- C Groundwater use conflicts (potable and service water; plants that use <100 gpm)
- © Groundwater quality degradation (Ranney wells)
- © Groundwater quality degradation (saltwater intrusion)
- © Groundwater quality degradation (cooling ponds in salt marshes).

**Comment:** The Supplemental EIS should investigate ways to reverse some of the adverse impacts to mainland and near shore habitats under the proposed action and all alternatives. Specifically, the area south and southwest of the plant contains the 100+ miles of cooling canals that have altered the natural environment by maintaining a hypersaline area of influence that in turn impedes natural groundwater flow from the upland side of the canals into the Bay. Rehydrating the hypersaline marshes with fresh water is one example of potential mitigation to be considered during the analysis. (27-14)

**Response:** The comment is noted. The groundwater flow in the vicinity of Turkey Point is controlled by precipitation and tidal action. Any exchange of water between the cooling canals and the groundwater would not alter the groundwater flow significantly, but may alter sheet runoff. This is a Category 1 issue that was considered in the GEIS. The comment provides no new information. Therefore, the issue will not be evaluated further.

# 2. Comments Concerning Category 1 Socioeconomic Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 socioeconomic issues include:

- C Public services: public safety, social services, and tourism and recreation
- C Public services, education (license renewal term)
- C Aesthetics impacts (refurbishment)
- C Aesthetics impacts (license renewal)
- C Aesthetics impacts of transmission lines (license renewal term).

**Comment:** The Supplemental EIS should investigate ways to minimize the facility's current intrusions to "old Florida's" natural landscape and scenic vistas. A mitigation option to consider under the proposed action and all alternatives may include repainting the structures in natural tones that mirror the surrounding landscape, and consequently make them less obtrusive to the natural setting. (27-11)

**Response:** The comment is noted. The comment suggests that mitigation measures be introduced to repaint the structures to make them less obtrusive. Aesthetic impacts were evaluated in the GEIS and determined to be a Category 1 issue. Aesthetic impacts of Units 1 and 2 (the fossil units) are outside the scope of the SEIS for Turkey Point. However, the information regarding the impact of Turkey Point structures on the natural landscape and scenic vistas will be discussed in Chapter 4 of the SEIS. Evaluation of the impacts of potential alternatives to license renewal at Turkey Point will be provided in Chapter 8 of the SEIS.

**Comment:** The Service is interested in working with FPL to minimize the excessive lighting of the Plant from dusk to dawn. This is a fragile resource critical to wildlife that is sought after by many visitors and residents. (27-12)

**Comment:** The Supplemental EIS should include mitigation options for the night sky under the proposed action and all alternatives. (27-13)

**Response:** The comments are noted. The comments suggest that mitigation measures be introduced to reduce the impact of Turkey Point lighting on the night sky. Aesthetic impacts of Units 1 and 2 (the fossil units) are outside the scope of the SEIS for Turkey Point. However, the information regarding the proximity of the national park to Turkey Point Units 3 and 4, and resulting impacts on the natural landscape of the park will be discussed in Section 4 of the SEIS.

**Comment:** Noise monitoring conducted by a noise consultant for the National Park Service identified the natural ambient sound levels in the southwestern portion of the park to be at or below 30 decibels. The operation of the Turkey Point Plant may result in intrusive industrial noise that may impede Biscayne National Park's efforts to preserve and/or restore the park's natural ambient sound levels. (27-3)

**Comment:** The supplemental EIS should include the natural soundscape of the park as part of the "affected environment" when identifying impacts and any potential mitigation for such impacts. (27-4)

**Response:** The comments are noted. The comments refer to potential noise impacts from operation of the Turkey Point facility. The noise generated by operations associated with Turkey Point Units 1 and 2 (the fossil units) are not within the scope of the SEIS. The noise associated with Units 3 and 4 during the relicensing term will be considered in Section 4 of the SEIS.

**Comment:** There is a concern that there will be a socioeconomic impact if you go along a path where you re-license a plant that will later shut down earlier than people think. (11-20)

**Response:** The comment is noted. Socioeconomic issues will be addressed in Section 4.2 of the SEIS. Decommissioning socioeconomic impacts, designated as a Category 1 issue, will be addressed in Section 7 of the SEIS.

# 3. Comments Concerning Category 1 Air Quality Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 air quality issues include:

C Air quality effects of transmission lines.

Comment: Turkey Point will keep air quality high with no emissions. (5-5 and 54-5)

**Comment:** Nuclear electricity is produced without producing any greenhouse gases or other air pollutants. (14-3 and 56-3)

**Response:** The comments are noted. Air quality impacts from plant operations were evaluated in the GEIS and found to be minimal. These emission are regulated through permits issued by the U.S. Environmental Protection Agency and the States. Air quality effects of transmission lines is a Category 1 issue as evaluated in the GEIS. The comments provide no new information and, therefore, will not be evaluated further.

**Comment:** The National Park Service is concerned about the continued introduction of anthropogenic air pollutants and particulate matter into an area of special concern. (27-5)

**Comment:** The Supplemental EIS should identify the cumulative effect associated with projected population growth and continued and increasing emissions under the proposed action and all alternatives. Mitigation measures, including air scrubbers and other similar technologies, should be fully evaluated and implemented. (27-6)

Response: The comments are noted. Air quality impacts from plant operations were evaluated in the GEIS and found to be minimal. These emission are regulated through permits issued by the U.S. Environmental Protection Agency and the States. Air quality effects of transmission lines is a Category 1 issue as evaluated in the GEIS. Emissions at Turkey Point are largely associated with Units 1 and 2 (the fossil units), which are not under NRC regulation. Emissions associated with Units 3 and 4 (the nuclear units) are governed by Permit Number 0250003-002-AV issued by the State of Florida Department of Environmental Protection. Impacts of emissions from fossil-fueled alternative forms of generation will be discussed in Section 8 of the SEIS. The comments provide no new information and, therefore, will not be evaluated further.

# 4. Comments Concerning Category 1 Land Use Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 land use issues include:

- C Onsite land use during license renewal term and refurbishment
- C Power line rights-of-way.

**Comment:** FPL owns, maintains, and uses some 20 thousand acres to sustain both the plant and the status quo of the environment for the sustenance of the flora, fauna and land. (37-5)

**Response:** The comment is noted. Onsite land use during the renewal period is a Category 1 issue as evaluated in the GEIS. Applicable site descriptive information, such as the amount of acreage for the plant, will be included in Section 2 of the SEIS.

# 5. Comments Concerning Category 1 Human Health Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 human health issues include:

- C Radiation exposure to the public during refurbishment
- © Occupational radiation exposure during refurbishment
- © Microbiological organisms (occupational health)
- C Noise
- C Radiation exposures to public (license renewal term)
- © Occupational radiation exposures (license renewal term).

**Comment:** There is a need to look at the cumulative impacts of any radiation that may be building up in the cooling canals outside in Biscayne National Park, say cesium-137 and strontium-90. Asks to test shellfish from Biscayne Bay for occurrence of strontium-90. (11-13)

**Comment:** Emissions from nuclear plants, even if within regulatory limits, may be adversely affecting public health. (18-3)

**Response:** The comments are noted. To the extent that these comments question the radiological protection afforded by NRC regulations, radiation doses to the public during the license renewal term are a Category 1 issue as evaluated in the GEIS. The evaluation of health effects of radiation, both natural and man-made, is an ongoing activity involving public, private, and international institutions. The assessment of health effects upon which the GEIS analysis is based was founded on the consensus of these sources. No changes in that consensus have occurred since the GEIS was completed. Further, the staff is not aware of any new information or studies that call into question the conclusions in the GEIS. Therefore, the comments will not be evaluated further.

**Comment:** NRC needs to remove the generic approach because there are issues with coastal reactors about how radiation accumulates in the environment. (11-12)

**Comment:** Radiological releases from the steam generation system, if they are impacting humans, must also be impacting the plants and wildlife of the area. (18-4)

**Comment:** The NRC should address the impacts that radioactive emissions from the plant during routine operations have had and may continue to have in the future on wildlife and the human environment. (28-5 and 57-8)

**Comment:** Under NEPA, the licensee must assess any current impact that radiation may be having on the environment surrounding the plant in order to assess the cumulative impact that may result from extending the operating license. (28-15)

**Comment:** NRC must analyze the impact of the potential increase in radiation that Turkey Point is having on the cooling canals and the aquatic and human environment surrounding the plant. (57-16)

**Response:** The comments are noted. Radiation exposures to the public during the license renewal term is a Category 1 issue that was evaluated in the GEIS. NRC considers public protection from radiological doses also to be protective of terrestrial and aquatic organisms. Public doses from Turkey Point emissions were specifically evaluated in Section 4.6 of the GEIS, using data from monitored emissions and ambient monitoring. The comments do not detail specific issues associated with coastal reactors, provide no new information, and, therefore, will not be evaluated further.

**Comment:** The Tooth Fairy Project, by the Radiation and Public Health Project, states that researchers had found that strontium-90 radiation levels in baby teeth of Miami-Dade County children are twice as high as in other areas of the country. This increase is found within a 50 mile radius of Turkey Point Nuclear Power Plant. (13-1)

**Comment:** NRC should sponsor Federal funds to test for strontium-90 in baby teeth. (13-2)

**Comment:** The EIS should include a mandate to assess health effects of radioactive emissions and strontium-90 in baby teeth. (13-3)

**Comment:** Strontium-90 concentrations in baby teeth have not changed since the 50's, and the concentrations in Dade County were higher than the other areas studied. Strontium-90 is considered an indicator of other radionuclides released from steam-generated degradation of reactor systems. (18-2)

**Response:** The comment is noted. Radiation exposures to the public during the license renewal term is a Category 1 issue and was evaluated in the GEIS. Although the referenced

report was not available at the time that the GEIS was written, the comment does not represent new information with regard to the Category 1 issue as evaluated in the GEIS because the study does not identify a significant departure from what was specifically documented in the GEIS with regard to public dose. Therefore, the comment will not be evaluated further.

**Comment:** There is new evidence of a link between strontium-90 and other radioisotopes in the environment and increases in breast, prostate, and childhood cancer rates. A study published by the Radiation and Public Health Project in 1996 identified a higher breast cancer mortality rate for 1985-1989 in women living within 100 miles of a nuclear reactor relative to a base period in the 50's. Turkey Point's rate was 26% higher during the 80's, vs. a U.S. average of 1% increase. In areas where nuclear plants have shut down, rates of childhood cancers, low birth rates and infant mortality rates have all improved. All this suggests that low dose rates over protracted intervals are a significant factor in the current cancer epidemic and other illnesses. (18-1)

Response: The comment is noted. Radiological exposures to the public during the license renewal term is a Category 1 issue that was evaluated in the GEIS. Doses to members of the public from Turkey Point emissions were specifically evaluated in Section 4.6 of the GEIS, using data from monitored emissions and ambient monitoring, and were found to be well within regulatory limits. The staff has reviewed the 1996 study and concludes that it provides no new evidence that links strontium-90 with increases in breast cancer, prostate cancer, or childhood cancer rates. The American Cancer Society recognizes that "public concern about environmental cancer risks often focuses on risks for which no carcinogenicity has been proven or on situations where known carcinogen exposures are at such low levels that risks are negligible. Ionizing radiation emissions from nuclear facilities are closely controlled and involve negligible levels of exposure for communities near such plants." The comment provides no new information and, therefore, will not be evaluated further.

**Comment:** NRC needs to look at the epidemiological studies about the health of the surrounding population around Turkey Point in terms of cancer. (11-14)

**Comment:** NRC and FPL should conduct an epidemiological study, a biological study of strontium-90 in teeth, and a medical study to see if radiation released from Turkey Point is contributing to cancer in the community. (18-5)

**Comment:** High incidence rates of cancer in the Dade county area may well be due to the high incidence of old persons and people moving from areas of the country with health problems. Strontium-90 may come from weapons-grade nuclear weapons materials and not nuclear power plants. (26-3)

**Comment:** Long Island has one of the highest rates of breast cancer. Gaseous radioactive tritium had been released from the stack at the reactor for 40 years. So look into what is going on at Turkey Point. (31-1)

Response: The comments are noted. Radiation exposures to the public during the license renewal term is a Category 1 issue as evaluated in the GEIS. At the request of Congress, the National Cancer Institute (NCI) conducted a study in 1990, "Cancer in Populations Living Near Nuclear Facilities," to look at cancer mortality rates around 52 nuclear power plants, including Indian Point, nine Department of Energy facilities, and one former commercial fuel reprocessing facility. The NCI study concluded "from the evidence available, this study has found no suggestion that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby." Additionally, the American Cancer Society has concluded that although reports about cancer case clusters in such 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. The comments provide no new information, therefore, the comment will not be evaluated further.

**Comment:** The SEIS should also review groundwater/drinking water pathways and the unique fact that the Biscayne Aquifer is an EPA designated sole source drinking water supply for millions of people in South Florida. (28-8)

**Response:** The comment is noted. The comment expresses concern regarding the levels of protection afforded by NRC radiological emissions standards. Radiation exposures to the public during the license renewal term is a Category 1 issue as evaluated in the GEIS. The comment provides no new information and, therefore, will not be evaluated further.

# 6. Comments Concerning Category 1 Terrestrial Resource Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 terrestrial resource issues include:

- Cooling tower impacts on crops and ornamental vegetation
- Cooling tower impacts on native plants
- C Bird collisions with cooling towers
- Cooling pond impacts on terrestrial resources
- © Power line rights-of-way management (cutting and herbicide application)

- C Bird collisions with power lines
- C Impacts of electromagnetic fields on flora and fauna (plants, agricultural crops, honeybees, wildlife, livestock)
- C Flood plains and wetland on power line rights-of-way.

**Comment:** The National Park Service recommends that the Supplemental EIS consider continued and expanded exotic plant eradication from FPL property for its benefits of removing harmful seed sources. (27-8)

**Response:** The comment is noted. Impacts on terrestrial resources resulting from continued operation during the renewal period have been evaluated and were designated as a Category 1 issue in the GEIS. The comment provides no new information. This is an operations concern that will be brought to the attention of FPL. The comment will not be evaluated further.

# 7. Comments Concerning Category 1 Postulated Accident Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 postulated accidents issues include:

C Design basis accidents.

**Comment:** Accidents may affect the Biscayne Aquifer, which is the drinking water source for the Miami-Dade county area. (3-9)

**Response:** The comment is noted. Design basis accidents are a Category 1 issue and were evaluated in the GEIS. The comment provides no new information and, therefore, will not be evaluated further.

**Comment:** The licensee's projections for the rapidly growing South Florida population that will occur during the extended license period increases risk and requires the licensee to conduct a probabilistic risk assessment that analyzes emergency response capability to determine whether they can meet the requirements of 10 CFR 50.54(a) in the event of an accident and the requirements of 40 CFR Part 190 and the proposed 40 CFR Part 61 to protect the public from potential high and lower level exposures and resultant health risk. Additionally, the environmental impacts, including environmental pathways, that could result from of a severe accident taking place at the Turkey Point plant, a Bay/Ocean plant, must be analyzed in a site-specific SEIS. (28-13)

**Response:** The comment is noted. Design basis accidents are a Category 1 issue as evaluated in the GEIS. The GEIS analysis does not include the assumption that area population would always remain static. Further, to the extent that the comment concerns emergency planning, such issues were determined by the Commission to be outside of license renewal. Finally, with the exception of a requirement to consider alternative mitigation measures, the Commission has determined that severe accident issues are not within the scope of license renewal. Therefore, this comment will not be evaluated further.

# 8. Comments Concerning Category 1 Uranium Fuel Cycle and Waste Management Issues

As stated in 10 CFR Part 51, Table B-1, Category 1 uranium fuel cycle and waste management issues include:

- C Offsite radiological impacts (individual effects from other than the disposal of spent fuel and high level waste)
- © Offsite radiological impacts (collective effects)
- C Offsite radiological impacts (spent fuel and high level waste)
- C Nonradiological impacts of the uranium fuel cycle
- C Low level waste storage and disposal
- C Mixed waste storage and disposal
- C On-site spent fuel
- C Nonradiolgical waste.

**Comment:** A spent fuel accident at Turkey Point could contaminate 224 square miles. Need to have appropriate response capability, especially under hurricane situations. (11-3)

**Comment:** There is no place to put the high-level nuclear waste and right now there is nuclear waste piling up at Turkey Point. This could create a problem in case of a nuclear-spent-fuel accident and resultant land contamination. (11-15)

**Comment:** The NRC should look at effects of a hurricane hitting the spent fuel pool, especially as the components in the pool age. (11-16)

**Comment:** There is a nuclear waste storage issue. There will be an increase in the amount of nuclear waste we leave our children. NRC needs to test if there will be a potential increase in the surrounding environment to ensure there will be no cumulative impact. (11-18).

Comment: The proposed action will result in twenty years of additional operation that will increase the amount of high-level and low-level nuclear waste. Presently, FPL does not have storage space for the additional high-level waste and appears to be uncertain as to disposal of their low-level waste. The storage of these wastes on site for the extended period of operation could increase the risk of an accidental release to the environment in that Turkey Point is located in a hurricane zone rather than a geologically stable area. If it becomes necessary to store these wastes on site because no permanent burial site has been implemented, the storage of this spent fuel on site could also increase the risk and consequences of a spent fuel pool accident depending on the storage method. The licensee should be required to demonstrate that they can permanently and safely dispose of both their high level and low-level nuclear waste off-site for the extended operation of the plant. Additionally, the NRC should analyze the potential environmental impact of such a potential accident in a site-specific SEIS. (28-14)

**Comment:** Relicensing will create more nuclear waste and radioactive byproducts that could adversely impact the environment, especially as repositories close. (57-15)

**Response:** The comments are noted. Uranium fuel cycle impacts are Category 1 issues as evaluated in the GEIS. The comments provide no new information and, therefore, will not be evaluated further.

# 9. Comments Concerning Category 2 Aquatic Ecology and Threatened and Endangered Species Issues

As stated in 10 CFR Part 51, Table B-1, Category 2 aquatic ecology and threatened and endangered species issues are:

- C Entrainment of fish and shellfish in early life stages
- C Impingement of fish and shellfish
- C Heat shock
- C Threatened or endangered species.

**Comment:** It is estimated that approximately 70% of the increase in population of the American Crocodile in South Florida is due to the preservation efforts of FPL in the cooling canal system. (5-3 and 54-3)

**Comment:** Beneficial coexistence of Turkey Point and the environment. The plant site gave some of the land to the National Park Service to help establish Biscayne National Park. Over 13,000 acres of that property is undeveloped, and is part of the Everglades Mitigation Bank. FPL is restoring this to its natural state and maintaining the land for the protection and preservation of the environment. (5-2 and 54-2)

**Comment:** They have worked with the county government to protect some of the environmentally endangered lands in the community. (6-4)

**Comment:** The Turkey Point Plant is also environmentally sensitive. The 13,000 acres that have been set aside for mitigation are evidence of the commitment to protect the environment. (7-3)

**Comment:** We have one of the only crocodile natural habitats in this area, and that says a lot about the dedication of the Turkey Point Plant and the employees to making sure the environment can coexist with this facility. (9-3)

**Comment:** The cooling canal systems are a unique habitat and would not exist in this day and age. It provides a home for the American crocodile. (12-1)

**Comment:** The lands associated with the Turkey Point Plant have the ability to benefit or harm many of the critical species (threatened and endangered) of South Florida. (27-7)

**Comment:** The Supplement EIS should consider the impacts and benefits that have occurred due to the alteration of the natural habitat from the Turkey Point cooling canals. The Park recognizes the success of the cooling canals as artificial breeding grounds for the endangered North American saltwater crocodile. (27-9)

**Comment:** The Park hopes to work more closely with FPL in the future with data exchange regarding the North American saltwater crocodile, to include monitoring of tagged animals that are observed in the park and research projects that could jointly benefit park resource managers and FPL. (27-10)

**Comment:** The water cooling in the canals is not interconnected to the adjacent fragile Biscayne Bay. The extensive both marshy and dry land provides much wildlife habitat for birds,

varmints and so forth. Part of the land even provides the community an open and sheltered picnic area. (37-6)

**Comment:** Cooling pond system provides a warm ecosystem for wintering birds and wildlife, and protects the American crocodile. (40-4)

**Comment:** The Turkey Point employees have developed a unique stewardship of the environment in the region surrounding the plant by preserving the natural habitat surrounding the plant, providing homes to many endangered species, including the American crocodile. (53-2)

**Response:** The comments are noted. The comments acknowledge the importance of the manner in which FPL operates the site to the benefit of threatened and endangered species. The appropriate descriptive information regarding the plant-specific ecology of the site will be addressed in Section 2 of the SEIS.

**Comment:** This process must comply with the Endangered Species Act. Within a 50 mile radius at Turkey Point there are probably 60 endangered and threatened species because it is a major ecosystem. (11-8)

**Comment:** Under the Endangered Species Act, the NRC must consult with the U.S. Fish and Wildlife Service on how the proposed action could adversely impact threatened and endangered species within at least a fifty mile radius of the Turkey Point plant prior to conducting relicensing activities. (28-10)

**Comment:** NRC has not undertaken consultation with the Fish and Wildlife Service for the proposed action. (57-10)

**Response:** The comments are noted. Threatened and endangered species on the plant site and transmission line rights-of-way will be addressed as a Category 2 issue in Section 4.6 of the SEIS. The staff will conduct appropriate consultation under the Endangered Species Act.

**Comment:** There are new and significant issues related to the presence of endangered and threatened species in the parks and preserves surrounding the site. (57-6)

**Response:** The comment is noted, however, the comment fails to identify the new and significant issues related to the presence of threatened and endangered species. Threatened and endangered species within the plant site and the transmission line rights-of-way will be addressed as a Category 2 issue in Section 4.6 of the SEIS.

# 10. Comments Concerning Category 2 Socioeconomic Issues

As stated in 10 CFR Part 51, Table B-1, Category 2 socioeconomic issues are:

- C Housing
- C Public services: public utilities
- C Public services, education (refurbishment)
- C Offsite land use (refurbishment)
- C Offsite land use (license renewal term)
- C Public services, transportation
- C Historic and archaeological resources.

**Comment:** Turkey Point maintains a wetlands mitigation bank that is used by Homestead and others to offset impacts to wetlands. Loss of the plant will affect the ability to develop. (2-5)

**Response:** The comment is noted. It addresses a Category 2 issue regarding offsite land use during the license renewal term, and will be evaluated in Section 4.4 of the SEIS.

**Comment:** Turkey Point is the largest employer in Dade County. Loss would impact 800 employees, and affect the plant's property tax base of \$8 million. There will be a great deal of ancillary job and facility loss if the license is not renewed. (2-2)

**Comment:** Keeping Turkey Point a part of this community is also important to the social and economic well-being of our neighbors, with an estimated economic impact of over \$60 million annually to the local economy, and by the participation of the Turkey Point employees in the community. (5-7)

**Comment:** They are a major provider of jobs in the community. (6-2)

**Comment:** With over 800 employees, just about all our families are some how touched through the connection with Turkey Point Plant. With \$50 billion in payroll multiplied throughout our community, many of our businesses are able to stay afloat and flourish because of the economic impact of this plant. (7-2)

**Comment:** We have employees that are there contributing \$8 million in real estate taxes, \$50 million a year in payroll to this community. (9-5)

**Comment:** Nuclear energy is a source of employment and economic activity that supports families, regional businesses, local governments as they provide residents with essential educational and social services. (14-5)

**Comment:** Turkey Point plays a vital role in the local economy. (15-2)

**Comment:** The 800 or so employees of the plant earn an average of over \$62,000 per year, bringing in a payroll of over \$50 million per year, with another \$10 million in goods and services purchased locally. This makes it possible for TIB to make loans to businesses and residents. (16-1)

**Comment:** Turkey Point staff contribute financially to the community, giving over \$150,000 to the United Way, and have a \$200,000 scholarship for Miami-Dade Community College. Turkey Point staff do a lot of work in the community on a volunteer basis. (17-1)

**Comment:** The economic impact of Turkey Point exceeds the payroll, and may be as high as \$150 to 200 million, because of the re-spending of the income in the local community. (22-2)

**Comment:** Turkey Point union members have donated over \$10,000 to the Miami Cancer and Burn Center over the past 7 years. (23-2)

**Comment:** The paychecks at Turkey Point contribute to the Monroe County service-related fields. (26-1)

**Comment:** The folks at Turkey Point are an essential component of this local economy. They are the largest employer in deep South Dade. (30-1)

**Comment:** Turkey Point is the largest employer in South Dade. (32-1)

**Comment:** Turkey Point facility raised over \$150,000 for the United Way for this community and participate heavily in civic activities. Turkey Point staff is highly involved in the community and have created a \$200,000 fund for scholarships at Miami-Dade Community College. (32-2)

**Comment:** The economic impact of not renewing the license would be devastating to the local community of South Dade and Keys Gate. (34-1)

**Comment:** Contributions from the Turkey Point staff to the United Way affect as many as 450 underprivileged people who are dependent upon their funding and contributions. (35-3)

**Comment:** FPL and its appropriation has another community interest in their direct dollar donations to the local hospital. (37-7)

**Comment:** Turkey Point employs about 800 people. (38-1)

**Comment:** Plant employees use community services and provide income to the city and jobs for residents. (40-2)

**Comment:** Turkey Point is the largest private employer in South Dade, with over 800 employees and annual base salaries of over \$62,000. Economic impacts would be felt in payroll, property taxes, and support of area services. (41-1)

**Comment:** Turkey Point Nuclear Plant is one of the largest employers in the region with over 800 employees and its purchase of local services helps sustain the economy of south Miami-Dade County. (53-3)

**Comment:** Keeping Turkey Point a part of this community is also important to the social and economic well-being of our neighbors. With an estimated economic impact of over \$60 million annually to the local economy, and by the participation of the Turkey Point employees in the community. (54-7)

**Comment:** Nuclear energy is a source of employment and economic activity that supports families, regional businesses, local governments as they provide residents with essential educational and social services. (56-5)

**Response:** The comments are noted. Socioeconomic issues specific to the plant are Category 2 issues and will be addressed in Section 4.4 of the SEIS. The comments support license renewal at Turkey Point Units 3 and 4.

# 11. Comments Concerning Environmental Justice

**Comment:** There is a need to look at the impact of re-licensing on Native Americans. The Miccosukee Tribe and Seminoles live within the 50 mile zone of Turkey Point. NRC needs to look at how the re-licensing may impact their culture and way of life. Their culture and whole way of life depends on the natural Everglades system and it not being contaminated. (11-21)

**Comment:** NRC must evaluate environmental justice impacts on the Miccosukee and Seminole Indians. (28-6)

**Response:** The comments are noted. Environmental Justice is an issue specific to the plant and will be addressed in Section 4.4 of the SEIS. The Miccosukee and Seminole Indians have been offered the opportunity to participate in the scoping process and will be invited to comment on the draft SEIS.

# 12. Comments Concerning Related Federal Projects

**Comment:** The NEPA analysis should involve the South Florida Ecosystem Restoration Task Force. (11-19)

**Comment:** NRC should ask the Fish and Wildlife Service, the Everglades National Park, Biscayne National Park, the Environmental Protection Agency, and the Army Corps of Engineers to become cooperating agencies on the site-specific EIS, and notify the South Florida Ecosystem Restoration Task Force and their working group of the scope of the proposed action. (57-11)

**Response:** The comments are noted. Consultation with U.S. Fish and Wildlife under the Endangered Species Act requirements will take place as part of the license renewal evaluation process under NEPA. Other Federal agencies, as appropriate, have been contacted for information. It is not appropriate for these agencies to be cooperating agencies under the proposed action of license renewal, because these other agencies will not be issuing permits or licenses related to the proposed license renewal action.

**Comment:** There is significant new information at Turkey Point in terms of its significance to this whole area - the whole South Florida area in the Everglades restoration effort. (11-6)

**Comment:** Under NEPA, the NRC must assess whether the proposed action conflicts with the Federal investment in the Everglades Restoration plan. (28-16)

**Comment:** NRC should be aware of the Everglades Restoration Project and the Federal government's commitment to the South Florida ecosystem. (57-3)

**Comment:** Relicensing may be incompatible with restoration of the Everglades and the South Florida ecosystem. (57-17)

**Response:** The comments are noted. However, the comments fail to explain how the existence of an Everglades restoration effort is significant new information that would require

further assessment in the SEIS. The U.S. Army Corps of Engineers Everglades Restoration Project will be invited to provide information as part of the NEPA analysis of this proposed action. The Everglades Restoration Plan will be discussed in Section 2 of the SEIS.

**Comment:** Government support for Everglades restoration, and the clearly defined Federal interest in the protection of Biscayne National Park, Everglades National Park, the Big Cypress National Preserve, and Miccosukee Indian Reservation, along with the endangered and threatened species that inhabit these lands, changes the likely environmental harms by a "considerable magnitude" and could significantly alter the costs and benefits of the proposed project. (28-3)

**Comment:** There are new and significant issues related to the context of the plant, including the Biscayne National Park, Everglades National Park, Big Cypress National Preserve, Miccosukee Indian Reservation, and the Everglades Restoration Bill. (57-5)

**Response:** The comments are noted. However, the comments fail to explain how the existence of an Everglades restoration effort is significant and new information that would require further assessment in the SEIS. The appropriate agencies will be contacted to provide information on their perceptions of scoping issues and impacts as a routine fulfillment of Federal responsibilities under NEPA. To the extent that these comments address offsite land use, which is a Category 2 socioeconomic issue, offsite land use will be discussed in Section 2 and 4 of the SEIS.

# 13. Comments Concerning Alternative Energy Sources

**Comment:** Nuclear is a good alternative to oil - keeps us from being dependent on foreign oil. (1-1)

**Comment:** Without Turkey Point, a new plant would likely have to be built, and a means for transporting the fuel to the plant would have to be constructed. This could mean constructing a new gas pipeline to the site. Windmills would require over 200,00 acres. A solar park would require over 50,000 acres, and both would be less reliable than Turkey Point. Turkey Point's license renewal is the least impact alternative for providing electricity to the South Florida community. (5-6 and 54-6)

**Comment:** It was calculated that propane gas is three times as expensive as electricity from Turkey Point. (10-2)

**Comment:** Could convert Turkey Point to a natural gas plant. (11-1)

**Comment:** There is a need to do a fair analysis of alternatives so we will not wind up in Dade County without sufficient power if the plant has to be derated or shut down in the future. (11-10)

**Comment:** Renewal of a nuclear plant's license is far more economical than building any type of new electrical facility. (14-6 and 56-6)

**Comment:** Current land use is for a nuclear plant, so there is no need to disturb new land for a new power plant. (16-3)

**Comment:** The nuclear plant produces no soot or greenhouse gases, and has no adverse effect on one of the most sensitive ecological areas in the country. A fossil plant could not do this. (26-2)

**Comment:** The Service is very concerned about the detrimental impacts that will occur without the power production from the nuclear units. As delivery is set today, this would result in a dramatic increase in the numbers of FPL barge transports through Biscayne National Park's sensitive marine ecosystem. Without nuclear energy production, reliance on burning fossil fuels without using extensive mitigation methods will result in serious threats to the Park's air quality. The Supplement should address these concerns during the alternatives analysis. (27-16)

**Comment:** The Service is concerned about the alternatives to license renewal and that it will result in the demand to develop new power plant facilities in deep South Dade, leading to land use changes that prevent the ability to preserve and protect the Bay. These direct and cumulative impacts related to a large-scale development of this character should be fully identified within the Supplement EIS. (27-15)

**Comment:** An objective review of alternatives and their environmental risks could preclude the need to conduct the expensive and time consuming relicensing process by substituting a more environmentally friendly alternative for the operation of this aged nuclear power plant located in one of the most environmentally sensitive areas in the world. (28-9)

**Comment:** Nuclear power is clean. The Tampa Tribune recently published an article on fossil fuel emissions and the FDA is considering having warning labels on deepwater pelagic species such as tuna, shark and swordfish due to fossil-fuel emissions. (30-2)

**Comment:** The alternative to Turkey Point is more power plants in the Keys with their unavoidable impact on the fragile Keys environment. Other alternatives, such as the sun which

Monroe County has in abundance, are not ready to power all the air-conditioners, lights, and countless no vacancy signs. (33-1)

**Comment:** Nuclear power is cleaner than other kinds of power. It provides the power they to keep their agricultural business going. (35-2)

**Comment:** It makes sense to extend the license. If these plants were required to shut down, new and possibly more expensive plants would have to be built in order to provide generation capacity required for an ever increasing population in the area. (36-3)

**Comment:** Look at reasonable alternatives. Look at gas-fired generator, fossil-fuel generator, need to be sure that the extension of the license gets us the best way of generating safe, reliable electricity for the community. (39-2)

**Comment:** Nuclear generation is currently the least expensive method of providing electricity to the area, and produces no pollutants to the air, unlike fossil fuels. (40-3)

**Comment:** NRC should evaluate a full study of alternatives, including those that are more environmentally friendly. (57-9)

**Response:** The comments are noted. Many of the comments support relicensing of Turkey Point. Impacts from reasonable alternatives for the Turkey Point license renewal will be evaluated in Section 8 of the SEIS.

**Comment:** The delivery of fossil fuel occurs by barge from the port of Miami through Biscayne Bay with over 300 trips each year hauling 12,000 barrels of bunker "C" fuel oil to the plant. The barge has run aground numerous times, and each trip adversely impacts the water quality by churning up the Bay bottom into the water column creating a turbidity plume that lasts long after the barge has passed. The thrust from the barge's tugboat may disrupt sea grass recovery by potentially ripping it from the bottom, as well as other vegetation. Turbidity is known to limit the photosynthesis of both the phyoplanktonic and sea grass communities that are essential to a healthy marine ecosystem. (27-1)

**Comment:** FPL should consider the possibility of extending the existing and under-utilized fuel pipeline from the former Homestead Air Force Base to the Power Plant as an alternative. (27-2)

**Response:** The comments are noted. The comments refer to fuel delivery to the fossil-powered Units 1 and 2. Fuel delivery to the fossil powered units is not within the scope of 10 CFR Part 51 or 54, as fossil plants are not subject to NRC regulation. The analysis of alternatives in Section 8 of the SEIS will include the possibility of replacing the nuclear plants by

alternative types of generation, including fossil plants. Section 8 will evaluate the impacts associated with pipelines needed to support alternative forms of generation and the impacts of barge delivery on the Biscayne Bay water quality and ecology.

# 14. Comments Concerning Safety Issues Within the Scope of License Renewal

**Comment:** The issue of pressure-vessel integrity at Turkey Point and does this reactor have the integrity it needs to have. This needs to be added to the NEPA process because its important to safety and to economics. (11-9)

**Comment:** There is an issue with hurricanes and aging equipment that could increase the risk probability and magnitude of a radiological accident. (11-11)

**Comment:** Need to be sure pressure vessels have the strength and the capacity to continue to operate for another 20 years. (39-1)

Comment: The NRC should require that the licensee perform an analysis based on plant-specific surveillance capsule test data, and plant-specific operating history, for both Turkey Point Units 3 and 4, because the rate at which the beltline weld material deteriorates and/or embrittles is plant specific. Such a plant-specific analysis is necessary to prove that an acceptable margin of safety exists for the reactor vessels in both Turkey Point Units 3 and 4 that will enable them to meet the requirements of 10 CFR 50.61 and 10 CFR (c)(1)(ii) during the period of extended operation, because the additional twenty years of operation will cause increased neutron radiation damage to the reactor vessel welds that could further decrease the margin of safety, thereby increasing the probability that a pressurized thermal shock event and resultant meltdown could take place at Turkey Point Unit 3 or 4, either as a result of an internal event or an external event , such as a hurricane, if fracture toughness is not maintained. In the event that such an accident occurs in a hurricane in which emergency response capability is curtailed or restricted, the consequences to the public could also be increased. (28-11)

**Comment:** The age-related degradation of multiple components could increase the chance that several components in the reactor and/or spent fuel pool, could fail simultaneously during a hurricane, thereby reducing the margin of safety of the plant and increasing the probability of an age-related accident and resultant radiological emergency that would have an extremely adverse impact on the human environment. The probability of a hurricane's (including a beyond design basis hurricane's) impact on deteriorated plant structures and components and its contribution to risk should be analyzed and discussed in quantitative terms by the licensee in their application or environmental report to meet the requirements of 10 CFR 50.4(a)(1) and also in a site-specific SEIS under NEPA. (28-12)

**Comment:** Operation of this aged and embrittled nuclear power plant beyond its original license will cause more radioactive fission products to accumulate and could increase the probability and consequences of a nuclear accident, threatening injury to herself, her family and the ecosystem of South Florida. (57-1)

**Comment:** NRC should ensure that the licensee conduct Charpy tests of the pressure vessel welds, because an embrittled pressure vessel would be subject to multiple failures of aging components, including that induced by a hurricane. NRC should evaluate whether multiple-component failure is more likely in an old facility. (57-12)

**Comment:** Hurricane and aging equipment could increase the risk, probability, and magnitude of a radiological accident. (57-13)

Response: The comments are noted. To the extent that these comments pertain to aging within the scope of license renewal, these issues will be addressed during the parallel safety analysis review performed under 10 CFR Part 54. Aging management issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS. The ability to cope with the effects of severe weather, such as hurricanes and tornados, is specifically addressed in the deterministic review conducted prior to issuance of an operating license. This forms part of a plant's licensing basis, which must be met at all times during the operating life of the plant. Weather events more severe than the plant's design basis have been addressed by the licensee in its individual plant examinations of internal and external events (IPE and IPEEE, respectively). These plant-specific risk studies provide baseline estimates of risk from internal and external events. In evaluating severe accident mitigation alternatives (SAMAs), a license renewal applicant uses risk profiles to identify potential means of further reducing risk (through design alternatives that enhance the ability to prevent or mitigate core damage). Section 5.2 of the SEIS will contain the staff's evaluation of SAMAs.

#### 15. Questions

The following comments were presented in the form of questions during the scoping process. The staff will take note of the questions to the extent that the questions apply to the issues discussed in the SEIS. However, the questions did not provide new information and will not be evaluated further.

### Water Quality

**Comment:** The cooling canals are unlined, and the water enters Card Sound and Biscayne Bay at 60 to 150 cubic feet per second. What levels of contaminants are migrating to the Sound, and what is appearing in the inshore marine life of Biscayne Bay National Park? (3-1)

**Comment:** Will the discharge of contaminants to the cooling canals and ultimately to Card Sound increase if Barnwell closes and the Southeast Regional Compact collapses? (3-2)

**Comment:** Do contaminants in the fish and shellfish of Card Sound and Biscayne Bay from Turkey Point discharges pose an unacceptable health risk for consumers of those resources? (3-3)

**Comment:** What are the actual levels of CO<sub>2</sub> production during the fuel fabrication process? (3-6)

**Comment:** What isotopes at what concentrations are present in the water of Lake Warren? (29-3)

**Comment:** What isotopes at what concentrations are present in the sediment of Lake Warren? (29-4)

**Comment:** What volume of water containing radioactive waste, other than condenser cooling water was discharged into Lake Warren in year 2000? (29-5)

**Comment:** What are the daily limits in volume and concentration for each chemical allowed for discharge by the National Pollutant Discharge Elimination System permit? (29-6)

**Comment:** Have there been any requested discharges of toxic chemicals in year 2000? What chemicals, what volume, what concentrations? (29-7)

**Comment:** What are the nonradioactive pollutants present in the water of Lake Warren? What chemicals, what concentrations? (29-8)

**Comment:** What radioactive isotopes have been found in the bay waters outside the Turkey Point plant in year 2000? (29-9)

**Comment:** What nonradioactive pollutants have been found in the bay waters outside the Turkey Point plant in year 2000? (29-10)

**Response:** The questions are noted. Radiological dose, offsite migration of radionuclides, water quality, and uranium fuel cycle impacts are Category 1 issues that were evaluated in the GEIS. Information from routine monitoring programs are available from the State of Florida Department of Health. The requirements in the National Pollutant Discharge Elimination System permit are set by the State of Florida and are not under the jurisdiction of the NRC. The permit is included as part of the applicant's Environmental Report, and will be discussed in

Section 2.2.3 of the SEIS. The questions provide no new information and, therefore, will not be evaluated further.

# Postulated Accidents

**Comment:** What safety impacts will result from the increased air traffic associated with the proposed change in use of Homestead AFB? (3-7)

**Comment:** If Homestead AFB becomes a space port, what will be the impacts on Turkey Point if a million pounds of liquid hydrogen stored in above-ground tanks near the plant ignite? (3-8)

**Response:** The questions are noted. The impacts associated with postulated accidents resulting from site hazards are evaluated under 10 CFR Part 50 as part of the licensing design basis. In January 2001, the Department of Defense announced that it will allow civilian control and development of a portion of the former Homestead Air Force Base, provided no future airport is located at that site. Should an airport be proposed near any nuclear power plant in the United States, the hazard to continued operation of the plant would be evaluated. The questions provide no new information and, therefore, will not be evaluated further.

#### Summary

The preparations of the plant-specific supplement to the GEIS takes into account all the relevant issues raised during the scoping process that are described above. Concerns related to the environmental license renewal review of Turkey Point were considered during the development of the draft SEIS for Turkey Point Units 3 & 4. The draft SEIS was available for public comment. Interested Federal, State, and local government agencies; local organizations; and members of the public were given the opportunity to provide additional input to be considered during the development of the final SEIS. Concerns identified that are outside the scope of the staff's environmental review have been or will be forwarded to the appropriate NRC program manager.

# Part II - Comments Received on the Draft SEIS

Pursuant to 10 CFR Part 51, the staff transmitted the *Generic Environmental Impact Statement* for License Renewal of Nuclear Plants, Regarding Turkey Point Units 3 and 4, Draft Report for Comment (NUREG-1437, Supplement 5, referred to as the draft SEIS) to Federal, State, and

local government agencies as well as interested members of the public. As part of the process to solicit public comments on the draft SEIS, the staff:

- c placed a copy of the draft SEIS into the NRC's electronic Public Document Room, its license renewal website, and the Homestead Branch Library located at 700 N. Homestead Boulevard, Homestead, Florida 33030
- copies, and certain Federal, State, and local agencies
- c published a notice of availability of the draft SEIS in the Federal Register on June 22, 2001 (66 FR 33538)
- © issued public announcements, such as advertisements in local newspapers and postings in public places, of the availability of the draft SEIS
- c announced and held two public meetings in Homestead, Florida, on July 17, 2001, to describe the results of the environmental review and answer related questions
- c issued public service announcements and press releases announcing the issuance of the draft SEIS, the public meetings, and instructions on how to comment on the draft SEIS
- c established a website to receive comments on the draft SEIS through the Internet.

During the comment period, the staff received a total of 8 comment letters in addition to the comments received during the public meetings.

The staff has reviewed the public meeting transcripts and the 8 comment letters that are part of the docket file for the application, all of which are available in the NRC's electronic Public Document Room. Appendix A, Part II, Section A.1 contains a summary of the comments and the staff's responses. Related issues are grouped together. Appendix A, Part II, Section A.2 contains excerpts of the July 17, 2001, public meeting transcripts, the written statements provided at the public meetings, and comment letters.

Each comment identified by the staff was assigned a specific alpha-numeric identifier (marker). That identifier is typed in the margin of the transcript or letter at the beginning of the discussion of the comment. A cross-reference of the alpha-numeric identifiers, the speaker or author of the comment, the page where the comment can be found, and the section(s) of this report in which the comment is addressed is provided in Table A-2. The speakers at the meetings are

listed in speaking order along with the page of the transcript excerpts in this report on which the comment appears. These comments are identified by the letters "TPD" followed by a number that identifies each comment in approximate chronological order in which the comments were made. The written statements (from the public meetings) and written comment letters are also identified by the letters "TPD."

The staff made a determination on each comment that it was one of the following:

- (1) a comment that was actually a request for information and introduced no new information.
- (2) a comment that was either related to support or opposition of license renewal in general (or specifically Turkey Point Nuclear Plant) or that made a general statement about the license renewal process. It may have made only a general statement regarding Category 1 and/or Category 2 issues. In addition, it provided no new information and does not pertain to 10 CFR Part 54.
- (3) a comment about a Category 1 issue that
  - (a) provided new information that required evaluation during the review, or
  - (b) provided no new information
- (4) a comment about a Category 2 issue that
  - (a) provided information that required evaluation during the review, or
  - (b) provided no such information
- (5) a comment that raised an environmental issue that was not addressed in the GEIS or the DSEIS
- (6) a comment on safety issues pertaining to 10 CFR Part 54, or
- (7) a comment outside the scope of license renewal (not related to 10 CFR Parts 51 or 54).

There was no significant new information provided on Category 1 issues [(3)(a) above] or information that required further evaluation on Category 2 issues [(4)(a)]. Therefore, the GEIS and draft SEIS remained valid and bounding, and no further evaluation was performed.

Comments without a supporting technical basis or without any new information are discussed in this appendix, and not in other sections of this report. Relevant references that address the issues within the regulatory authority of the NRC are provided where appropriate. Many of these references can be obtained from the NRC electronic Public Document Room.

Within each section of Part II of this appendix (A.1.1 through A.1.21), similar comments are grouped together for ease of reference, and a summary description of the comments is given,

followed by the staff's response. Where the comment or question resulted in a change in the text of the draft report, the corresponding response refers the reader to the appropriate section of this report where the change was made. Revisions to the text in the draft report are designated by vertical lines beside the text.

Some numbers were initially assigned to portions of verbal or written statements that were later determined not to be comments. These items were removed from the table. As a result, not all numbers are sequential (see Table A-2).

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD09-1	Υ	Marsh	Afternoon Meeting Transcript (07/17/01)	A-165	A.1.1
TPD10-1	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-165	A.1.2
TPD10-2	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-166	A.1.14
TPD10-3	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-166	A.1.14
TPD10-4	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-166	A.1.14
TPD10-5	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-166	A.1.14
TPD10-6	С	lvy	Afternoon Meeting Transcript (07/17/01)	A-167	A.1.1
TPD11-1	С	Lanza	Afternoon Meeting Transcript (07/17/01)	A-167	A.1.2
TPD11-2	С	Lanza	Afternoon Meeting Transcript (07/17/01)	A-167	A.1.2
TPD12-1	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-167	A.1.2
TPD12-2	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.19
TPD12-3	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.2
TPD12-4	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.15
TPD12-5	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.14
TPD12-6	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.14
TPD12-7	Α	Penelas	Afternoon Meeting Transcript (07/17/01)	A-168	A.1.1
TPD13-1	1	Toner	Afternoon Meeting Transcript (07/17/01)	A-169	A.1.2
TPD13-2	1	Toner	Afternoon Meeting Transcript (07/17/01)	A-169	A.1.2
TPD13-3	1	Toner	Afternoon Meeting Transcript (07/17/01)	A-169	A.1.2

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD14-1	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-170	A.1.2
TPD14-2	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-170	A.1.2
TPD14-3	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.18
TPD14-4	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.9
TPD14-5	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.9
TPD14-6	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.9
TPD14-7	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.9
TPD14-8	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.9
TPD14-9	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-171	A.1.19
TPD14-10	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.15
TPD14-11	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.8
TPD14-12	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.7
TPD14-13	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.14
TPD14-14	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.14
TPD14-15	В	Hovey	Afternoon Meeting Transcript (07/17/01)	A-172	A.1.1
TPD15-1	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-173	A.1.2
TPD15-2	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-173	A.1.17
TPD15-3	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-173	A.1.7
TPD15-4	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-174	A.1.8
TPD15-5	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-174	A.1.15
TPD15-6	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-174	A.1.2
TPD15-7	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-174	A.1.19
TPD15-8	L	Thompson	Afternoon Meeting Transcript (07/17/01)	A-174	A.1.14
TPD16-1	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-176	A.1.9
TPD16-2	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-176	A.1.9

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD16-3	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-176	A.1.9
TPD16-4	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-176	A.1.9
TPD16-5	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-177	A.1.9
TPD16-6	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-177	A.1.9
TPD16-7	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-178	A.1.9
TPD16-8	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-178	A.1.9
TPD16-9	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-178	A.1.9
TPD16-10	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-178	A.1.9
TPD16-11	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-178	A.1.9
TPD16-12	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-179	A.1.9
TPD16-13	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-179	A.1.9
TPD16-14	J	Brown	Afternoon Meeting Transcript (07/17/01)	A-179	A.1.9
TPD17-1	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-181	A.1.9
TPD17-2	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-180	A.1.9
TPD17-3	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-182	A.1.9
TPD17-4	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-180	A.1.9
TPD17-5	Е	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-181	A.1.9
TPD17-6	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-181	A.1.9
TPD17-7	Ε	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-181	A.1.9
TPD17-8	Е	Sternglass	Afternoon Meeting Transcript (07/17/01)	A-182	A.1.9
TPD18-1	Н	Keaton	Afternoon Meeting Transcript (07/17/01)	A-183	A.1.9
TPD18-2	Н	Keaton	Afternoon Meeting Transcript (07/17/01)	A-183	A.1.9
TPD18-3	Н	Keaton	Afternoon Meeting Transcript (07/17/01)	A-184	A.1.9
TPD19-1	D	Moeller	Afternoon Meeting Transcript (07/17/01)	A-185	A.1.9
TPD20-1	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-189	A.1.18

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	\$	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD20-2	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-189	A.1.18
TPD20-3	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-189	A.1.18
TPD20-4	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-190	A.1.18
TPD20-5	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.18
TPD20-6	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.18
TPD20-7	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.18
TPD20-8	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.18
TPD20-9	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.8
TPD20-10	М	Oncavage	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.18
TPD21-1	D	Jacobs	Afternoon Meeting Transcript (07/17/01)	A-191	A.1.9
TPD21-2	D	Jacobs	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.9
TPD21-3	D	Jacobs	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.9
TPD21-4	D	Jacobs	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.3
TPD21-5	D	Jacobs	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.3
TPD22-1	F	Pitz	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.18
TPD22-2	F	Pitz	Afternoon Meeting Transcript (07/17/01)	A-192	A.1.13
TPD22-3	F	Pitz	Afternoon Meeting Transcript (07/17/01)	A-193	A.1.18
TPD22-4	F	Pitz	Afternoon Meeting Transcript (07/17/01)	A-193	A.1.3
TPD23-1	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.19
TPD23-2	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.14
TPD23-3	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.14
TPD23-4	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.14
TPD23-5	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.14
TPD23-6	М	Donworth	Afternoon Meeting Transcript (07/17/01)	A-194	A.1.2
TPD24-1	D	Friedrichs	Afternoon Meeting Transcript (07/17/01)	A-195	A.1.1

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

•		Speaker or Author Source		Page of Comment	Section(s) Where Addressed
TPD24-2	D	Friedrichs	Afternoon Meeting Transcript (07/17/01)	A-195	A.1.14
TPD24-3	D	Friedrichs	Afternoon Meeting Transcript (07/17/01)	A-195	A.1.1
TPD25-1	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.2
TPD25-2	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.19
TPD25-3	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.2
TPD25-4	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.19
TPD25-5	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.7
TPD25-6	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.15
TPD25-7	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.19
TPD25-8	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-196	A.1.2
TPD25-9	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-197	A.1.2
TPD25-10	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-197	A.1.19
TPD25-11	Α	Velazquez	Afternoon Meeting Transcript (07/17/01)	A-197	A.1.19
TPD26-1	R	Rothschild	Afternoon Meeting Transcript (07/17/01)	A-198	A.1.14
TPD26-2	R	Rothschild	Afternoon Meeting Transcript (07/17/01)	A-198	A.1.18
TPD27-1	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.1
TPD27-2	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.19
TPD27-3	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.14
TPD27-4	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.2
TPD27-5	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.14
TPD27-6	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.15
TPD27-7	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.2
TPD27-8	L	Dilan	Afternoon Meeting Transcript (07/17/01)	A-199	A.1.2
TPD28-1	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-200	A.1.1
TPD28-2	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-200	A.1.2

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

	No.	S	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
-	TPD28-3	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-200	A.1.2
	TPD28-4	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-200	A.1.2
	TPD28-5	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-201	A.1.2
	TPD28-6	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-201	A.1.2
	TPD28-7	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-201	A.1.7
	TPD28-8	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-201	A.1.2
	TPD28-9	В	Thompson	Afternoon Meeting Transcript (07/17/01)	A-201	A.1.1
	TPD29-1	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.9
	TPD29-2	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.9
	TPD29-3	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.9
	TPD29-4	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.9
	TPD29-5	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.13
	TPD29-6	S	Showen	Afternoon Meeting Transcript (07/17/01)	A-202	A.1.9
	TPD30-1	D	Rydholm	Afternoon Meeting Transcript (07/17/01)	A-203	A.1.2
	TPD30-2	D	Rydholm	Afternoon Meeting Transcript (07/17/01)	A-203	A.1.14
	TPD30-3	D	Rydholm	Afternoon Meeting Transcript (07/17/01)	A-203	A.1.1
	TPD31-1		Cullen	Afternoon Meeting Transcript (07/17/01)	A-204	A.1.9
	TPD31-2		Cullen	Afternoon Meeting Transcript (07/17/01)	A-204	A.1.15
	TPD31-3		Cullen	Afternoon Meeting Transcript (07/17/01)	A-204	A.1.1
	TPD31-4		Cullen	Afternoon Meeting Transcript (07/17/01)	A-204	A.1.17
	TPD32-1	Т	Breslin	August 5, 2001, Letter	A-260	A.1.3
	TPD32-2	Т	Breslin	August 5, 2001, Letter	A-260	A.1.6
	TPD32-3	Т	Breslin	August 5, 2001, Letter	A-260	A.1.18
	TPD32-4	Т	Breslin	August 5, 2001, Letter	A-260	A.1.3
	TPD32-5	Т	Breslin	August 5, 2001, Letter	A-260	A.1.13

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD32-6	Т	Breslin	August 5, 2001, Letter	A-260	A.1.9
TPD33-1	G	Hogue	July 31, 2001, Letter	A-261	A.1.20
TPD34-1	J	Lorion	Evening Meeting Transcript (07/17/01)	A-210	A.1.18
TPD34-2	J	Lorion	Evening Meeting Transcript (07/17/01)	A-216	A.1.18
TPD34-3	J	Lorion	Evening Meeting Transcript (07/17/01)	A-216	A.1.18
TPD34-4	J	Lorion	Evening Meeting Transcript (07/17/01)	A-217	A.1.20
TPD34-5	J	Lorion	Evening Meeting Transcript (07/17/01)	A-217	A.1.18
TPD34-6	J	Lorion	Evening Meeting Transcript (07/17/01)	A-217	A.1.4
TPD34-7	J	Lorion	Evening Meeting Transcript (07/17/01)	A-217	A.1.9
TPD34-8	J	Lorion	Evening Meeting Transcript (07/17/01)	A-217	A.1.18
TPD34-9	J	Lorion	Evening Meeting Transcript (07/17/01)	A-218	A.1.17
TPD34-10	J	Lorion	Evening Meeting Transcript (07/17/01)	A-218	A.1.13
TPD34-11	J	Lorion	Evening Meeting Transcript (07/17/01)	A-218	A.1.4
TPD34-12	J	Lorion	Evening Meeting Transcript (07/17/01)	A-218	A.1.16
TPD34-13	J	Lorion	Evening Meeting Transcript (07/17/01)	A-218	A.1.12
TPD34-14	J	Lorion	Evening Meeting Transcript (07/17/01)	A-219	A.1.15
TPD34-15	J	Lorion	Evening Meeting Transcript (07/17/01)	A-219	A.1.3
TPD35-1	D	Moss	Evening Meeting Transcript (07/17/01)	A-214	A.1.2
TPD35-2	D	Moss	Evening Meeting Transcript (07/17/01)	A-214	A.1.9
TPD35-3	D	Moss	Evening Meeting Transcript (07/17/01)	A-214	A.1.14
TPD35-4	D	Moss	Evening Meeting Transcript (07/17/01)	A-214	A.1.19
TPD36-1	S	Fletcher	Evening Meeting Transcript (07/17/01)	A-215	A.1.2
TPD36-2	S	Fletcher	Evening Meeting Transcript (07/17/01)	A-215	A.1.14
TPD36-3	S	Fletcher	Evening Meeting Transcript (07/17/01)	A-215	A.1.2
TPD37-1	S	Kennedy	Evening Meeting Transcript (07/17/01)	A-215	A.1.1

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD37-2	S	Kennedy	Evening Meeting Transcript (07/17/01)	A-215	A.1.14
TPD38-1	J	Wasolewski	Evening Meeting Transcript (07/17/01)	A-220	A.1.15
TPD38-2	J	Wasolewski	Evening Meeting Transcript (07/17/01)	A-220	A.1.1
TPD38-3	J	Wasolewski	Evening Meeting Transcript (07/17/01)	A-220	A.1.11
TPD39-1	М	Finlan	Evening Meeting Transcript (07/17/01)	A-220	A.1.1
TPD40-1	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.9
TPD40-2	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.18
TPD40-3	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.13
TPD40-4	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.9
TPD40-5	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.18
TPD40-6	K	Bailey	Evening Meeting Transcript (07/17/01)	A-221	A.1.18
TPD41-1	K	Sovia	Evening Meeting Transcript (07/17/01)	A-222	A.1.2
TPD41-2	K	Sovia	Evening Meeting Transcript (07/17/01)	A-222	A.1.14
TPD41-3	K	Sovia	Evening Meeting Transcript (07/17/01)	A-222	A.1.11
TPD41-4	K	Sovia	Evening Meeting Transcript (07/17/01)	A-222	A.1.2
TPD42-1	Т	Williams	Evening Meeting Transcript (07/17/01)	A-223	A.1.2
TPD42-2	Т	Williams	Evening Meeting Transcript (07/17/01)	A-223	A.1.19
TPD42-3	Т	Williams	Evening Meeting Transcript (07/17/01)	A-223	A.1.11
TPD42-4	Т	Williams	Evening Meeting Transcript (07/17/01)	A-224	A.1.1
TPD42-5	Т	Williams	Evening Meeting Transcript (07/17/01)	A-224	A.1.1
TPD43-1	R	Hovey	Evening Meeting Transcript (07/17/01)	A-224	A.1.1
TPD43-2	R	Hovey	Evening Meeting Transcript (07/17/01)	A-225	A.1.1
TPD43-3	R	Hovey	Evening Meeting Transcript (07/17/01)	A-226	A.1.2
TPD43-4	R	Hovey	Evening Meeting Transcript (07/17/01)	A-226	A.1.2
TPD43-5	R	Hovey	Evening Meeting Transcript (07/17/01)	A-226	A.1.9

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD43-6	R	Hovey	Evening Meeting Transcript (07/17/01)	A-227	A.1.19
TPD43-7	R	Hovey	Evening Meeting Transcript (07/17/01)	A-227	A.1.11
TPD43-8	R	Hovey	Evening Meeting Transcript (07/17/01)	A-227	A.1.14
TPD43-9	R	Hovey	Evening Meeting Transcript (07/17/01)	A-227	A.1.1
TPD43-10	R	Hovey	Evening Meeting Transcript (07/17/01)	A-226	A.1.9
TPD44-1	L	Thompson	Evening Meeting Transcript (07/17/01)	A-228	A.1.7
TPD44-2	L	Thompson	Evening Meeting Transcript (07/17/01)	A-228	A.1.15
TPD44-3	L	Thompson	Evening Meeting Transcript (07/17/01)	A-229	A.1.19
TPD44-4	L	Thompson	Evening Meeting Transcript (07/17/01)	A-229	A.1.14
TPD44-5	L	Thompson	Evening Meeting Transcript (07/17/01)	A-229	A.1.1
TPD44-6	L	Thompson	Evening Meeting Transcript (07/17/01)	A-229	A.1.2
TPD45-1	Н	Keaton	Evening Meeting Transcript (07/17/01)	A-230	A.1.9
TPD45-2	Н	Keaton	Evening Meeting Transcript (07/17/01)	A-230	A.1.9
TPD45-3	Н	Keaton	Evening Meeting Transcript (07/17/01)	A-231	A.1.9
TPD46-1	D	Moeller	Evening Meeting Transcript (07/17/01)	A-232	A.1.9
TPD46-2	D	Moeller	Evening Meeting Transcript (07/17/01)	A-234	A.1.9
TPD47-1	М	Jonckheere	Evening Meeting Transcript (07/17/01)	A-236	A.1.4
TPD47-2	М	Jonckheere	Evening Meeting Transcript (07/17/01)	A-236	A.1.9
TPD47-3	М	Jonckheere	Evening Meeting Transcript (07/17/01)	A-236	A.1.9
TPD47-4	М	Jonckheere	Evening Meeting Transcript (07/17/01)	A-236	A.1.4
TPD48-1	М	Donworth	Evening Meeting Transcript (07/17/01)	A-237	A.1.14
TPD49-1	R	Anderson	Evening Meeting Transcript (07/17/01)	A-238	A.1.7
TPD49-2	R	Anderson	Evening Meeting Transcript (07/17/01)	A-238	A.1.14
TPD49-3	R	Anderson	Evening Meeting Transcript (07/17/01)	A-238	A.1.17
TPD49-4	R	Anderson	Evening Meeting Transcript (07/17/01)	A-239	A.1.7

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

	No.		Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
	TPD49-5	R	Anderson	Evening Meeting Transcript (07/17/01)	A-239	A.1.1
	TPD49-6	R	Anderson	Evening Meeting Transcript (07/17/01)	A-239	A.1.2
l	TPD50-1	М	Oncavage	Evening Meeting Transcript (07/17/01)	A-240	A.1.4
	TPD50-2	М	Oncavage	Evening Meeting Transcript (07/17/01)	A-240	A.1.17
	TPD50-3	М	Oncavage	Evening Meeting Transcript (07/17/01)	A-241	A.1.17
l	TPD50-4	М	Oncavage	Evening Meeting Transcript (07/17/01)	A-241	A.1.14
	TPD51-1	D	Peyton	Evening Meeting Transcript (07/17/01)	A-242	A.1.2
l	TPD51-2	D	Peyton	Evening Meeting Transcript (07/17/01)	A-242	A.1.8
	TPD51-3	D	Peyton	Evening Meeting Transcript (07/17/01)	A-242	A.1.1
l	TPD52-1	С	Doherty	Evening Meeting Transcript (07/17/01)	A-242	A.1.1
	TPD52-2	С	Doherty	Evening Meeting Transcript (07/17/01)	A-243	A.1.14
	TPD52-3	С	Doherty	Evening Meeting Transcript (07/17/01)	A-242	A.1.14
	TPD53-1	М	Richardson	Evening Meeting Transcript (07/17/01)	A-244	A.1.18
	TPD53-2	М	Richardson	Evening Meeting Transcript (07/17/01)	A-244	A.1.2
	TPD54-1	С	Broom	Evening Meeting Transcript (07/17/01)	A-245	A.1.1
	TPD54-2	С	Broom	Evening Meeting Transcript (07/17/01)	A-245	A.1.1
	TPD54-3	С	Broom	Evening Meeting Transcript (07/17/01)	A-245	A.1.18
	TPD54-4	С	Broom	Evening Meeting Transcript (07/17/01)	A-246	A.1.2
	TPD55-1	W	Shomar	Evening Meeting Transcript (07/17/01)	A-247	A.1.2
	TPD55-2	W	Shomar	Evening Meeting Transcript (07/17/01)	A-247	A.1.2
	TPD55-3	W	Shomar	Evening Meeting Transcript (07/17/01)	A-247	A.1.14
l	TPD55-4	W	Shomar	Evening Meeting Transcript (07/17/01)	A-247	A.1.1
	TPD56-1	J	Randles	Evening Meeting Transcript (07/17/01)	A-248	A.1.2
	TPD56-2	J	Randles	Evening Meeting Transcript (07/17/01)	A-248	A.1.19
I	TPD56-3	J	Randles	Evening Meeting Transcript (07/17/01)	A-248	A.1.15

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD56-4	J	Randles	Evening Meeting Transcript (07/17/01)	A-249	A.1.14
TPD56-5	J	Randles	Evening Meeting Transcript (07/17/01)	A-249	A.1.14
TPD56-6	J	Randles	Evening Meeting Transcript (07/17/01)	A-249	A.1.2
TPD56-7	J	Randles	Evening Meeting Transcript (07/17/01)	A-250	A.1.19
TPD56-8	J	Randles	Evening Meeting Transcript (07/17/01)	A-250	A.1.2
TPD56-9	J	Randles	Evening Meeting Transcript (07/17/01)	A-250	A.1.2
TPD57-1	J	Balfe	Evening Meeting Transcript (07/17/01)	A-250	A.1.18
TPD57-2	J	Balfe	Evening Meeting Transcript (07/17/01)	A-250	A.1.4
TPD57-3	J	Balfe	Evening Meeting Transcript (07/17/01)	A-250	A.1.18
TPD57-4	J	Balfe	Evening Meeting Transcript (07/17/01)	A-250	A.1.17
TPD57-5	J	Balfe	Evening Meeting Transcript (07/17/01)	A-250	A.1.17
TPD57-6	J	Balfe	Evening Meeting Transcript (07/17/01)	A-251	A.1.18
TPD58-1	В	Anderson	Evening Meeting Transcript (07/17/01)	A-251	A.1.1
TPD58-2	В	Anderson	Evening Meeting Transcript (07/17/01)	A-252	A.1.1
TPD59-1	R	Rothschild	Evening Meeting Transcript (07/17/01)	A-252	A.1.2
TPD59-2	R	Rothschild	Evening Meeting Transcript (07/17/01)	A-253	A.1.14
TPD59-3	R	Rothschild	Evening Meeting Transcript (07/17/01)	A-253	A.1.14
TPD59-4	R	Rothschild	Evening Meeting Transcript (07/17/01)	A-254	A.1.17
TPD60-1	S	Collins	August 23, 2001, Letter	A-261	A.1.1
TPD60-2	S	Collins	August 23, 2001, Letter	A-261	A.1.8
TPD60-3	S	Collins	August 23, 2001, Letter	A-261	A.1.8
TPD60-4	S	Collins	August 23, 2001, Letter	A-261	A.1.8
TPD61-1	С	Gonzalez	July 30, 2001, Letter	A-262	A.1.8
TPD61-2	С	Gonzalez	July 30, 2001, Letter	A-262	A.1.8
TPD61-3	С	Gonzalez	July 30, 2001, Letter	A-262	A.1.8

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

	No.	\$	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
	TPD62-1	Т	Jones	August 27, 2001, Letter	A-264	A.1.2
	TPD62-2	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-3	Т	Jones	August 27, 2001, Letter	A-265	A.1.14
	TPD62-4	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-5	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-6	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-7	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-8	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-9	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-10	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-11	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-12	Т	Jones	August 27, 2001, Letter	A-265	A.1.21
	TPD62-13	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-14	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
1	TPD62-15	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-16	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
l	TPD62-17	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-18	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
l	TPD62-19	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
1	TPD62-20	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
l	TPD62-21	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
1	TPD62-22	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-23	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-24	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
	TPD62-25	Т	Jones	August 27, 2001, Letter	A-266	A.1.21

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD62-26	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
TPD62-27	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
TPD62-28	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
TPD62-29	Т	Jones	August 27, 2001, Letter	A-266	A.1.21
TPD62-30	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-31	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-32	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-33	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-34	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-35	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-36	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-37	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-38	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-39	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-40	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-41	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD62-42	Т	Jones	August 27, 2001, Letter	A-267	A.1.21
TPD63-1	Ε	Johnson	July 17, 2001, Letter	A-267	A.1.1
TPD63-2	Е	Johnson	July 17, 2001, Letter	A-267	A.1.2
TPD63-3	Ε	Johnson	July 17, 2001, Letter	A-267	A.1.14
TPD63-4	Е	Johnson	July 17, 2001, Letter	A-267	A.1.14
TPD63-5	Е	Johnson	July 17, 2001, Letter	A-267	A.1.14
TPD63-6	E	Johnson	July 17, 2001, Letter	A-267	A.1.2
TPD63-7	Ε	Johnson	July 17, 2001, Letter	A-267	A.1.2
TPD63-8	Ε	Johnson	July 17, 2001, Letter	A-267	A.1.2

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	s	peaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD63-9	E	Johnson			A.1.1
			July 17, 2001, Letter	A-267	
TPD64-1	J	Lorion	September 6, 2001, Letter	A-268	A.1.4
TPD64-2	J	Lorion	September 6, 2001, Letter	A-268	A.1.18
TPD64-3	J	Lorion	September 6, 2001, Letter	A-268	A.1.12
TPD64-4	J	Lorion	September 6, 2001, Letter	A-268	A.1.13
TPD64-5	J	Lorion	September 6, 2001, Letter	A-268	A.1.18
TPD64-6	J	Lorion	September 6, 2001, Letter	A-268	A.1.4
TPD64-7	J	Lorion	September 6, 2001, Letter	A-268	A.1.4
TPD64-8	J	Lorion	September 6, 2001, Letter	A-268	A.1.4
TPD64-9	J	Lorion	September 6, 2001, Letter	A-268	A.1.16
TPD64-10	J	Lorion	September 6, 2001, Letter	A-268	A.1.4
TPD64-11	J	Lorion	September 6, 2001, Letter	A-269	A.1.3
TPD64-12	J	Lorion	September 6, 2001, Letter	A-269	A.1.3
TPD64-13	J	Lorion	September 6, 2001, Letter	A-269	A.1.3
TPD64-14	J	Lorion	September 6, 2001, Letter	A-270	A.1.3
TPD64-15	J	Lorion	September 6, 2001, Letter	A-270	A.1.3
TPD64-16	J	Lorion	September 6, 2001, Letter	A-270	A.1.3
TPD64-17	J	Lorion	September 6, 2001, Letter	A-270	A.1.16
TPD64-18	J	Lorion	September 6, 2001, Letter	A-270	A.1.18
TPD64-19	J	Lorion	September 6, 2001, Letter	A-270	A.1.18
TPD64-20	J	Lorion	September 6, 2001, Letter	A-270	A.1.4
TPD64-21	J	Lorion	September 6, 2001, Letter	A-270	A.1.4
TPD64-22	J	Lorion	September 6, 2001, Letter	A-270	A.1.9
TPD64-23	J	Lorion	September 6, 2001, Letter	A-271	A.1.13
TPD64-24	J	Lorion	September 6, 2001, Letter	A-271	A.1.15

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD64-25	J	Lorion	September 6, 2001, Letter	A-271	A.1.18
TPD64-26	J	Lorion	September 6, 2001, Letter	A-271	A.1.18
TPD64-27	J	Lorion	September 6, 2001, Letter	A-271	A.1.9
TPD64-28	J	Lorion	September 6, 2001, Letter	A-271	A.1.18
TPD64-29	J	Lorion	September 6, 2001, Letter	A-272	A.1.18
TPD64-30	J	Lorion	September 6, 2001, Letter	A-272	A.1.18
TPD64-31	J	Lorion	September 6, 2001, Letter	A-272	A.1.12
TPD64-32	J	Lorion	September 6, 2001, Letter	A-272	A.1.12
TPD64-33	J	Lorion	September 6, 2001, Letter	A-272	A.1.12
TPD64-34	J	Lorion	September 6, 2001, Letter	A-272	A.1.14
TPD64-35	J	Lorion	September 6, 2001, Letter	A-273	A.1.14
TPD64-36	J	Lorion	September 6, 2001, Letter	A-273	A.1.12
TPD64-37	J	Lorion	September 6, 2001, Letter	A-273	A.1.9
TPD64-38	J	Lorion	September 6, 2001, Letter	A-273	A.1.9
TPD64-39	J	Lorion	September 6, 2001, Letter	A-273	A.1.4
TPD64-40	J	Lorion	September 6, 2001, Letter	A-273	A.1.3
TPD64-41	J	Lorion	September 6, 2001, Letter	A-271	A.1.16
TPD64-42	J	Lorion	September 6, 2001, Letter	A-269	A.1.4
TPD65-1	М	Oncavage	January 31, 2001, Letter	A-274	A.1.18
TPD65-2	М	Oncavage	January 31, 2001, Letter	A-274	A.1.18
TPD65-3	М	Oncavage	January 31, 2001, Letter	A-275	A.1.18
TPD65-4	М	Oncavage	January 31, 2001, Letter	A-275	A.1.18
TPD65-5	М	Oncavage	January 31, 2001, Letter	A-275	A.1.3
TPD65-6	М	Oncavage	January 31, 2001, Letter	A-275	A.1.18
TPD65-7	М	Oncavage	January 31, 2001, Letter	A-275	A.1.4

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	5	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD65-8	М	Oncavage	January 31, 2001, Letter	A-275	A.1.3
TPD65-9	М	Oncavage	January 31, 2001, Letter	A-275	A.1.3
TPD65-10	М	Oncavage	January 31, 2001, Letter	A-275	A.1.3
TPD66-1	F	Pitz	July 17, 2001, Letter	A-276	A.1.13
TPD66-2	F	Pitz	July 17, 2001, Letter	A-276	A.1.3
TPD66-3	F	Pitz	July 17, 2001, Letter	A-276	A.1.3
TPD66-4	F	Pitz	July 17, 2001, Letter	A-276	A.1.18
TPD66-5	F	Pitz	July 17, 2001, Letter	A-276	A.1.3
TPD66-6	F	Pitz	July 17, 2001, Letter	A-276	A.1.3
TPD66-7	F	Pitz	July 17, 2001, Letter	A-276	A.1.4
TPD66-8	F	Pitz	July 17, 2001, Letter	A-276	A.1.3
TPD67-1	R	Anderson	July 17, 2001, Letter	A-277	A.1.1
TPD67-2	R	Anderson	July 17, 2001, Letter	A-277	A.1.19
TPD67-3	R	Anderson	July 17, 2001, Letter	A-277	A.1.14
TPD67-4	R	Anderson	July 17, 2001, Letter	A-277	A.1.14
TPD67-5	R	Anderson	July 17, 2001, Letter	A-277	A.1.14
TPD67-6	R	Anderson	July 17, 2001, Letter	A-277	A.1.15
TPD67-7	R	Anderson	July 17, 2001, Letter	A-277	A.1.2
TPD68-1	В	Thompson	Handout from Public Meeting (07/17/01)	A-277	A.1.1
TPD68-2	В	Thompson	Handout from Public Meeting (07/17/01)	A-278	A.1.2
TPD68-3	В	Thompson	Handout from Public Meeting (07/17/01)	A-278	A.1.2
TPD68-4	В	Thompson	Handout from Public Meeting (07/17/01)	A-278	A.1.2
TPD68-5	В	Thompson	Handout from Public Meeting (07/17/01)	A-278	A.1.2
TPD68-6	В	Thompson	Handout from Public Meeting (07/17/01)	A-279	A.1.2
TPD68-7	В	Thompson	Handout from Public Meeting (07/17/01)	A-279	A.1.2

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
TPD68-8	В	Thompson	Handout from Public Meeting (07/17/01)	A-279	A.1.9
TPD68-9	В	Thompson	Handout from Public Meeting (07/17/01)	A-279	A.1.9
TPD68-10	В	Thompson	Handout from Public Meeting (07/17/01)	A-280	A.1.2
TPD68-11	В	Thompson	Handout from Public Meeting (07/17/01)	A-280	A.1.1
TPD69-1	D	Moeller	Handout from Public Meeting (07/17/01)	A-286	A.1.9
TPD70-1	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.1
TPD70-2	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.14
TPD70-3	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.19
TPD70-4	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.2
TPD70-5	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.19
TPD70-6	D	Peyton	Handout from Public Meeting (07/17/01)	A-287	A.1.1
TPD71-1	R	Andersen	Handout from Public Meeting (07/17/01)	A-289	A.1.7
TPD71-2	R	Andersen	Handout from Public Meeting (07/17/01)	A-289	A.1.14
TPD71-3	R	Andersen	Handout from Public Meeting (07/17/01)	A-289	A.1.17
TPD71-4	R	Andersen	Handout from Public Meeting (07/17/01)	A-290	A.1.2
TPD71-5	R	Andersen	Handout from Public Meeting (07/17/01)	A-290	A.1.2
TPD71-6	R	Andersen	Handout from Public Meeting (07/17/01)	A-290	A.1.2
TPD71-7	R	Andersen	Handout from Public Meeting (07/17/01)	A-290	A.1.1
TPD72-1	J	Mangano	Handout from Public Meeting (07/17/01)	A-294	A.1.9
TPD72-2	J	Mangano	Handout from Public Meeting (07/17/01)	A-294	A.1.12
TPD72-3	J	Mangano	Handout from Public Meeting (07/17/01)	A-294	A.1.9
TPD72-4	J	Mangano	Handout from Public Meeting (07/17/01)	A-294	A.1.9
TPD72-5	J	Mangano	Handout from Public Meeting (07/17/01)	A-294	A.1.9
TPD72-6	J	Mangano	Handout from Public Meeting (07/17/01)	A-296	A.1.9
TPD72-7	J	Mangano	Handout from Public Meeting (07/17/01)	A-297	A.1.9

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

	No.	5	Speaker or Author	Source	Page of Comment	Section(s) Where Addressed
1	TPD72-8	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
l	TPD72-9	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
l	TPD72-10	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
1	TPD72-11	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
l	TPD72-12	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
I	TPD72-13	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
1	TPD72-14	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
I	TPD72-15	J	Mangano	Handout from Public Meeting (07/17/01)	A-298	A.1.9
1	TPD72-16	J	Mangano	Handout from Public Meeting (07/17/01)	A-299	A.1.9
I	TPD72-17	J	Mangano	Handout from Public Meeting (07/17/01)	A-299	A.1.9
1	TPD72-18	J	Mangano	Handout from Public Meeting (07/17/01)	A-299	A.1.9
1	TPD72-19	J	Mangano	Handout from Public Meeting (07/17/01)	A-300	A.1.9
I	TPD72-20	J	Mangano	Handout from Public Meeting (07/17/01)	A-300	A.1.9
1	TPD72-21	J	Mangano	Handout from Public Meeting (07/17/01)	A-300	A.1.9
I	TPD72-22	J	Mangano	Handout from Public Meeting (07/17/01)	A-300	A.1.9
I	TPD73-1	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.1
1	TPD73-2	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.19
	TPD73-3	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.2
1	TPD73-4	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.15
1	TPD73-5	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.14
	TPD73-6	Α	Penelas	Handout from Public Meeting (07/17/01)	A-308	A.1.14
	TPD74-1	L	Anthony	Handout from Public Meeting (07/17/01)	A-308	A.1.2
	TPD74-2	L	Anthony	Handout from Public Meeting (07/17/01)	A-309	A.1.1
I	TPD75-1	L	Anthony	Handout from Public Meeting (07/17/01)	A-309	A.1.1
	TPD75-2	L	Anthony	Handout from Public Meeting (07/17/01)	A-309	A.1.2

Table A-2. Turkey Point Units 3 and 4 SEIS Comment Log

No.	;	Speaker or	Sauraa	Page of	Section(s) Where
		Anthony	Source	Comment	Addressed
TPD75-3	L	Anthony	Handout from Public Meeting (07/17/01)	A-309	A.1.15
TPD75-4	L	Anthony	Handout from Public Meeting (07/17/01)	A-310	A.1.2
TPD75-5	L	Anthony	Handout from Public Meeting (07/17/01)	A-310	A.1.1
TPD76-1	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.1
TPD76-2	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.2
TPD76-3	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.14
TPD76-4	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.19
TPD76-5	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.19
TPD76-6	J	Randles	Handout from Public Meeting (07/17/01)	A-310	A.1.15
TPD76-7	J	Randles	Handout from Public Meeting (07/17/01)	A-311	A.1.2
TPD76-8	J	Randles	Handout from Public Meeting (07/17/01)	A-311	A.1.1
TPD77-1	D	Johnson	July 17, 2001, Letter	A-311	A.1.9
TPD78-1	Н	Mueller	August 27, 2001, Letter	A-320	A.1.10
TPD78-2	Н	Mueller	August 27, 2001, Letter	A-320	A.1.20
TPD78-3	Н	Mueller	August 27, 2001, Letter	A-321	A.1.11
TPD78-4	Н	Mueller	August 27, 2001, Letter	A-321	A.1.11
TPD78-5	Н	Mueller	August 27, 2001, Letter	A-321	A.1.15
TPD78-6	Н	Mueller	August 27, 2001, Letter	A-321	A.1.20
TPD78-7	Н	Mueller	August 27, 2001, Letter	A-321	A.1.5
TPD78-8	Н	Mueller	August 27, 2001, Letter	A-321	A.1.20
TPD78-9	Н	Mueller	August 27, 2001, Letter	A-321	A.1.20
TPD78-10	Н	Mueller	August 27, 2001, Letter	A-321	A.1.10
TPD78-11	Н	Mueller	August 27, 2001, Letter	A-321	A.1.11
TPD78-12	Н	Mueller	August 27, 2001, Letter	A-321	A.1.11

# A.1 Comments and Responses

# A.1.1 General Comments in Support of License Renewal at Turkey Point Units 3 and 4

**Comment:** Commissioner Moss supports Turkey Point Power Plant renewal. (TPD09-1)

**Comment:** The City of Homestead supports FP&L and their relicensing. (TPD10-6)

**Comment:** I support Turkey Point Nuclear Plant license renewal application. (TPD12-7)

**Comment:** Renewing the licenses of Turkey Point Nuclear Power Plant is in the best interest of the community and in continuing to provide safe, clean, reliable and low cost electricity to customers. (TPD14-15)

**Comment:** The Dade County Farm Bureau stands unanimously in support of Florida Power and Light's relicensing efforts for their Turkey Point Plant. (TPD24-1)

**Comment:** Despite the loss of revenue sources from other areas, agriculture still is the main engine of Dade County, Florida, and we find no reason not to support FPL's relicensing of Turkey Point. (TPD24-3)

**Comment:** On behalf of the Vision Council we wish to register our support for the relicensing of the Turkey Point Nuclear Power Plant. (TPD27-1)

**Comment:** I'm here today to speak in favor of the twenty year license renewal and continued operation of the Turkey Point nuclear facility. (TPD28-1)

**Comment:** I'm asking that the license renewal for the Turkey Point nuclear facility be approved so that we can keep this very valuable source of energy for the community well into the future. (TPD28-9)

**Comment:** From our prospective as a community partner with Florida Power and Light and with Turkey Point, Homestead Air Reserve Station endorses the renewal of their license. (TPD30-3)

**Comment:** I hope you will take your own reports, your own analysis and grant the license renewal here. (TPD31-3)

**Comment:** I'm here to show my support for the renewal of the license of the Turkey Point facility. (TPD37-1)

**Comment:** With the experts they have that know their field, I say let it go, give them the license renewal and go on from there. (TPD38-2)

**Comment:** I just wanted to reiterate the stand of the Board of Directors of the Greater Homestead Florida City Chamber of Commerce in support of the license renewal. (TPD39-1)

**Comment:** So please continue and I hope the NRC finds favorably for license renewal. (TPD42-4)

**Comment:** In conclusion, the Draft looks at the affects of relicensing in three categories, small, medium and large. It's my opinion that if you don't relicense this facility, obviously the impacts are going to be huge. (TPD42-5)

**Comment:** FPL strongly supports the openness of this process and during the last two years we have been involved in dialogue with the community surrounding Turkey Point. We've met with more than a thousand homeowners, community groups and Government officials. Our purpose was to share the information about license renewal and plant operations. (TPD43-1)

**Comment:** I believe the report reflects a comprehensive assessment of the environmental impacts of license renewal. (TPD43-2)

**Comment:** In summary, I believe that renewing the licenses of FPL Turkey Point nuclear power plant is in the best interest of our community in continuing to provide safe, clean, reliable and low cost electricity to our customers. (TPD43-9)

**Comment:** I believe extending our operations is more than renewing our license. It's about renewing the future of South Florida. (TPD44-5)

**Comment:** I want to close by saying that the Draft GEIS is factual and complete and should contribute to a fair and objective review of the environmental impacts of license renewal at Turkey Point. (TPD49-5)

#### Appendix A

**Comment:** And so I just want to say that I'm here in support of clean electricity and I hope that they renew the license, and now I'm going to go home and sit in my recliner chair and burn electricity. (TPD51-3)

**Comment:** We strongly support Turkey Point's application for license renewal. (TPD52-1)

**Comment:** I endorse the license extension of the Turkey Point 3 and 4 and why, because in my view power plants are a national resource. (TPD54-1)

**Comment:** More importantly, power plants are a national -- are an issue of national security, for this country, for this state, for this community. In my opinion the stability of that resource is paramount to any national security element that is considered locally or in Washington, D.C. or any place in the world. (TPD54-2)

**Comment:** It has been proven and documented time and time again that nuclear energy is unquestionably the safest and the most efficient effective and environmentally friendly means of producing electricity. (TPD55-4)

**Comment:** And I think that's an important distinction. Chernobyl was mentioned earlier. Chernobyl was built by a communist government, inspected by the same government, run by the same government. There was no union that could look at safety. There was no FP&L and NRC regulating it. There was no public as to whether it was good, safe, bad, anything else. To compare Chernobyl with any power plant in the United States with the oversight that we have, with the possibility of participation by citizens to put in their input, their concerns. (TPD58-1)

**Comment:** This is a wonderful system we have here. We're relying on the NRC to technically oversee it. We're relying on the good folks at FP&L who live here with us not to be sacrificing their families just as ours. And it's really a remarkable procedure that we go through here in this country and when you go spend some time in some of these dismal places in Eastern Europe, the gentleman talked about being stuck in an elevator, it happens. And you greatly appreciate the process that we have here and the regulation that we have here and the companies that we have here that provide this thing, because there's a lot of places in this world that never had a choice and got some pretty bad stuff from where they live, the buildings they live in, the cars they drove and what the power was and what got sprayed around their neighborhood. (TPD58-2)

**Comment:** The State has determined that, at this stage, the license renewal for the Turkey Point Power Plant units 3 and 4 is consistent with the Florida Coastal Management Program. (TPD60-1)

**Comment:** I strongly support the Turkey Point Re-licensing effort. (TPD63-1)

**Comment:** I believe strongly that the re-license should be granted. (TPD63-9)

**Comment:** On behalf of the Vision Council, we wish to register our support for the relicensing of the turkey Point Nuclear Power Plant. (TPD67-1)

**Comment:** I am here today to speak in favor of the twenty-year license renewal and continued operation of the Turkey Point Nuclear Facility (TPD68-1)

**Comment:** For these reasons, and in closing, I am asking that the license renewal for the Turkey Point Nuclear Facility be approved (TPD68-11)

**Comment:** A resolution from the Board of Directors of the Greater Homestead/Florida City Chamber of Commerce, in support of the license renewal for Florida Power and Light's Turkey Point plant to allow the plant to continue to safely produce electricity for an additional 20 years beyond the year 2013. (TPD70-1)

**Comment:** The Board of Directors of the Greater Homestead/Florida City Chamber of Commerce does hereby support the renewal of the operating license of Turkey Point. (TPD70-6)

**Comment:** Together, these are key factors in the NRC's conclusion in the draft GEIS that supports a positive decision on renewing the license for an additional 20 years. (TPD71-7)

**Comment:** I am pleased with the NRC assessment and agree that renewing the operating license of the turkey Point Nuclear Plant is the most positive environmental option to help meet the growing energy needs of South Florida (TPD73-1)

**Comment:** I support and endorse the relicensure of the units at Turkey Point. (TPD74-2)

**Comment:** We extend our support and endorsement of the FPL application for license renewal. (TPD75-1)

**Comment:** We recommend the relicensure of FPL when their current license expires. (TPD75-5)

**Comment:** Voice my support for the Turkey Point license renewal (TPD76-1)

**Comment:** I support the renewal of the Turkey Point license for safe, clean and affordable electricity. (TPD76-8)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

# A.1.2 General Comments in Support of Turkey Point Units 3 and 4

**Comment:** There is a lot of mis-information being pumped into the public. This is not fair to the public. (TPD25-8)

**Comment:** This article here only talks about Turkey Point and St. Lucie. How many of you know another nuclear power plant employer? Crystal River, how come it's not in that study? If you're going to be objective about your analysis, your study, you include all the variables. (TPD25-9)

**Response:** The comments are noted. The comments refer to the RPHP report. The comments provide no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** The preservation of the site and the species present there will continue during the renewed operating license period. (TPD15-6)

**Response:** The comment is noted. The comment acknowledges the importance of the manner in which FPL operates the site to the benefit of wildlife, including threatened and endangered species (see Section 4.6). The appropriate descriptive information regarding the plant-specific ecology of the site is addressed in Sections 2.1 and 2.2 of the SEIS. The comment is noted. The comment is supportive of license renewal at Turkey Point Units 3 and 4, and is general in nature. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** I'm here today to speak in favor of Turkey Point. (TPD10-1)

**Comment:** Both the Mayor and I have read the Draft Supplemental Environmental Impact Statement and we are very comfortable. (TPD11-1)

Comment: Turkey Point nuclear is one of the safest and best run nuclear plants. (TPD11-2)

**Comment:** Renewing the operating license of the Turkey Point Nuclear Plant is the most positive environmental option to help meet the growing energy needs of South Florida. (TPD12-1)

**Comment:** Turkey Point Nuclear Plant is one of the safest and best run nuclear plants in the country as judged by the regulators and its peers. (TPD12-3)

**Comment:** The conclusion of the report is that there is no significant change to the present environmental impact and minimal change to the potential environmental risks from continuous operation of the plant. (TPD13-1)

**Comment:** The alternatives to continued operation of the plant and the reports do not appear to be economically or environmentally effective. (TPD13-2)

**Comment:** If the plants are maintained in accordance with the NRC issued license and problems associated with extended operational life and continue to support the emergency plan, it is reasonable to conclude that it will continue to be good neighbors to Monroe County. (TPD13-3)

**Comment:** The Turkey Point plant is safe and has a positive impact on the environment. (TPD14-1)

**Comment:** There is a strong case for continued operation of the Turkey Point plant. (TPD14-2)

**Comment:** The Supplemental Environmental Impact Statement concludes that the environmental impact from operating Turkey Point for an additional twenty years will be small and less than the impacts of other energy sources. (TPD15-1)

#### Appendix A

**Comment:** The United Way is extremely proud of its partnership with FPL in providing services for those in need in our community. (TPD23-6)

**Comment:** FPL is a good neighbor. (TPD25-1)

**Comment:** You could find a reason to shut down Turkey Point tomorrow. Would that serve a purpose? Would that be in the best interest of the community? No. (TPD25-3)

**Comment:** The best single industry a community can have is a nuclear power plant facility, because it generates capacity for business, it's non-polluting and a tremendous payroll capacity. (TPD27-4)

**Comment:** The nuclear power plant industry has a proven security record and the safeguards and security required at such installations should be known. (TPD27-7)

**Comment:** Thousands upon thousands of South Florida residents are confident of the plant's safety, its management and security they provide every day, because they like us, live in close vicinity to the plant. (TPD27-8)

**Comment:** On Florida Power and Light property we have what is known as a Join Safety Program, which program through committees insures both the company and union have an equal say to provide for the safety of the employees, safe plan operation, safety to the public and environmental protection. (TPD28-2)

**Comment:** The Turkey Point facility has consistently been recognized as being one of the safest and most reliable nuclear power plants both in the United States and in the world. (TPD28-3)

**Comment:** The only nuclear power plant in the United States to receive three consecutive superior ratings from its regulator, the Nuclear Regulatory Commission, spanning the years of 1994 through 1999. (TPD28-4)

**Comment:** In the area of training, both the company and the union have developed and consistently oversee some of the most vigorous training programs within the company for its employees. All employees are also trained on a regular basis for even the unlikely event of an emergency. (TPD28-5)

**Comment:** Environmentally, the plant must meet very strict and stringent radiation safety standards designed to protect the employees and insure the community health and safety. (TPD28-6)

**Comment:** The employees of Turkey Point nuclear facility and the company have established themselves as good stewards of our environment. They manage to achieve a careful balance between the environment and producing a very cost effective, clean, safe and reliable source of electricity that is possible at all times. (TPD28-8)

**Comment:** The Homestead Air Reserve Station endorses Turkey Point. (TPD30-1)

**Comment:** I reaffirm my support for Turkey Point. (TPD35-1)

**Comment:** The safe operations of the facility out there just continue to be in the foresight on a day in/day out basis. (TPD36-1)

**Comment:** The continued support of this facility of Turkey Point to the City (of Homestead) is just great and needed very much. (TPD36-3)

**Comment:** But I'm here as a concerned citizen in support of FP&L and Turkey Point. (TPD41-1)

**Comment:** What impresses me the most is their safety record. Having received numerous superior ratings through the years from the NRC, plus having been rated as one of the safest and most reliable nuclear power plant in the world gives me a very comfortable feeling having them as a much needed neighbor for the next twenty years, as they have been for the current twenty-five that we've been all living together. (TPD41-4)

**Comment:** I think the Draft EIS so far is an excellent document that obviously has been well put together and covers the items required by law. (TPD42-1)

**Comment:** And when I look at the evidence presented in the Supplemental Environmental Impact Statement and other license renewal document, I'm assured of the plant's safety and positive impact on our environment. (TPD43-3)

**Comment:** First, the performance of our plant is top notch, thanks to our employees. Their time and effort and dedication have resulted in Turkey Point consistently being recognized as safe and one of the most reliable and efficient plants in the industry. Our employees have also worked diligently through effective maintenance programs to sustain the option for continued plant operation well beyond the initial forty year license. (TPD43-4)

**Comment:** We're committed to safely and reliably operating the Turkey Point power plant long into the future to meet the area's energy needs while protecting the environment. (TPD44-6)

**Comment:** I'd also like to commend Florida Power and Light and the nuclear professionals at Turkey Point for the continued excellent record of safety performance and commitment to protecting the health and safety of their community and the surrounding environment. (TPD49-6)

**Comment:** I like electricity. I like the people who make electricity. I think electricity is a good thing. (TPD51-1)

**Comment:** I don't think there's anybody in our community that would object to the continued operation of the nuclear facility at Turkey Point for an additional twenty years as long as we all felt very comfortable that it can be done safely and it will continue to generate low cost, environmentally low impact electrical power to support our community and provide us with the quality types of people and activities that FP&L contributes to Homestead, Florida City and the Greater South Dade area. (TPD53-2)

**Comment:** When you walk to the Turkey Point plant, from the security guard that meets you, to the radiation control technicians who escort you around, to the project managers and to the facility managers, you find commitment to excellence at that plant. It is an organizational culture at that plant. So I don't care if I'm talking to a craftsman or I'm talking to Bob Hovey, I'm going to get the same commitment and the same straightforward response and pride in their operation that I would want in my own business affairs.

I know of no other finer team of professionals than what they have out at that plant. (TPD54-4)

**Comment:** To guarantee the safety of the residents one must insure that all safety procedures at Turkey Point are fully adhered to and that the employees at Turkey Point are well educated and well trained.

The fact that Turkey Point is the only plant in the United States to receive three consecutive superior ratings from the NRC in the recent years leaves me no doubt that Turkey Point is one of the safest and most reliable nuclear power plants in the U.S. and even in the world.

In terms of the qualifications of the employees, almost half of Turkey Point's employees hold advanced degrees. That education is further enhanced by the training they receive. There are more than twelve training programs offered to employees. Some are so specialized that they are certified by an independent training organization. (TPD55-1)

**Comment:** I would not be standing before you today if I was not 100 percent sure that Turkey Point is absolutely and definitely safe and vital to our community. (TPD55-2)

Comment: Eighteen years ago, I came to Florida and went to work for Florida Power and Light. I found out what safety is all about. They completely changed the way you think about safety by how they do things. Bob Hovey and myself here work very closely on safety. That's one of the things we agree upon wholeheartedly. We have no disagreements with that. We work well together. You heard the business manager here earlier today talk about the safety that we do throughout the state. We're setting records on safety out there. We have programs out there where we're looking at each other. We actually go and check each other, have a check sheet to go check off on things that we do. This is not part of my speech in here. (TPD56-1)

**Comment:** Florida Power and Light didn't tell me what to say or what to do up here. I volunteered to come up here because I think it's a safe plant to work at. I'm an electrician out there. I've been an electrician out there for eighteen years. I go to training every year. It's part of my job to go to training, to go to learn, to find out about the environmental impact, the studies that they have at the other plants that we go over. We have to sign and verify that this is what we've done. Everything -- these people from the NRC right here, they regulate us. They do an excellent job of it, and I never realized how well NRC does until I came down to Florida and started working for FP&L. They're a good agency, they help us a great deal. They help us run that plant out there and without them we'd be hurting. (TPD56-6)

**Comment:** They know it's a safe plant. They know it's a safe place to work. If there is anything that I ever thought was unsafe, we got several mechanisms we could go to do that. (TPD56-8)

**Comment:** And you talk about—you was talking about the cancer rates in Dade County. I am a survivor. A year ago, almost a year ago today, I found out that I had a problem and I had cancer. Where did I get that cancer out? I got that in 1969 when I quit smoking and quit drinking. Every doctor that I've been to, including the ones in New York that found it, first question they asked me was, did you smoke. That's what we ought to be looking at, if you're looking for safety. That plant out there is safe. I'd be glad to work at that until 2010 when I retire. (TPD56-9)

**Comment:** I've also spent some time in some other industries and as has been said before, this plant has a culture, an atmosphere, an attitude of safety. Other plants that I've been in, they don't care about the employees, they kill to keep the product going. And I'm pleased to say that I'm part of that process and that I'm glad to be involved in that process. (TPD59-1)

**Comment:** FPL agrees with all of the conclusions and proposed findings in the DSEIS. (TPD62-1)

**Comment:** Turkey Point has been an excellent neighbor, as witnessed by myself, my company and community. (TPD63-2)

**Comment:** Turkey Point has an excellent environmental record. It has been demonstrated over the years with their strong commitment to the environment, which is represented by their support of the South Florida Ecosystem, and demonstrated most assuredly by their safety record. (TPD63-6)

**Comment:** They are rated as one of the most reliable nuclear power plants in the United States and have consistently had "superior" ratings from the regulators, you - the NRC. (TPD63-7)

**Comment:** Never have I had any alarm or concern as a result of the Power Plant's location, but only found them to be quiet, outstanding neighbor that serves the local community, and beyond. (TPD63-8)

**Comment:** Thousands upon thousands of South Florida residents are confident of the plant's safety (TPD67-7)

**Comment:** On Florida Power and Light property we have what is known as Joint Safety Program. This is a program through Committees, that ensures both the Company and Union have an equal say to provide for the safety of the employees, safe plant operation, safety to the public and environmental protection. (TPD68-2)

**Comment:** Turkey Point has been consistently recognized as being: One of the safest and most reliable nuclear power plants in both the United States and the World. (TPD68-3)

**Comment:** Turkey Point has been consistently recognized as being: The only nuclear power plant in the U.S. to receive three consecutive superior ratings from its regulator the Nuclear Regulatory Commission, spanning the years of 1994-1999. (TPD68-4)

**Comment:** Safety performance indicators consistently in the top percentile of Nuclear Plants throughout the U.S. (TPD68-5)

**Comment:** The "Quest for Excellence" award from an independent assessor in 1995, 1998, and 2000 for excellence in Nuclear Plant performance. (TPD68-6)

**Comment:** In the area of training, both the Company and the Union have developed and constantly oversee some of the most rigorous training programs within the Company for its employees. (TPD68-7)

**Comment:** Over the past twenty-eight years since the plant has been operational, I believe the Employees of the Turkey Point Nuclear Facility and the Company have established themselves as good stewards of our environment. They have clearly demonstrated their commitment of managing and achieving a careful balance between the environment and producing a very cost effective, clean, safe and reliable source of electricity is possible at all times. (TPD68-10)

**Comment:** Since 1995, Turkey Point is the only nuclear plant in the nation to consistently achieve the highest performance rating from the Nuclear Regulatory Commission (TPD70-4)

**Comment:** It's obvious from these figures that nuclear energy provides vital clean air benefits to Florida and the U.S., considering that each state must control emissions from electric generating sources through the Clean Air Act. In your community, Turkey Point also provides stable jobs, a strong tax base, and safe, reliable, and affordable electricity. (TPD71-4)

**Comment:** I want to close by saying that the draft GEIS is factual and complete, and should contribute to a fair and objective review of the environmental impacts of license renewal at Turkey Point. (TPD71-5)

**Comment:** I'd like to commend Florida Power and Light and the nuclear professionals at Turkey Point for their continued excellent record of safety performance and commitment to protecting public health and safety and the environment. (TPD71-6)

**Comment:** Turkey Point Nuclear Plant is one of the safest and best-run nuclear plants in the country as judged by its regulators and its peers. It has consistently received top ratings from the Nuclear Regulatory Commission and by the Institute of Nuclear Power Operations. (TPD73-3)

**Comment:** The plant has been recognized as having a stellar performance record in the past decade of years with little anticipation of degradation of this status in the foreseeable future. (TPD74-1)

**Comment:** FPL has not operated detrimentally to the environment even in their periods of heavy power generation. (TPD75-2)

**Comment:** FPL has an impressive safety record -- many times cited by the NRC -- as one of the safest and most reliable plants in the U.S. (TPD75-4)

**Comment:** Plant provides: a wild life reserve, power for our homes, a cleaner environment, jobs to support the community, support for hundreds of business in the way of jobs and material that is purchased, cheaper electrical bills (TPD76-2)

**Comment:** Turkey Point is rated as one of the safest and most reliable nuclear power plants in the U.S. and world. (TPD76-7)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

### A.1.3 Comments in Opposition to License Renewal at Turkey Point Units 3 and 4

**Comment:** The Generic Environmental Impact Statement published in 1996 is obsolete in light of much more recent study. (TPD21-4)

**Response:** The comment is noted. All analyses conducted for Supplemental EISs include ensuring that potential new and significant information has been identified and reviewed. The purpose of the scoping process is to help identify new and significant information and issues that were not addressed or addressed incorrectly in the GEIS. No such information was identified during the Turkey Point relicensing environmental review. The comment provides no new and significant information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** The NRC should postpone its decision on extending the license of Turkey Point and all other reactors until it has thoroughly evaluated all available information, including recent reports and significant research in progress on nuclear reactor emissions and public health. (TPD21-5)

**Response:** The comment is noted. Radiation exposures to the public during the license renewal term is a Category 1 issue that was evaluated in the GEIS. Public doses from Turkey Point emissions were specifically evaluated in Section 4.6 of the GEIS, using data from monitored emissions and ambient monitoring. The comment does not provide new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** Leave this license in place until its original expiration date and then come back to the people and talk about renewal. No relicensing at this time. (TPD22-4)

**Response:** The comment is noted. The 10 year lead time is needed to allow planning for power generation alternatives. The comment provides no new information and therefore will not be evaluated further. There was no change to the SEIS text.

**Comment:** The renewal process was very clearly outlined for the audience. I was concerned to learn from the discussion of the license renewal process that the focus of this particular meeting would be narrowly focused on matters that pertained only to the Turkey Point plants 3 and 4 and would not address general environmental issues that involved them. (TPD32-1)

**Comment:** I hope the Commission will carefully consider the statement made by one of the speakers, who questioned the validity of the statistical methodology used in the General Environmental Impact Statement. (TPD32-4)

**Comment:** Renewal of an operating license for the Turkey Point Nuclear Power plants is identified under 10 CFR Part 51 of the Commission's regulations as a major federal action significantly affecting the quality of the human environment, within the meaning and provisions of the National Environmental Policy Act ("NEPA"), 42 U.S.C. 4332(2)(C). As such, the NRC has a statutory obligation under NEPA to take certain procedural steps to assess the environmental damage that renewing operating licenses for up to 20 years beyond the 40-year term of the initial license could inflict. (TPD64-12)

**Comment:** In closing, it is my contention that the NRC's Draft GEIS does not support the premature conclusion that "the adverse impacts of continued operation are considered to be of SMALL significance." It appears to me that it is more a case of "No look = No harm." The people of South Florida, and the beautiful Everglades ecosystem where they live, deserve to know the potential environmental impacts that may be caused by the proposed relicensing action...environmental impacts that can only be known through legally sufficient NEPA process that takes the "hard look" required by NEPA. In my opinion, the NRC has not taken the requisite "hard look" at the Turkey Point relicensing process and should do so. (TPD64-40)

**Response:** The comments are noted. The comments provide no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** I don't think you've complied with either the spirit or the intent of the National Environmental Policy Act. (TPD34-15)

**Comment:** No, to relicensing. (TPD66-8)

**Comment:** The NRC avers to meet its NEPA requirements by improperly conducting a bifurcated process in which it purports to analyze environmental impacts in a generic process

under 10 CFR. Parts 51, while simultaneously conducting relicensing activities under 10 CFR. Part 54. (TPD64-13)

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**Comment:** The NRC's Draft GEIS process, which was conducted concurrent with the relicensing process, fails to meet NEPA requirements that an environmental impact assessment must be "prepared early by such an agency...so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made." 40 CFR. 1502.5. Finally, it continues to be my contention that this so-called "relicensing" proceeding should be treated as though it is a new request for an initial construction permit and operating license and that the range of alternatives, or their analysis, should not be limited. (TPD64-14)

**Comment:** Section 1502.2 states that, "agencies shall not commit resources prejudicing selection of alternatives before making a final decision (1506.1)." 40 CFR. 1502.2(f). The Commission's conducting of the relicensing review under 10 CFR. Part 54, while at the same time averring to conduct an objective NEPA process under 10 CFR. Part 51, raises a serious question. Having already begun to invest substantial resources in the relicensing process, can the NRC be trusted to have taken the objective "hard look" at alternatives that is required by NEPA? Or will the Commission's EIS process, in the words of one Judge in another NEPA case, "be a classic Wonderland case of first-the-verdict, then the trial? See, Metcalf v. Daley, 214 F.3d(9th Cir. 2000). It is my contention that the Draft GEIS is fatally defective and does not meet the requirements of the Act, because the Commission's evaluation of the environmental impact of the relicensing proposal has been tainted by the process. (TPD64-15)

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**Response:** The comments are noted. The NRC's obligations under NEPA are to analyze environmental impacts and draft an EIS that the Commission can use in making a decision regarding relicensing. Those obligations are different from the NRC's mission as stated in the Atomic Energy Act (AEA), which are to protect public health and safety, and provide for the common defense and security. The NRC makes a decision on relicensing after the staff has provided the Commission with the necessary analyses and documentation required under both NEPA and the AEA.

The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Like all federal agencies, the NRC is required to implement the policies of NEPA in its decision-making. See 42 U.S.C. 4332; 40 CFR. 1507.1. NEPA requires the NRC to prepare a detailed statement, known as an Environmental Impact Statement (EIS) prior to any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. 4332(C). The NRC's failure to prepare a site-specific SEIS and take the requisite "hard look" necessary

to evaluate the consequences of this major federal action prior to commencing the relicensing process under 10 CFR Part 54 is designed to "rubber stamp" its predetermined decision and deprives me, and other similarly situated individuals, of my statutory rights under NEPA. Additionally, it raises the important question as to whether the relicensing of nuclear power plants beyond their design basis should continue, since Congress has never resolved the important public policy issue of whether it is in the national and public interest to run old nuclear power plants beyond their original license. (TPD64-11)

Comment: NEPA requires an agency to prepare a supplemental EIS (SEIS) if "there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed actions or its impacts." 40 CFR. 1502.9(c)(1). It is my contention that, as part of this process, the NRC should have conducted a site-specific Supplemental Environmental Impact Statement (SEIS), that should have included a review of the original Environmental Statement that was conducted on Turkey Point, before irretrievably committing resources on relicensing activities under 10 CFR. Part 54. The original EIS on Turkey Point, that was issued only a short time after NEPA was passed in 1969, does not address "substantial environmental issues," such as the proposed project's impact on the 7.8 billion dollar Everglades restoration effort, the largest environmental repair job in human history. The Licensee's current Environmental Report does not even discuss the proposed action's impact on this important Congressionally authorized project and the Draft GEIS fails to adequately analyze any adverse impacts on the project that may occur. (TPD64-16)

Response: The comments are noted. The environmental review process, which is set forth in 10 CFR Part 51, implements the National Environmental Policy Act of 1969 (NEPA). This process provides for the preparation of generic environmental impact statements to avoid the time and expense of repeated reviews of essentially the same material. When an environmental issue has been resolved generically, there is no need to conduct another detailed review of the same issue with respect to a particular application unless there is significant new information related to some aspect of the issue. The technical bases that were considered in developing the GEIS included environmental insights gained from thousands of reactor-years of operating experience, including Turkey Point Units 3 and 4. It addresses and draws generic conclusions on 69 environmental issues associated with license renewal. These are Category 1 issues. The NRC staff reviews all of the information it collects for its review, including public comments collected during the scoping phase, to determine whether there is any new and significant information related to the Category 1 issues. If new and significant information is identified, the NRC staff will evaluate the impacts related to that information. The NRC staff performs site-specific analysis for all of the Category 2 and noncategorized issues that are applicable to each plant that applies for license renewal. There was no change to the SEIS text.

Comment: How can the NRC ignore its own Standard Review Plan? (TPD65-5)

**Response:** The comment is noted. The comment refers to siting hazards and is outside the scope of license renewal. The staff conducted an independent review of the issues as set forth in NUREG-1555, Supplement 1, the Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal. This issue has been referred to the appropriate program office within the NRC. There was no change to the SEIS text.

**Comment:** Shouldn't the lead agency for base disposal, the Air Force, be told that there are major safety discrepancies with the NRC methodology concerning the closeness of the proposed commercial airport to the nuclear plant? (TPD65-8)

**Response:** The comment is noted and is outside the scope of license renewal. The issue is referred to the appropriate program office within the NRC. It does not add any new information. There was no change to the SEIS text.

**Comment:** If the licensee, which is a large landholder in the area, is the only entity with all the safety related information, how can the NRC be sure there is no conflict of interest? Developing land near a new commercial airport could be an extremely lucrative enterprise. (TPD65-9)

**Comment:** Another conflict of interest may arise if the licensee thinks that a negative safety assessment would damage its chances of obtaining a license renewal. (TPD65-10)

**Comment:** The tens of billions of dollars he would spend to build a missile defense system would best be spent on sustainable energy programs, which would wean us from fossil fuel consumption as well as the radioactive nightmare of nuclear power. (TPD66-5)

**Response:** The comments are noted and are outside the scope of license renewal. They do not add any new information. There was no change to the SEIS text.

**Comment:** You are here today to talk about relicensing a 29-year-old nuclear plant, a renewal that isn't even up for another nine years. When the current renewal is up for review in 2010, this plant will be 37 years old. Longevity in humans is admirable; longevity in nuclear power plants is hazardous. Add this increase in plant life span to the present day-to-day perils associated with radioactivity release from it and we have a ticking time-bomb right here in south Florida. (TPD66-2)

**Response:** The comment is noted. To the extent that the comment pertains to aging within the scope of license renewal, these issues will be addressed during the parallel safety analysis review performed under 10 CFR Part 54. Aging management issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS. The comment provides no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** Why the rush to relicense? The current operating permit does not expire for nine years, why can't we wait until then? There certainly is not a pressing need to go through this process at this time, unless of course it is political expediency. (TPD66-3)

**Comment:** Leave this license in place until its original expiration date, then come back to the people and talk about renewal. (TPD66-6)

**Response:** The comments are noted. The NRC allows licensees to conduct relicensing analyses before the current operating licenses expire because of the long lead time necessary to replace major power generation. There was no change to the SEIS text.

#### A.1.4 Comments in Opposition to Turkey Point Units 3 and 4

**Comment:** Now, I'd like to get to some specific comments on the EIS because I think that's where the Nuclear Regulatory Commission is really going wrong. Because I think that their concept of the National Environmental Policy Act has not evolved at all. I don't know if they're keeping up with the case law. I'm not a lawyer but I'm involved in a number of NEPA cases with people that I work with and I know it quite well and I know the cases quite well. And I'm very concerned about this process.

First of all, it's a bifurcated process in which they are going ahead with the whole relicensing process at the same time they're evaluating the environmental impact. Well, under NEPA you're required to take a hard look at environmental impact, and it's not to be prejudiced, a prejudiced decision that rubber stamps something you've already decided. So by going ahead on this track with the relicensing without evaluating the environmental consequences first, I personally don't think that complies with the National Environmental Policy Act. (TPD34-6)

**Response:** The comment is noted. The NRC's obligations under NEPA are to analyze environmental impacts and draft an EIS that the Commission can use in making a decision regarding relicensing. Those obligations are different from the NRC's mission as stated in the Atomic Energy Act (AEA), which are to protect public health and safety, and provide for the common defense and security. The NRC makes a decision on relicensing after the staff has provided the Commission with the necessary analyses and documentation required under both NEPA and the AEA.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

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**Comment:** I think the issue of nuclear energy has a kind of a clouded vision with people in the United States, especially the people that stand to make a lot of money from nuclear power, including the administration that's in Washington right now. (TPD47-1)

**Response:** The comment is noted. The comment is against license renewal for Turkey Point Units 3 and 4. The comment provides no new information and will not be evaluated further. There was no change to the SEIS text.

Comment: The other thing I wanted to say as a mathematician, this generic study takes, from what I've been told, it takes about 102, the data from 102 power plants, and adds up the numbers and divides by 102. And that's not really very good mathematics when you're talking about different places in the country. You know, somebody said that the smoke stacks, the number of birds that fly into the smoke stacks is the same all over the country, so you can just kind of average that out. But Turkey Point is close to the Everglades so I'd think there would be more birds flying there than there would be in some other part of the United States where there are not that many birds and maybe -- that's just an example. But us people here in Homestead and in South Florida would be very concerned about the number of birds that would be flying into our smoke stacks, just like we're concerned about the number of children that are dying of brain cancer here in South Florida and the number -- and the levels of strontium 90.

So I would like the data that is included in this study not to be generic but to be site specific to South Florida. And again, I would like it to be reviewed by an independent panel of scientific experts from all over the world, not just the United States. (TPD47-4)

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Response: The comment is noted. This comment requests a site specific analysis because the commenter assumes that impacts are averaged across all licensed plants. Neither the GEIS nor this SEIS express results in terms of averages across the country in the manner noted by the commenter. The environmental review process provides for the preparation of generic environmental impact statements to avoid the time and expense of repeated reviews of essentially the same material. When an environmental issue has been resolved generically, there is no need to conduct another detailed review of the same issue with respect to a particular application unless there is significant new information related of the issue. The technical bases that were considered in developing the GEIS included environmental insights gained from thousands of reactor-years of operating experience, including Turkey Point Units 3 and 4. It addresses and draws generic conclusions on 69 environmental issues associated with license renewal. These are Category 1 issues. The NRC staff reviews all of the information it collects for its review, including public comments received during the scoping phase, to

determine whether there is any new and significant information related to the Category 1 issues. If new and significant information is identified, the NRC staff will evaluate the impacts related to that information. The NRC staff performs site-specific analysis for all of the Category 2 and noncategorized issues that are applicable to each plant that applies for license renewal. The comment doe not provide any new information. There was no change to the SEIS text.

**Comment:** This interim report from the Governor's Energy Study Commission is completely missing from the Draft SEIS. It's available on the State of Florida website. I suggest you download it to take a look at it. It's going to play a large part in our lives.

The final report is due in December, well in time for the 2002 Florida Legislative Session. This deregulation plan says, and I quote, "Investor owned serving utilities should not longer be in the business of owning and operating generation."

In simple language that means that Florida Power and Light, Tampa Electric, Florida Power Corp. will sell their power plants to other companies.

A Governor's committee is working on a plan where retail sales of electricity is done by a different company that operates the transmission grid, and that is separate from the other companies that generate electricity. Basically, they are breaking up the monopolies that utilities now have.

This proposal changes the whole character of the Draft SEIS. No longer would FP&L be concerned with the alternatives to relicensing Turkey Point. FP&L would sell or trade all their plants, sell their transmission lines to grid Florida and concentrate on their new business model of buying electricity to sell to their customers. (TPD50-1)

**Response:** The comment is noted. The staff reviewed the report from the Energy Study Commission, and found nothing to change staff's analysis and conclusions contained in the SEIS. There was no change to the text of the SEIS.

**Comment:** The EIS report is weak. I notice quite often it mentions small impacts, but what exactly is small when we're speaking of humanity, endangered animals? It's kind of important. I don't know exactly what small is. (TPD57-2)

**Response:** The comment was noted. Definitions of impact levels were provided in Section 4.0 of the SEIS. There was no change to the SEIS text.

**Comment:** These cumulative impacts [from released fission products], which should have been analyzed in a site-specific SEIS, have not been adequately addressed in the Draft GEIS; as required by NEPA. (TPD64-6)

Response: The comment is noted. Radiological effluents, including those into the Turkey Point cooling canals and the resulting radiation exposure to the public and workers were evaluated in the GEIS and determined to be a Category 1 issue. Additionally, Florida Power and Light monitors both gaseous and liquid effluents released from the reactors and maintains an offsite dose calculation manual (ODCM) that describes the methodology and parameters that are used in the prediction of potential offsite doses from radioactive liquid and gaseous effluents. These calculations are performed to demonstrate the licensee's compliance with its technical specifications and NRC regulations. The State of Florida also provides environmental monitoring around the Turkey Point Site to ensure that effluent releases are within or below regulatory limits. No new information was provided by the comment. Therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** Nor did the Draft GEIS undertake a fair and objective NEPA analysis of alternatives to the relicensing proposal, as evidenced by page 8-55 of the Draft GEIS which amazingly concludes that the environmental impacts of solar power are LARGE, while those of continued operation of the Turkey Point nuclear power reactors, which create large amounts of nuclear waste and radioactive fission produces, are SMALL. (TPD64-7)

**Response:** The comment is noted. Rooftop solar applications are discussed in Section 8.2.6.2 of the SEIS. Section 8.2.6.2 concludes that implementation of solar technologies on a scale large enough to replace Turkey Point Units 3 and 4 would likely result in LARGE environmental impacts. The text in Section 8.2.6.2 has been editorially modified for clarity. Environmental issues associated with nuclear waste are Category 1 issues. NRC's findings for issues related to the uranium fuel cycle and waste management are set out in 10 CFR, Subpart A, Appendix B, Table B-1. There was no change to the SEIS text.

**Comment:** The original environmental review on Turkey Point was very limited and failed to consider substantial environmental issues. Even more important, changed circumstances and significant new information concerning the South Florida ecosystem in which Turkey Point is located, require the NRC to conduct a site specific SEIS prior to any major investment of resources into the relicensing assessment under 10 CFR. Part 54 of the relicensing process. Despite the fact, that these substantial environmental issues and significant information has been brought to the NRC's attention, the NRC refused to adequately analyze these issues in the requisite SEIS or the woefully inadequate Draft GEIS, that they performed. (TPD64-10)

**Response:** The comment is noted. Section 4.7 contains discussion of all new and potentially significant issues that were raised during the scoping process. In addition, NRC specifically consulted with the US Army Corps of Engineers regarding potential impacts on or conflicts with the Everglades restoration efforts. They did not identify any concerns regarding relicensing of Turkey Point Units 3 and 4, therefore the staff concluded there was no new and significant information with regard to the south Florida ecosystem. There was no change to the SEIS text.

**Comment:** Moreover, there were other issues not adequately addressed, or not addressed at all, in the original EIS on Turkey Point, the Licensee's Environmental Report, and even the Draft GEIS that raise questions about the agency's proposal to relicense a nuclear power plant in this area. These issues include, but are not limited to the following: the redevelopment of the Homestead Air Base site within five miles of the plant (TPD64-20)

**Response:** The comment is noted. Evaluation of site hazard issues, such as the Homestead Air Force Base, is part of the current licensing basis and is beyond the scope of the SEIS. There was no change to the SEIS text.

**Comment:** The effect that the failure to adequately assess the environmental impacts that the relicensing of Turkey Point will have on the South Florida ecosystem in the Turkey Point Draft Generic Environmental Impact Statement (GEIS) will directly impact me and my family and friends who use the South Florida ecosystem for hiking, boating, bird watching, fishing, contemplation and observation of the diverse plant and animal species that frequent this fragile ecosystem. (TPD64-1)

**Comment:** Moreover, there were other issues not adequately addressed, or not addressed at all, in the original EIS on Turkey Point, the Licensee's Environmental Report, and even the Draft GEIS that raise questions about the agency's proposal to relicense a nuclear power plant in this area. These issues include, but are not limited to the following: the siting of a school two miles from the plant. (TPD64-21)

**Response:** The comments are noted. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** The power that we get from Turkey Point can easily be replaced by more environmentally benign sources that do not contain the uncertain risks associated with the operation of these nuclear reactors beyond their original lives, and longer than any nuclear power plants have ever operated in this country. It is my contention that the NRC's Draft GEIS process failed to adequately analyze the impacts of this major federal action on the fragile South Florida environment, because the NRC failed to take the "hard look" required by NEPA. "General statements about "possible" effects and "some risk" do not constitute a "hard look"

absent justification regarding why more definitive information could not be provided." Neighbors of Cuddy Mountain v. United States Forest Service, 137 F.3d 1372, 1380 (9th Cir. 1998.) (TPD64-39)

**Response:** The comment is noted. Alternatives and their impacts were evaluated in Section 8. The comment did not provide new information. There was no change to the SEIS text.

**Comment:** But I think in the Environmental Impact Statement you need to look, and I don't think it needs to be generic because I think Turkey Point is a special -- this whole South Florida region is a special place. I think there is significant new information that requires a site specific EIS, not this generic EIS. (TPD34-11)

**Comment:** The NRC has conducted a Generic Environmental Impact Statement (GEIS), rather than a site-specific SEIS that should have reviewed the original Turkey Point Environmental Statement. In my opinion, under NEPA the NRC was required to prepare, publish, and seek public comment on a site-specific SEIS on Turkey Point prior to commencing other costly activities in the relicensing process. It appears that the process conducted by the NRC was an attempt to evade any meaningful review of its actions under NEPA by streamlining the process under 10 CFR. Part 51, so that it could conduct an environmental analysis concurrent with a relicensing process. The NRC NEPA process appears to be designed to "end run" NEPA and "rubber stamp" the relicensing decision, and does not allow a meaningful choice among alternatives. (TPD64-42)

Comment: The Draft GEIS for the License Renewal of the Turkey Point Nuclear Power Plants appears to "rubber stamp" Florida Power & Light's (FPL or Licensee) license renewal request, rather than permit the full and objective evaluation required under the National Environmental Policy Act (NEPA). The NRC's failure to prepare a full and objective site-specific Environmental Impact Statement (EIS), or Supplemental EIS (SEIS), prior to conducting the license renewal process (reportedly estimated to cost between \$15 to \$19 million dollars), is an irretrievable commitment of resources designed to prejudice the process prior to a full environmental analysis, and does not comply with the spirit or intent of NEPA. While, this may be the Commission's protocol for relicensing, I contend that this type of "end run" proceeding, apparently designed to skirt NEPA, does not meet the spirit or intent of the Act. (TPD64-8)

**Response:** The comments are noted. The environmental review process, which is set forth in 10 CFR Part 51, implements the National Environmental Policy Act of 1969 (NEPA). This process provides for the preparation of generic environmental impact statements to avoid the time and expense of repeated reviews of essentially the same material. When an environmental issue has been resolved generically, there is no need to conduct another detailed review of the same issue with respect to a particular application unless there is

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significant new information related to the issue. The technical bases that were considered in developing the GEIS included environmental insights gained from thousands of reactor-years of operating experience, including Turkey Point Units 3 and 4. It addresses and draws generic conclusions on 69 environmental issues associated with license renewal. These are Category 1 issues. The NRC staff reviews all of the information it receives for its review, including public comments collected during the scoping phase, to determine whether there is any new and significant information related to the Category 1 issues. If new and significant information is identified, the NRC staff will evaluate the impacts related to that information. The NRC staff performs site-specific analysis for all of the Category 2 and noncategorized issues that are applicable to each plant that applies for license renewal. The comments do not provide new information. There was no change to the SEIS text.

**Comment:** How can a citizen, concerned for his own safety, get information that's exclusively held by the licensee? (TPD65-7)

**Response:** The comment is noted and is outside the scope of license renewal. The issue is referred to the appropriate program office within the NRC. It does not add any new information. There was no change to the SEIS text.

**Comment:** For the sake of political opportunism you would further endanger the health of residents of south Florida. (TPD66-7)

**Response:** The comment is noted. To renew the license for the facility, the staff has to make a determination that the activities authorized by the renewed license will continue to be conducted in accordance with the current licensing basis and that any changes to the current licensing basis are in accordance with the Atomic Energy Act and the Commission's regulations. Therefore, the plant will not be relicensed unless the NRC concludes that it can be operated safely. There was no change to the SEIS text.

# A.1.5 Comments Concerning Category 1 Water Quality Issues

**Comment:** Page A-28; Requirements for the NPDES permit should be known, and the Final GSEIS should provide more detail in response to these comments. Furthermore, the NRC'S response to the comments on NPDES requirements is not specific ("...and are not under the jurisdiction of the NRC"). Known permit requirements should be addressed in the FGSEIS. (TPD78-7)

**Response:** The comment is noted. The statement on page A-28 has been changed to reference Section 2.2.3 as the location of a description of the NPDES permit. The description

of the permit has been revised to include the requirements of the permit as they relate to water quality.

## A.1.6 Comments Concerning Category 1 Socioeconomic Issues

Comment: Nothing in the handout, "Preliminary Results of Environmental Review of Turkey Point Units 3 and 4," or the discussion indicated that the looming shortage of technical and scientific personnel in the nuclear industry had been addressed in the general environmental impact statement. The looming shortage of technical and scientific personnel in the nuclear industry will affect FP&L and must be addressed as part of its relicensing review. Adequate numbers of properly trained workers are essential to the operation of the industry as a whole and individual plants as well, including Turkey Point 3 and 4. Across the country, the number of students studying for work in the nuclear industry has been dropping and university reactors have been fewer and fewer. What steps has FP&L taken and what steps will it take to ensure adequate numbers of workers under such industry-wide conditions? (TPD32-2)

**Response:** The comment is noted. The Commission's regulations and the plant's license identify critical staff positions for the plant. Experience, training, and qualifications for these critical positions are specified. The NRC will suspend operations of any plant if it cannot meet these requirements. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

# A.1.7 Comments Concerning Category 1 Air Quality Issues

**Comment:** Turkey Point can continue to produce clean electricity without air pollution or greenhouse gases. (TPD14-12)

**Comment:** Clean air is important to the neighbors of Turkey Point. Turkey Point provides this benefit. (TPD15-3)

**Comment:** Nuclear power doesn't contribute to the greenhouse effect. It doesn't pollute. (TPD25-5)

**Comment:** The company consistently monitors the air and water quality around the plants and surrounding communities to insure these standards are maintained. (TPD28-7)

**Comment:** We have been told by our neighbors that clean energy is important to them and we believe Turkey Point provides that benefit. (TPD44-1)

**Comment:** First, license renewal will maintain economic electric generation that does not produce greenhouses gasses or other air pollutants, such as sulphur dioxide, nitrogen oxide and particulates. (TPD49-1)

**Comment:** It's obvious from these figures that nuclear energy provides vital clean air benefits to Florida and to the United States, considering that each state must control emissions from electric generating sources through the Clean Air Act. (TPD49-4)

**Comment:** License renewal will maintain economic electric generation that does not produce greenhouse gases or other air pollutants, such as sulfur dioxide, nitrogen oxide and particulates. (TPD71-1)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

### A.1.8 Comments Concerning Category 1 Land Use Issues

**Comment:** Turkey Point placed over 14, 000 acres of sensitive wetlands with permanent conservation where the lands there were stored and preserved in its natural condition. (TPD14-11)

**Response:** The comment is noted. The Everglades Mitigation Bank is discussed in Section 2.2.1 of the SEIS. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** Turkey Point should operate for an additional twenty years to be able to continue the award winning conservation work that was initiated almost thirty years ago. Turkey Point preserves and protects the environment. Turkey Point operates in harmony with the environment. (TPD15-4)

**Response:** The comment is noted. The impacts of Turkey Point Units 3 and 4 on the environment are discussed in Section 4. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** If the licensee, which is a large land holder in the area, is the only entity with all of the safety-related information, how can the NRC be sure there is no conflict of interest? Developing land near a new commercial airport could be an extremely lucrative enterprise. (TPD20-9)

**Response:** The comment is noted. NRC responsibility does not include regulating licensee activities outside of nuclear plant operations and licensing. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** I never even considered this thing about Biscayne Bay and the need to camouflage Turkey Point. I've lived down here a long time. I've been stuck out on the bay in a boat at night and in bad rain storms. It's my favorite landmark to stay out of the shallows, so don't camouflage it too much. (TPD51-2)

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**Response:** The comment is noted. As discussed in Section 4.7.2, the greatest aesthetic impact of the Turkey Point plant is associated with the two fossil Units 1 and 2. The operations and facilities associated with Units 1 and 2 are outside the scope of relicensing of the nuclear Units 3 and 4, and this SEIS. There was no change to the SEIS text.

**Comment:** The South Florida Regional Planning Council (SFRPC) noted that the project should be consistent with the goals and policies of the Miami-Dade County comprehensive plan and corresponding land developing regulations. (TPD60-2)

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**Comment:** SFRPC recommends that impacts to the natural systems be minimized to the greatest extent feasible. (TPD60-3)

**Comment:** SFRPC also requests that the goals and policies of the Strategic Regional Policy Plan for South Florida be observed when making decisions regarding this project. (TPD60-4)

**Comment:** The project should be consistent with the goals and policies of the Miami-Dade County comprehensive plan and its corresponding land development regulations. It is important for the applicant to coordinate permits with all governments of jurisdiction. (TPD61-1)

**Comment:** The project is located immediately adjacent to the Biscayne National Park and Biscayne Bay Surface Water Improvement and Management Area (SWIM), natural resources of regional significance designated in the SRPP. The goals and policies of the SRPP should be observed when making decisions regarding this project. (TPD61-3)

**Response:** The comments are noted. The South Florida Regional Planning Council submitted a letter to the Florida Costal Management Program on September 20, 2000 as discussed in Section 2.2.1 of the SEIS. In its letter the Council stated that: "The license renewal, as proposed, is generally consistent with the goals and policies of the Strategic Regional Policy Plan for South Florida, particularly those regarding land use and public facilities, emergency preparedness, and natural resources of regional significance. Council staff believes enactment

of the program will further our goals for a more livable, sustainable, and competitive region." The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Staff recommends that, if this permit is granted, 1) impacts to the natural systems be minimized to the greatest extent feasible and 2) the permit grantor determine the extent of sensitive wildlife, marine life, and vegetative communities in the vicinity of the project and require protection and or mitigation of disturbed habitat. (TPD61-2)

**Response:** The comment is noted. The NEPA process analyzes impacts to natural systems and identifies mitigation needs that will minimize any significant impacts. The SEIS analysis did not determine that impacts to natural systems would be significant. Additionally, the NRC staff consulted with other federal agencies regarding impacts to sensitive species and habitats. No significant impacts have been identified. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

## A.1.9 Comments Concerning Category 1 Human Health/Radiological Issues

**Comment:** NRC monitors the performance of Turkey Point, as well as other independent agencies. Agencies agree that the operations at Turkey Point are safe and have no adverse impact on the surrounding community. This includes the State of Florida Department of Health which conducts monitoring and sampling of the South Dade area around Turkey Point. (TPD14-4)

**Comment:** There are claims by an activist group opposed to nuclear power called the Tooth Fairy Project that Turkey Point is harming people in Miami-Dade County. These claims are just not true. (TPD14-5)

**Comment:** The group organized against Turkey Point claims the answers for some types of cancer are found in the plant's operations. That is not the case. (TPD14-6)

**Comment:** The environment around the plant is safe for children. The group's claims have been repeatedly rejected by Federal and State Health Agencies as well as by leading scientists in the radiation protection field. (TPD14-7)

**Comment:** The NRC has appropriately addressed these claims in the Draft Supplemental Environmental Impact Statement and concluded the Tooth Fairy study shows no link to adverse health affects. (TPD14-8)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. This issue is addressed in Section 4.7.1. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

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**Comment:** The NRC requires that electric utilities measure emissions of radioactive chemical from nuclear reactors and levels of those chemicals in the air, water, soil and food. If these levels fall below Federal permissible levels, the NRC presumes there is no detectible health risk to residents living near reactors. That is what we see to be the serious flaw in the entire methodology of the Supplement Report. The NRC is not requiring nor has it successfully and thoroughly reviewed our research, but the numerous references, the 60 references that are in the report we're submitting. The issue here is that of looking at in-body levels of radiation as the true indicator of state health of the population. (TPD16-1)

Response: The comment is noted. This comment implies that NRC should measure radioactive substances in persons living near nuclear power plants. Such measurements would be misleading and unwarranted for a variety of reasons: Radioactive substances may come from a variety of sources. In the case of strontium 90, for example, the primary source has always been fallout from atmospheric weapons tests (United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001a). The comments imply that strontium 90 measured in people near nuclear plants must have come from nuclear plants, however, there is no factual basis for this claim. Interpretation of measurements of radioactive materials in people is difficult unless one knows what each individual was exposed to, when the exposures occurred, and by what routes they occurred (ingestion, inhalation, etc.). Travel must be accounted for, since even a couple of days in a high-fallout area could swamp any effect of local exposures if inhalation were suspected to be a primary route. In particular for strontium 90, dietary contributions from foodstuffs produced out of the region must be considered. Finally, migration must be accounted for to interpret measurements, because people may have lived somewhere else for the better part of their lives. Substances in the human body are dynamic, not static. This includes radioactive and nonradioactive substances. The dynamic processes include intake of material; uptake to systemic circulation from the gastrointestinal tract, respiratory tract, or skin; translocation throughout the body system; retention over time; and elimination via excretion and radioactive decay. Thus, even in deciduous teeth, the time course of exposure leading to intake and all other dynamic processes must be considered to interpret measurements. Very little Sr-90 is released from a nuclear power reactor, and little if any Sr-90 found in the environment can be directly attributed to reactor effluents. In the year 2000, Turkey Point Units 3 and 4 did not release any Sr-90 in their gaseous effluents (FPL 2001). Even in the event that any measurable Sr-90 can be found in a person living near Turkey Point or any other nuclear reactor, the Sr-90 cannot be absolutely attributed to the releases from the

reactor. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The NRC electrical utilities, including the Florida Department of Health have made no independent study of cancer in persons living near nuclear reactors from 1957 to 1990. (TPD16-3)

**Response:** The comment is noted. An epidemiological study of the human health effects from Turkey Point is beyond the scope of the license renewal process. Numerous scientifically designed, peer-reviewed studies of personnel exposed to occupational levels of radiation (versus life-threatening accident doses or medical therapeutic levels) have shown minimal effects on human health, and any effects were from exposures well above the exposure levels of the typical member of the public from normal operation of a nuclear power plant. The radiation effects of normal reactor operation on human health are Category 1 issues. Based on the analysis in the GEIS, the Commission made a generic determination that the radiation effects of normal reactor operation during the renewal term on human health would be SMALL. The staff has not identified any significant new information related to the radiation aspects of human health in the ER, the scoping process, its independent review, or in this comment that would call the conclusions of the GEIS into question. Therefore, the staff relies on those conclusions as amplified by supporting information in the GEIS related to the radiation effects of normal operation during the renewal term on human health. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The study that was cited by the National Cancer Institute made a controversial conclusion that nuclear reactors did not affect local cancer rates, a result that would be expected based on the methodology used. In virtually all of the control counties, there were counties that were right next to counties that had nuclear power plants, as if radiation stopped at the county border. This is a flawed study and it must be re-looked at and re-evaluated. (TPD16-4)

**Response:** The comment is noted. Conclusions that the NCI methodology was flawed are those of the commenter and do not reflect those of the scientific community. It is outside the scope of this environmental review to require additional study. The comment provides no new information relevant to relicensing Turkey Point; therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** One of the comments that the NRC made is that we do not have controls in the study. That is not true. There are several controls that go into the study. Proximity and distance from nuclear reactors is one control. The teeth of people who were born before and

after a nuclear reactor opened is another control. And the opening and closing of nuclear reactors and the teeth of children that was collected around that is another control. (TPD16-5)

| | **Response:** The comment is noted. Control data were not defined in the report from the Radiation and Public Health project, nor are such data and their uncertainties summarized in that report. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The NRC electric utilities, including the Florida Department of Health, have not measured levels of strontium 90 in the bodies - or other radioactive chemicals - in the bodies of persons living near nuclear reactors. (TPD16-2)

**Comment:** What the Radiation and Public Health Project has found in the baby teeth study, both nationally and in South Florida, is that the levels of strontium 90 from the St. Louis study from practically non-detectable since strontium 90 is a man-made element only produced by nuclear weapons and nuclear reactors.

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Various studies have indicated a projected decline of strontium 90 again to practically undetectable. This is the level of radioactive strontium 90 above the projected value that we have found in the teeth tested in Dade County to date. These are the average levels and these are the highest levels. (TPD16-6)

**Comment:** The methodology presently used by the NRC is to calculate cancers only by using what comes out of the stack, and this appears to be the weakest method you can possibly use. Where as the correlation between strontium 90 levels actually found in human bodies and cancer rates seems to be the most reliable method. (TPD21-3)

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**Comment:** Do the NRC and Florida Power and Light make adequate measurements of radiation dose to the public from Turkey Point emissions? The NRC says that they do, and that the public is not affected (p. 2-10).

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The NRC cannot and should not presume that Turkey Point emissions are harmless, since it does not measure in-body levels of radioactive chemicals like Strontium-90. In recent years, Strontium-90 measurements in milk near nuclear plants were no longer required. These levels were significant: in 1976, milk from dairy farms 5 to 10 miles from the Millstone plant in Connecticut had the same Strontium-90 concentration as in 1961-62, at the peak of atmospheric atomic weapons testing. With 123,000 Floridians living within 10 miles of Turkey Point, and over 3 million within 50 miles, it is critical that such measurements be made and compared with trends in cancer. (TPD72-22)

Response: The comments are noted. Although commercial nuclear power reactors do release Sr-90 into the environment, it is in very small amounts. The amount of Sr-90 released into the environment from a nuclear reactor is so small that it can only be reliably detected in the effluents themselves. During 2000, Turkey Point Units 3 and 4 did not release any Strontium-90 in the gaseous effluents. Liquid effluents containing radioactive materials, including Strontium-90 and Strontium-89 were released into the closed system cooling canals. The only time Strontium was released in the liquid effluents was during the second quarter and the releases were 0.12 MBq (3.2 E-06 Ci) of Strontium-90 and 0.37 MBq (10 E-06 Ci) of Strontium-89 (FPL 2001). For the second quarter of 2000, the total radioactive effluents were about 150 times below NRC regulatory limits (6.63 E-03 percent of applicable limits). The quantity of materials released to the atmosphere and liquid for 2000 are comparable to the quantities released in the past five years and the expected quantities in years to come, including the license renewal period. Any Sr-90 detected in environmental samples (soil or water) is most likely residual fallout from atmospheric nuclear weapons testing, not nuclear power reactor emissions. Likewise, any Strontium-90 found in deciduous teeth is likely from fallout.

Additional information has been added to section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The data on cancer rates in Southeast Florida. This is not the Radiation and Public Health Project's data. This is public health data from the data base of the SER Group, the Surveillance Epidemiological Report that was set into the process by Richard Nixon when he launched the war on cancer. And so this data is not data that we have generated, but the data that we have analyzed.

The Radiation and Public Health Project has found that the childhood cancer rate in the five Southeastern Florida counties have risen to become one of the highest in the United States and suggests a link with the areas high strontium 90 levels.

The Radiation and Public Health Project also found that annual rises and decline in cancer incidence in Miami-Dade children under age five matched those in radiation detected in the local precipitation - this is data emissions - measured in rain by the EPA, and that chart is attached to our study.

Cancer in children under ten in Miami-Dade and four other Southeastern Florida counties rose 35 percent from the early '80's to the late '90's, but it declined by eight percent in all of the rest of the State. (TPD16-7)

**Response:** The comment is noted. Due to the concern from the issues regarding the increased cancer rates raised by RPHP, the Florida Department of Health chose to also look at

the cancer rates using the same data used by RPHP. Staff from the Bureau of Environmental Epidemiology interviewed the RPHP staff to determine the source of data and then performed their own calculations and graphed the results. The overall finding was that they could not identify any unusually high rates of cancers in the area, but as would be expected, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations. The documentation of the Bureau of Epidemiology calculations and interpretations is included in this appendix (TPD77). Therefore, the claim by the RPHP that there are elevated rates of cancer in the vicinity of the plant are unsubstantiated and refuted by the State of Florida study. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

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**Comment:** The Radiation and Public Health Project respectfully submits to the Nuclear Regulatory Commission that the Generic Impact Statement is flawed. It says that the baby teeth study does not present new information. This is new and significant information and the first study on the measure of in-body radioactivity, specifically near nuclear power plants. (TPD16-8)

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**Response:** For the reasons discussed in Section 4.7.1 Evaluation of Potential New and Significant Radiological Impacts on Human Health, the staff has determined that this is not new and significant information. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health

**Comment:** The GEIS asserts that the doubling in cancer in the past half century is not due to any environmental cause other than cigarette smoking, failing to cite the consideration research which we've documented in The Radiation and Public Health Project's report that links cancer and environmental toxins like radiation. (TPD16-9)

**Response:** The comment is noted. The conclusions presented with regard to cancer incidents are those of the national agencies responsible for this kind of research, i.e. the National Cancer Institute and the American Cancer Society. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The NRC in this report ignores the rise in cancer rates among children, which also has doubled in the period. The children do not smoke. The children have not been exposed to long term medical X-rays, and that is simply not addressed here. (TPD16-10)

**Response:** The comment is noted. The conclusions about cancer rates in Section 4.7.1 are those of the National Cancer Institute and the American Cancer Society and not those of the

NRC. The NRC relies upon the authoritative scientific analysis and conclusions of these national cancer agencies. The NCI and ACS studies of cancer rates near nuclear power plants do not support the conclusion that cancer rates of any age group are higher near nuclear power plants. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The larger GEIS does not mention the increased sensitivity of the fetus and the infant to radiation exposure, which was pointed out in the BEIR V Report through the National Academy of Sciences in 1990, and that report concluded there is no safe, non-linear exposure to radiation. (TPD16-11)

Response: The comment is noted. Regardless of whether the GEIS specifically mentions the sensitivity or the fetus and infant to radiation exposure, the regulations for protecting the public are intentionally conservative and provide adequate protection for the public, for all ages and radiosensitivity, including fetuses, infants, and children. FP&L monitors both gaseous and liquid effluents released from the reactors and predicts potential offsite doses from radioactive liquid and gaseous effluents. These calculations are performed to demonstrate the licensees compliance with its technical specifications and NRC regulations. The State of Florida also provides environmental monitoring around the Turkey Point Site to ensure that effluent releases are within or below regulatory limits.

The National Academy of Sciences Committee on the Biological Effects of Ionizing Radiation published its fifth report (BEIR V) just over a decade ago (National Research Council 1990). That report contains mathematical models that predict risk of radiation-induced cancers in human populations over and above the incidence of cancer that occurs in the absence of radiation exposure. The BEIR V committee chose a linear, nonthreshold (LNT) dose-response model for solid cancers and a linear-quadratic (LQ) model for leukemia.

Other national and international organizations have studied the question of radiation and cancer, and generally come up with similar conclusions (International Commission on Radiological Protection (ICRP) 1991, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001b, National Council on Radiation Protection and Measurements (NCRP) 2001).

The BEIR V report, the UNSCEAR 2000 report, and NCRP Report 136 do not address what is safe or not safe; they merely evaluate excess cancer risk in terms of probabilities. ICRP Publication 60, however, does define safe in the sense of acceptable risk, and this and similar definitions have been reaffirmed by the National Council on Radiation Protection and Measurements (NCRP 1993) and the U.S. Environmental Protection Agency (EPA 1987).

#### Appendix A

These implicit definitions of safe are embodied in all U.S. radiation protection regulations, including those of the NRC.

There is no human activity without some risk, however slight. Safe does not mean without risk, but rather with an acceptably tiny risk. What risk is acceptable from society's standpoint is determined by the political process in the U.S. as spelled out recently, for example, by the U.S. Presidential/Congressional Commission on Risk Assessment and Risk Management (Omenn et al. 1997).

The BEIR V report does not state that there is no safe dose of radiation, and such a statement is in conflict with conventional wisdom as embodied in U.S. law, regulation, and political process.

Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

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**Comment:** The NRC cannot and should not presume that Turkey Point emissions are harmless since it does not measure in-body levels of radioactive chemicals like strontium 90, which is also a market for other isotopes. (TPD16-12)

**Response:** The comment is noted. This comment implies that NRC should measure radioactive substances in persons living near nuclear power plants. Such measurements would be misleading and unwarranted for a variety of reasons discussed below: Radioactive substances may come from a variety of sources.

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In the case of strontium 90, the primary source has always been fallout from atmospheric weapons tests (United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001a).

The comments imply that strontium 90 measured in people near nuclear plants must have come from nuclear plants, which is not the case.

Interpretation of measurements of radioactive materials in people is difficult unless one knows what each individual was exposed to, when the exposures occurred, and by what routes they occurred (ingestion, inhalation, etc.). Travel of the individual being studied must be accounted for, since even a couple of days in a high-fallout area could swamp any effect of local exposures if inhalation were suspected to be a primary route. In particular for strontium 90, dietary contributions from foodstuffs produced out of the region must be considered. Finally, migration must be accounted for to interpret measurements, because people may have lived somewhere else for the better part of their lives.

Substances in the human body are dynamic, not static. This includes radioactive and nonradioactive substances. The dynamic processes include intake of material; uptake to systemic circulation from the gastrointestinal tract, respiratory tract, or skin; translocation throughout the body system; retention over time; and elimination via excretion and radioactive decay. Thus, even in deciduous teeth, the time course of exposure leading to intake and all other dynamic processes must be considered to interpret measurements. Very little Sr-90 is released from a nuclear power reactor, and little if any Sr-90 found in the environment can be directly attributed to reactor effluents. In the year 2000, Turkey Point Units 3 and 4 did not release any Sr-90 in their gaseous effluents (FPL 2001). Even in the event that any measurable Sr-90 can be found in a person living near Turkey Point or any other nuclear reactor, the Sr-90 cannot be absolutely attributed to the releases from the reactor.

Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** In recent years, strontium 90 measurements in milk near nuclear power plants were no longer required these levels were significant. In 1976 milk from dairy farms near the Millstone Plant in Connecticut had the same strontium 90 concentration as at the peak of atomic bomb testing. (TPD16-13)

**Response:** The comment is noted. This SEIS only deals with environmental impacts related to Turkey Point Units 3 and 4 and does not address other nuclear facilities such as Millstone.

Although commercial nuclear power reactors do release Sr-90 into the environment, it is in very small amounts. The amount of Sr-90 released into the environment from a nuclear reactor is so small that it can only be reliably detected in the effluents themselves. During 2000, Turkey Point Units 3 and 4 did not release any Strontium-90 in the gaseous effluents. Liquid effluents containing radioactive materials, including Strontium-90 and Strontium-89 were released into the closed system cooling canals. The only time Strontium was released in the liquid effluents was during the second quarter and the releases were 0.12 MBq (3.2 E-06 Ci) of Strontium-90 and 0.37 MBq (10 E-06 Ci) of Strontium-89 (FPL 2001). For the second quarter of 2000, the total radioactive effluents were about 150 times below NRC regulatory limits (6.63 E-03 percent of applicable limits). The quantity of materials released to the atmosphere and liquid for 2000 are comparable to the quantities released in the past five years and the expected quantities in years to come, including the license renewal period. Any Sr-90 detected in environmental samples (soil or water or milk) is most likely residual fallout from atmospheric nuclear weapons testing, not nuclear power reactor emissions.

Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The Radiation and Public Health Project calls for the postponement of a decision on this license application until the local health affects and studies impacting strontium 90 on local health affects are thoroughly evaluated. (TPD16-14)

**Response:** The comment is noted. The health effects from Sr-90 are known and characterized in a number of studies such as NCRP Report No. 110, Some Aspects of Strontium Radiobiology (NCRP 1991). Very little Sr-90 is released from a nuclear power reactor, and little if any Sr-90 found in the environment can be directly attributed to reactor effluents. In the year 2000, Turkey Point Units 3 and 4 did not release any Sr-90 in their gaseous effluents (FPL 2001). These releases are typical of the releases in the last five years.

Based on the information provided, no further studies on the health effects in the vicinity of the Turkey Point Plant are warranted. The comment provides no new information; therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The pattern that we see in Dade, with a big peak after the Hurricane Andrew which must have distributed radioactive debris all over the area. (TPD17-1)

**Response:** The comment is noted. This is an unsubstantiated assertion. Environmental monitoring by FPL and State of Florida following Hurricane Andrew did not show any increased radioactive contamination in the environment. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** This kind of study based on 500 teeth, was repeated in Dade County. The last atmospheric test occurred in 1980 and there was a big peak, going from as low as one and a half to four and a half picocuries. Then there were large releases, both monitored and unmonitored, from the problems of the heat steam generator at Turkey Point and there was another peak. Then the steam generator was repaired, and what we have in effect found is that there was another peak when Chernobyl arrived. And then when the Biscayne Aquifer was contaminated by all these build-up, we see a build-up in the base line. These peaks occurred on the top of something else, and that is a very serious problem. (TPD17-2)

**Response:** The comment is noted. There is no evidence supporting the assertion that there were substantial releases of Sr-90 from the facility, and no evidence that the Biscayne Aquifer has been contaminated. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** We are endangering the welfare of the entire nation by ignoring this kind of data regarding child cancer rates. (TPD17-3)

Response: The comment is noted. Radiation exposure to the public during the license renewal term is a Category 1 issue as evaluated in the GEIS. At the request of Congress, the National Cancer Institute (NCI) conducted a study in 1990, Cancer in Populations Living Near Nuclear Facilities, to look at cancer mortality rates around 52 nuclear power plants, including Indian Point, nine Department of Energy facilities, and one former commercial fuel reprocessing facility. The NCI study concluded from the evidence available, this study has found no suggestion that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby. Additionally, the American Cancer Society has concluded that although reports about cancer case clusters in such 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. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** When Hurricane Andrew came, even though the plant itself may have survived, what happened is apparently that much of the radioactivity in the canals and the stored area outside and the accumulated radioactive dust was blown up all over the county and in fact it reached other areas as well, because here we can take a look at the striking similarity. This data was obtained from the Dade County Cancer Incident Registry that registers cancer since 1982. (TPD17-4)

**Response:** The comment is noted. This is an unsubstantiated assertion. Environmental monitoring by the State of Florida following Hurricane Andrew did not show any increased radioactive contamination in the environment. Even if the sediments in the cooling canals were contaminated with high levels of Sr-90 (which they are not), a mechanism that explains how these sediments were somehow distributed throughout southern Florida by a hurricane without destroying the canals defies explanation. There was no change to the SEIS text.

**Comment:** Here are two plants located in Florida, Palm Beach, Broward, Martin, St. Lucie, and they are all within 100 miles, so Palm Beach and Broward get it no matter which way the wind is blowing. (TPD17-6)

**Response:** The comment is noted. The GEIS took into consideration the location of nuclear facilities and major population centers in assessing the human health impacts from radiological releases, and considered the impacts to be generic and thus Category 1.

This unsubstantiated assertion provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The cancers are not declining. They are growing among children and this is the zero to nine year group, and they come in spikes that are associated with known events that produce radioactivity into the environment. (TPD17-5)

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**Comment:** We're talking about a total of about 1800 children that developed cancer during that period in the five county area, and the increase is 35 percent above what it should have been. (TPD17-7)

**Comment:** During the period 1983-84, when radioactive exposures to fetuses and infants were greatly reduced, infant mortality in Miami-Dade and Broward Counties fell 19.1% from the previous two years, significantly different from the 6.4% national drop. In 1985-86, when the reactors had returned to full power, the infant mortality rate increased 1.2%, while it fell 4.3% in the U.S. These findings are consistent with research on other closed reactors. (TPD72-7)

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Response: The comments are noted. Due to the concern from the issues regarding the increased cancer rates raised by RPHP, the Florida Department of Health chose to also look at the cancer rates using the same data used by RPHP. Staff from the Bureau of Environmental Epidemiology interviewed the RPHP staff to determine the source of data and then performed their own calculations and graphed the results. The overall finding was that they could not identify any unusually high rates of cancers, but as would be expected, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations. The documentation of the Bureau of Epidemiology calculations and interpretations is attached as part of the transcript in this appendix.

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Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** More data from the Center for Disease Control. Dade County white infant mortality incidentally, black is almost twice as high. The data shows that when the last of U.S. tests occurred there was a peak above the normal decline of 46 percent per year that has been taking place since 1935, except for the period of bomb testing. Then the Chinese bomb test. Then the French bomb test. Then the start of Turkey Point which increased here 50 percent. But when it was repaired infant mortality declined. Then came the steam generator repair here, and then came Chernobyl and it raised it again. And then Hurricane Andrew, still another small peak. (TPD17-8)

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**Response:** The comment is noted. The comment infers that when certain activities occurred producing radiological fallout or reactor effluents, the infant mortality rate increased, and

subsequently decreased when these activities were not occurring. The staff concludes that there are many causes of infant mortality and simply graphing the data and looking for trends or correlations in the data does not establish a cause-and-effect relationship.

Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The sampling program with the State has found no environmental levels of build-up and concentration of materials. (TPD18-1)

**Comment:** To date the sampling program with the State has not found anything in the environment that would either increase or affect or harm the citizens of the State of Florida, at any one of the nuclear plants. (TPD18-2)

**Response:** The comments are noted. The comments provide information in support of the conclusions presented in the GEIS and reiterated in Section 4.7.1. The comments did not result in a change to the SEIS text.

**Comment:** Careful analysis and observation of the data presented here does not support the alarming claims made by RPHP regarding cancer mortality rates and trends in Southeastern Florida counties when compared to the rest of the State of Florida and the nation.

The Florida Department of Health takes these assertions seriously and have reviewed the data used by RPHP regarding cancer rates of Southeast Florida. Using this data to reconstruct calculations and graphing the results, we have not been able to identify any unusually high rate of cancers in these counties. (TPD18-3)

**Response:** This comment refutes the statement by the Radiation and Public Health Project, Inc.(RPHP) that there are large increases in the cancer rates in south eastern Florida counties that are attributable to the Turkey Point and St. Lucie nuclear power facilities.

A summary of the Florida Department of Health's statement regarding the calculations and findings of the data related to cancer rates in the counties near Turkey Point has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The Tooth Fairy report is based on junk science. There is no evidence of increased cancer rates or strontium concentrations in the project area. (TPD19-1)

**Response:** The comment is noted. The comment is supportive of license renewal at Turkey Point Units 3 and 4, and is general in nature. The comment provides no new information; therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The GEIS Supplement filed, specifically Section 4.7.1, the statement for Turkey Point criticizes the baby teeth study for not performing environmental testing for strontium 89. We must realize how inconclusive such testing would be. With a half life of 60.5 days, much of this radioactivity would decay while this chemical sits in the rad-waste hold-up tank. More of the activity would decay as it gets released, deposited and absorbed in the environment. More activity would be lost as it is collected and transported to an independent laboratory. And even more of the activity would be lost as it sits in the lab awaiting testing. (TPD21-1)

**Response:** The comment is noted. The 60.5 day half-life of Sr-89 is sufficiently long that it could be detected in the environment if it was periodically released from the facility. Without detecting Sr-89 in the environment, it is impossible to claim that Sr-90 is from a nuclear reactor and not residual fallout from atmospheric nuclear weapons testing. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The NRC needs to monitor all gasses and liquid effluents for strontium 90.

The NRC needs to put monitors in the places where the unplanned, unmeasured radioactivity gets released to the environment. The NRC needs to have random samples of food sources measured for strontium 90, such as local vegetables, fish, blue claw crab, Florida lobster, local milk and local drinking water.

The NRC needs to publish the NRC's own measurements and strontium 90 levels in baby teeth.

The NRC needs to correlate all the listed monitoring procedures and cancer statistics to accurately find out if or if not there's a significant relation between nuclear plan operations enhancer. (TPD21-2)

**Response:** The comment is noted. The NRC sets limits on radiological effluents, requires monitoring of effluents and foodstuffs to assure those limits are met, and has set dose limits to regulate the release of radioactive material from nuclear power facilities. The regulations are intentionally conservative and provide adequate protection for the public including the most radiosensitive members of the population. FPL monitors its effluent and calculates offsite doses caused by radioactive liquid and gaseous effluents. These calculations are performed to demonstrate the licensee's compliance with its technical specifications and NRC regulations. The licensee's Offsite Dose Calculation Manual (ODCM) provides for collection and analysis of

a variety of samples such as soil, water, plants and animals. NRC does not perform studies of strontium in baby teeth because it is not considered a reliable method to determine public health impacts from releases from nuclear reactors. NRC relies on the studies performed by the National Cancer Institute (NCI) that conducted a study in 1990, "Cancer in Populations Living Near Nuclear Facilities," to look at cancer mortality rates around 52 nuclear power plants, nine Department of Energy (DOE) facilities, and one former commercial fuel reprocessing facility. The NCI study concluded from the evidence available, this study has found no suggestion that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby. Additionally, the American Cancer Society had concluded that although reports about cancer case clusters in such 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.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The Federal Government permits FP&L to release radioactive materials into the environment as a function of normal operations. The National Research Council Committee on the biological affects of ionizing radiation has found that there is no safe level of exposure to radiation. (TPD29-2)

Response: The comment is noted. The National Academy of Sciences' Committee on the Biological Effects of Ionizing Radiation published its fifth report (BEIR V) just over a decade ago (National Research Council 1990). That report contains mathematical models that predict risk of radiation-induced cancers in human populations over and above the incidence of cancer that occurs in the absence of radiation exposure. The BEIR V committee chose a linear, nonthreshold (LNT) dose-response model for solid cancers and a linear-quadratic (LQ) model for leukemia. Other national and international organizations have studied the question of radiation and cancer, and reached similar conclusions (International Commission on Radiological Protection (ICRP) 1991, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001b, National Council on Radiation Protection and Measurements (NCRP) 2001).

The BEIR V report, the UNSCEAR 2000 report, and NCRP Report 136 do not address what is safe or not safe; they merely evaluate excess cancer risk in terms of probabilities. ICRP Publication 60, however, does define safe in the sense of "acceptable risk," and this and similar definitions have been reaffirmed by the NCRP (National Council on Radiation Protection and Measurements (NCRP) 1993) and the EPA (U.S. Environmental Protection Agency (EPA) 1987). These implicit definitions of "safe" are embodied in all U.S. radiation protection regulations, including those of the NRC. There is no human activity without some risk, however

slight, so "safe" does not mean "with no risk," but rather "safe" means "with an acceptably tiny risk." What risk is acceptable from society's standpoint is determined by the political process in the U.S. as spelled out recently, for example, by the U.S. Presidential/Congressional Commission on Risk Assessment and Risk Management (Omenn et al. 1997).

The BEIR V report does not state that there is no safe dose of radiation, and such a statement is in conflict with conventional wisdom as embodied in U.S. law, regulation, and political process. No new information was provided by the comment. Therefore, the comment will not be evaluated further. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** Strontium 90 is a major component of permitted radioactive emissions. Never having existed in nature, created only in atomic bomb blasts, in nuclear reactors, it is a known carcinogen. There has been no above ground testing for decades. Strontium 90 presence in the environment is increasing rather than declining, as one might expect. (TPD29-3)

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**Response:** The comment is noted. The assertion that strontium 90 concentrations are increasing is incorrect: data presented in the UNSCEAR 2000 report show clearly that this isotope is declining on both local and worldwide scales over the past decades. During the year 2000, Turkey Point Units 3 & 4 released no Sr-90 in their gaseous effluents. In liquid effluents, they only released 0.12 MBq (3.2 E-6 Ci), which was less than 0.01 percent of the total quantity of radioactive material released into the cooling canals. These releases are typical for the last 5 years of Turkey Point's operation, and are not considered a major component of the plants effluents. No new information was provided by the comment. Therefore, the comment will not be evaluated further. This comment did not result in a change to the text of the SEIS

**Comment:** South Florida is proving to have the highest levels of strontium 90 in teeth nationwide, and according to RPHP, curiously, among the highest childhood cancer rates as well. (TPD29-4)

Response: The comment is noted. Very little Sr-90 is released from a nuclear power reactor, and little if any Sr-90 found in the environment can be directly attributed to reactor effluents. In the year 2000, Turkey Point Units 3 and 4 did not release any Sr-90 in their gaseous effluents (FPL 2001). Even in the event that any measurable Sr-90 can be found in a person living near Turkey Point or any other nuclear reactor, the Sr-90 cannot be absolutely attributed to the releases from the reactor. Due to the concern from the issues regarding the increased cancer rates raised by RPHP, the Florida Department of Health chose to also look at the cancer rates using the same data used by RPHP. Staff from the Bureau of Environmental Epidemiology interviewed the RPHP staff to determine the source of data and then performed their own calculations and graphed the results. The overall finding was that they could not identify any

unusually high rates of cancers, but as would be expected, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations. The documentation of the Bureau of Epidemiology calculations and interpretations is attached as part of the transcript in this appendix.

Section 4.7.1 contains additional discussion of this topic.

**Comment:** Before renewing the license at any nuclear power facility the first consideration should be public health and safety. Research by the Radiation and Public Health Project indicate a correlation between operation of nuclear power plants and childhood and adult cancer. (TPD29-1)

**Comment:** The question of the safety of normal operations emissions should have been answered a long time ago. Determine the radiation cancer link before proceeding. Find the answer. Put public health first. (TPD29-6)

**Response:** The comments are noted. Radiological effluents and the resulting radiation exposure to the public and workers was evaluated in the GEIS and determined to be a Category 1 issue. No new information was provided by the comment. Therefore, the comments will not be evaluated further. There was no change to the SEIS text.

For additional information concerning a cancer risk and the cause-effect relationship between cancer and radiological effluent releases from Turkey Point Units 3 & 4, see Section 4.7.1.

**Comment:** I also came away puzzling over the following statement in the handout in the section, "Radiological Impacts on Human Health," "National Cancer Institute examined cancer mortality rates around 52 nuclear plants, including Turkey Point, and populations." I was under the impression that, in the absence of a specific catastrophic instance, causal determinations were exceptionally hard if not impossible to make using public health data. Thus the inability to demonstrate causality should not necessarily be grounds for complacency. (TPD32-6)

**Response:** The comment is noted. The NRC is not complacent when it comes to protecting public health and safety. The NRC relies on a strategy of establishing conservative limits and ensuring that those limits are not exceed. The National Academy of Sciences' Committee on the Biological Effects of Ionizing Radiation published its fifth report (BEIR V) just over a decade ago (National Research Council 1990). That report contains mathematical models that predict risk of radiation-induced cancers in human populations over and above the incidence of cancer that occurs in the absence of radiation exposure. The BEIR V committee chose a linear,

nonthreshold (LNT) dose-response model for solid cancers and a linear-quadratic (LQ) model for leukemia.

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Other national and international organizations have studied the question of radiation and cancer, and reached similar conclusions (International Commission on Radiological Protection [ICRP] 1991, United Nations Scientific Committee on the Effects of Atomic Radiation [UNSCEAR] 2001b, National Council on Radiation Protection and Measurements [NCRP] 2001).

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The BEIR V report, the UNSCEAR 2000 report, and NCRP Report 136 do not address what is safe or not safe; they merely evaluate excess cancer risk in terms of probabilities. ICRP Publication 60, however, does define safe in the sense of "acceptable risk," and this and similar definitions have been reaffirmed by the National Council on Radiation Protection and Measurements (NCRP 1993) and the U.S. Environmental Protection Agency (EPA 1987). These implicit definitions of "safe" are embodied in all U.S. radiation protection regulations, including those of the NRC.

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There is no human activity without some risk, however slight, so "safe" does not mean "with no risk," but rather "safe" means "with an acceptably tiny risk." What risk is acceptable from society's standpoint is determined by the political process in the U.S. as spelled out recently, for example, by the U.S. Presidential/Congressional Commission on Risk Assessment and Risk Management (Omenn et al. 1997). Additionally, the fact that studies by both the American Cancer Society and the National Cancer Institute found no increase in cancer mortality in the vicinity of nuclear plants only underscores the adequacy of the limits established by the NRC.

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Additional information has been added to section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

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**Comment:** Recently many problems have come to light as a result of the relicensing activities for Turkey Point. There are new and significant information about the baby teeth study. (TPD40-1)

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**Response:** The comment is noted. As discussed in Section 4.7.1 of the SEIS, information on baby teeth is neither new nor significant. There was no change to the SEIS text.

**Comment:** Recently many problems have come to light as a result of the relicensing activities for Turkey Point. The releases of radioactive waste into the environment. (TPD40-4)

**Response:** The comment is noted. Radiological effluents and the resulting radiation exposure to the public and workers was evaluated in the GEIS and determined to be a Category 1 issue.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** For example, in 1990 the National Cancer Institute conducted an independent study of 62 communities around the United States, U.S. nuclear facilities in operation for at least ten years. The agency confirmed that there was no increase in health risk of living in proximity to nuclear power plants. (TPD43-5)

**Comment:** The NRC also appropriately addressed these claims in the Draft Supplement Environmental Impact Statement and concluded that the Tooth Fairy study shows no link to adverse health affects. So the bottom line, forget the fairy tale; Turkey Point is safe. (TPD43-10)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Another thing, our Department of Epidemiology in Tallahassee has been reviewing a study that was done called the Tooth Fairy Study and to that they have done an analysis which I would like to read the summary of. It's several pages, about seventeen pages. I'm not going to read it all. It has been presented to the NRC. And the summary goes like this.

"In summary, we reconstructed the calculations made by the RPHP" -- that's the Tooth Fairy people -- "using the same data from" -- I messed up earlier so I'm not going to repeat that mistake -- "using the same data from which they base their claims. RPHP claims that there are striking increases in cancer rates in Southeastern Florida counties and attributes these increases to radiation exposure from nuclear reactors.

Given the data to reconstruction calculations and graphing out our findings, we have not been able to identify unusually high rates of cancers in these counties. As we would expect, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations.

One has to use careful scientific and objective evaluation of these fluctuations to avoid misinterpretation. Careful analysis and observation of the data presented here does not support the alarming claims made by the RPHP regarding cancer mortality rates and trends in Southeastern Florida counties when compared with the rest of the State of Florida and the nation." (TPD45-2)

**Comment:** "Dear Interested Parties: Much concern has been relayed to us about statements made by the Radiation and Public Health Project Incorporated, and the March 28, 2001 announcement. RPHP has implied that there are large increases over time in cancer rates in Southeastern Florida counties and they attribute these increases to radiation exposure to the Turkey Point and St. Lucie power plants.

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The Florida Department of Health takes these assertions seriously and has reviewed the data used by RPHP regarding cancer rates in Southeast Florida. Using this data to reconstruct calculations and graphing the results we have not been able to identify any unusually high rates of cancers in these counties. Attached is the Bureau of Environmental Epidemiology report addressing this data and the RPHP findings. Should you need any further clarification please feel free to contact me at 850-245-4299," and it's signed "Sincerely, David R. Johnson, Medical Doctor, Master of Science, Bureau Chief of Environment Epidemiology." (TPD45-3)

**Response:** The comments are noted. This statement refutes the statement by the Radiation and Public Health Project, Inc. (RPHP) that there are large increases in the cancer rates in south eastern Florida counties that are attributable to the Turkey Point and St. Lucie nuclear power facilities. A summary of the Florida Department of Health's statement regarding the calculations and findings of the data related to cancer rates in the counties near Turkey Point has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The Tooth Fairy Project is a fairy tale. (TPD46-1)

**Response:** The comment is noted. The comment provides no new information; therefore, the comments will not be evaluated further.

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**Comment:** I've had an opportunity to read your Impact Statement, and I think you've hit the nail right on the head. I think you've done your homework. I read the report from the Florida Bureau of Health. I work with them on almost a daily basis in my job. I trust their methodology. I trust their analysis. I trust their findings. (TPD31-1)

**Comment:** Now of course, issues dealing with the Tooth Fairy Project and other issues were brought to my attention and when it happened, you know, it caused some concern on my part. But I was able to get a hold of information that I feel comfortable with, if you will, that that's not an issue that needs to be concerned about right now.

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Having said that, I'm sure that the Commission, the esteemed body who has responsibility for oversight on these kinds of issues, will continue to monitor these kinds of things and in the

future if there are any concerns in reference to the health and safety to the people of this community, I'm sure that that information will be brought to the fold. (TPD35-2)

**Comment:** Up to date we have found a stable environment, no increases in radiation and no increases in radionuclides that can be found in the environment. (TPD45-1)

**Comment:** Why doesn't the Tooth Fairy group just pay someone to analyze the strontium, the cesium in the environment around here. You'd find it's not from Turkey Point. (TPD46-2)

**Comment:** The U.S. Nuclear Regulatory Commission (U.S. NRC) has concluded in the draft Environmental Impact Statement that the environmental impacts of offsite radioactive releases from nuclear plants are small. Equally important, the U.S. NRC has rejected the allegations of the proponents of the "Tooth Fairy" project that increases levels of strontium-90 emitted from nuclear plants are causing adverse health effects. As noted by the information presented above, I fully concur with these conclusions. (TPD69-1)

**Response:** The comments are noted. The comments provide no new information, therefore, the comments will not be evaluated further. These comments did not result in a change to the text of the SEIS.

**Comment:** I read this beautiful glossy thing put out by Florida Power and Light, and they say how it's very safe around the nuclear power plants, but they didn't mention how maybe fifty miles away in Miami Beach, that's where the highest level of strontium 90 are being found, which is from where the gasses are released by Turkey Point because the pressure builds up. Those gasses contain the nuclear isotopes and that's where the children of Miami Beach are finding that. (TPD47-2)

**Response:** The comment is noted. The assertion regarding strontium 90 levels in Miami Beach is unsubstantiated, and the staff is unable to postulate a reasonable transport system that would result in the highest concentrations being present in Miami Beach. Radiological effluents and the resulting radiation exposure to the public and workers was evaluated in the GEIS and determined to be a Category 1 issue. No new information was provided by the comment. Therefore, the comment will not be evaluated further. This comment did not result in a change in the SEIS text.

**Comment:** But I really feel is that there needs to be a panel of scientists that are analyzing all the research done by the NRC, by the Tooth Fairy, and that panel of experts has to be kind of the way a jury is selected, that there's the environmentalists and there's the nuclear people and we're going to agree on the scientists, because I'm sure that the NRC, you guys can find

scientists that are going to support you, and you're saying that we're finding scientists that support us. (TPD47-3)

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**Response:** The comment is noted. The NRC typically does not establish panels of scientists to evaluate research. Analysis of the research performed by organizations is outside the scope of license renewal for Turkey Point Units 3 and 4. No new information was provided by the comment. Therefore, the comment will not be evaluated further. There was no change to the SEIS text.

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**Comment:** NEPA also requires the consideration of "cumulative impacts" in assessing the proposed action, such as the impact that radioactive emissions from the plant may have had, and may continue to have, on wildlife and the human environment. (TPD64-22)

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**Response:** The comment is noted. Cumulative radiological impacts were evaluated in the GEIS. Environmental monitoring of fish and wildlife is conducted routinely by the Plant and by the Florida Department of Health. The results of those studies have not shown any accumulation of radioactive components in the environment. No indication of "cumulative impacts" have ever been found. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

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**Comment:** The fact that the Turkey Point reactors are located in a hurricane region presents "special circumstances" in that the radiological threat from such an accident would be potentially greater than for another plant because of the inability to evacuate. In the case of a maximum hurricane, it is essential to ensure that critical components do not lose the ability to perform their intended safety function. Age related stress, corrosion and metal fatigue of both safety related and non-safety related equipment could make Turkey Point more susceptible to hurricane induced damage and make the risk, probability, and magnitude of a radiological accident more severe than other plants. (TPD64-27)

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**Response:** The comment is noted. NRC regulations under 10 CFR 51.53 require license renewal applicants to consider alternatives to mitigate severe accidents if the staff has not previously evaluated SAMAs for the applicant's plant in an environmental impact statement or related supplement or in an environmental assessment. The staff's evaluation of this analysis is presented in Section 4.7.3 and Section 5.1.2 of the SEIS.

The ability to implement protective actions, such as evacuation for the public is considered an operational issue, and not related to license renewal. The issue of evacuation during an emergency, whether for a hurricane or other event is assessed under the current operating license for Turkey Point Units 3 and 4. There was no change to the SEIS text.

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**Comment:** Also, I don't know -- I asked the question about analyzing cumulative impacts in the environment and I understand you said that State of Florida tests some fish and different things like that. But I'm not sure that the kind of analysis you have in your report is extensive enough to meet the requirements of NEPA under the cumulative impact requirement. (TPD34-7)

**Comment:** The Draft GEIS did not adequately analyze and foreclose the impact that the current operation of Turkey Point is having on the cooling canals and the aquatic and human environment surrounding the plant and assess the cumulative impacts of past, present and future operations as is required by NEPA. Relicensing of the Turkey Point reactors will mean that adverse impacts to the human environment (if occurring) will continue for an additional twenty years beyond the current license period. The impacts that the accumulation and biological magnification of radiation may be having on plant, animal and marine life and the immune system, as well as human health, and the potential cumulative impacts that may occur during the twenty years extended operation must be analyzed under NEPA. (TPD64-37)

**Comment:** The impact of radionuclides and any bioaccumulation or biomagnification that may be occurring in the food chain, marine life, plant, and humans from plant emissions and the coastal disposition and dispersion should have been analyzed in the Draft GEIS. This analysis should have included research on any build-up of strontium-90 and cesium-137 in the surrounding environment, including Biscayne Bay. The sediments of the Turkey Point cooling canals should have also been analyzed for any build-up of tritium and other fission products. The potential radiation exposure through sand, soil, dust, air, food chain, and marine life may increase as the plant ages and its life is extended by the relicensing. Analysis of any current impact that may exist, as well as the cumulative impacts that could result from the extended operation, were not adequately analyzed on a site specific basis in the Draft GEIS. (TPD64-38)

Response: The comments are noted. Radiological effluents, including those into the Turkey Point cooling canals and the resulting radiation exposure to the public and workers were evaluated in the GEIS and determined to be a Category 1 issue. Additionally, Florida Power and Light monitors both gaseous and liquid effluents released from the reactors and maintains an offsite dose calculation manual (ODCM) that describes the methodology and parameters that are used in the prediction of potential offsite doses from radioactive liquid and gaseous effluents. These calculations are performed to demonstrate the licensee's compliance with its technical specifications and NRC regulations. The State of Florida also provides environmental monitoring around the Turkey Point Site to ensure that effluent releases are within or below regulatory limits. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Environmentally, the plant must meet very strict and stringent radiation safety standards designed to protect the employees and ensure the community health and safety. (TPD68-8)

**Comment:** The Company consistently monitors the air and water quality at the plant and surrounding communities to ensure these standards are maintained. (TPD68-9)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Do operations of reactors, which routinely emit man-made radioactivity into the air, soil and water, from where they are inhaled and/or ingested by people, result in increased risk of disease, including cancer? (TPD72-1)

Response: The comment is noted. The question was addressed by the National Cancer Institute and the American Cancer Society, as stated in Section 4.7.1 of the SEIS. No increase in cancer rates has been found near nuclear power plants. The NRC's regulatory limits for radiological protection are set to protect workers and the public from the harmful effects of radiation on humans. The limits were 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, and National Academy of Sciences) and are conservative to ensure that the public and workers at nuclear power plants are protected. The NRC radiation exposure standards are presented in 10 CFR Part 20, "Standards for Protection Against Radiation," and are based on the recommendations in ICRP 26 and 30. Numerous scientifically designed, peer-reviewed studies of personnel exposed to occupational levels of radiation versus life-threatening accident doses or medical therapeutic levels) have shown minimal effect on human health, and any effect was from exposures well above the exposure levels of the typical member of the public from normal operation of a nuclear power plant.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** Does the buildup of nuclear waste from reactor operations pose a threat to the health of local residents? (TPD72-3)

Response: The comment is noted. The NRC assumes, the commenter refers to onsite storage of spent nuclear fuel. Onsite storage of spent nuclear fuel is a Category 1 issue. The impacts of onsite storage of spent fuel during the renewal term are evaluated in Chapter 6 of the SEIS. The Commission found (10 CFR Part 51, Subpart A, Appendix B, Table B-1) that spent fuel from an additional 20 years of operation can be safely accommodated onsite at all plants if a permanent repository or monitored retrievable storage is not available, and that the associated impacts are SMALL. This is a Category 1 issue for which the staff found no new and significant information. This comment did not result in modification of the SEIS text.

**Comment:** Current regulatory policies do not include an adequate risk assessment for low-dose exposures. (TPD72-4)

**Response:** The comment is noted. On the contrary, a tremendous amount of excellent scientific work has been completed over the course of the twentieth century, and renewed efforts are ongoing (see, for example, the U.S. Department of Energy Low-Dose Research Program at http://lowdose.org and review the history provided at this web site).

While current U.S. radiation dose limits (NRC 1993) are based on the ICRP's 1977 guidance (International Commission on Radiological Protection (ICRP 1977) as published by the U.S. Environmental Protection Agency (EPA 1987), the evidence gathered since that time has not changed the risk assessment significantly. See, for example, summaries by NCRP (National Council on Radiation Protection and Measurements (NCRP) 2001) and UNSCEAR (United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001b). These risk assessments, which incorporate the latest scientific research from around the world, generally rule out the existence of radiation risks that differ much from the ICRP guidance of 1977. Managing radiation risks using current dose limits and ALARA programs is consistent with safety as defined by the political process in the U.S.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The NRC requires that electric utilities measure emissions of radioactive chemicals from nuclear reactors, along with levels of these chemicals in air, water, soil, and food. It does not require environmental measurements of Strontium-90, one of the most toxic radioactive chemical produced by reactors. (TPD72-5)

**Response:** The comment is noted. Strontium 90 (Sr-90) is produced in roughly 5.8% of nuclear fissions in a reactor's fuel elements, and undergoes radioactive decay with a half-life of almost 29 years. Sr-90, and its radioactive decay product yttrium 90 (Y-90), are not harmful

unless they are near or inside the body. They are easily shielded if outside the body, resulting in no radiation exposure.

The statement is made in the comment that the NRC does not require environmental measurements of Sr-90. On the contrary, licensees perform environmental monitoring for radionuclides in the vicinity of each nuclear reactor. In the case of Turkey Point, these measurements are performed by the State of Florida. Based on the results of their environmental monitoring program, no elevated levels of radionuclides in the environment attributed to plant operation were detected.

Compared to other radionuclides, both natural and human-made, Sr-90 isn't one of the more toxic. For example, naturally-occurring thorium 230 is 700 times more radiotoxic for inhalation.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The average concentration of Sr-90 in Miami-Dade baby teeth increased 21.5% from 1981-87 to 1988-94. During this period, the cancer incidence rate in Miami-Dade children under age ten rose 6.8%. Here, Sr-90 and childhood cancer are rising together, as was found in Suffolk County, NY, implying a cause-and-effect relationship. (TPD72-6)

**Response:** The comment is noted. This comment on the Turkey Point SEIS implies that claimed statistical associations between cancer rates and reactor operations are cause-and-effect relationships. The NRC does not agree with the results presented by the RPHP, nor does the Florida Department of Health. Cancer incidence rates in Miami-Dade do not show the trends suggested by the RPHP, nor is there support for the inference regarding elevated levels of strontium-90 in teeth attributable to the operation of the Turkey Point Plant.

Many scientists have addressed the question of when one can decide that an association is causal, that is, when two things that appear to be associated over time can lead one to deduce that one causes the other.

A simple counter example helps illustrate this point. A college professor gives the following example of a causal inference: "In the winter I wear galoshes. In the winter I get colds. Therefore, galoshes cause colds." There's no argument that a strong statistical association exists between exposure to galoshes and the health effect of colds. There is, however, an argument about whether galoshes cause colds. So, how does one go about addressing whether this association is really causation?

Here are some of the major factors to consider before inferring that a statistical association is a causal one (Hill 1965):

- 1. Strength: Is a large effect observed, e.g., 32-fold lung cancer increase in heavy smokers?
- 2. Consistency: Is the effect consistently observed across studies?
- 3. Specificity: Does the effect occur in specific persons, for particular sites and types of disease.
- 4. Temporality: Does exposure precede disease? Is there a suitable latent period between exposure and clinical symptoms?
- 5. Biological Gradient: Is there a dose-response curve in which increasing dose leads to increasing response?
- 6. Biological Plausibility: Is there a plausible biological mechanism for the observed association?
- 7. Coherence: Does the cause-and-effect inference seriously conflict with generally known facts of the natural history and biology of the disease?
- 8. Experiment: Does intervention reduce or prevent the association?
- 9. Analogy: Do other, similar agents produce the effects?

The bottom line is that strong statistical association alone does not prove causation. The RPHP work fails to meet many of these criteria, even if the strontium measurements were the result of the nuclear power plant operations. In particular, they fail to meet criteria 1, 2, 3, 4, and 6. Epidemiology is the study of patterns of health and disease in human populations. In 1995 an international group of experts assembled to help determine how to use epidemiology studies for risk assessments. Their work has been published (Federal Focus Inc. 1996) and a non-copyrighted summary can be found on the internet at <a href="http://www.pnl.gov/berc/epub/risk/index.html">http://www.pnl.gov/berc/epub/risk/index.html</a>. In relation to the SEIS for Turkey Point, the cancer rate is only relevant with regard to the impacts from Turkey Point. See TPD 16, Comment 12 to address the cancer rates in southeast Florida. Based on a number of related comments, additional information has been added to section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

**Comment:** The Gould report was not available to the NRC at the time that the GEIS was written.

The article by Gould and his associates in the "International Journal of Health Services" was published in September 2000, well before the EIS was completed in May 2001. (TPD72-8)

**Response:** The comment is noted. The staff agrees with the comment, but not the conclusions in the Gould report. The document being referred to is the Generic Environmental Impact Statement for License Renewal (GEIS), which was published in 1996. Section 4.7.1 of the SEIS provides a staff response to the Gould report as well as a subsequent study presented by the Radiation Public Health Project (2001) on the same subject. This comment did not result in modification the SEIS text.

**Comment:** Comments that the GEIS should include adverse health effects of radioactive emissions and Sr-90 measurements in baby teeth are not new information.

The Gould study represents the first assessment of in-body measurements of radioactivity and its health effects near U.S. nuclear reactors. The NRC, public health departments, including the Florida Department of Health, and utilities have never made such measurements. (TPD72-9)

**Response:** The comment is noted. For the reasons discussed in Section 4.7.1 Evaluation of Potential New and Significant Radiological Impacts on Human Health, the staff has determined that this is not new and significant information. This comment did not result in a change to the text of the SEIS.

**Comment:** Only one study was cited by the GEIS as evidence that no causal association between nuclear facilities and cancer exists.

There are numerous articles published in the medical literature that document elevated levels of cancer near nuclear facilities or after reactor accidents like Three Mile Island and Chernobyl. At least 11 studies in the United Kingdom alone show high levels of childhood cancer near various nuclear plants (TPD72-10)

**Response:** The comment is noted. There is general consensus that there were no discernable increases in cancer mortality or morbidity around TMI-2 after the 1979 accident. The releases resulting from the Chernobyl accident were many orders of magnitude higher than routine plant releases, and are in no way comparable to the routine releases from Turkey Point. See Section 4.7.1 for additional discussion.

**Comment:** NRC permissible limits for radioactive emissions are based on recommendations from organizations such as the International Commission on Radiological Protection and National Council on Radiation Protection and Measurements.

The GEIS does not adequately address the evidence that the fetus and developing infant are at significantly higher risk of cancer and brain damage from low-level radiation that had been previously understood. This evidence is presented in the 1990 report of the Committee on the biological Effects of Ionizing Radiation, National Research Council -- National Academy of Science (BEIR V), in 1990.

The BEIR V report states "there is concern about radioactivitiy in the environment around nuclear facilities." It also notes that, "...the new data do not contradict the hypothesis, at least with respect to cancer induction and hereditary genetic effects, that the frequency of such effects increases with low-level radiation, as a linear, nonthreshold function of the dose." In other words, there are no safe limits for exposure to radiation, especially for the developing fetus. (TPD72-11)

Response: The comment is noted. Regardless of whether the GEIS specifically mentions the sensitivity of the fetus and infant to radiation exposure, the regulations for protecting the public are intentionally conservative and provide adequate protection for the public, for all ages and radiosensitivity, including fetuses, infants, and children. FP&L monitors both gaseous and liquid effluents released from the reactors and predicts potential offsite doses from radioactive liquid and gaseous effluents. These calculations are performed to demonstrate the licensees compliance with its technical specifications and NRC regulations. The State of Florida also provides environmental monitoring around the Turkey Point Site to ensure that effluent releases are within or below regulatory limits.

The National Academy of Sciences Committee on the Biological Effects of Ionizing Radiation published its fifth report (BEIR V) just over a decade ago (National Research Council 1990). That report contains mathematical models that predict risk of radiation-induced cancers in human populations over and above the incidence of cancer that occurs in the absence of radiation exposure. The BEIR V committee chose a linear, nonthreshold (LNT) dose-response model for solid cancers and a linear-quadratic (LQ) model for leukemia.

Other national and international organizations have studied the question of radiation and cancer, and generally come up with similar conclusions (International Commission on Radiological Protection (ICRP) 1991, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) 2001b, National Council on Radiation Protection and Measurements (NCRP) 2001).

The BEIR V report, the UNSCEAR 2000 report, and NCRP Report 136 do not address what is safe or not safe; they merely evaluate excess cancer risk in terms of probabilities. ICRP Publication 60, however, does define safe in the sense of acceptable risk, and this and similar definitions have been reaffirmed by the National Council on Radiation Protection and Measurements (NCRP 1993) and the U.S. Environmental Protection Agency (EPA 1987). These implicit definitions of safe are embodied in all U.S. radiation protection regulations, including those of the NRC. There is no human activity without some risk, however slight. Safe does not mean without risk, but rather with an acceptably tiny risk. What risk is acceptable from society's standpoint is determined by the political process in the U.S. as spelled out recently, for example, by the U.S. Presidential/Congressional Commission on Risk Assessment and Risk Management (Omenn et al. 1997). The BEIR V report does not state that there is no safe dose of radiation, and such a statement is in conflict with conventional wisdom as embodied in U.S. law, regulation, and political process. Additional information has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health

**Comment:** The average value across the U.S. today from fallout of atmospheric nuclear weapons tests should be approximately 4 pCi of Sr-90 per gram of calcium in baby teeth.

The average radioactivity concentration in St. Louis baby teeth from bomb test fallout plummeted from 11.03 to 4.60 pCi Sr-90/g Ca from 1964 to 1970, after the bomb testing ended. In addition, British researcher Janine Bell calculated that by the mid-1980s, the burden of radioactivity from bomb test fallout was below the 1951-52 levels, at the beginning of bomb testing. Both constitute evidence that current levels of bomb test fallout should be well below 4 pCi, and perhaps close to zero. As opposed to the NRC's projected Sr-90 levels in soil, RPHP is referring to projected Sr-90 levels in bone and teeth. (TPD72-12)

**Response:** The comment is noted. The comment is outside the scope of license renewal. Furthermore, there is wide variability of Sr-90 values in soil across the United States. Decisions made based on average U.S. soil values are of limited value because of this variability. See Section 4.7.1 for additional discussion. This comment did not result in modification the SEIS text.

**Comment:** Rhabdomyosarcoma is not rare.

Writing in the New England Journal of Medicine in 1999, two Mayo Clinic researchers estimated the number of new cases among the 60 million American children under age 15 to be only 250 per year (out of 8,000 total childhood cancer cases). The rate of rhabdomyosarcoma in western Suffolk County NY, near a number of nuclear reactors, is 15 times higher than the national rate. (TPD72-13)

Response: The comment is noted. The information provided in the SEIS with regard to rhabdomyosarcoma is a direct statement from the recognized national authority on cancers, the American Cancer Society, and a leading research hospital (St. Jude Children's Research Hospital). It is not based on extrapolations as is the article referenced by Mangano et al. The cancer rates in the vicinity of a single plant, as referred to in the Gould et al. article, do not represent trends across the nation with regard to rates near nuclear plants. This has been demonstrated by the National Cancer Institute's study of cancer rates near nuclear plants versus areas remote from nuclear plants. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** No association has been documented between the incidence of rhabdomyosarcoma and any environmental condition, including radiation exposure.

In 1991, University of Pittsburgh researcher published a study showing that children of women who received X-rays during pregnancy had twice the risk of developing the disease. In 1999, an Arizona research team demonstrated that one-quarter of mice who had Sr-90 applied to their skin developed rhabdomyosarcoma or a related soft-tissue cancer. (TPD72-14)

**Response:** The comment is noted. The conclusions presented in the SEIS with regard to rhabdomyosarcoma and radiation exposure are those of the American Cancer Society, which was based on a review of all available data, including those referenced in this comment. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** While cancer risk has doubled in the past half-century, this increase does not appear to be due to environmental causes other than cigarette smoking.

Cancer incidence in Connecticut children under age 10 has nearly doubled from the early 1940s to the mid-1990s, an increase similar to the adult population. None of these cancers are caused by children using tobacco; and because the rate of smoking among adults (parents) has declined about 40% since the mid-1960s the increase is due to factors other than tobacco. Children are most susceptible to the effects of environmental toxins such as radiation. (TPD72-15)

**Response:** The comment is noted. The conclusions about cancer rates in Section 4.7.1 are those of the National Cancer Institute and the American Cancer Society and not those of the NRC. The NRC relies upon the authoritative scientific analysis and conclusions of these national cancer agencies. The NCI and ACS studies of cancer rates near nuclear power plants do not support the conclusion that cancer rates of any age group are higher near nuclear power plants.

The comment provides no new information and will not be evaluated further. There was no change to the text.

**Comment:** It is not apparent that the Gould report included control groups.

The baby teeth study contains several control groups, including temporal controls, distance from reactor controls, and Sr-90 levels before and after reactors open and/or close. In 10 teeth from children born at least 200 miles from nuclear reactors, the average Sr-90 concentration is about 60% below that of those born near reactors. In addition, Sr-90 levels in 19 teeth of children born in San Luis Obispo County CA, after startup of the Diablo Canyon nuclear reactors in the mid-1980s, are 50% higher than for children born before the reactors opened. Additional control data are being analyzed. (TPD72-16)

**Response:** The comment is noted. Control data were not defined in the report from the Radiation and Public Health project, nor are such data and their uncertainties summarized in that report. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The Gould report does not report factors such as where the mother lived while pregnant, nor consider the sources of food that the children may have consumed.

The [Gould] report states that all baby teeth are classified according to where the mother lived during pregnancy. It also collects information on the type of water (bottled, municipal, other) consumed in the household. This data is clearly outlined in the methodology section of the Gould report. (TPD72-17)

Response: The comment is noted. The comment is a rebuttal by the Radiation Public Health Program (RPHP) to a statement made in Section 4.7.1 of draft Supplement 5 to the GEIS that concluded that the Gould report does not report factors that influence the source of any radioactivity in baby teeth such as where the mother lived while pregnant, nor considers the source of food that the children may have consumed. The Gould report does not present any data that would allow a reviewer to determine where teeth came from, nor are summaries presented with regard to concentrations in various subgroups, e.g., children whose mothers consumed only bottled water. Furthermore, no data are presented, nor are the samples screened by, what food stuffs or food sources were used during any time prior to collection of the sample. Because strontium behaves similarly to calcium in biological systems, the primary source of uptake is food rather than water, which is apparently the only behavioral factor addressed by the commenter's research.

The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** The American Cancer Society reports that studies show cancer clusters do not occur more often near nuclear plants than they do by chance elsewhere in the population.

In Counties within 30 miles of nuclear plants in the eastern U.S., rates of cancer in children under 10 years old from 1988-97 exceeded national rates in 13 of 13 areas. The cancer rates in Miami-Dade County and in Martin/St. Lucie Counties are the highest of all these. (TPD72-18)

**Response:** The comment is noted. As stated in the SEIS, the American Cancer Society report is one of two studies of cancer rates near reactors done by the United State's premier science agencies responsible for cancer research. The other was by the National Cancer Institute. Both studies resulted in the same conclusion: no suggestion that nuclear facilities may be linked causally with excess deaths from leukemia or from other cancers in populations living nearby.

Due to the concern from the issues regarding the increased cancer rates raised by RPHP, the Florida Department of Health chose to also look at the cancer rates using the same data used by RPHP. Staff from the Bureau of Environmental Epidemiology interviewed the RPHP staff to determine the source of data and then performed their own calculations and graphed the results. The overall finding was that they could not identify any unusually high rates of cancers, but as would be expected, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations. The documentation of the Bureau of Epidemiology calculations and interpretations is attached as part of the transcript in this appendix. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** Did Hurricane Andrew, which swept directly over the Turkey Point site in September 1992, damage the plant, re-suspend accumulated radioactivity on the site, and harm the environment and human health?

While the NRC states that it deemed the plant's design adequate to withstand severe weather in the original license granted to Turkey Point (p. 4-43), it didn't specifically address Hurricane Andrew's effects on the plant. Such a devastating natural disaster should merit consideration in the GEIS, which is supposed to protect local public health from harmful radiation until 2033. (TPD72-19)

**Response:** The comment is noted. The commenter requests a site-specific safety analysis of the impact of Hurricane Andrew on the Turkey Point Plant. Such an evaluation is outside the scope of license renewal. The impacts of hurricane force winds and storm surges on the plant were analyzed as part of the original plant application, and is found in the licensee's safety analysis report. The comment provides no new information, and therefore, will not be evaluated further. The comment did not result in a modification of the SEIS text.

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**Comment:** Does liquid radioactive waste discharged into below-ground cooling canals present any threat to the local environment and public health? The NRC claims there is no such threat (p. 2-17 and 2-18).

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Cooling canals are unlined, and located close to the Biscayne Aquifer, which supplies local drinking and farm water. According to the NRC there "may be exchange of water between the cooling canal system and the groundwater beneath the canal" (p.2-18). Neither the NRC nor the utility monitors the amount of radioactive chemicals shifting from the canals to the groundwater, so the potential threat to the environment and human health is untested and should be explored. (TPD72-20)

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**Response:** The comment is noted. The state of Florida monitors concentrations of radionuclides on fish and shellfish in Biscayne Bay near the cooling canals. All concentrations have been and continue to be within the State and Federal permissible limits. The comment provided no new information and did not result in changes to the text.

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**Comment:** Turkey Point nuclear units 3 & 4 were closed for most of 1983 and 1984 to replace defective steam generators, which began to corrode soon after the plant opened in the early 1970s. The GEIS acknowledges that steam generator leaks can be associated with "unmonitored radioactive releases." Are the currently-used steam generators and their potential for tube leaks and corrosion an environmental issue when considering the re-licensure application? (This issue not addressed by the NRC).

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Turkey Point's original and current steam generators were manufactured by the Westinghouse Corporation, which was sued by 14 utilities operating nuclear plants. Westinghouse won one suit, while settling the others out of court. Florida Power and Light, which filed the original suit in 1978 based on problems at Turkey Point, entered into one of these settlements. Because Turkey Point's current generators have been used for nearly 20 years (up to 50 years if the license is extended), the NRC should address any potential environmental and health threats posed by these aging parts, before an extension of its license is granted. (TPD72-21)

**Response:** The comment is noted. To the extent that the comment pertains to aging within the scope of license renewal, these issues will be addressed during the parallel safety analysis

review performed under 10 CFR Part 54. Aging management issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS. The comment provides no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** Radiation and Public Health Project, Inc. has implied that there are large increases over time in cancer rates in southeastern Florida counties and they attribute these increases to radiation exposure from the Turkey Point and St. Lucie power plants.

The Florida Department of Health...has reviewed the data used by RPHP regarding cancer rates in southeast Florida. Using this data to reconstruct calculations and graphing the results, we have not been able to identify any unusually high rates of cancers in these counties. (TPD77-1)

**Response:** The comment is noted. This comment refutes the statement by the Radiation and Public Health Project, Inc.(RPHP) that there are large increases in the cancer rates in south eastern Florida counties that are attributable to the Turkey Point and St. Lucie nuclear power facilities.

A summary of the Florida Department of Health's statement regarding the calculations and findings of the data related to cancer rates in the counties near Turkey Point has been added to Section 4.7.1, Evaluation of Potential New and Significant Radiological Impacts on Human Health.

## A.1.10 Comments Concerning Category 1 Aquatic Issues

**Comment:** Clarification is needed regarding environmental impacts of the existing recirculating cooling canal system. (TPD78-1)

**Comment:** The National Park Service (Appendix E; pages E-6 to E-11) states that the miles of cooling canals from Turkey Point have altered the natural environment by maintaining a hypersaline area which impedes natural groundwater flow from the upland side of the canals into Biscayne Bay. The NPS also states that the landscape has been altered at the downstream side of these canals by dwarf mangroves and high salinity marshes, as a result of the lack of freshwater flow (which occurred until the creation of the cooling canals; page E-10). The Biscayne National Park requested that the NRC investigate ways to mitigate these impacts. (TPD78-10)

**Response:** The comments are noted. A new Section 4.74 has been added to the SEIS to address this issue.

## A.1.11 Comments Concerning Category 1 Terrestrial Issues

**Comment:** I don't know if you folks know the eighteen mile stretch to the Keys, Florida Power and Light owns a lot of that land and they're restoring 14,000 plus acres to its natural resilience. (TPD38-3)

**Comment:** But leave it at recognizing that we placed over 14,000 acres of sensitive wetlands and permanent conservation where the land is being restored and preserved to the natural condition. (TPD43-7)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** More importantly, is their on-going strong commitment to sensitive environmental issues as proven in FP&L receiving Environmental Business Practices Award from the Greater Miami Chamber of Commerce. The Turkey Point property is also a testament to that commitment since most of the property remains in its natural habitat. (TPD41-3)

**Comment:** Two things, however, remain as my most important reason for supporting the renewal of license at Florida Power and Light nuclear facility.

... Number two, what would happen to the local environment should Florida Power and Light be denied relicensure?

The vast expanse of primitive wetlands, the natural areas that Florida Power and Light are responsible for, we must keep that in mind when it comes to license renewal. By renewing the license it is my opinion that they're going to be able to continue to maintain and improve what they've already started. (TPD42-3)

**Response:** The comments are noted. The comments acknowledge the importance of the manner in which FPL operates the site to the benefit of threatened and endangered species (see Section 4.6). The appropriate descriptive information regarding the plant-specific ecology of the site is addressed in Section 2 of the SEIS. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Page 4-11; Section 4.2 Transmission Lines: "Herbicides are used occasionally, primarily applied to individual trees or shrubs to prevent re-sprouting, although broadcast applications are used as general weed control in some of the urban and suburban areas". The

GSEIS (sic) should specify the types and quantities of herbicides applied, and the alternatives to spraying plants with defoliants. (TPD78-3)

**Comment:** Similarly, the FGSEIS (sic) should include details regarding broadcast applications for weed control (types, frequency, quantities, alternatives to chemical applications, etc.). Improperly applied herbicides and weed killers can impact surface and ground water resources. Poorly timed applications of herbicides in and around residential areas could impact sensitive populations. In addition, some herbicides can also cause potential adverse impacts to wildlife if not used in a conservative manner. (TPD78-4)

**Response:** The comments are noted. Information on the herbicides used was added to the discussion in Section 2.1.7 and Section 4.2 of the SEIS. In general, herbicide use, as well as mechanical control of vegetation, within power line rights-of-way was evaluated in the GEIS and found to be of small significance at all plants. The GEIS was reviewed by EPA and this conclusion was not called into question at that time. The EPA comments do not provide additional information that would change that conclusion. Hence, the conclusion in the GEIS is retained in the SEIS.

**Comment:** Appendix A, page A-6 provides an answer to this comment, but does not clarify whether, or how, the construction of the cooling canals may have resulted in impacts to the landscape and the salt marshes in question. However, in the text of the DGSEIS (page 4-7), in the section discussing cooling pond impacts on terrestrial resources, impacts are characterized as small significance." Clarification is needed regarding direct and indirect impacts from the construction and operation of the cooling canals. (TPD78-11)

**Comment:** Page A-6 does not address the request from the NPS regarding consideration of mitigation measures. The Final GSEIS, which should provide more information regarding impacts of the cooling canals, should also include information regarding potential mitigation measures, if impacts have occurred. (TPD78-12)

**Response:** The comments are noted. A new Section 4.7.4 has been added to the SEIS to address this issue.

## A.1.12 Comments Concerning Category 1 Postulated Accidents Issues

**Comment:** One specific thing that I brought up in my hearing where I was denied a hearing, or my pre-hearing, is that neither in the Generic Environmental Impact Statement nor in the Turkey Point supplement do I find information on a hurricane hitting Turkey Point and the impact that would have on an aging plant, because you have to remember, this is not a new plant. (TPD34-13)

**Response:** The comment is noted. The commenter requests a site-specific safety analysis of the impact of Hurricane Andrew on the Turkey Point Plant. Such an evaluation is outside the scope of license renewal. The impact of hurricane force winds and storm surges on the plant were analyzed as part of the original plant application, and is found in the licensee's safety analysis report. The comment provides no new information, and therefore, will not be evaluated further. The comment did not result in a modification of the SEIS text.

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**Comment:** A 1982 study (CRAC2) provided by the Congressional Subcommittee on Oversight and Investigations showed that in certain weather conditions, a meltdown at Turkey Point could cause 29,000 early deaths within a twenty mile radius of the plant, 4,000 delayed cancer deaths and 45,000 injuries within a seventy mile radius of the plant, and 43 billion dollars in property damage. (TPD64-3)

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**Response:** The comment is noted. The risk from severe weather conditions, resulting in high winds and flooding, were considered as part of the licensee's individual plant examination of external events. In response to an NRC staff request for additional information (memo from J. H. Wilson, NRC to T. F. Plunkett, FPL, dtd 31 Jan 2001, ML010320326) the applicant addressed the risk from hurricanes and demonstrated that the risk was small (memo from R. J. Hovy, FPL, to NRC, dtd 30 Mar 2001, ML011000182). The staff agreed with the licensee's assessment and provided the basis for this conclusion in Section 5.2.2.2 of the SEIS. There was no change to the SEIS text.

Comment: Moreover, the NRC is aware that Turkey Point is a coastal/ocean plant with shoreline, aquatic and drinking water pathways, and that contaminants from an accident would be deposited on an open body of water that could increase the dose to the population after the accident. According to NUREG-0769, Addendum1; NUREG-0440, interdiction has the potential to reduce the dose by factors of from 2 to 10. Interdiction, which according to NUREG-1437, page 5-63, could consist of "preventing use of the water or making contaminated food difficult to obtain" may be difficult at this site on Biscayne Bay. NUREG-1437 page 5-94 states that ocean and estuarine sites would be the hardest to effect interdiction because of the food pathway." The Draft GEIS did not adequately address this coastal/ocean plant issue, nor the potential impacts that the proposed action that the permeable Biscayne Aquifer is an EPA designated sole source of drinking water for millions of people in South Florida. (TPD64-31)

**Comment:** The Draft GEIS on Turkey Point should also analyze whether the dose from an accident at Turkey Point could exceed those in Section 5 of NUREG 1437, Volume 1 in a site-specific SEIS. For instance, Section 5.3.3.4.5 entitled "Ocean Sites" says that Seabrook has the "potential for producing a larger maximum individual doses than that of the LPGS generic ocean site" because of the high shoreline user rates and large annual seafood catch. It further states that "the uninterdicted total population dose estimate for Seabrook is 6 times that of the

LPGS generic ocean site. Page 5-85 of NUREG 1437 says that based on certain site specific assumptions, "it can be concluded that Seabrook represents the largest uninterdicted population dose at ocean sites other than Turkey Point." It does not appear that Turkey Point was part of the "Current ocean site severe liquid pathway analyses compared with Liquid Pathway Generic Study (LPGS) results" contained in Table 5.24 and, thus, these issues should have been analyzed in the Draft GEIS supplement or in a site-specific SEIS. Turkey Point does appear in Table 5.25 of NUREG-1437 entitled, "Earlier ocean sites without severe accident liquid analyses compared to Seabrook." This table identifies the location and groundwater pathway for Turkey Point as permeable limestone to a barge canal and the Atlantic Ocean. Indeed, this would also contradict the statement on page 4-8 in the Draft GEIS that the cooling canal system at Turkey Point, which is dug into porous limestone rock, is a closed system that does not discharge water to Biscayne Bay. The failure to recognize that water does migrate to Biscayne Bay caused the Draft GEIS to improperly narrow the scope of its analysis on fish and shellfish only to the cooling canal system itself which would skew the analysis of environmental impacts. Id at 4-8. (TPD64-32)

Comment: Additionally, page 5-95 of NUREG-1437 states that "the Seabrook analysis provides a larger groundwater population dose than all but Turkey Point," but concludes that "the population dose from Turkey Point at MYR would not be expected to exceed Seabrook." NEPA requires that the NRC take a "hard look" at this unsupported conclusion by analyzing it in a site-specific SEIS and/or the Draft GEIS. It is unclear to me why Turkey Point, a coastal plant subject to hurricanes, was not included in the current severe accident liquid pathway analyses. Especially since it appears that including it may have altered the generic conclusion in NUREG-1437, Volume 1, concerning radiation exposure risk in the event of a severe reactor accident in which radioactive contaminants are released into the atmosphere and deposited on large bodies of water. I could find no adequate analysis in the Draft GEIS of the environmental impacts of a severe accident at Turkey Point on the aquatic food, shoreline, swimming, air, and surface and groundwater pathways. (TPD64-33)

**Response:** The comments are noted. Table B-1 of 10 CFR Part 51 Appendix A states that the probability weighted consequences of atmospheric releases, fallout onto open bodies of water, releases to ground water, and societal and economic impacts from severe accidents are small for all plants. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** As was stated in the above discussion of hurricanes, the Turkey Point site presents special circumstances in that these spent fuel rods being stored on site, and not in the reactor containment building, could be distributed to the environment by a hurricane and age related accident that disrupts emergency response. Such an accident could cause severe and irreversible contamination of the surrounding environment and disrupt emergency response.

The Licensee's Turkey Point site is probably the most unsafe site to store nuclear wastes in the country, and the NRC should have analyzed the impact that the relicensing of this plant will have on the South Florida environment as it pertains to both the high-level and low-level nuclear waste that will be created. The special circumstances that occur at Turkey Point are far too important to be dismissed generically and should have been addressed in a site-specific SEIS and even the Draft GEIS that was conducted. (TPD64-36)

Response: The comment is noted. Absent new and significant information, the Commission's regulations (10 CFR Part 51) treat all spent fuel pool accidents, irrespective of what caused the accident, as a generic Category 1 event, not requiring a site-specific analysis. The Commission has made a distinction between reactor accidents and spent fuel accidents. In the past, the NRC has considered the effects of severe weather phenomenon, including hurricanes, on reactors generally. However, in NUREG-1738 (February 2001), the staff examined the effect of hurricanes as well as other external events on spent fuel pools in particular, and found the risks "very low" or negligible. The provisions of 10 CFR Part 51 cover environmental issues related to onsite spent fuel storage generically, and all such issues, including accident risk, fall outside the scope of license renewal.

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Emergency response issues are considered current operating issues, and are not within the scope of license renewal. The GEIS describes onsite storage of low level waste during the license renewal period as a generic Category 1 issue of SMALL potential impact not requiring a site-specific analysis.

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The comment provides no new information; therefore, the comment will not be evaluated further. There was no change to the SEIS text.

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**Comment:** Does the aging of reactors increase the chance of a serious accident? (TPD72-2)

**Response:** The comment is noted. Aging management issues are outside the scope of the 10 CFR Part 51 NEPA review, and will not be evaluated further in this SEIS. The comment provides no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

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# A.1.13 Comments Concerning Category 1 Uranium Fuel Cycle and Waste Management Issues

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**Comment:** Upon the global environment in health we have a monster waiting to be unleashed about 400 million metric tons of spent nuclear fuel, which is festering like a boil on the face of humanity.

The spent nuclear fuel poses a danger for over a half a million years and no one knows what to do with it or how to contain it. It is real and it is extremely dangerous to humanity. (TPD22-2)

**Comment:** Extending the operation of the nuclear power plant for years beyond its design life raises a whole host of safety questions, not the least of which is the matter of accumulation of nuclear waste. (TPD29-5)

**Comment:** The lack of political will to solve the problem of long-term storage of spent fuel, for example, makes the assumption that on-site storage of spent fuel at Turkey Point will be temporary seem increasingly weak. (TPD32-5)

**Comment:** That (nuclear waste) is being stored right now on site at Turkey Point because they don't have any place right now to move it. And until they come up with a solution to that nuclear waste problem, this is my personal opinion here, I don't think they should be creating that nuclear waste. (TPD34-10)

**Comment:** Recently many problems have come to light as a result of the relicensing activities for Turkey Point.

The storage of high level waste. (TPD40-3)

**Comment:** Additionally, according to NUREG CR 4982, Severe Accidents in Spent Fuel Pools in Support of Generic Issue 82, a worst case accident in a spent fuel pool could result in an interdiction area (an area with such a high level of radiation that it is assumed that it can never be decontaminated) of 224 square miles. (TPD64-4)

**Comment:** Upon the global environment and health we have a monster waiting to be unleashed. I am talking about 400 million metric tons of spent nuclear fuel festering like a boil upon the face of humanity. This beast poses a danger for a half-million years, and no one knows what to do with it, or how to contain it. (TPD66-1)

Response: The comments are noted. Onsite storage of spent nuclear fuel is a Category 1 issue. The safety and environmental effects of a long-term storage of spent fuel onsite has been evaluated by the NRC and, as set forth in the Waste Confidence Rule, 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 licensed operating life, which may include the term of a renewed license. At or before the end of that period, the fuel would be moved to a permanent repository. The GEIS and the SEIS are based upon the assumption that storage of the spent fuel onsite is not permanent. No new information was provided by the

comments. Therefore it will not be evaluated further. This comments did not result in a change to the text of the SEIS.

**Comment:** The environmental risks for the continued operation of the Turkey Point reactors, including the significant environmental effects that may result from offsite radiological impacts from the fuel cycle and the storage of nuclear waste were not analyzed in the Draft GEIS on a site specific basis, which resulted in a skewed analysis of alternatives that caused things like solar power to be rated more environmentally harmful than nuclear power. (See Draft GEIS at 9-7 and 8-55.) Clearly, a fair and objective analysis, which was not the case in the Draft GEIS, would have identified alternatives that are more environmentally friendly than the continued operation of this aged nuclear power plant located in one of the most environmentally sensitive areas in the world. (TPD64-23)

Response: The comment is noted. The comment suggests that impacts from the uranium fuel cycle were underestimated, thereby making impacts of alternatives appear worse than for relicensing. Onsite storage of spent nuclear fuel is a Category 1 issue. The safety and environmental effects of a long-term storage of spent fuel onsite has been evaluated by the NRC and, as set forth in the Waste Confidence Rule, 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 licensed operating life, which may include the term of a renewed license. At or before the end of that period, the fuel would be moved to a permanent repository. The GEIS and the SEIS are based upon the assumption that storage of the spent fuel onsite is not permanent. No new information was provided by the comment. Therefore it will not be evaluated further. There was no change to the SEIS text.

### A.1.14 Comments Concerning Category 2 Socioeconomic Issues

**Comment:** One of the most troubling aspects of deregulation is the disposition of the millions of dollars held for the decommissioning of Turkey Point. I urge the NRC to become significantly involved in this issue. If private companies are allowed to get control of this money and the usual activities of mergers and acquisitions and spin-offs and selling of assets and bankruptcies all occur, we may never see this money again. That would be a real environmental impact, new and significant. (TPD50-4)

Response: The comment is noted. NRC regulations require that funds be available to decommission nuclear power plants. The applicable regulations are at 10 CFR 50.75. The comment, however, is beyond the scope of license renewal. This comment did not result in modification of the SEIS text.

Comment: Page 1-8 Line # 4

The number 13,000 homes is incorrect. The correct number is "over 250,000 homes" (TPD62-3)

**Response:** The comment is noted. The comment resulted in modification of the SEIS text.

**Comment:** Section 4.4.6 of the Draft GEIS does not adequately analyze the environmental justice impacts of the proposed action. For instance, it does not address the significant environmental and cultural impacts that could be caused to the Miccosukee Tribe of Indians who live in the Florida Everglades. A radiological accident at Turkey Point has the potential to adversely impact the Miccosukee Tribe's culture and way of life, which depends on a healthy Everglades ecosystem. Because it fails to address the Miccosukee Tribe and other Native Americans, it incorrectly concludes that "no unusual resource dependencies or practices, such as subsistence agriculture, hunting or fishing through which the populations could be disproportionately high and adversely affected." It is clear that the Tribe's centuries old culture and way of life could be adversely impacted by the proposed action. (TPD64-34)

**Response:** The comment is noted. There was extensive interviewing of several government and private social service agencies in Miami-Dade County. One of the purposes of the interviews was to identify any subsistence farming or subsistence fishing among low income or minority populations. No such activities were uncovered.

In addition, the NRC sent a letter to Miccosukee and other Native American tribes in the area. The letter informed them of the public meetings, invited them to attend and raise any concerns that the re-licensing of Turkey Point Units 3 and 4 would have on their traditional way of life. The tribes did not raise any concerns before the preparation of the draft SEIS (December 2000) or on the draft SEIS itself (July 2001). The GEIS evaluated the radiological consequences of accidents and determined they were SMALL at all sites. There was no change to the SEIS text.

**Comment:** Additionally, there is no analysis of the minority populations that live around the plant's dependence on fishing and agriculture for food through which they could be adversely affected by the proposed action. These issues must be analyzed before the NRC can make a conclusion as to the level of impact from an environmental justice perspective. (TPD64-35)

**Response:** The comment is noted. There was extensive interviewing of several government and private social service agencies in Miami-Dade County. One of the purposes of the

interviews was to identify any subsistence farming or subsistence fishing among low income or minority populations. No such activities were uncovered. There was no change to the SEIS text. **Comment:** The impact of Turkey Point present in the community is very significant. Turkey Point employs 800 people and another 500 seasonal workers. (TPD10-2) Comment: The spouses of Turkey Point employees are our teachers, our nurses, other members in the work force for our community. (TPD10-3) **Comment:** We know what the loss of economic generator is to this community because we've had that happen to us, and that's in the form I can relate it to, Homestead Air Force Base. (TPD10-4) Comment: Turkey Point employees get involved in community activities, volunteerism, the donations to the United Way. We can count on the employee and the company of FP&L. (TPD10-5) Comment: Turkey Point employees are caring neighbors to communities surrounding the plant. Its employees make significant contributions to the community and to civic organizations. (TPD12-5) **Comment:** Turkey Point Nuclear Plant is the largest private employer in the region with over 800 employees and its purchase of local services help sustain economy of South Miami-Dade County. (TPD12-6) **Comment:** Turkey Point is an important economic factor in the community. The payroll for around 800 employees tax dollars, purchases and contributions to local United Way agencies help in the area. (TPD14-13) **Comment:** Turkey Point employees are active in their churches, in scout organizations, PTA, little leagues and even local Government. (TPD14-14) Comment: Taking away Turkey Point would have a big impact on the community. (TPD15-8) Comment: Florida Power and Light, the IBEW and its employees raise over a million dollars for community needs in Miami-Dade county. Turkey Point itself employees contribute over

\$150,000.00. (TPD23-2)

**Comment:** In terms of services this means quality care and education programs, through programs like the YMCA right here, the Brethrens Christian Association. It means food for the hungry at the Homestead food kitchen. It means therapeutic programs for developmentally disabled children and at the Association for Retarded Citizens. (TPD23-3)

**Comment:** Turkey Point itself has 62 leadership givers which is a tremendous commitment. These are people who give \$1,000.00 or more to United Way for health and human services. (TPD23-4)

**Comment:** In addition to the very, very significant report, the financial contributions, FPL, the IBEW and its employees contribute thousands of hours of volunteer services in the community, which is tremendous. (TPD23-5)

**Comment:** FPL actively supports the community and are a part of the community and help and aid and assist in every way possible agriculture in Dade County. (TPD24-2)

**Comment:** Because of the facilities at FPL, the Scout Camp, provides the perfect facility to train leaders. The facilities are also used to train Boy Scouts in the Atomic Energy Merit Badge. (TPD26-1)

**Comment:** Turkey Point facility is an important economic engine in itself. The number of people employed and their wage base is unparallel in our area. (TPD27-3)

**Comment:** Perhaps as in a community such as ours is the fact that the plants employees are our neighbors, our friends and important contributors to the life of our community. (TPD27-5)

**Comment:** Prior to Hurricane Andrew we had an Air Force water survival training center that was based right there at the mouth of the cooling canals and I have utilized that. We've utilized the pavilion for functions in our wing and at our base and have been very happy with that. (TPD30-2)

**Comment:** They've been good neighbors in this community for many, many years. (TPD35-3)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4, and are general in nature. The comments provide no new information; therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** I'm here tonight on behalf of the City of Homestead though, because the plant is a necessity to our local economy as well, ... (TPD36-2)

#### Appendix A

Comment: I would like to comment concerning the relationship as far as a good neighbor that the Turkey Point facility has had with our police department over the years. It's been very instrumental in some of the training. They've been very open. They've been very available as far as providing their facilities, their firearms range, some of their training houses and some cross training of their personnel with our personnel, some training as far as tactical -- I should mention that I'm the tactical commander for our local SWAT Team. We work closely with Miami-Dade SWAT Team in some training exercises at that facility. They're always very open, very supportive. They're a good neighbor. They've provided us with some facilities such as the firing range. Our's was destroyed shortly after Hurricane Andrew. They've been so gracious as to let us use their training facility on a regular basis for firearms requalification. We probably utilize the site once a month for tactical training. Their training house is there that they provide along with the range qualification courses that they provide us. (TPD37-2)

**Comment:** And having the cost effective convenience of Turkey Point has been a huge benefit to Miami and South Dade, and I'm specifically talking about the cost for electricity. (TPD41-2)

**Comment:** The payroll for 800 some employees, tax dollars, purchases and contributions to local United Way agencies help in this area.

But perhaps more importantly is the role our people play in the community. Our employees are active in churches, scout organizations, PTA's, little leagues and even local Government. (TPD43-8)

**Comment:** Our neighbors have told us that taking away Turkey Point would have a big impact on this community and we agree with that conclusion. (TPD44-4)

**Comment:** I'm here to talk about FPL's commitment to the community.

Each year FPL, the IBEW and its employees raise over a million dollars for health and human services in our community. Of that amount, Turkey Point employees raise over \$150,000.00 for services here in the Homestead Florida City area and those services include scouting, mentoring, youth programs, early childhood development programs, therapeutic programs, et cetera.

In addition to the tremendous financial support that we get from FPL, we also receive thousands of hours of volunteer time from the employees, which is tremendous in our community. In conclusion, because I want to be brief, it is late, I just want to say that United Way is tremendously proud of our partnership with FPL and its employees in our community. (TPD48-1)

**Comment:** Second, license renewal will preserve good jobs for this area and will continue to support the economy (TPD49-2)

**Comment:** For years Turkey Point and its employees have contributed to the United Way, Boys Scouts and Girls Scouts, little league, South Florida Blood Bank and many more. We applaud Turkey Point's endless efforts in contributing to our community and being environmentally conscious, providing safe and economical power to our community. (TPD52-2)

**Comment:** Besides being one of the largest employers in the immediate area, we have found Turkey Point to be a good neighbor, conscious of the environment and generous to our community. (TPD52-3)

**Comment:** I'm here to tell you that it would be a great disservice to our community and a grave mistake if the license is not renewed. I urge you to renew Turkey Point's license for twenty more years, thus renewing our hopes for a safe and strong future economy for our beloved community. (TPD55-3)

**Comment:** And one of the things I've learned at Florida Power and Light is, is a lot of things they do for us. They do a lot for the community. As you heard, United Way, we work a lot with United Way. They support United Way quite a bit. When I first started this job here I went up and we had a United Way meeting and I was sitting up front and I didn't realize the significance of sitting up front. Up front was the million dollar contributors and I didn't realize it. I was sitting up where all the million dollar contributors are. (TPD56-4)

**Comment:** There's some of the things that we gain by having this plant. You take all the businesses and all the people that support it. There are several thousand businesses, or several thousand people that support it in this business that we do, that support us, the support that we get. Homestead here would be really impacted. I know a lot of business we use in here, because at one time I purchased -- I worked on the fossil site also when it was all combined, it was all one thing. They separated the fossil and the nuclear right now. And I did some purchasing for a couple of years. And I was surprised at the amount of money and stuff that's spent just for the products and things that we buy and the number of people that come in here and support or business. (TPD56-5)

**Comment:** Also, I want to thank FPL for supporting me and the Boy Scouts with funds. Mr. Hovey is chairman of the Friends of Scouting Campaign for the District, the Thunderbird

#### Appendix A

District. FPL supports the Boy Scouts, the facility. There's a marvelous scout camp out at the plant that we use for training and it's a scouts camp and it's right on the bay and the boys have a good time and it's also a Girl Scout camp too. (TPD59-2)

**Comment:** FP&L provides facilities for the Atomic Energy Merit Badge. We have the poster out there. For the last six years we've been able to get approximately thirty-six boys a year for the Atomic Energy Merit Badge and those boys appreciate that Merit Badge. (TPD59-3)

**Comment:** They are the single largest private employer of the South Dade Community with over 800 full time employees with annual base salaries over \$62,000. (TPD63-3)

**Comment:** I know, and have known, several employees who work at the Plant and live in the surrounding areas who participate in numerous civic organizations and support our local community events. (TPD63-4)

**Comment:** The economic impact of Turkey Point on the local area community is felt in payroll, property taxes and support of area local services and their product purchases. (TPD63-5)

**Comment:** The Turkey Point Nuclear Facility is an important economic engine in itself. The number of people employed and their wage base is unparalleled in our area. (TPD67-3)

**Comment:** Mr. William Fruth, a well-known economic development planner has stated that the single best industry a community can have is a nuclear power facility, because of its generating capacity for other businesses, it's non polluting power and its tremendous payroll impact. (TPD67-4)

**Comment:** Perhaps as important to a community such as ours is the fact that the plant's employees are our neighbors, our friends and important contributors to the life of our community. They are active in our little leagues, churches, civic and government organizations. FPL corporate at Turkey Point is a responsible citizen. (TPD67-5)

**Comment:** Whereas, Florida Power and Light's Turkey Point Plant is located in the Homestead/Florida City area and provides 900 jobs. (TPD70-2)

**Comment:** License renewal will preserve good jobs for this area. And communities like Homestead, where these plants are located, will continue to gain substantial tax revenue. (TPD71-2)

**Comment:** Miami-Dade County is a diverse community with many needs. The Turkey point employees are caring neighbors to communities surrounding the Plant. Its employees make significant contributions to community and civic organizations. (TPD73-5)

**Comment:** Turkey Point nuclear Plant is the largest private employer in the region with over 800 employees and its purchase of local services helps sustain the economy of South Miami-Dade County. (TPD73-6)

**Comment:** Financial security for employees, contractors and support business who employ several thousand people. (TPD76-3)

**Response:** The comments are noted. Socioeconomic issues specific to the plant are Category 2 issues and are addressed in Section 4.4 of the SEIS. The comments support license renewal at Turkey Point Units 3 and 4. There was no change to the SEIS text.

## A.1.15 Comments Concerning Category 2 Threatened and Endangered Species Issues

**Comment:** You can go to any of the discharge canals in power plants and you are going to see the family of manatees, especially in the winter months. They go there because it is warm. (TPD25-6)

**Comment:** We have crocodiles. We have alligators. We have manatees. I think it's significant that in the area around the three nuclear power plant locations in Florida, obviously here at Turkey Point, major ground, major habitat for the American crocodile. We certainly have alligators. I believe the State of Florida has a million alligators. They are not dying off.

Manatees are at the Turkey Point plant. Crystal River is a habitat of the manatees. A number of other endangered species are thriving at the nuclear power plant at Turkey Point. (TPD31-2)

**Response:** The comment is noted. The manatee is not found in the closed cooling canal system at the Turkey Point site. It is, however found in the drainage canals to the west and south of the closed cooling canal system, in the turning basin used by the fossil units, and in Biscayne Bay. The comment acknowledges the importance of the manner in which FPL operates the site to the benefit of threatened and endangered species (see Section 4.6). The appropriate descriptive information regarding the plant-specific ecology of the site is addressed in Section 2 of the SEIS. There was no change to the SEIS text.

**Comment:** The Endangered Species Act. I think your scope is again woefully inadequate because you only look at the plant site and transmission corridor. An accident at Turkey Point

or a large radiation release could impact a much larger area. An accident could definitely impact almost all of the Everglades or a large part of the central Everglades which has about 64 threatened and endangered species. And I know that you haven't looked a that. (TPD34-14)

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**Response:** The comment is noted. The NRC consulted with the US Fish and Wildlife Service and National Marine Fisheries Service, the agencies responsible for determining impacts to species protected under the Endangered Species Act. These agencies found that relicensing would have no significant effects on these species. In addition, impacts of accidents are not required for analysis under ESA under US Fish and Wildlife Service guidelines. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

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**Comment:** The ultimate responsibility for Section 7 obligations remains with the federal action agency. The NRC did not properly define the scope for interagency section 7 consultation for the project. The NRC failed to ask the FWS to study the impact that offsite consequences from a radiological accident could have on at least a fifty-mile radius of the plant; and instead allowed the review to be limited to the area directly surrounding the plant. There are a myriad of threatened and endangered species that inhabit this vast ecosystem, and that could be adversely affected by the proposed action. (TPD64-24)

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**Response:** The comment is noted. Under ESA guidelines, federal agencies are required to address the impacts of proposed federal actions on species listed for protection under the ESA. ESA guidelines do not require addressing impacts of accidents. The NRC evaluates the impacts on Federally-protected species of routine operations only. There was no change to the SEIS text.

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**Comment:** The Turkey Point employees have developed a unique stewardship of the environment in the region surrounding the plant by preserving the natural habitat which provides homes to many endangered species including the American crocodile. (TPD12-4)

**Comment:** Turkey Point remains a guardian of our natural resources. Only about a tenth of the property is used for power production and most of the land provides a home to about seventeen threatened or endangered species. The American crocodile has found safe haven and a nesting ground in the plant cooling canals. This is one of the three areas in the country where the crocodile is living and indeed thriving. (TPD14-10)

**Comment:** In recognition of efforts in land preservation, FPL was presented the Edison Electric Institute Environmental Award for Turkey Point's land management work earlier this year, and the Greater Miami Chamber of Commerce Environmental Award in 2000, both recognizing FPL's efforts for preservation and education on the endangered American crocodile. (TPD15-5)

**Comment:** Turkey Point has done a remarkable job in protecting and increasing the population of the endangered American crocodile. (TPD27-6)

**Comment:** And every year we're producing, or the cooling canal system is producing over 300 crocodile babies. It's really a very good significant environment story. (TPD38-1)

**Comment:** But another reason I believe that Turkey Point should operate for an additional twenty years is to be able to continue the award winning conservation work that was initiated almost thirty years ago. (TPD44-2)

**Comment:** Turkey Point's done a lot of things for us. We hear about the impact it has -- that we've had on our environment to crocs and everything else. I've been out there and looked at - they don't allow us out there any more because they're afraid of some impact we may have going out there. You used to go out there and it used to be good fishing back in the back canals out there, but they don't allow us to do that any more. Which we understand why they do it, because they are protected out there. (TPD56-3)

**Comment:** Just one example is the remarkable job they have done in protecting and increasing the population of the endangered American Crocodile. (TPD67-6)

**Comment:** Miami-Dade County has a very strong record of its commitment to protect its natural environment. The Turkey Point employees have developed a unique stewardship of the environment in the region surrounding the Plant by preserving the natural habitat, which provides homes to many endangered species, including the American Crocodile. (TPD73-4)

**Comment:** Their cooling canals do not actively interface with the immediately adjacent Biscayne Bay in that they use self contained land-locked cooling canals, incidentally providing breeding grounds for crocodiles and other wildlife in their extensive land holdings and generally protecting the environment, and being community sensitive to even permitting use of selected lands for recreation, etc. (TPD75-3)

**Response:** The comments are noted. The comments acknowledge the importance of the manner in which FPL operates the site to the benefit of threatened and endangered species (see Section 4.6). The appropriate descriptive information regarding the plant-specific ecology of the site is addressed in Section 2 of the SEIS. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** We have Protection of the some of the last salt water crocks and rare bird of south Florida. (TPD76-6)

**Response:** The comment is noted. The comment provides no new information and will not be evaluated further. It is noted that the comment is in support of license renewal of Turkey Point Units 3 and 4. There was no change to the SEIS text.

**Comment:** Page A-18; The GSEIS should provide more detailed responses to specific comments, including Endangered Species. The document defers detailed information to the GEIS, and yet consultation activities with the U.S. Fish and Wildlife Service should have been initiated with the preparation of this DGSEIS (sic). (TPD78-5)

**Response:** The comment is noted. Consultation with U.S. Fish and Wildlife Service was initiated and a Biological Assessment submitted. On December 7, 2001, the FWS informed the NRC that, based on the biological assessment, the proposed relicensing of the Turkey Point Plant is not expected to significantly impact fish and wildlife resources. The results of this consultation have been incorporated into the final SEIS in Section 4.6.

### A.1.16 Comments Concerning Related Federal Projects

**Comment:** So I think that under NEPA a site specific EIS that looks at most importantly the Everglades restoration effort, which was not around when Turkey Point was built...

So I would think that anything that's going on on future use of Turkey Point or whatever kind of plant would be an alternative to that should also be looked at in the context of Everglades restoration and I think that's a significant environmental issue that has a page and a half in that EIS.

I reviewed just yesterday one component of one small restoration project, a Tamiami Trail little project. It was this big. The EIS on renewing the license of Turkey Point that has significant issues is this big.

Now the Everglades restoration document is 4,000 pages. So I think that this EIS is woefully inadequate in looking at the Everglades restoration issue. (TPD34-12)

**Response:** The comment is noted. NRC consulted with other federal agencies responsible for protection of plants, fish, and wildlife resources in the area, as well as with the US Army Corps of Engineers, which is responsible for restoration of the Everglades ecosystem. None of these agencies, nor any member of the public, nor the staff's review, identified any causal link between operation over an additional 20 years and adverse impact to the Everglades. There was no change to the SEIS text.

Comment: The NRC appears to be blithely unaware that South Florida is the scene of the largest ecosystem restoration project in human history. This is evidenced by a few scant paragraphs and a line on page 2-52 of the Draft GEIS that states that "The Federal Government is also participating in the Comprehensive Everglades Restoration Plan." No analysis of potential impacts that the proposed action may have on the Everglades Restoration plan was conducted. In one short line, the Draft GEIS has glossed over the effort to restore the Florida Everglades that will take decades and cost at least \$8 billion dollars. As pioneer conservationist Marjory Stoneman Douglas reminded us, "There are no other Everglades in the world." Yet, the NRC, seemingly oblivious to the federal government's commitment to the South Florida ecosystem has refused to analyze any impact that its major federal action may have on the major federal Everglades restoration effort that did not exist when Turkey Point was licensed. This failure to address and analyze the impacts that the relicensing could have on the restoration effort does not meet the requirements of NEPA. (TPD64-9)

**Comment:** This significant new information, and the clear Congressional intent concerning the protection of the Everglades ecosystem, seriously alters the environmental picture and required that a site-specific SEIS on the impact that the proposed project may have on the human environment around Turkey Point nuclear power plant be conducted. This was not done. In fact, the Draft GEIS contains only a scant mention of the restoration plan. Moreover, in its Order dated February 26, 2001, the Atomic Safety and Licensing Board (ASLB) made the incredible ruling at page 29-30 that, "By seeking to have the NRC and the Applicant specifically consider the environmental impacts of license renewal on the restoration project for the Everglades, the contention goes beyond the information the applicant needs to provide in its environmental report pursuant to 10 CFR. 51.53(c) and the issues the NRC must consider in preparing the draft and final SEIS..." The ASLB cited no federal case law or NEPA statutory authority to support their conclusion on this important environmental issue and, in fact, also concluded that they were not authorized to determine whether the Commission's license renewal regulations violate NEPA. (See Board Order at page 17.) Thus, in one fail (sic) swoop, the ASLB swept a very important environmental issue that should be analyzed in a sitespecific SEIS under the proverbial rug. (TPD64-17)

**Response:** The comments are noted. NRC consulted with other federal agencies responsible for protection of plants, fish, and wildlife resources in the area, as well as with the US Army Corps of Engineers, which is responsible for restoration of the Everglades ecosystem. None of these agencies, nor any member of the public, nor the staff's review, identified any causal link between operation over an additional 20 years and adverse impact to the Everglades. There was no change to the SEIS text.

**Comment:** Also, due to the environmental importance of this area and the vast ecosystem restoration effort being undertaken here, I asked the NRC to request that the Fish and Wildlife Service, Everglades National Park, Biscayne National Park, the Environmental Protection

Agency, and the Army Corps of Engineers become cooperating agencies on the Draft GEIS. The NRC, again ignoring the Everglades restoration plan, determined that there were no federal project activities that would make that desirable. See Draft GEIS at 2-53. (TPD64-41)

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**Response:** The comment is noted. It is true that cooperating agencies have joint responsibility for the proposed action. In the case of Turkey Point relicensing, the agencies mentioned in the comment did not share in the proposed action, and therefore are not cooperating agencies. However, NRC did specifically consult with these agencies regarding potential impacts of relicensing. There was no change to the SEIS text.

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### **A.1.17 Comments Concerning Alternatives**

**Comment:** In the Draft SEIS, FPL concludes that Turkey Point would not be a reasonable site for a natural gas plant since it would necessitate laying 150 mile pipe line through Everglades habitat.

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It seems that the NRC has missed work to build a new gas pipe line from Grand Bahama Island to Ft. Lauderdale, Project Calypso. To serve the west coast of Florida another pipe line is proposed from Mobile Bay to Tampa under the Gulf of Mexico. That's called Project Gulfstream.

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I'm sure when this information is considered it will have a marked affect on the alternatives to relicensing. (TPD50-2)

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**Response:** The comment is noted. Information on the proposed pipeline from Grand Bahama Island to Port Everglades and the Gulfstream Natural Gas System pipeline from Mobile, Alabama to Palm Beach County, Florida has been added to Section 8.2.2 of the SEIS.

**Comment:** The analysis in the Supplemental Environmental Impact Statement also looked at replacing the two reactors with equivalent electricity producers, new nuclear reactors, oil or gas burning generators, even solar panels, and concluded these options would produce greater pollution and ecological impacts. (TPD15-2)

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**Response:** The comment is noted. Environmental impacts associated with various alternatives to renewal of the operating licenses for Turkey Point Units 3 and 4 are discussed in Section 8 of the SEIS. There was no change to the SEIS text.

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**Comment:** I moved from the northeast because of the pollution and I know that comes from fossil plants and I don't want to see any more fossil plants down here in South Florida. (TPD31-4)

**Response:** The comment is noted. Air quality impacts from Turkey Point Plant operations were evaluated in the GEIS and found to be minimal. The comment provides no new information and, therefore, will not be evaluated further.

**Comment:** The study of alternatives I think was very obscure. As I just said, in the report is says that solar has a larger environmental impact. And of course it looked at building a solar field instead of using solar power on your roof where it's supposed to be in a small scale application. But even then, solar power does not create all this nuclear waste that some of the - I mean the standard for disposing of it is ten thousand years. That's the EPA standard to keep it out of the environment. Some of it's in the environment for hundreds of thousands of years. (TPD34-9)

**Response:** The comment is noted. Rooftop solar applications are discussed in Section 8.2.6.2 of the SEIS. Section 8.2.6.2 concludes that implementation of solar technologies on a scale large enough to replace Turkey Point Units 3 and 4 would likely result in LARGE environmental impacts. The text in Section 8.2.6.2 has been editorially modified for clarity. Environmental issues associated with nuclear waste are Category 1 issues. NRC's findings for issues related to the uranium fuel cycle and waste management are set out in 10 CFR, Subpart A, Appendix B, Table B-1.

**Comment:** Thirdly, renewal of Turkey Point's license is far more economical with less environmental impact than building a new power plant or in pursuing other energy alternatives. (TPD49-3)

**Response:** The comment is noted. Alternative power generation is addressed in Section 8 of the SEIS. The comments provides no new information, and supports license renewal at Turkey Point Units 3 and 4. There was no change to the SEIS text.

**Comment:** The Draft SEIS also needs to look at the conversion of the Fort St. Vrain reactor to natural gas. All the expensive infrastructure was reviewed and plant now produces electricity. I've heard that the conversion of the Fort St. Vrain plant costs 250 million dollars.

Natural gas conversion along with Project Calypso should be the strongest alternative to the license renewal in the Final SEIS. (TPD50-3)

**Response:** The comment is noted. Conversion of Turkey Points Units 3 and 4 to a natural gas fired combined cycle plant would have environmental impacts that are generally comparable to those for a new combined cycle plant as discussed in Section 8.2.2 of the SEIS. An exception would be that a smaller amount of land would need to be disturbed with conversion. Overall, however, the environmental impacts associated with conversion would be greater than renewal of the OLs for Units 3 and 4. An additional disadvantage of conversion is that it is unlikely that

conversion activities could begin until Units 3 and 4 are permanently shut down. Until the conversion is completed, FPL would be without the 1386 MW(e) generated by Units 3 and 4. There was no change to the SEIS text.

**Comment:** Modern technology, there's plenty of modern technology that seems to be being ignored. (TPD57-4)

**Comment:** One thing mentioned is fear of the economy dropping. But if we focus on new energy there will be a new economy that will come about. (TPD57-5)

**Response:** The comments are noted. The comments are general in nature. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** I was looking at the report, part of the report that says okay, if we do fossil we can do this, if we go solar we can do that. But all of those processes say that we have to close this plant. So that means we have to become a disposable society. We have to throw away this plant and build a new one, and I don't think that's the way to go. (TPD59-4)

**Comment:** Renewal of Turkey Point's license is far more economical than building a new power plant. (TPD71-3)

**Response:** The comments are noted. The comments are supportive of license renewal at Turkey Point Units 3 and 4. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

## A.1.18 Comments Concerning Safety

**Comment:** The performance of Turkey Point is top notch, thanks to the employees. Their time, effort and dedication have resulted in Turkey Point consistently being recognized as safe and one of the most reliable and efficient plants in the industry. The employees have also worked diligently through effective maintenance programs to sustain the option for continued plant operations well beyond the initial forty year license. (TPD14-3)

**Comment:** The Miami group of the Sierra Club is calling for safety hearings concerning the license renewal of Turkey Point nuclear reactors. The Miami group also calls for an Environmental Impact Statement that studies site specific health and safety issues. (TPD20-1)

**Comment:** Isn't there a legal requirement for the NRC, not the licensee, to provide a safety evaluation for a final EIS? (TPD20-4)

**Comment:** Another conflict of interest may arise if the licensee thinks that a negative safety assessment would damage its chances of obtaining a license renewal. (TPD20-10)

**Comment:** Request a call for safety hearings for the Turkey Point plant. (TPD22-1)

**Response:** The comments are noted. Operational safety is outside the scope of the evaluation under 10 CFR Part 51. The results of the NRC staff's review of the licensee's aging management programs for structures, systems, and components within the scope of license renewal and conducted pursuant to 10 CFR Part 54 will be documented in a safety evaluation report separate from this SEIS. There was no change to the SEIS text.

**Comment:** A study of spent fuel consequences by Brookhaven National Laboratories, that was commissioned by the Nuclear Regulatory Commission stated if there was an accident in the spent fuel pool and the cooling water was drained, the spent fuel would heat up and set itself on fire. The study only accounted for one decommissioned reactor with forty years of spent fuel on site. Turkey Point has a combined fifty-seven years of spent fuel with more on the way.

The consequences for this accident of a generic reactor range from 53,800 latent fatalities to 143,000 latent fatalities, and permanently contaminated land estimates range from 869 square miles to 2,790 square miles. (TPD20-2)

Response: The comment is noted. The Commission's regulations (10 CFR Part 51) treat all spent fuel pool accidents as a generic Category 1 event, not requiring a site-specific analysis. The assumptions in the Brookhaven National Laboratories report (NUREG/CR-6451) are very conservative and were never endorsed by the NRC. A more recent study on spent fuel pool risk (Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants, NUREG-1738) concluded that the risks from spent fuel pools are low and well within the Commission's safety goals. NUREG-1738 found that the consequences of an accident involving a spent fuel pool fire resulting in a large radioactive release could be significant. However, because of the low likelihood of occurrence of such an event, the overall risk to the public is low. Although NUREG-1738 is directed at quantifying the risk for decommissioning reactor spent fuel pools, the results are arguably bounding for operating reactor spent fuel pools. There was no change to the SEIS text.

**Comment:** How can the NRC ignore its own standard review plan? (TPD20-5)

#### Appendix A

**Response:** The comment refers to siting hazards and is outside the scope of license renewal. The staff conducted and independent review of the issues as set forth in NUREG-1555, Supplement 1, the Standard Review Plans for Environmental Reviews for Nuclear Power Plants, Supplement 1: Operating License Renewal. There was no change to the SEIS text.

**Comment:** In June, 2000 the Nuclear Regulatory Commission issued a safety assessment saying commercial airport development was safe, but also said, quote, "it should be noted however that the margin between the estimated aircraft crash frequency and the acceptance guidelines of SRP 3.5.1.6 is relatively small." The NRC is responsible for public safety, but the NRC's formula wasn't used. It was done using Department of Energy calculations, but the Department of Energy has no responsibility for public safety as the NRC does.

Bird air strike rates were under-valued. State averages and national averages hardly compared to the birds flying around Biscayne National Park and Everglades National Park. Caribbean, Central American and South American general aviation rates were totally ignored.

When the formula asked for the height of the structures to calculate crash probabilities, the 400 foot tall smoke stacks mysteriously disappeared from the calculations.

All this air crash safety information should be in the Generic Environmental Impact Statement and the site specific Environmental Impact Statement, but it is not.

In January the Atomic Safety and Licensing Board met to hear my petition arguments. Administrative Judge Thomas Moore, asked FP&L lawyer and the NRC lawyers to show him in the Generic EIS where air crashes into spent fuel pools have been studied. The Judge asked them "where in the GEIS is the safety study for spent fuel pool damage caused by hurricanes?" The lawyers had no answers. (TPD20-3)

**Comment:** How can the NRC insure public health and safety and approve airport development when it doesn't possess all the data and assumptions that were used in the calculations and cannot verify the licensee's conclusions? (TPD20-6)

**Comment:** How can a citizen concerned for its own safety get information that's exclusively held by the licensee? (TPD20-7)

**Comment:** Shouldn't the lead agency, the Air Force, be told that there are major safety discrepancies with the NRC methodology concerning the closeness of the proposed commercial airport to the nuclear plant? (TPD20-8)

**Response:** The comments are noted and are outside the scope of license renewal. These issues, related to operational safety, have been referred to the appropriate program office within the NRC. They do not add any new information. There was no change to the SEIS text.

**Comment:** If they're able to fix an old car and make it continue to work, we should be able to fix this nuclear plant and maintain it in a way that it can keep running safely and efficiently. (TPD26-2)

**Response:** The comment is noted. To the extent that the comment pertains to aging within the scope of license renewal, these issues will be addressed during the parallel safety review performed under 10 CFR Part 54. Aging management issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS. The comment is noted and is supportive of nuclear power. The comment provides no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** The last speaker from the public attending the meeting said that he had worked at more than one nuclear facility and contrasted the fine management of the Turkey Point reactors by FP&L with poor management at one or more other sites. I believe that the Commission should, for the public good, follow up on that public testimony, informal though it may have been, about the alleged poor management at those other plants. (TPD32-3)

Response: The commenter is referring to a verbal comment made by another member of the public, at the July 17, 2001 evening public meeting at Homestead, FL. The statement made by the member of the public referred to his experience at nuclear and non-nuclear facilities. It is not clear whether the plants he referred to as only caring about "delivering the product" were nuclear or non-nuclear plants. On a daily basis, NRC resident inspectors monitor the performance of nuclear power plants. On a quarterly basis, nuclear power plants submit performance indicators on the plant's performance. If the performance indicators cross established thresholds, the NRC staff will take an escalating series of actions until performance improves.

On a monthly basis the NRC staff reviews the trend in allegations received concerning each nuclear power plant. If there is an increasing trend of allegations, the staff conducts a more thorough analysis of the potential causes of the increasing trend. If the staff finds that work environment issues are contributing to the trend, it will engage the licensee to address the work environment issues.

In addition to the monthly review of allegations, the staff also assesses the work environment during inspections of the licensee's corrective action program. As part of this inspection, the NRC staff asks licensee employees how licensee management reacts when they raise safety or

regulatory issues. Through these mechanisms, the NRC already monitors the performance of all nuclear power plants.

The comment is noted. The comment provides no new information, therefore, the comment will not be evaluated further. There was no change to the SEIS text.

**Comment:** Well, government studies stay that a full scale accident at Turkey Point could cause 29,000 immediate deaths, 4,000 delayed death, cause 43 billion dollars in property damage, and the melt down of the spent fuel pool, the worse case accident, Government documents in the spent fuel pool can contaminate 224 square miles radius of the area of land. (TPD34-3)

Response: The comment is noted. The Commission's regulations (10 CFR Part 51) treat all spent fuel pool accidents as a generic Category 1 event, not requiring a site-specific analysis. A recent study on spent fuel pool risk (Technical Study of Spent Fuel Pool Accident Risk at Decommissioning Nuclear Power Plants, NUREG-1738) concluded that the risks from spent fuel pools are low and well within the Commission's safety goals. NUREG-1738 found that the consequences of an accident involving a spent fuel pool fire resulting in a large radioactive release could be significant. However, because of the low probability of occurrence of such an event, the overall risk to the public is low. Although NUREG-1738 is directed at quantifying the risk for decommissioning reactor spent fuel pools, the results are arguably bounding for operating reactor spent fuel pools. There was no change to the SEIS text.

**Comment:** Speaker comments that "nuclear power plants can be dangerous". (TPD34-2)

**Comment:** The Atomic Safety and Licensing Board doesn't want to look at those issues and they denied me a hearing. They even said in their order that issues like Everglades restoration, which are a huge environmental issue in South Florida, do not have to be looked at in the licensee's environmental report or in this Environmental Impact Statement. (TPD34-5)

**Comment:** Therefore, the Miami Group of Sierra Club calls for safety hearings and an Environmental Impact Statement that studies the site specific health and safety issues. (TPD40-6)

**Comment:** I do want to emphasize though, as I did last December, that you've mentioned the fact that you have a parallel course, one is looking at the environmental impact, the other is the safety impacts. And I mentioned then that we as a community are depending upon your technical expertise for that safety impact. And we can talk about how the company impacts us here, but most of us don't have the technical expertise to be able to talk to the safety aspects of the plant and its ability to operate safely for another twenty years. (TPD53-1)

**Response:** The comments are noted. The comments provide no new information, therefore, the comments will not be evaluated further. There was no change to the SEIS text.

**Comment:** Our standard of living, nationally and here in Florida, is dependent upon safe reliable power and our future as a nation depends upon it. But when looking at these issues you have to look at performance. Florida Power and Light has a history and a reputation for quality performance. Those of you that were with us earlier this afternoon got to hear the representative from the IBEW speak about the national recognition and the industrial recognition that FP&L has received and that Turkey Point has received. (TPD54-3)

**Response:** The comment is noted. Safety issues are outside the scope of this SEIS. It is noted that the comment is in support of license renewal of Turkey Point Units 3 and 4. There was no change to the SEIS text.

**Comment:** The human environment could also be adversely impacted by the offsite consequences of the NRC'S proposed action to operate these old nuclear power reactors for twenty years beyond the original license. (TPD64-2)

**Response:** The comment is noted. The NRC will not relicense a facility unless it can be operated safely. There was no change to the SEIS text.

**Comment:** Moreover, there were other issues not adequately addressed, or not addressed at all, in the original EIS on Turkey Point, the Licensee's Environmental Report, and even the Draft GEIS that raise questions about the agency's proposal to relicense a nuclear power plant in this area. These issues include, but are not limited to the following: the intense population growth and ability to evacuate in the case of a or (sic) hurricane; (TPD64-18)

**Comment:** Moreover, there were other issues not adequately addressed, or not addressed at all, in the original EIS on Turkey Point, the Licensee's Environmental Report, and even the Draft GEIS that raise questions about the agency's proposal to relicense a nuclear power plant in this area. These issues include, but are not limited to the following: the siting of Turkey Point in a hurricane zone in light of Hurricane Andrew, (TPD64-19)

**Response:** The comments are noted. This is outside the scope of the SEIS. There was no change to the SEIS text.

**Comment:** Relicensing a twenty-nine year old nuclear power plant, a renewal that isn't up for another ten to twelve years. When the current renewal is up for review this plant will be forty years old. Longevity in humans is admirable, longevity in nuclear power plants is hazardous.

#### Appendix A

Add this increase plant life span to the present day to day perils associated with radioactivity release from it and we have a ticking time bomb right here in South Florida.

Why the rush to relicense? Why not safety hearings?

The current operating permit does not expire for ten to twelve years. Why can't we wait until then?

These aging reactors pose more of a threat to civilization than all of the supposed missiles that President Bush envisions while he lies sleeping in his bed. (TPD22-3)

**Comment:** Speaker had comment regarding "specific concern about vessel and annealing the vessel and annealing or the need for annealing." (TPD34-1)

**Comment:** Again, I could find nothing about the reactor vessel and the integrity and any mitigation actions or what it would cost to anneal that vessel or whether that would make it cost prohibitive to go ahead with this course of action. (TPD34-8)

**Comment:** Recently many problems have come to light as a result of the relicensing activities for Turkey Point.

The deterioration of aging plant safety components. (TPD40-5)

**Comment:** Number one, it's an old facility. (TPD57-1)

**Comment:** The operation of these aged and embrittled nuclear power reactors for twenty years beyond the original license will cause more radioactive fission products to accumulate and could increase the probability and consequences of a nuclear accident; thereby increasing the threat of harm to me, my family, our property and the South Florida ecosystem, which includes priceless Everglades and Biscayne National Parks. (TPD64-5)

**Comment:** An analysis of the aging reactor pressure vessels at Turkey Point and any impacts that such aging could have on the human environment were not analyzed in the Draft GEIS. Such an analysis was necessary, not only to ensure the public health and safety, but also for the cost benefit analysis of alternatives required by NEPA. The replacement cost of the reactor pressure vessels at Turkey Point could be prohibitive and annealing would create further environmental issues that should have been addressed. It is my understanding that no nuclear power plant has ever replaced its vessel. (TPD64-25)

**Comment:** Additionally, the Draft GEIS did not analyze in a site-specific fashion whether the age-related degradation of multiple components at Turkey Point could increase the chance that

several components will fail simultaneously, thereby decreasing the safety margin of the plant and increasing the probability of an age-related accident and resultant radiological emergency that would have an extremely adverse impact on the human environment. (TPD64-26)

Comment: It is my contention that the operation of the aged Turkey Point beyond its original license could increase the risk that a hurricane could cause an age-related accident and radiological emergency and complicate emergency response, thereby making an accident more likely and the results more catastrophic. Turkey Point is located in an area of high hurricane activity. In 1992, a direct hit by Hurricane Andrew caused extensive damage to the plant and the surrounding area was unable to evacuate if it had become necessary. Hurricanes are "frequently occurring natural phenomena" in our area that has a long hurricane season, thus accidents that could be caused by them, or occur contemporaneously with them, are not remote or highly speculative. Neither is the already proven possibility that such an event could disrupt offsite emergency response, thereby causing potentially serious consequences to public health and safety. Thus, impacts of hurricanes on the proposed project should have been analyzed, but they were not among the external phenomena that were analyzed in either the Draft GEIS or NUREG-1437. See Draft GEIS at 4-43 and NUREG 1437. (TPD64-28)

**Response:** The comments are noted. To the extent that the comments pertain to aging within the scope of license renewal, those issues will be addressed during the parallel safety analysis review performed under 10 CFR Part 54. Aging management issues are outside the scope of 10 CFR Part 51 and will not be evaluated further in this SEIS.

As discussed in Section 3.7.3 of this SEIS, the adequacy of a plant's design basis is outside the scope of license renewal. The impacts, or potential impacts, of hurricanes on Turkey Point Units 3 and 4 were addressed during the design review conducted before the operating licenses were issued. Emergency response issues are considered current operating issues, and are not within the scope of license renewal.

The comments provide no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

**Comment:** The South Florida population, including the Miami Area, has increased dramatically since Turkey Point was built. According to the Licensee's application, there is a high population of 2,572,526 people presently living within 50 miles of the Turkey Point plants. According to a chart entitled "Regional Population Distribution year 2025," there will be 3,952,697 people living in a fifty-mile radius of the plant during the license renewal period. This figure appears to be much lower than other figures that have been cited for estimated population growth in South Florida. Additionally, the current proposal to rebuild the Homestead Air Base site would greatly increase the population in the vicinity of the plant and could stress the evacuation capability of the surrounding community. The Draft GEIS did not adequately analyze the impacts that the

proposed action may have on the rapidly growing population in the South Florida area. (TPD64-29)

**Comment:** The Generic Environmental Impact Statement for License Renewal of Nuclear Plants, NUREG 1437, Vol. 1, Page 5-11 states that as "the population around the plant increases, the potential risk and the increase in risk must be specifically examined. The NRC should have adequately analyzed whether the population in the rapidly growing South Florida area that is in the path of the highest frequency wind direction could safely evacuate in the event of a nuclear accident during the extended twenty year operation before relicensing this plant as required by 10 CFR.50.4(a)(1). Such an analysis should include an accident analysis in which a hurricane (an external event) effectively eliminates or prolongs emergency response. According to NUREG-1437, Volume 1, page 5-17, success of evacuation depends on the warning time available and the time it takes to carry out the evacuation. The Draft GEIS did not adequately analyze this site-specific issue and did not address evacuation in a hurricane at all. (TPD64-30)

Response: The comments are noted. The staff evaluated impacts under current population conditions. Safety reviews and emergency preparedness are an ongoing process at all plants, including Turkey Point, and is outside the scope of license renewal. There was no change to the SEIS text.

**Comment:** The runway (for the Homestead Air Force Base that is being considered for conversion to a commercial airport) is located 4.9 miles from the Turkey Point Nuclear Plant and I feel there is a significant safety hazard. (TPD65-1)

Response: The comment is noted. The Record of Decision for disposition of Homestead Air Force Base does not include conversion to a commercial airport. This issue has been referred to the appropriate NRC program office. There was no change to the SEIS text.

**Comment:** Recently many problems have come to light as a result of the relicensing activities for Turkey Point.

The commercial airport safety assessment. (TPD40-2)

Comment: I believe the NRC wrongly used a DOE air crash formula instead of their own Standard Review Plan, NUREG-0800. The twin 400 foot smokestacks were omitted from the calculations, the bird airstrike hazard was underestimated, and foreign general aviation as a crash prone category was completely ignored. (TPD65-2)

**Response:** The comments are noted. This issue is an operational safety issue, and therefore, is outside the scope of license renewal. The comments have been referred to the appropriate NRC program office. There was no change to the SEIS text.

**Comment:** FP&L is sensitive to the environment. I understand you do a lot of work. You restore things, you're helping out crocodiles, but what if the nuclear power plant would just explode and all your work would just go to dust? (TPD57-3)

**Comment:** The commendable safety record seems to be—holding back a pack of hungry wolves from children with a shredded rope. This safety aspect that we're keeping up. How about out with the old and in with the new? (TPD57-6)

**Comment:** I am upset that I cannot get the necessary information that was used to calculate air crashes into Turkey Point. (TPD65-3)

**Comment:** Isn't there a NEPA requirement for the NRC, not the licensee, to provide a safety evaluation for an Final SEIS? (TPD65-4)

**Comment:** How can the NRC ensure the public health and safety and approve airport development when it doesn't possess all the data and assumptions that were used in the calculations and cannot verify the licensee's conclusions? (TPD65-6)

**Comment:** These aging reactors pose more of a threat to civilization than all of the supposed missiles that President Bush envisions while he lies sleeping in his bed. (TPD66-4)

**Response:** The comments are noted. Operational safety issues are outside the scope of this SEIS. There was no change to the SEIS text.

#### A.1.19 Comments Regarding a Need for Power

**Comment:** By approving the license Turkey Point Nuclear Plant will be able to provide South Florida with safe, clean, reliable and economical electricity well into the twenty-first century. (TPD12-2)

**Comment:** Another factor to consider is Turkey Point's ability to help meet Florida's energy needs. Turkey Point Power can help sustain the economic growth and maintain the quality of life in the area. The plant is strategically located in the FPL generating system and Turkey Point is among the lowest cost producers of electricity in the FPL system, so it will help keep electric bills low. (TPD14-9)

**Comment:** An important environmental benefit of continued Turkey Point operations, license renewal is also important to meeting the energy needs of South Florida. Florida is growing approximately two percent per year and the electricity consumed per customer is also increasing. (TPD15-7)

**Comment:** Turkey Point meets the energy needs in our community. (TPD23-1)

**Comment:** Nuclear energy is one of the most reliable sources of energy that we have today. (TPD25-2)

**Comment:** Nuclear power is the most reliable source of energy that we have today. (TPD25-4)

**Comment:** ... there are pros and cons, and I believe that nuclear power far out-weighs the benefits that we derive from it... (TPD25-7)

**Comment:** Today we are seventy percent dependent on foreign oil, and If we lose power we would have to come up with alternatives for sources of energy, and not next week, not ten years from now. We need today. (TPD25-10)

**Comment:** Nuclear power is the answer. (TPD25-11)

**Comment:** One of the things we do have in South Florida is adequate power. (TPD27-2)

**Comment:** I want to certainly ask that you renew, if you will, their license so they continue to provide power to this community. (TPD35-4)

**Comment:** Two things, however, remain as my most important reason for supporting the renewal of license at Florida Power and Light nuclear facility.

Number one, the abundance of locally generated affordable power (TPD42-2)

**Comment:** Another factor to consider is our ability to help meet Florida's energy needs. Turkey Point power helps sustain our economic growth and maintain our quality of life. Our plant is strategically located in the FPL generating system to help maintain that system and Turkey Point is among the lowest cost producers of electricity in the FPL system, so we'll help keep the electric bills low for all of our customers. (TPD43-6)

**Comment:** FPL must provide power plants to keep up with this growing demand and insure an ample supply of electricity. (TPD44-3)

**Comment:** And one of the things that we do produce is 693 million watts of electricity per each unit, and that approximately covers everything from Miami airport south. So if we loose them units we'd be watching T.V. in the dark down here. That's one of the bad things that we'd be doing. (TPD56-2)

**Comment:** The power that we produce out there, we strive to make cheaper power. (TPD56-7)

**Comment:** One of the things we do have is adequate power. (TPD67-2)

**Comment:** Turkey Point generated over 1,400 million watts of electricity, enough to supply the annual needs of approximately 250,000 homes (TPD70-3)

**Comment:** We believe Turkey Point is both safe and cost efficient, ensuring safe, high-quality, low-cost power. (TPD70-5)

**Comment:** Miami-Dade County is a growing community with increasing demands for electricity. By approving the license, Turkey Point Nuclear Plant will be able to provide South Florida with safe, clean, reliable and economical electricity well into the 21st century. (TPD73-2)

Comment: Turkey Point is the lowest cost producer of electricity in the FPL system (TPD76-4)

**Comment:** Electricity provided from Turkey Point powers an area from Miami International Airport and south. (TPD76-5)

**Response:** The comments are noted. The need for power is specifically directed to be outside the scope of license renewal (10 CFR 51.95 (c)(2)). The comments are in support of license renewal of Turkey Point Units 3 and 4. The comments provide no new information and, therefore, will not be evaluated further. There was no change to the SEIS text.

#### A.1.20 General Comments

**Comment:** The Department of Interior has reviewed the Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 5 Regarding Turkey Point Units 3 and 4 and has no comments at this time. (TPD33-1)

**Response:** The comment is noted. There was no change to the SEIS text.

**Comment:** Speaker comments "public involvement is the cornerstone to safer -- I won't admit nuclear power is safe because it creates nuclear waste which I can't say is safe because we leave it to future generations -- but public involvement is very important." (TPD34-4)

**Response:** The comment is noted. The NRC agrees that public involvement is very important to the regulation of nuclear energy. There was no change to the SEIS text.

**Comment:** More detail is also needed regarding the facility's compliance with 40 CFR Part 112, regarding storage of petroleum products. (TPD78-2)

**Response:** The comment is noted. Turkey Point Units 3 and 4 are exempted from review and filings under 40 CFR Part 112 because their diesel storage tanks are less than 1 million gallons in size. This exemption is certified under 40 CFR Part 112.20 paragraph e, Appendix C. There was no change to the SEIS text.

**Comment:** Page A-25; Water quality impacts to Biscayne Bay from barge deliveries are deferred to the GEIS. This DGSEIS could provide more information in regards to legitimate concerns. (TPD78-6)

**Response:** The comment is incorrect. Water quality impacts due to barge deliveries are addressed in the SEIS under the Alternatives Section (8.2.4), as stated in the response to the comment. Current barge traffic supports only the fossil Units 1 and 2; therefore current barge impacts on water quality are outside the scope of this SEIS. There was no change to the SEIS text.

**Comment:** Appendix E; Table E-1: While the table is apparently intended to be comprehensive, it does not include EPA's plan review and approval requirements for storage of petroleum products under the Oil Pollution Prevention Program's Spill Prevention Control and Countermeasures (SPCC), at 40 CFR Part 112. This program is not delegated to the FDEP, and the applicant (Florida Power and Light) has had numerous inspections of its facilities by EPA for compliance with this EPA program. (TPD78-8)

**Response:** The comment is noted. The nuclear power plants are excepted from this requirement because the storage for the diesel generators is less than the 1 million gallon minimum set 40 CFR Part 112. There was no change to the SEIS text.

**Comment:** The table should be amended to include this approval requirement, as well as any regulatory authority the U.S. Coast Guard has via The Oil Pollution Act of 1990, Facility Response Plan (FRP) requirements for oil storage facilities. A release or discharge from these

facilities could potentially present a significant or substantial harm to the environment. (TPD78-9)

**Response:** The comment is noted. This comment refers only to the operation of the fossil plants, not the nuclear facilities. There was no change to the SEIS text.

## A.1.21 Editorial Comments

Comment: Page 2-41, Table 2-11

Because FPL plans no refurbishment (Chapter 3) and Turkey Point tax payments are small relative to the taxing jurisdiction's tax base (Section 4.4.3, beginning at line 30), the Table 2-11 land use information is immaterial and should be deleted. (TPD62-13)

**Response:** The comment is noted. Table 2-11 of the SEIS provides information on the land use status of the potentially affected environment. This information is potentially useful to readers of the SEIS regardless of FPL's plans regarding refurbishment or FPL's tax payments. There was no change to the SEIS text.

**Comment:** Page 2-4, Line # 17-18

The stacks related to Turkey Point Units 1 and 2 and their environmental impacts are not within the scope of this major federal action and this discussion should be omitted from the DSEIS. (TPD62-4)

**Comment:** Page 2-43, Line # 2-3

It should be noted that the stacks related to Turkey Point Units 1 and 2 and their environmental impacts are not within the scope of this major federal action. (TPD62-14)

**Response:** The comments are noted. The first paragraph of Section 2.2.8.4 points out that visual and noise impacts from Units 1 and 2 are not considered in the SEIS. The information on the stacks is presented as part of the environmental setting to the same extent as is the rest of the built and natural environment of the site. There was no change to the SEIS text.

Comment: Page 2-37, Table 2-8

Because Turkey Point is located in a high population area that has no growth control measures (Page 4-21, beginning on line 14), the Table 2.8 housing information is immaterial and should be deleted. (TPD62-11)

Comment: Page 2-39, Line # 1

Education information is pertinent only if an applicant plans refurbishment. Because FPL plans no refurbishment (Chapter 3), the education information should be deleted. (TPD62-12)

Comment: Page 2-45, Table 2-13

The age distribution information is immaterial and should be deleted. (TPD62-15)

**Comment:** Page 2-43, Line # 13

The transient population information is immaterial and should be deleted. (TPD62-16)

Comment: Page 2-47, Section 2.2.8.6

The low-income information (page 2-48, lines 18-26) is demographic information that is pertinent only to the Section 4.4.6 environmental justice analysis and could be moved to that section. With the exception of the tax information (on page 2-50), the economic information is not relevant and should be deleted. (TPD62-17)

**Response:** The comments are noted. Section 2 describes the current baseline of socioeconomic activity in the study region. It serves as the basis for evaluation of the relicensing (Section 4) and alternatives (Section 8). There was no change to the SEIS text.

Comment: Page 4-7, Line # 36

For the reasons stated in FPL's Environmental Report submitted with its application for renewed licenses, FPL disagrees with NRC's conclusion that all Category 2 issues pertaining to plants with cooling ponds are applicable to Turkey Point Units 3 and 4. (TPD62-19)

**Response:** The comment is noted. Evaluation of impacts on fish and wildlife is not limited by the designation of the cooling canal waters as not being waters of the United States. There was no change to the SEIS text.

**Comment:** Page 4-25, Line # 35

As the environmental report indicates, the Turkey Point site was subject to daily tidal incursions before plant construction. DSEIS Section 2.2.9.1 indicates that the area has been subjected to a rising water table and had at one point been characterized as being too swampy to survey. Section 2.2.9.2 indicates that a cultural resources survey was conducted on land adjacent to the Turkey Point site, with no cultural resources identified. All these observations make it reasonable to conclude that cultural resources are unlikely to be found at the Turkey Point site. Therefore, it is unclear why the Turkey Point DSEIS contains the wording, "However, additional care should be taken...to ensure that historic properties are not inadvertently impacted." There does not appear to be a reasonable basis for including the cautionary wording in the Turkey Point DSEIS and it should be deleted. (TPD62-22)

**Response:** The comment is noted. Although there is substantial circumstantial evidence that historic properties are not likely to be found at the Turkey Point site, a survey for cultural resources and historic properties has not been conducted at the site or along associated transmission corridors. Lacking such site-specific survey information it is not possible to conclude that there is no potential for discovery of previously unknown sites. The wording is appropriate for the information available. There was no change to the SEIS text.

Comment: Page 4-40, Line # 6

Insert the following:

"The Florida Department of Health's Bureau of Environmental Epidemiology has also reviewed the allegations of Gould, et al. (DOH 2001). The Department used the data cited by Gould, et al. to reconstruct calculations and was not able to identify unusually high rates of cancers in counties nearby nuclear power facilities. The Department concluded that, "Careful analysis and observation of the data presented here does not support the alarming claims made by the RPHP [Radiation and Public Health Project] regarding cancer mortality rates and trends in southeastern Florida counties when compared with the rest of the state of Florida and the nation." (TPD62-28)

**Response:** The comment is noted. The proposed text is consistent with the updated information provided in Section 4.7.1. The comment resulted in modification of the SEIS text.

Comment: Page 4-42, Line # 32-41

The GDC are not applicable to Turkey Point as stated. The Criterion 2 reference is correct as it is referenced in the SAR. The SRP is not applicable to Turkey Point which was licensed before issuance of the SRP in 1987. (TPD62-29)

**Comment:** Page 1-5, Line # 26-27

Should read "contain an analysis of any Category 1 issues unless there is new and significant information on a specific issue - this is pursuant to 10 CFR 51.53 (c) (3) (iii) and (iv)." (TPD62-2)

Comment: Page 2-5, Line # 17

Delete the words "equilibrium core" and "rate". This clarifies the sentence. (TPD62-5)

Comment: Page 2-7, Line # 15

Revise sentence to read, "FPL does not use biocontrol chemicals in the circulating water system." (TPD62-6)

Comment: Page 2-7, Line # 23

The canal system is bordered by the Everglades Mitigation Bank not the Everglades. Directional descriptions toward or away from the Everglades are accurate. Revise the wording accordingly. (TPD62-7)

**Comment:** Page 2-13, 4-24 Line # 15, 38

Change "an additional" to "Up to an additional...". (TPD62-8)

Comment: Page 2-20, Line # 1

It is unclear what boilers are being referred to. The nuclear plant does not have boilers. (TPD62-9)

Comment: Page 2-21, Line # 8

Replace "Within southern Biscayne Bay, Card Sound, and the Turkey Point cooling canal system are..." with "Within the vicinity of Turkey Point are..." As written, the sentence implies that there are 11 protected species within the cooling canal system, an implication that is incorrect and inconsistent with the rest of the paragraph. (TPD62-10)

**Comment:** Page 2-50, Line # 1-7

FPL is described here as a "major" property taxpayer, while Section 4.4.3 states that FPL pays two percent of the Miami-Dade property taxes. This discussion should be revised to factually state that FPL pays two percent of Miami-Dade property taxes without characterizing the nature of the tax payments. (TPD62-18)

**Comment:** Page 4-22, Line # 24

Change the wording to read, "FPL assumed an increase of 60 employees during the license renewal period." (TPD62-20)

**Comment:** Page 4-22, Line # 25

Change 185 to 184. The environmental report states that there will be 184 new jobs. (TPD62-21)

**Comment:** Page 4-33, Line # 29

Revise the bullet to read, "Continue to deny public access to the canals." Other bullets should also be stated in terms of continuing action. (TPD62-23)

Comment: Page 4-36, Line # 3

The word "states" should be "asserts." (TPD62-24)

Comment: Page 4-36, Line # 6

The words "referred to" should be "alleges." (TPD62-25)

Comment: Page 4-36, Line #8

The word "stated" should be "asserts." (TPD62-26)

**Comment:** Page 4-37, Line # 31, 32

"FPL 2000c" is an incorrect reference for the REMP Report. (TPD62-27)

Comment: Page 5-2, Line # 21

Delete "and Section 5.1 of this SEIS" and add at the end of the sentence "and briefly discussed in Section 5.1 of this SEIS." (TPD62-30)

Comment: Page 5-3, Line # 29

Insert after the word "events", "including for example hurricanes and flooding". (TPD62-31)

Comment: Page 5-6, Line # 28

Change "core melt accidents" to "postulated core melt scenarios". (TPD62-32)

Comment: Page 5-19, Sec. 5.2.5 second line

Change sentence to read, "The cost estimates conservatively excluded the cost...". (TPD62-36)

**Comment:** Page 5-19, 2nd paragraph 5th line

Delete "FPL responded...attributes" and insert the following at the beginning of the sentence:

"In its original submittal, supplemented with responses to NRC Staff's requests for additional information, FPL provided a summary of the key risk-reduction attributes...". (TPD62-37)

Comment: Page 8-24, Line # 6

Insert the word "partially" between the words "pipeline through". (TPD62-39)

**Comment:** Page 8-24, Line # 29

Replace the word "approximately" with "more than...". North of Lake Okeechobee to Turkey Point would be between 100 and 200 miles. (TPD62-40)

Comment: Page 8-60, 8-61 See also Table 8-9 Line # 29, 3 respectively

The 186 MW(e) shortfall (1386-1200) would have to be made up by MW and MW-hrs. Running Turkey Point 1 & 2 at a higher capacity factor will not affect peak megawatt output. (TPD62-41)

Comment: Page 8-61, Line # 7

Insert the word "direct" between "few" and "environmental." (TPD62-42)

Response: The comments are noted. The comments resulted in modification of the SEIS text.

Comment: Page 5-23, 1st paragraph under Sec. 5.2.6.2 2nd line

Strike the words "Although there could have been more attention given to evaluating actual costs.". (TPD62-38)

**Response:** The comment is noted. The staff rejects the proposed change in wording. The staff still believes more attention could have been given by the licensee in evaluating costs. No new information was provided by the comment. Therefore, the comment will not be evaluated further. This comment did not result in a change to the text of the SEIS.

**Comment:** Page 5-10, Line # 8-15

Modify the wording to read as follows: "The FPL approach in doubling of core damage frequency to account for the calculated benefits for external events provides a numerically reasonable estimate of the potential impact of external events. The staff believes the search for external event vulnerabilities as a part of the Turkey Point IPEEE, did not identify any risk contributors that would benefit from potential SAMAs and considers the FPL approach to be adequate." (TPD62-33)

**Response:** The comment is noted. The staff rejects the proposed change in wording. The staff continues to believe that doubling the core damage frequency fails to capture the true benefit that could result from a specific SAMA. No new information was provided by the comment. Therefore, the comment will not be evaluated further. This comment did not result in a change to the text of the SEIS.

**Comment:** Page 5-14, Line # 12-18

Strike the sentences beginning with "The preliminary review" on line 12 and ending with "modeled in the current PSA" on line 18. (TPD62-34)

**Response:** The comment is noted. The staff rejects the proposed change in wording. The wording in the draft SEIS accurately describes the staff's review. No new information was provided by the comment. Therefore, the comment will not be evaluated further. This comment did not result in a change to the text of the SEIS.

Comment: Page 5-16, Table 5.5

Three SAMAs (50, 54, 116) listed in the ER are not listed in Table 5.5. (TPD62-35)

**Response:** The comment is noted. Table 5.5 was not meant to be a comprehensive list of all of the SAMAs. Table 5.5 only attempts to demonstrate how certain SAMAs are placed in pertinent categories and describe their disposition.

# A.2 Public Meeting Transcript Excerpts and Comment Letters

Transcript of the Afternoon Public Meeting on July 17, 2001, in Homestead, Florida

[Introduction, Mr. Cameron] [Presentation by Mr. Grimes] [Presentation by Mr. Wilson] [Presentation by Mr. Brandt] [Presentation by Mr. Snodderly]

Ms. Jacobs: Diane Jacobs, Sierra Club.

I'd like to know why the application is filed so far in advance of the expiration of the original licenses?

Mr. Grimes: Typically, large generating capacity takes about ten years to plan and project. The replacement power for a plant about the size of Turkey Point would need to be in the planning stages about this time in order for Florida Power and Light to reasonably be able to replace that capacity in the event it concluded to close the plant upon its expiration.

So we're finding that all of the plants that these licenses expire in the 2010 to 2015 range are the ones that are currently pursuing license renewal in order to establish what the requirements for plant operations beyond that term would need to be.

Mr. Cameron: Thank you. Thank you very much.

Is there another question on process?

Ms. Rudisch: My name is Mary Rudisch, Sierra Club.

After this Draft Supplement is reviewed and if the NRC decides that amendments need to be made to the Environmental Impact Statement, how do you go about that process?

Mr. Cameron: Okay, Jim, do you want to handle that one, and is it clear what Mary is asking us?

Mr. Wilson: I'm hoping if I get a little bit far afield you'll recalibrate me and let me know.

We'll be collecting comments provided at this public meeting off the transcript. We'll also be looking at comments that we receive either in writing or in E-mail at a special address.. We'll be giving you a sheet to show you how to provide those comments.

At the end of the scoping period, that's some time after September 6th, at the end of the comment period, I'm sorry, we will look at every comment and try and group like comments and then disposition them. They will appear on an Appendix to the Environmental Impact Statement that we'll issue hopefully some time in January, before the end of January. We'll try and characterize each comment and restate it, and if necessary, we'll change the text in the Environmental Impact Statement to accommodate the comment and there will be a kind of a road map that tracks the comment to the change in the document that we made.

Mr. Cameron: Mary, does that answer your question?

Ms. Rudisch: Can I ask a question about the safety review process, which is different from the environmental review process?

Let me think for a second how I want to say this.

After the review of the Draft Supplement for the safety review process of the two Turkey Point nuclear reactors, has that ever prompted the NRC to go back and reinspect the plant in the past? Has that ever been your practice, to go back and reinspect the plant?

Mr. Grimes: Let me say -- let me answer the question in this way.

We have resident inspectors that live and work in these plants and follow them on a routine basis. The trigger for inspection activities is normally an event or an inspection finding or a maintenance finding. In some cases we have had questions arise by the content of applications. The larger population of applications that we get are license amendments for the existing licenses. We've only completed three license renewal reviews. So I can't say we have a lot of experience that we can draw on in terms of issues that were triggered by the content of the application.

By and large, our inspection activities are derived from plant operating experience, things that we find in the plant, as opposed to materials that's presented in applications.

Does that answer your question?

Ms. Rudisch: I understand that the process is ongoing and I understand that the NRC has resident inspectors that live here in Homestead, Florida with their families, but I also understand that they're rotated out every four years too.

The question is, I guess what I wanted to ask was, based on public comment to the -- based on public comment, has the NRC ever gone back and reinspected plants, based on public comment?

Mr. Cameron: And this could be apart from license renewal, right?

Mr. Grimes: And the answer is, yes. We have had -- there are circumstances where public comments have triggered questions in our own minds and we've said well, we don't have any record to draw on and we don't have any recent experience, so that's a good question, let's go find out what the answer is. And we conduct an inspection.

If it's a fairly simple thing we call a resident and say, "Would you please go look?"

In other cases we've augmented the plans for the team inspections we conduct for the license renewal process. Team inspections have a flexible perk to them. And so we've included specifics in there that were triggered by comments that were raised during the scoping process for the environmental review.

Mr. Brown: I'm Dr. Brown, Jerry Brown, with the Radiation and Public Health Project. Mike, I have a question for you. I'm sorry, I didn't get your last name.

In relationship to the very detailed accident analysis that you've done and your conclusion that things are in a safety zone, if that is so, does the NRC take a position on the renewal of the Price Anderson Act, which is up for renewal in Congress? The Price Anderson Act passed in 1957 at the insistence of the utilities, place a limit of liability on any pro-reactor accident and the limit of dollar liability that the utility would face.

If the reactors are in your analysis safe, do you feel there is a need for the Price Anderson Act and does the NRC Commission or staff take any position on the Price Anderson Act?

Mr. Snodderly: The Price Anderson Act assumes that there is an accident. So in response to your question I say yes, there is a need for Price Anderson, because what we're doing is, we're trying to assess that the probability of such accident is low. What Price Anderson's trying to address is, given an accident, you need some type of insurance to cover the cost associated with such an accident.

So I think that's a key distinction. One is trying to show that the probability or likelihood of such an accident is low; that's what I was looking at and I want to put that over here. Now given an accident, do we need some type of an insurance fund to address the consequences associated with the given accident.

So I think that's an important distinction. Does that answer your question?

Mr. Brown: (Inaudible.)

Mr. Cameron: I'm going to repeat that for the record. Does the NRC take a position on renewing the Price Anderson Act?

Let's go to Chris Grimes. You heard from Mike on one aspect of it. Chris, answer to that?

Mr. Grimes: I'm going to say that I think that we look to Congress to make some decisions about liabilities and we've established a fairly detailed evaluation of the risks of power plant accidents and their probability. And just like any other insurance fund, you can establish -- you can use those to establish financial risk factors, but I don't think the NRC staff has a particular position on the need for such insurance or that fund. And that I do know that that matter is pending before Congress, and if we were to ask for an opinion -- quite frankly, I don't know that we would express an opinion.

Mr. Cameron: I think we'll need to go on here, but some information that may be helpful is that there was a hearing, Congressional hearing, about two weeks ago on Price Anderson that not only the NRC but some non-governmental organizations and others testified at. Now I don't know if there's an answer in the NRC testimony to your question, Dr. Brown, but can we make and note, and I'll make a note that we can get Dr. Brown the copy of the NRC's public testimony in that.

All right, other questions?

Mr. Oncavage: Mark Oncavage, Petitioner for Safety Hearings, pro se.

The question is, the published date of the GEIS is 1996, correct? How much time prior to 1996 were you collecting data and studies?

Mr. Grimes: I'm going to defer to Mr. Wilson.

Mr. Wilson: I believe that they were working on the Generic Environmental Impact Statement in the late 1980's. We had a working draft that we were working with in early 1990's. I believe we issued it for comment in 1992, and it took four years to resolve the comments and issue a final document.

Mr. Oncavage: So to re-cap, the earliest portion of the data collection goes back to the late '80's?

Mr. Wilson: That's my understanding.

Mr. Cameron: Okay, other questions?

Yes, sir, and please just state your name and affiliation for the record.

Mr. Dan: My name is Steve Dan. I live in Miami. I've lived here my whole life.

Dr. Brown's article from the other day, I'm sure you've all had a chance to review it, about the Tooth Fairy Project. And it's a national study of baby teeth in Miami-Dade, where they found that the teeth have the highest concentrations of strontium 90 found anywhere in the nation.

I was just wondering, because according to this we're within regulatory limits. I was concerned with what are those limits, how much is being emitted now, how much has been emitted over time? You say you are within limits now. Have you always been within those limits?

You also mentioned that the soil is within range of soils found around nuclear weapons testing fall-out. How does that compare to the rest of the nation now?

And you say that cancer rates are stable or declining, and I was wondering if that's true here, because according to Dr. Brown's article, that information seems to be contradictory.

So I was wondering if you could comment on those things.

Mr. Cameron: Okay, there was a whole list of questions there. Do we want to go to Trish Milligan to try to address some of those?

Keep in mind that we are considering questions, comments, on the record. Hopefully we'll give you some of the information you need and see if we can perhaps provide other information later.

This is Patricia Milligan from the NRC staff. She's with the Office of Nuclear Reactor Regulation and she is a health physicist, correct?

Ms. Milligan: Yes. I'm a certified health physicist and also a pharmacist and licensed to practice in a bunch of different states and I've done a lot of work in nuclear pharmacy as well. So my background has been fairly extensive and I've only been with the NRC about three years.

So I'm going to have to ask you to repeat all of your questions. I didn't read the article by Dr. Brown in the Miami paper. I think it was yesterday's paper. I didn't get a chance to see that.

So if you could ask me again, one at a time, and then I'll answer your questions one at a time.

Mr. Dan: Are you aware of the Tooth Fairy Project?

Ms. Milligan: Yes, I am.

Mr. Cameron: Why don't you go up to the front? That's a good idea.

Mr. Dan: The Tooth Fairy Project. Are you aware of the Tooth Fairy Project?

Ms. Milligan: Yes, I am.

Mr. Dan: Okay. The conclusions there look pretty grave for both sets, grown-ups who have lived down here our whole lives. Could you comment on that?

Ms. Milligan: Well, the Florida Department of Health just released from the Department of Epidemiology, a review of that study and their conclusions were very different looking at the very same data that Dr. Brown and his group looked at.

The report is available and I could read you sections of it, but the summary says in essence that they were unable to replicate any of the results from Dr. Brown's study using Dr. Brown's data and that they found in fact the cancer rates in this area to be at or below State and National averages and they did not find the instance of cancers and strontium to be what Dr. Brown's study has been suggesting. That was just released today and there is copies available here, sir, for you.

Mr. Cameron: Okay, second question?

Mr. Dan: We were talking about that the strontium 90 concentrations are in the soil, concentrations that you'd expect near nuclear weapons testing facilities. Is that what we

believe is going on, that we're at around where the rest of the nation is? I mean does the rest of the nation have the same, you know, fall-out problem as if they were right next to a nuclear weapons test facility?

Ms. Milligan: As I understand the question, you are interested in what the strontium 90 concentration in the soil is in this area?

Mr. Dan: Correct.

Ms. Milligan: Okay. When you have fall-out from atmospheric testing, what you see is you have different fall-out patterns depending on such things as rainfall. Rain will scrub particulates from the atmosphere and they'll deposit. Areas of higher rainfall will have higher particulate matter such as strontium 90 and other things in atmosphere testing.

Coincidentally or interestingly enough, some of the sites out west where the atmospheric testing occurred have in fact, because of low rainfall, actually less fall-out than some of their neighbors that have more rainfall.

So rainfall patterns, if you look at it globally, not just in this country but around the world, they all vary depending on regional factors. We do not see any one particular area to be alarmingly high in terms of fall-out if you look at it on a national and global average.

Mr. Dan: So again, you're saying that the soil here in Miami-Dade County is no higher than the national average?

Ms. Milligan: Yes, that's correct. It's all within the bounds of background that we expect from strontium 90 fall-out from atmospheric testing.

I will say though that certain states, because of precipitation patterns and because of composition of soil, may have less strontium 90 and other states may have a little more, but if you look at it as an average, we're all right in the average that's expected from atmospheric fallout.

Mr. Cameron: Another question, Mr. Dan?

Mr. Dan: We're saying here that the National Cancer Institute attributes cancer rates to longer life and that the cancer rates have been stable or declining. I'm sure that's nationally. But here, according again to Dr. Brown's article, that's not true. In fact, cancer rates are increasing in this part of the area.

Ms. Milligan: Well again, if you take a look at what the Department of Health just released today and they reviewed the cancer statistics, they do not find the increase in cancer that Dr. Brown's study has said. And they used the same data that Dr. Brown used.

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If you look at the National Cancer Institute national data, you find that Florida, as to these counties down here, tend to have a lower than a national average cancer rate for some of -- for breast cancer and for leukemia.

Mr. Dan: Finally, just curious about, is there a way for the public to be able to find strontium 90 level in their house, like some sort of little test kit or something along these lines so that we could know when you guys --

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Ms. Milligan: That's an interesting marketing idea. Maybe that's my next career.

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But no, at this point, you could I suppose find a lab that could do the analysis for you, and a great many of our labs are able to do those analyses. I don't know of anything commercially that's available.

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What we do know when we look at environmental samples, is that the amount of strontium 90 we've learned is very, very, very low in terms of picocuries quantities and picocuries -- would be one -- so we're looking at extraordinary small quantities, oftentimes are too small to even be detected.

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Mr. Cameron: Okay. Mr. Dan, I think we're going to move on, and I thank you for your questions. I would point out that Dr. Brown and Dr. Sternglass are going to be making some comments later on. We also have Mr. Keaton here from the State of Florida who might provide us a little bit more information on the recent Florida study, although I would emphasize in fairness to him that that is not his particular group and for Mr. Dan or others who want to talk to Ms. Milligan later after the meeting, please take the opportunity to do that.

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Do we have other questions before we go on? Yes, ma'am?

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Ms. Gilbert: Cathy Gilbert. Just to repeat one question that was just now asked and wasn't answered, was what is the emission rate here? What kind of emissions do we have from the plant?

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Mr. Cameron: I think that that's a broad question in terms of different types of emissions. Who's the best person to answer that? Trish?

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Ms. Milligan: Every year our licensee is required to file an annual report that details what's released, the quantities of all the isotopes that are released. And when I went back and took a look specifically at Turkey Point in preparation for coming down here so I could answer these kind of questions, all the releases from Turkey Point were within minimum ranges typically for the strontium isotope which were well within the regulatory limits for releases. Some years they were below concentrations. But the folks from Turkey Point probably have that data more readily available. We also have it available. I think it's on our website.

Mr. Cameron: So that if people did want to take a look at that information we could give them a reference on our website so they could take a look at that and I'll put that up there as another issue and we'll try to get that where you can access that.

Yes?

Ms. Rudisch: Mary Rudisch, Sierra Club. So the information that the NRC reviews is information that Florida Power and Lights gives you?

Mr. Cameron: Can we talk -- I think put this in context and talk about how the monitoring program works, where it starts, whose responsibility it is? Can you do that for us, Chris?

Mr. Grimes: I'm going to try and do that on a very broad scale.

The power reactor license requires that the applicant have a monitoring program. And so they actually conduct the monitoring. In this case I understand, and I'll be corrected if I'm wrong, I'm sure, I believe that the State of Florida actually does the monitoring for them and then they in turn take those results and give them back to the NRC as the results of the monitoring program they're required to have.

But there are also other monitoring that's done beyond the NRC requirements, simply for the utility to have a better understanding about what's going on in the environment around them. But they provide a required set of results on environmental monitoring from in the plant to the immediate environment and then to the extreme environment. There are three ranges of monitoring. And then they provide those results to us.

But as I mentioned before, we have resident inspectors that are checking the monitoring results almost on a daily basis depending on where the monitoring results might occur during their plant tours. And then we also have region based and headquarters based staff that come out and periodically sample the monitoring reports relative to actual in plant conditions.

Mr. Cameron: Thank you very much. Let's go to this gentleman here.

Mr. Danek: My name is Joe Danek with Florida Power and Light, and as the NRC just said, we do have a monitoring program that's conducted by the plant. It is closely followed by the resident inspector, but also the regional radiation protection inspector from the Nuclear Regulatory Commission and monitor releases. We also have a cross-check sampling program associated with that.

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One thing very unique with the State of Florida is that the State Department of Health does the entire radiological environmental monitoring program around Turkey Point and St. Lucie site. That's very unique for the State of Florida. Many states, power plants do their own radiological environmental monitoring program, but in our case the State does that and I think they -- the radiological environment around Turkey Point and their measurements continue to be very, very low level to within comparable levels within the State.

Mr. Cameron: Okay, thank you very much. Maybe Mr. Keaton can tell us a little bit more about that when we hear from him later.

Are there other questions before we move on to the -- to hearing more from our review? Yes?

Ms. Jacobs: I don't know exactly who to direct this to. Diane Jacobs, Sierra Club. But do you think that there's any evidence or any reason to suspect that the current acceptable level of strontium 90 in emission from these nuclear power plants might be too high?

Ms. Milligan: One of the things that I looked at when I was evaluating a lot of this data is, I took a look at what's happening in America and then I looked at what's happening outside in other countries. Other countries have nuclear power plants. For example, just about eighty-five percent of electricity is from nuclear power in France, and I looked at Japan as well. And when I went and looked at their incidents rates of cancer and looked at strontium 90 and looked at those things, what I found was logically -- I expected that okay, if there's a strontium 90 issue than France should have very high instances of these diseases. And what we found -- what I found when I looked at the disease rate, cancer rates in France, taking away from lung cancer because they smoke -- but if you look at breast cancer and blood cancer is what you find is that they are in par or actually less than in America. If you go to Japan you find that breast cancer and blood cancers are up to one-third less than what they are in America. So if strontium 90 were the smoking gun that's causing all these things, then you should expect to see it globally in those countries similar to U.S., you should expect to see comparable factors, and you just don't see that.

Ms. Jacobs: (Inaudible.)

Ms. Milligan: I think our levels are similar to international levels, yes. Their levels are not higher than ours, in answer to your question. They're actually at our level, or in fact in some instances, lower.

Mr. Cameron: Thank you very much. Chris just wants to add something.

Mr. Grimes: I'd like to add that during the course of some of the comments that we're going to hear tonight, we're going to hear from views on radiation health effects, we're going to hear some questions about the adequacy of radiation health standards. Our purpose in this meeting is to hear from you, to hear about those concerns and to get as much in the way of specifics about these concerns as possible so that we can go back and address them. There are numerous studies that we could refer to and there are some conferences that are held just for the purpose of discussing radiation health effects and low levels of radiation and separation of variables and things like that. But we do have a fairly detailed account of what the radiation safety standards are in Title 10, refer to Federal regulations and where they come from and how they're founded and what they mean. And then we have a variety of these different studies.

And so as part of what we're going to do tonight, today or whatever. I have already lost where we are in the day. We're in Florida, I know that. But we do want to hear about these comments and concerns and then we're going to try and gel those into some issues that we can address specifically in response to the comments in the preliminary report.

Mr. Cameron: Okay. Thank you very much, Chris.

Yes, sir, and could you tell us who you are?

Mr. Velazquez: My name is Arnold Velazquez. I'm a consulting engineer. And the question I'd like to ask, are there any steps in the process to verify or validate the test results obtained at the plant?

Mr. Cameron: When you say test results, I have a feeling -- okay. The question is, is there any way to validate the monitoring results?

Mr. Grimes: I'm going to give a very simplistic answer to that.

The normal process consists of looking at the standards that are used to calibrate the instruments that are relied upon to make a measurement, and so part of the inspection process is to check the validity of the inspection standard. Most of them go back to National Institute of Standards and Technologies reference point that are used in order to calibrate the instrument. And so we normally look at that process that's used to calibrate the instruments that are relied

upon. But periodically there will be independent samples that are taken and tested separately as a means of also validating the process that is used, and those are done randomly. They're normally done on an unannounced basis so that the process -- there's a confidence in the process level by checking it in an unannounced way.

Mr. Cameron: Okay, thank you very much.

Let's take one more question and then let's move on to public comment. As I said and several have said, if you have time after the meeting to talk individually with the NRC staff they'll be available for you.

Yes, ma'am?

Ms. Roberts: My name is Maria Roberts and what I would like to hear right now is a summary of the Tooth Fairy report and a summary of the Florida Department of Health report and thereafter continued public comment. That's what I would like, please.

Mr. Cameron: Well, I understand why you would like to hear that now, but I think that what we're going to have to do is to hear that during the course of the public comment, and we do have Dr. Brown and Dr. Sternglass who is going to talk about the Tooth Fairy Report. What we'll do is we'll follow that up with the State personnel who can at least tell us a little bit about it.

Well, hopefully we should be there around 3:30, okay. All right.

Before we go into public comment, there is a NRC evaluation form for the meeting, okay. It's called NRC Public Meeting Feedback. We try to use this to get a feel if we're doing an effective job, at least on the public meeting part. So if you could fill that out for us before you leave. There's copies out there on the desk.

And right now what I'd like to do is, we do have Yolanda Marsh with us. I believe she probably is still with us, from Commissioner Denis Moss' office, and I was going to ask her to come up first.

I just would ask you to try to keep it to five minutes. We may have some people who go over a minute or so. Some may be under.

Yolanda, you can be there or you can be up here, wherever you feel most comfortable.

Ms. Marsh: I don't even have five minutes.

Mr. Cameron: Good. I don't mean good, but -- (Laughter).

Yolanda, our stenographer said that this one isn't picking up as much, so maybe you could go -- did you fix this? Why don't you go ahead and try it? I'm sorry.

Ms. Marsh: Hello. My name is Yolanda Marsh. I am with Commissioner Moss' office. I am just here today to represent Commissioner Moss because he couldn't be here due to another engagement.

O9-1 And I'm just basically here to say that Commissioner Moss is in support of the Turkey Point Power Plant renewal. And that's basically it, and if you all have any questions for him, you can feel free to contact our office or write letters to comment on whatever you feel that you would like to comment on.

And I do have my business cards here if you all want them. I will place them up front and you can get them later.

Mr. Cameron: Okay. Thank you very much, Yolanda, and thank Commissioner Moss for us.

Let's go to Mr. Curt Ivy who's the City Manager for the City of Homestead. Mr. Ivy?

We're going to go through some local emergency planning officials next. We're going to hear from Florida Power and Light and then we're going to get to Dr. Brown, Dr. Sternglass, and State of Florida and others.

Mr. Ivy? Wherever you feel most comfortable.

TPD10 Mr. Ivy: Let me go up here.

Thank you. Good afternoon. I'm Curt Ivy, City Manager for the City of Homestead.

I'm here today to speak in favor of Turkey Point. I'm not going to speak on the need for future power. I'm not going to speak on their safety record. I'm not going to speak on their environmental record. All that I'm sure will come out.

I'm going to speak to you as a community manager in the City of Homestead. I'd rather talk about the impact that Turkey Point has on our community. Again, there's a lot more experts out there that can deal with the other issues in regards to Turkey Point. But myself, I'm interested in the impact to our community.

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The impact to our community for the presence of Turkey Point being in our community is very significant. We're talking 800 employees, one of our largest employers in the area. I'm talking about another 500 seasonal, I will use the term seasonal workers, that come in and use the services of the surrounding community, including Homestead. I'd like to talk about spouses of employees being our teachers, our nurses, other members in the work force for our community. I mention that only because we had one other organization here that's no longer here and that was Homestead Air Force Base.

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We know what the loss of economic generator is to this community because we've had that happen to us, and that's in the form I can relate it to, Homestead Air Force Base.

We lost not only the economics of the business there, but we also lost things such as I just mentioned, school teachers, nurses, the kids in our honors programs. It just diluted the quality of our community, the quality of life in our community, considerably, and I would relate that if we didn't have a Turkey Point, for example, here and an employer of the magnitude of that, we would again experience that kind of negative impact to our community.

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So I did want to be very specific about that and speak about the impact on the surrounding community. We're talking about salaries with disposable income. If a community is going to grow and enrich itself, we don't just have to have jobs, we have to have jobs that bring in salaries that are above the norm, or else we'll just stay level. We have to have salaries that keep above the norm to bring in disposable income into our community if we expect to grow economically in our community. It's not always the quantity of jobs. Sometimes it's the quality. Here we have both, quantity and quality in our jobs.

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I also -- again, I read some of the data on this particular issue in terms of their average salaries. The \$62,000.00 a year is what was the average salary mentioned for Turkey Point employees. This is significant in our community. Our average salary in our community does not reach \$62,000.00, I assure you.

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We are again, as a community leader in the City of Homestead and someone who manages the day to day business, or tries to, and if you've been reading the paper lately you might say that there might be a new manager, but at any rate, we have our problems and we certainly do not want to take the chance on losing a partner that we have. And I didn't mention the community activities they get involved in, the volunteerism, the donations, the United Way, over \$150,000.00 going to the United Way, among a whole host of other types of activities that we can count on from the employees and the company of FP&L.

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So from the prospective as a community leader, this is an important issue for us, one of many we face. And I will reiterate we have lost economic engine. We do know what that means to a community. Until you lose it, sometimes you take it for granted. And we certainly don't want to

do that. One thing, we learn lessons from history. At least we try to remember those and learn lessons from history.

So for our prospective from the City of Homestead, we totally support FP&L and their relicensing. Thank you.

Mr. Cameron: Thank you, Mr. Ivy.

Next we're going to go to Chuck Lanza who is from the Miami-Dade County Emergency Planning. And Chuck, please tell us your title and everything else, okay.

- Mr. Lanza: Thank you very much. I'd like to welcome the NRC and thank you for being here today. My name is Chuck Lanza. I'm the director of the Miami-Dade County Office of Emergency Management. I was present and had the opportunity to speak at the last public hearing. I've also had the good fortune to be able to read into the record a letter from Mayor Alex Penelas, which I will do again tonight.
- Both the Mayor and I have read the Draft Supplemental Environmental Impact Statement and we are very comfortable. He's comfortable with presenting this letter and I am comfortable with supporting him in that presentation.
- The quotes in the letter, Turkey Point nuclear is one of the safest and best run nuclear plants. As the emergency manager for Dade County I can attest to that. We work very closely with the company and with all the employees of the company and I can reaffirm the fact that I do attest to their safety and their willingness to work very closely with the community to make their operation a safe operation.
- At this time I'd like to read into the record a letter from the Honorable Alex Penelas. The letter is from the Office of the Mayor, Miami-Dade County, Florida, Alex Penelas, Mayor.
  - "Good evening. I would like to welcome the members of the Nuclear Regulatory Commission to Miami-Dade County and thank them again for the professionalism and commitment on this very important endeavor. I received and reviewed a copy of the Draft Supplemental Environmental Impact Statement which was prepared after much careful analysis by the NRC. I am pleased with their assessment and agree that renewing the operating license of the Turkey Point Nuclear Plant is the most positive environmental option to help meet the growing energy needs of South Florida. I would like to explain why I support the license renewal of the Turkey Point Nuclear Plant."

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12-2 "Miami-Dade County is a growing community with increasing demands for electricity. By approving the license Turkey Point Nuclear Plant will be able to provide South Florida with safe, clean, reliable and economical electricity well into the twenty-first century." 12-3 "Turkey Point Nuclear Plant is one of the safest and best run nuclear plants in the country as judged by the regulators and its peers. It has consistently received top ratings from the Nuclear Regulatory Commission and by the Institute of Nuclear Power Operation." "Miami-Dade County has a very strong record of its commitment to protect its natural environment. The Turkey Point employees have developed a unique stewardship of the 12-4 environment in the region surrounding the plant by preserving the natural habitat which provides homes to many endangered species including the American crocodile." "Miami-Dade County is a diverse community with many needs. The Turkey Point employees 12-5 are caring neighbors to communities surrounding the plant. Its employees make significant contributions to the community and to civic organizations." "Turkey Point Nuclear Plant is the largest private employer in the region with over 800 12-6 employees and its purchase of local services help sustain economy of South Miami-Dade County." "I appreciate being allowed to enter these comments into the record which enables me to 12-7 demonstrate why I support Turkey Point Nuclear Plant license renewal application. I am always available for questions. Thank you." "Sincerely, Alex Penelas, Mayor, Miami-Dade County." Mr. Cameron: Thank you very much. Another emergency management official, Irene Toner from Monroe County. Irene? TPD13 Ms. Toner: Good afternoon. My name is Irene Toner. I'm the Director of Emergency Management from Monroe County. The history of nuclear power plants in the United States has shown public support in a general decline and now a recent renewal of interest. The renewal of interest in nuclear power plants has been due in part to their improvement for producing electricity. It would be of no use without their ability to maintain and improve their safety records.

The safety of the citizens of Monroe County is my primary reason for renewing this support. The Draft Environmental Impact Statement for the Turkey Point Plant, the impact of renewing the operating license for Units 3 and 4 and the alternatives available if the license is not renewed.

The conclusion of the report is that there is no significant change to the present environmental impact and minimal change to the potential environmental risks from continuous operation of the plant.

The alternatives to continued operation of the plant and the reports do not appear to be economically or environmentally effective. The plant, although located in Miami-Dade County, has the potential to have a large impact on Monroe County and its citizens. If the plants are maintained in accordance with the NRC issued license and problems associated with extended operational life and continue to support the emergency plan, it is reasonable to conclude that it will continue to be good neighbors to Monroe County.

Thank you.

Mr. Cameron: Thank you very much, Irene.

Next we're going to hear from the representatives of the licensed applicant, Mr. Robert Hovey from Florida Power and Light. He's the Vice President, Turkey Point Plant, and then we'll hear from Ms. Thompson and then we're going to go to Dr. Brown.

Mr. Hovey: Good afternoon and thank you, Mr. Cameron. My name is Bob Hovey and I am the Vice President of Florida Power and Light's Turkey Point Nuclear Power Plant. I appreciate this opportunity to speak to you today about FPL's application for the renewal of the Turkey Point operating licenses. Assisting me is Liz Thompson, our license renewal project manager who will address more specifically the findings contained in the Draft Supplemental Environmental Impact Statement next.

I'd like to thank the Nuclear Regulatory Commission for arranging and holding the meeting today. FPL strongly supports the openness of this process. During the last two years we have been involved in dialogue with the communities surrounding Turkey Point. We've met with more than one thousand homeowner, community groups and Governmental officials. Our purpose was to share the information about license renewal and plant operations, and we believe that the community interests and priorities should be incorporated into not only our license renewal at Turkey Point but overall operations.

Community in-put is an integral part of the license renewal process. The application we prepared consisted of two parts, a safety analysis and an environmental report. Our application has been open to public review for some time and the NRC has requested comments from interested parties.

Just as the process has been open in reviewing the environmental aspects of the license renewal, the safety analysis is following a parallel path. There are open public meetings and the NRC is currently going through an intensive review of plant systems to insure the safe operation for an additional twenty years. A public meeting on the scoping of NRC's environmental review of our license renewal application was held here at the Homestead YMCA in December of last year.

Today's meeting continues the open process of seeking public in-put on license renewal. We welcome the opportunity to gain additional community in-put on the environmental aspects of our license renewal.

I'd like to thank the members of the community represented here today for taking time out of your busy schedules to share your views and ideas on the Draft Report with the Nuclear Regulatory Commission. We appreciate the support provided to us by the South Dade community, but I'd also like to thank the NRC staff and members of the National Laboratories Review Team for their work in preparing the Supplemental Environmental Impact Statement for Turkey Point license renewal.

I believe the report reflects a comprehensive assessment of the environmental impact of license renewal.

With that said, let me provide a little bit about my background. I came to Florida Power and Light in 1995 as the site Vice President at Turkey Point with a Master's Degree in Business Administration, a Bachelor's Degree, a Bachelor's of Science Degree in Nuclear Engineering and a Bachelor of Arts Degree in Business Administration. I also have spent time at other utilities in the nuclear field and I did time in the United States Navy in the Submarine Service.

On a personal level, my wife and I have six children and we live here in the South Dade area. As Vice President of Turkey Point my first job and my primary focus is the health and safety of my family, the Turkey Point employees, my friends and this community. Their well being comes before all else.

When I look at the evidence presented in the Supplemental Environmental Impact Statement and other license renewal documents, I'm assured of the plant's safety and positive impact on our environment. I believe the case for continued operation for Turkey Point is strong.

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Let me address four areas. First, our performance, the economics of Turkey Point's electricity, the environmental stewardship and the community presence.

- First, the performance of our plant is top notch, thanks to our employees. Their time, effort and dedication have resulted in Turkey Point consistently being recognized as safe and one of the most reliable and efficient plants in the industry. Our employees have also worked diligently through effective maintenance programs to sustain the option for continued plant operations well beyond the initial forty year license.
- Not only does the NRC monitor our performance, other independent agencies also agree that our operations are safe and have no adverse impact on the surrounding community. This includes the State of Florida Department of Health which conducts monitoring and sampling of the South Dade area around Turkey Point.
- Today you may hear claims by an activist group opposed to nuclear power called the Tooth Fairy Project that Turkey Point is harming people in Miami-Dade County. Let me assure you that their claims are just not true. As a parent I understand that we all want to protect our children's health and we want answers when any child is suffering from cancer or any type of illness. The group organized against Turkey Point claims the answers for some types of cancer are found in the plant's operations. That is not the case.
  - I could not in good conscience work at a facility that could be harmful to any child. Having worked at Turkey Point for many years, I am convinced that the environment around our plant is safe for your children and mine. The group's claims have been repeatedly rejected by Federal and Safe Health Agencies as well as by leading scientists in the radiation protection field, some of which are in the audience here today.

For example, in 1990 the National Cancer Institute conducted an independent study of 62 communities around the United States nuclear facilities that were in operation for at least ten years. The agency confirmed that there was no increased health risk of living in proximity to nuclear power plants.

- The NRC has also appropriately addressed these claims in the Draft Supplemental Environmental Impact Statement and concluded the Tooth Fairy study shows no link to adverse health affects.
  - So bottom line, forget the fairy tale; Turkey Point is safe.
- Another factor to consider is our ability to help meet Florida's energy needs. Turkey Point power can help sustain our economic growth and maintain our quality of life. Our plant is strategically located in the FPL generating system and Turkey Point is among the lowest cost

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producers of electricity in the FPL system, so it will help us keep our electric bills low. And that's good news for our customers.

From and environmental standpoint, Turkey Point remains a guardian of our natural resources.

We use only about a tenth of the property for power production and most of our land providing a home to about seventeen threatened or endangered species. The endangered American crocodile has found a safe haven and a nesting ground in the plant cooling canals. This is one of the three areas in the country where the crocodile is living and indeed thriving.

14-11 | We also placed over 14,000 acres of sensitive wetlands with permanent conservation where the 14-12 | lands there were stored and preserved in its natural condition. In addition, we can continue to produce clean electricity without air pollution or greenhouse gases.

Finally, what does Turkey Point mean to our community? We asked the neighbors and they told us that we're an important economic factor in this community, one that they want to see remain as a viable contributor. The payroll for around 800 employees tax dollars, purchases and contributions to local United Way agencies help in this area.

But perhaps more importantly is the role our people play in the community. Our employees are active in their churches, in scout organizations, PTA, little leagues and even local Government.

As a testimony to our community role, many members of the local community spoke in support of Turkey Point during the December, 2000 public meetings here in this room.

In summary, I believe reviewing the licenses of Turkey Point Nuclear Power Plant is in the best interest of our community and in continuing to provide safe, clean, reliable and low cost electricity to our customers.

That's my professional opinion as Vice President of Turkey Point Nuclear Plant and my personal conviction as a parent and an active member of the community.

Now I'd like to turn it over to our license renewal project manager, Liz Thompson, to provide some additional details on FPL's license renewal efforts and the comments on the Draft Environmental Impact Statement.

Mr. Cameron: Okay. I think that the public are speaking and we're going to other people who signed up to speak and following on after Liz is done and after other people in the community. So everybody will get a chance to speak. I would just ask everybody to try to keep it to five minutes and we are going to hear from Dr. Brown and Dr. Sternglass, Mr. Oncavage, other members of the Sierra Club.

Liz, please.

Ms. Thompson: Thank you. Good afternoon everyone. I would also like to thank the Nuclear Regulatory Commission and each of you here today for your time and involvement in the license renewal process. It's a pleasure to be here today to share some thoughts with you about the Supplemental Environmental Impact Statement for Turkey Point.

As Bob said, my name is Liz Thompson and I'm the project manager for the Turkey Point license renewal effort. I've worked at the site for about fourteen years and am personally involved in not only license renewal, but operations, maintenance, engineering. I have first-hand experience of the team work that has enabled the plant to become a top performer in its class and a viable candidate for license renewal.

License renewal was not a process that we entered into lightly. We realize we have a responsibility to the community in which we're located. In preparing our license renewal application we were extremely careful to insure that programs and procedures are in place to assure safe operations and that the plant is having a positive impact on the environment. That process is not something new. It's how we run our business every day.

The NRC has now evaluated the environmental aspects associated with our license renewal application. The Supplemental Environmental Impact Statement for the Turkey Point license renewal provides a thorough examination of the 92 environmental issues addressed in the regulations. This is a very broad approach and it has been thoughtfully designed and is intended to cover a wide spectrum of considerations that need to be evaluated in renewing our licenses.

- The Supplemental Environmental Impact Statement concludes that the environmental impact from operating Turkey Point for an additional twenty years will be small and less than the impacts of other energy sources. This conclusion is based on the detailed analysis of the impact areas. The analysis in the Supplemental Environmental Impact Statement also looked at replacing the two reactors with equivalent electricity producers, new nuclear reactors, oil or gas burning generators, even solar panels, and concluded these options would produce greater pollution and ecological impacts.
- We have been told by our neighbors that clean energy is important to them and we believe Turkey Point provides that benefit.

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But another reason I believe that Turkey Point should operate for an additional twenty years is to be able to continue the award winning conservation work that was initiated almost thirty years ago. I'm proud of the work we do to preserve and protect the environment. We believe in our responsibility to operate in harmony with the environment.

Turkey Point's unique location successfully combines modern technology with a strong environmental commitment. In recognition of our efforts in land preservation, FPL was presented the Edison Electric Institute Environmental Award for Turkey Point's land management work earlier this year, and the Greater Miami Chamber of Commerce Environmental Award in 2000, both recognizing FPL's efforts for preservation and education on the endangered American crocodile. These efforts have attracted world wide attention, being featured in National Geographic Magazine and on television CNN and the Discovery Channel. The preservation of the site and the species present there will continue during the renewed operating license period.

Aside from the very important environmental benefits of continued Turkey Point operations, license renewal is also important to meeting the energy needs of South Florida. Florida is growing approximately two percent per year and the electricity consumed per customer is also increasing. FPL must provide power plants to keep up with this growing demand and insure an ample supply of electricity. This means keeping solid performers like Turkey Point as a viable part of FPL's generation network, one that uses a diverse energy mix to insure that our customers, when they flip that switch, the electricity is there.

As Bob Hovey mentioned, there are many additional benefits Turkey Point provides to the community. Our neighbors have told us that taking away Turkey Point would have a big impact on the community, and we agree with that conclusion.

The Turkey Point employees want to remain a part of this community and they want to remain your neighbors. I believe extending the operations is more than renewing the license, it's about renewing our future in South Florida. We are committed to safely and reliably operate in the Turkey Point Power Plant long into the future to meet the energy needs of this area while protecting the environment.

Thank you.

Mr. Cameron: Okay, thank you, Liz. We're next going to hear from Dr. Jerry Brown and Dr. Ernest Sternglass. Can we get the view graph machine set up for them?

After Dr. Brown and Dr. -- well, Dr. Brown first and then we're going to have Dr. Sternglass. We'll then want to hear from Mr. Keaton of the State and we're going to try to fit someone in quickly if we can but we'll -- okay, we don't have to worry about that.

All right. This is Dr. Jerry Brown and he'll provide further information on what he's doing.

Dr. Brown: Good afternoon. We have an executive summary of our presentation here today and we'll pass it out to anyone who would like it.

My name is Dr. Jerry Brown. I'm a research associate with the Radiation and Public Health Project. I teach anthropology at the Florida International University. I've been there since it opened in 1972. I received my Ph.D. Degree from Cornell University.

In the mid '80's I served as an executive director for Business Executives for National Security, which was an organization formed by Fortune 1000 executives including Ted Turner, Peter Grace of the Grace Company, Tom Watson of IBM, President of IBM. The purpose of that organization was several fold; to put the Pentagon on a business like basis, to reduce the risk of nuclear war and to change the relationship with the Soviet Union.

So I've been involved around radiation issues for some time.

The report that we have here today, of which there is an executive summary being circulated, we also have the full report. For anyone that would like it, please see us at the end of the presentation.

This report will also be shared with Florida Power and Light, with the Florida Department of Health, with the EPA and with other members of Congress who have responsibility both in the environmental and in the health area.

The principal author as you see here is Joseph Mangano, a epidemiologist and public health researcher. Jay Gould is a director of the project. He's a former Ph.D. economist and statistician from Chicago, University of Chicago, a former science advisor to the EPA under the Carter Administration. Dr. Ernest Sternglass who will be speaking soon is Professor of Radiation Physics at the University of Pittsburgh School of Medicine. Janet Sherman, M.D., internist, toxicologist, former -- worked many years ago with the Atomic Energy Commission assessing health impacts of radiation.

The reason I take some time to point this out, and I've just met Mr. Hovey today in person and I've met him through the press, was just to maybe correct some mis-impressions that he may have had from our article.

Number one, we are not an activist group. We do not get involved in lobbying or policy. We are a research and public education group.

Number two, we are not an anti-nuclear group. We are an anti-cancer group and we want to get to the root of the increased levels of cancer and why we have this cancer epidemic in the United States that will strike forty percent of all Americans in their lifetime and why we have elevated levels of cancer here in South Florida.

Number three, he indicated that there were -- this was a non-medical group, and there are a variety of medical as well as scientific professionals involved with our research.

I want to submit a report to the Nuclear Regulatory Commission as both a comment on the Turkey Point GEIS and also we believe that the data we're presenting is new and significant and has implications for all 43 of the utilities who have indicated specific reactors that they have an interest in re-licensing throughout the United States.

We understand, and I will go rather quickly now through the bullet points of the executive summary given the time limitation.

I'm on Page 3. The NRC requires that electric utilities measure emissions of radioactive chemical from nuclear reactors and levels of those chemicals in the air, water, soil and food. If these levels fall below Federal permissible levels, the NRC presumes there is no detectible health risk to residents living near reactors. That is what we see to be the serious flaw in the entire methodology of the Supplement Report. The NRC is not requiring nor has it successfully and thoroughly reviewed the -- not only our research, but the numerous references, the 60 references that are in the report we're submitting. The issue here is that of looking at in-body levels of radiation as the true indicator of the state of health of the population.

The NRC electric utilities, including the Florida Department of Health, have not measured levels of strontium 90 in the bodies -- or other radioactive chemicals -- in the bodies of persons living near nuclear reactors. This includes the Florida Department of Health, which is currently looking into the serious cancer levels that exist in St. Lucie area. In their research protocol which we've reviewed, they've reviewed over 300 chemicals, but they have not reviewed a known carcinogen, radioactive strontium 90.

So this is the aspect of the research that we are trying to address here.

The NRC electrical utilities and Public Health Department have made no independent study of cancer in persons living near nuclear reactors from 1957 to 1990. The study that was cited by the National Cancer Institute made a controversial conclusion that nuclear reactors did not affect local cancer rates, a result that would be expected based on the methodology used.

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What was the methodology? In virtually all of the control counties, there were counties that were right next to counties that had nuclear power plants, as if radiation stopped at the county border. This is a flawed study and it must be re-looked at and re-evaluated.

The Radiation and Public Health Project, known as the Tooth Fairy Project in the community, measures strontium 90 levels in baby teeth and effects on their bones. It is the first study to do in-body radioactivity of levels of persons living near nuclear power reactors and in more remote locations. One of the comments that the NRC made is that we do not have controls in the study. That is not true. There are several controls that go into the study. Proximity and distance from nuclear reactors is one control. The teeth of people who were born before and after a nuclear reactor opened is another control. And the opening and closing of nuclear reactors and the teeth of children that was collected around that is another control.

During the 1950's and 1960's, concern about increased strontium 90 levels in St. Louis baby teeth which corresponded to increased childhood cancer and leukemia rates were factors in President John F. Kennedy's decision, and Congress' decision, to ratify the 1963 Partial Test Ban Treaty, which ended not some, not a permittable level, but all atmospheric and all under water nuclear testing. And what we have found in our baby teeth study, both nationally and here in South Florida, is that the levels of strontium 90 from the St. Louis study -- from practically non-detectable since strontium 90 is a man-made elements only produced by nuclear weapons and nuclear reactors, to this level in 1963 when President Kennedy and Premier Kruschev in the UK decided to stop bomb testing.

Various studies have indicated a projected decline of strontium 90 again to practically undetectable. This is the level of radioactive strontium 90 above the projected value that we have found in the teeth tested in Dade County to date. These are the average levels and these are the highest levels.

As a reference point, the baby teeth methodology is not a new one. It replicates a very significant earlier study that played an important role in American history and Dr. Sternglass was invited by the Kennedy White House to testify on the impact of those findings before the Joint Committee on Atomic Energy at that time.

What is the reference base when we say the levels are equal to the 1950's or 1956? This was a time and a period in which the United States and the former Soviet Union tested the equivalent of 40,000 Hiroshima bombs in the atmosphere according to data provided by the Natural Resources Defense Council.

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The data on cancer rates in Southeast Florida. This is not our data. This is public health data from the data base of the SER Group, the Surveillance Epidemiological Report that was set into process by Richard Nixon when he launched the war on cancer. And so this data is not data that we have generated, but data that we have analyzed.

We have found that the childhood cancer rate in the five Southeastern Florida counties have risen to become one of the highest in the United States and suggests a link with the areas high strontium 90 levels.

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We also found in this report that annual rises and decline in cancer incidents in Miami-Dade children under age five matched those in radiation detected in the local precipitation -- this is data emissions -- measured in rain by the EPA, and that chart is attached to our study.

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Cancer in children under ten in Miami-Dade and four other Southeastern Florida counties rose 35 percent from the early '80's to the late '90's, but it declined by eight percent in all of the rest of the State. This we think is significant. We argue and we assert and we respectfully submit to the Nuclear Regulatory Commission that the Generic Impact Statement is flawed. There are no -- it says that the baby teeth study does not present new information. This is new and significant information and the first study on the measure of in-body radioactivity, specifically near nuclear power plants.

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The main thing, and again I'm trying to be sensitive to the time here, is that the GEIS asserts that the doubling in cancer in the past half century is not due to any environmental cause other than cigarette smoking, failing to cite the consideration research which we've documented in this report that links cancer and environmental toxins like radiation.

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The NRC in this report ignores the rise in cancer rates among children, which also has doubled in the period. The children do not smoke. The children have not been exposed to long term medical X-rays, and that is simply not addressed here.

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The larger GEIS does not mention the increased sensitivity of the fetus and the infant to radiation exposure, which was pointed out in the Beer 5 Report through the National Academy of Sciences in 1990, and that report concluded there is no safe, non-linear exposure to radiation.

How are we doing on time?

Mr. Cameron: Actually, we're pretty far over and I was going to ask you if you could just conclude and we could get Dr. Sternglass up. I think we had you for about ten minutes.

Dr. Brown: I'm very sorry.

Mr. Cameron: That's fine.

Dr. Brown: There are many issues raised in this report. I want to focus in conclusion on what we believe is the key one, and that is, do the NRC and Florida Power and Light make adequate measures of radiation dose to the public from Turkey Point emissions? The NRC says that they do and that the public is not affected.

Our view is that the NRC cannot and should not presume that Turkey Point emissions are harmless since it does not measure in-body levels of radioactive chemicals like strontium 90, which is also a market for other isotopes. In recent years strontium 90 measurements in milk near nuclear power plants were no longer required. These levels were significant. In 1976 milk from dairy farms near the Millstone Plant in Connecticut had the same strontium 90 concentration as at the peak of atomic bomb testing.

We call for the postponement of a decision on this license application until the local health affects and studies impacting strontium 90 on local health affects are thoroughly evaluated.

Thank you for your time.

Mr. Cameron: Okay. Thank you, Dr. Brown.

Dr. Sternglass? And then we're going to go to Harlan Keaton from the State of Florida and then Dr. Dade Moeller. And we're going to continue on this issue and then we're going to go to Mark Oncavage.

Dr. Ernest Sternglass, University of Pittsburgh Medical School.

Dr. Sternglass: Thank you very much. I'll be using some slides to give you some detail that you can see for yourself whether or not there has been any increase in strontium 90 in baby teeth or in cancer rates among children in the county and in the entire southeast part of Florida.

The most important point that needs to be made is that the recognition that bomb fall-out produced childhood cancer is very old. This shows the -- can we get this focused? This shows a report by the Japanese Cancer Society from Dr. Sige (Phonetic), and you can see for yourself that the cancer rates jumped enormously during the time of nuclear testing, beginning shortly after 1945, typically a four to five year delay before these cancers showed, which is similar to

what Dr. Ellis Stewart found in Oxford University in 1956-58, that children exposed during pregnancy generally develop tumors at twice the rate that other children did and it took only very small doses of radiation to do that.

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I'm going to go through these slides very quickly in order just to have you see the nature of the data, and I have complete copies of these available for anyone who would like to see them in more detail.

This is what happened in this country. In Connecticut cancer rates were measured since 1935 incidents, new cases, and that is shown by the dark line. And you can see the strontium 90 that was measured by the St. Louis group showed the same peak, and therefore this is a very strong relationship that was long ago established with regard to small levels of strontium 90 in the diet.

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Now why did we go ahead and measure this in Long Island? That's because Long Island had a very large increase, 30 percent or so since 1950, in breast cancer. And so we got the teeth from 500 children by now, and this shows the relationship between the two; strontium 90 the dark line, cancer rates the other line. The cancer rates have been shifted three years because typically it takes three to five years for the childhood cancers to appear.

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So in that sense, we are simply repeating what the St. Louis study did and now we can show you how close the relationship is. When we divided the St. Louis 500 -- I mean the teeth into 500 -- from 500 children into components of four periods each, with close to 100 teeth in each one, we found a direct linear relationship for this range from only one pico-curies to one and a half picocuries strontium in the cancer increase rate of children under ten.

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Now with this kind of data based on 500 teeth, we repeated the story here in Dade County. And here we see the following interesting pattern. The last atmospheric test occurred in 1980 and there was a big peak, going from as low as one and a half to four and a half picocuries. Then there were large releases, both monitored and unmonitored, from the problems of the heat steam generator at Turkey Point and there was another peak. Then the steam generator was repaired, and what we have in effect found is that there was another peak when Chernobyl arrived. And then when the Biscayne Aquifer was contaminated by all these build-up, we see a build-up in the base line. In other words, these peaks occurred on top of something else, and that's a very serious problem because when Hurricane Andrew came, even though the plant itself may have survived, what happened is apparently that much of the radioactivity in the canals and the stored area outside and the accumulated radioactive dust was blown up all over the county and in fact it reached other areas as well, because here we can take a look at -- these are by the way data obtained from the Dade County Cancer Incident Registry that

registers cancer since 1982 -- and you see a striking similarity. Again, the cancers are not declining. They are growing among children and this is the zero to nine year group, and they come in spikes that are associated with known events that produce radioactivity into the environment.

What we have found therefore is that we greatly underestimated the effect of strontium 90, and the reason is that we didn't know until 1968, some 25 years after the beginning of the nuclear age, that a study done at the University of Oslo, a cancer hospital, that they took animals and gave them tiny amounts of strontium and they found a depression in the bone cellularity. That means the white cells, the policemen of the body were damaged. And that leads to increases in cancer of all types, infectious diseases and many other abnormalities related to the immune system.

But that was not known until many nuclear plants had already been designed, and believe me, I worked for fifteen years for the Westinghouse Electric Corporation as assistant, ended up as assistant to the vice president for research. We never would have imagined, could have imagined how serious the affect of tiny doses of strontium 90 could actually be.

But here we now see, here are two plants located in Florida, Palm Beach, Broward, Martin, St. Lucie, and they are all within 100 miles, so Palm Beach and Broward get it no matter which way the wind is blowing. And the tragedy is that when you let it go out towards the ocean, eventually it comes back with the ocean breeze.

And now let's take a look at a typical county, like for instance, Martin. And this by the way is five southeast Florida counties, Dade, Broward, Palm Beach, Martin, St. Lucie, and we see the same pattern that we see in Dade, with a big peak after the Hurricane Andrew which must have distributed radioactive debris all over the area. And we're talking about hundreds of children. We're talking about a total of about 1800 children that developed cancer during that period in the five county area, and the increase is 35 percent above what it should have been.

Now here is the Center for Disease Control, the wonder website, showed what happened in the nearby county, Martin. Often counties like this were used by the NIA as control counties. And you can see as compared to San Francisco, which declined, when in 1989 its reactor was shut down and there was an enormous improvement in cancer rates. But your county, and you can look it up on your internet, Martin increased like that from way below San Francisco to way above.

If that is not a source for concern, then I wonder what the health department calls a reason for concern.

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Now let's take a look at breast cancer. I think some of you in the audience may have relatives and friends who have developed it. This is again from the Center for Disease Control. You can download it on your computer, the wonder website. And you see that during the time of bomb testing in the 1980's, San Francisco exceeded the U.S. It was a hot bed for breast cancer that nobody understood. It went up to about 165 per hundred thousand in the age group over 65 that developed most of the cancer. And you can see that an incredible decline took place by about half for which no other explanation has ever been advanced.

I would like to know what other cancer therapy there exists that we in our medical schools have failed to find.

Mr. Cameron: Dr. Sternglass, can you wrap for us, please?

Dr. Sternglass: This is it. This is the last graph, and I'm just in time.

This is again from the Center for Disease Control. Dade County white infant mortality -- incidentally, black is almost twice as high. But you will see here that when the last of U.S. tests occurred there was a peak above the normal decline of 46 percent per year that has been taking place since 1935, except for the period of bomb testing.

Then the Chinese bomb test. Then the French bomb test. Then the start of Turkey Point which increased here 50 percent. But when it was repaired infant mortality declined. Then came the steam generator repair here, and then came Chernobyl and it raised it again. And then Hurricane Andrew, still another small peak.

But what this means is of great concern to all of us because for every child that develops cancer there are ten to a hundred that die of other causes in the first year of life and many are damaged who survive because of our ability to keep tiny babies alive. It means that we are endangering the welfare of the entire nation by ignoring this kind of data.

Thank you.

Mr. Cameron: Thank you very much, Dr. Sternglass. And Dr. Sternglass' graphs are available for people. Thank you. Thank you very much.

Can we go to Harlan Keaton and then we'll go to Dr. Dade Moeller. Harlan, would you like to join us up here?

Mr. Keaton: I'm going to make this as short as I can because I know everybody's ready to go get something to eat, or get something anyway.

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Basically, I am the representative for the State that goes out and takes the samples and the analysis -- does the analysis for what we've been talking about around the nuclear power plant. We do analysis around -- Florida has five nuclear power plants at three sites other than this one.

In our testing program, our program is audited by the EPA. We have the NRC inspectors that go out with us. We have a tremendous quality assurance program that we go through to make sure that our testing is correct. All of our standards are traceable. All I'm trying to do is let you know that what we do out there, we feel is accurate.

From that standpoint, we have a tremendous surveillance program around the nuclear power plant where we pick up things like gamma radiation, air, water, raw leaf vegetation, fish and crustacean, sediment and food crops. We take these back to our lab and analyze them on a quarterly basis and then we do send a report, after the four quarters is done, into an annual report, and that goes to the NRC for their review.

We have to date not found anything in the environment that would either increase or affect or harm the citizens of the State of Florida, at any one of the plants. We found no environmental levels of build-up and concentration of materials. I know you've heard about testing for strontium 90. Well, yes, everybody used to test for strontium 90 and it wasn't found very much, but just because you don't test for strontium 90 doesn't mean you can't identify it. Strontium 90 is a beta emitter and we check everything for beta emissions. If you don't see elevated levels, there's not going to be any strontium there.

The next point we do is, we have an environment epidemiology group that goes and looks at cancer throughout the State. Now I'm not a part of that group, but they just finished a report today which was presented to the NRC and I'm sure that the group of scientists, the Fairy group, they have it now, and I would like to read the summary of that, and I don't mean to demean -- you know, I'm not trying to make light of that. I didn't remember the name.

This report is available. It's out in the room that we have out there. Other copies will also be available later. If I can turn to the summary page. All right.

In summary, and this is the epidemiological group in Tallahassee, they've gone over the same data that Dr. Sternglass and his group have. This is their conclusion.

"In summary, we reconstructed the calculations made by the RPHP, using the same data for which they base their claim. RPHP claims that there are striking increases in cancer rates in Southeastern Florida counties and attributes to these increases to radiation exposure from nuclear reactors. Using this data to reconstruct calculations and graphing our findings, we have not been able to identify unusually high rates of cancers in these counties. As we would

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expect, just by chance some county rates appear higher than state and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases and small underlying county populations. One has to use careful scientific and objective evaluation of these fluctuations to avoid misinterpretation. Careful analysis and observation of the data presented here does not support the alarming claims made by RPHP regarding cancer mortality rates and trends in Southeastern Florida counties when compared to the rest of the State of Florida and the nation."

In conclusion, I'd like to read the cover letter of this that came from Dr. David Johnson.

"Much concern has been related to us about statements made by Radiation and Public Health Project Incorporated on the March 28, 2001 announcement. RPHP has implied that there are large increases over time in cancer rates in Southeastern Florida counties and they attribute these increases to radiation exposure from the Turkey Point and St. Lucie power plants. The Florida Department and Health takes these assertions seriously and have reviewed the data used by RPHP regarding cancer rates of Southeast Florida. Using this data to reconstruct calculations and graphing the results, we have not been able to identify any unusually high rate of cancers in these counties. Attached is the Bureau of Environment Epidemiology report addressing the data and the RPHP findings. Should you need any further clarification, please feel free to contact me at 850-245-4299. David Johnson, M.D., Master of Science, Bureau of Environmental Epidemiology."

That's all I have to say.

Mr. Cameron: Thank you very much. Next is Dade Moeller.

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Mr. Moeller: My name is Dade Moeller. You may have heard the name Dade before. I was born and reared in the State of Florida. I went here to public schools for twelve years.

I'd like to begin though with an apology. Had I known or had any inkling of the fiasco of the counting of the ballots, you know, during the past Presidential Election, I never would have let them name this county after me.

Now you could say why am I here? Well, I've spent my entire career in the field of radiation protection and I was so incensed to learn of the Tooth Fairy Project and to be able to read that project and the information that was put out that I -- I'm a senior citizen, so I went to the airport and I bought myself a ticket and I came down here because I wanted to share some truth with you. And as I go along I will cite back some references to my own career so you'll understand who I am.

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My time is limited. Let me get right to the bottom line.

The Tooth Fairy Project is exactly what the name implies; it's a fairy tale. The report is unadulterated gobbely-goop and it is one of the worst examples of junk science that I have ever read in my life. There are newspapers reporters here; please don't mis-quote me, because I meant exactly what I said.

Now what is the basis for my statement? Well first of all you've seen these curves and all that was just put up and they quote a number of picocuries in the teeth. Did you see any uncertainty, markings on those numbers? No, they're given to you as precise numbers. Well in many cases the uncertainty is far larger than the number itself and they do not provide that to you. What they need to do is go take Statistics 101 and in that they tell you how to calculate the uncertainty.

The second thing that they do is they only give you picocuries. Where's the dose? Any toxicologist will tell you that the dose makes the poison and if they had calculated the doses, which I did, that would result in one or two picocuries of strontium 90 per gram in the teeth, they'd find that the dose each year is about comparable, in fact it's less, than the dose that you would receive in flying from Florida to California due to cosmic radiation on the airplane.

Now if they're really interested in reducing cancer and if they really believe these little small doses are causing it, go to Miami International Airport and every time a plane is listed as going to California, go up and warn the passengers, don't fly to California because it's going to cause cancer.

What's the third thing? He said we've analyzed 500 teeth. He said if we can get 1000 teeth in Dade County we'll have it made. That will provide clinical evidence that there's a relationship between the picocuries of strontium 90 and cancer.

Well, they need in this case to go take a course Epidemiology 101. Epidemiology does not tell you that this agent caused this affect. All that epidemiology can do is tell you a relationship, a possible correlation, between something in the environment and some ill affect. And furthermore, I went ahead and calculated it out and for the dose levels we're talking about you would have to follow more than a million people for more than a hundred years to determine if there was any correlation.

Now what are my credentials for having made these statements? Well, I worked for the U.S. Public Health Service for eighteen years. What did I do? I worked as a laboratory chemist at the Oak Ridge National Laboratory, the radio-chemistry lab, from 1956 to 1957.

What else did I do? I directed the Northeast Radiological Health Laboratory in Massachusetts for five years. And what did we do? We monitored strontium 90 in children. We got bones from accident victims at hospitals and we did monitoring for those fourteen states.

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In addition, I directed the Public Health Radiation Protection Training Program for five years, so I think perhaps I know just a little bit about the subject.

Furthermore, I went from there to Harvard. For twelve years I was chairman of the Department of Environmental Sciences. For my last ten years there I was Associate Dean of the Harvard School of Public Health. I think that shows something about my credentials.

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Now let's just look at some of their claims. The compound all of this gobbely-goop with distortions. Let me give you a few.

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They said years ago, increase in breast cancer and it's due to nuclear plants. Well, in Minnesota -- well, we just heard what the Florida Department of Public Health just said. The Minnesota Department of Public Health checked their information. What did they do? It said they distort the data.

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If a county didn't have enough breast cancer, suddenly it was moved away from the nuclear power plant. If they found the county with a high breast cancer rate they moved it in closer to the nuclear power plant. I wondered which is easier, move the counties or move the plants? There must be some reason for doing it.

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The Millstone Plant. At the Millstone Plant they charge that the strontium 90 in the milk nearby was due to releases from the Millstone Plant. Who went in there and proved them wrong? The administrator of the U.S. Environmental Protection Agency. He had his crew go in and sample the strontium 90 and determine its source. There's nothing complicated by this. And they would never do it here around Turkey Point. If you went into the environment here and determined the source of that strontium 90, and you can do it just like you do with DNA today, you know, to capture a person who murdered someone years ago, the same processes are available for strontium 90. And in Connecticut -- they mentioned Connecticut earlier today -- they tested it and strontium 90 was totally from fall-out. It was not at all from those nuclear plants.

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And then he mentioned the National Cancer Institute. And in that they challenge the Sternglass conclusion that breast cancer was caused by nuclear power plants, and in this book, if you read their material, they're always telling you, read the book The Enemy Within, you know, come buy my book The Enemy Within. Well, if you read that book it says in there, in a secret memo the National Cancer Institute said all of their calculations were correct. And then they have an appendix in the book. So I flipped to the appendix. I want to find that wonderful memo. Well, it wasn't in the appendix. So why if it endorsed their work, it's the first time it ever happened, if it did, for a long time, finally it's been endorsed, why don't they show it?

Well, I know the man who wrote the memo, Charles Land, Dr. Charles Land. He's an epidemiologist. And I called Charles and I said, "What's the scoop here? Did you really endorse it."

And he said, "In that memo they can add one and one and get two, and they can multiply two times two and get four, but their conclusions were totally wrong because in-put data was wrong and everything about the analysis was wrong."

Now am I the only person in the world that's read this? In 1971, one of the first times I met Dr. Sternglass, and it was at the annual meeting of the Health Physics Society in New York City. And it had never happened in the history of the Society, every ex-president, every living expresident of that Society, signed a statement saying that Sternglass and his crew did not know what they were talking about. How do I know that? I was present in the Society and I appeared before the T.V. cameras and I presented the statement.

If you or I had said a statement, if you said to me, "Dade, you're wrong on your study," I would go correct it. Not them. They have no shame whatsoever. No shame whatsoever.

The National Academy of Sciences. I was on the committee that reviewed the relationship between the doses from radiation and health affects. Well, we thought out of courtesy, let's have Dr. Sternglass appear. He appeared and he made all the claims. He hadn't changed one iota. They're the same old claims he's always made. And he made those claims and we said, "Well, sir, where are the data?"

And he said, "Well, I'll give you the data."

Well, twenty years later we've never gotten the data. And in their report they stated that again, he did not know what he was talking about.

Let me wrap it up by saying he violates every principal of good science in his work. Don't be taken in by his comments. Check his credentials. If you have a leak in your kitchen faucet do you call an anthropologist or physicist to come repair it? No, you get a licensed plumber. If

your spouse is sick or you're sick or your children are sick, you go to a medical specialist, and what do you seek? If it's a real serious illness you seek a Board Certified medical doctor.

Let's ask, are they certified? There are groups, there are boards that certify you for rad protection, there are boards that certify you in environmental health. I'm certified both in radiation protection and in environmental health. I can answer. I looked just before I came down at the American Board of Health and none of their names are in there.

Thank you for your time. It's been a pleasure to return to my home state.

Mr. Cameron: Thank you very much, Dr. Moeller, and --

Dr. Sternglass: I might have one minute to answer these terrible charges?

I would like to read --

Mr. Cameron: Dr. Sternglass, I'm going to give you -- in light of the nature of what was said, I'm going to give you one minute to do that, and please, we have to move on.

We're going to give him a chance to do it. Go ahead, Dr. Sternglass. Go ahead.

Dr. Sternglass: I'm reading from an article from Health Physics. It's Developments, Successes, Failures and Eccentricities by Dr. Carl D. Morgan, Ph.D., who founded the Health Physics Society of which Professor Moeller was at one time a president.

And this is what he says. I'll just read this paragraph.

"It was a great disappointment to me to see the change in Health Physics, an organization of which I have been a principal organizer. I was the first president of the Health Physics Society and I believed then and until about 1975 it to be a professional and scientific organization to protect people from exposure to ionizing radiation. Now it became clear that this was no longer the case. Health physicists, at least in the U.S., refuse to bite the hand that feeds them, the Department of Energy. It saddens me to say that this Society for whose growth and development I once worked so hard, now is demonstrating that its primary purpose is not to protect the employer or employee or the members of the neighboring public, but to protect the company that signs the paychecks. A few years earlier Dr. Dade W. Moeller, the president of the Health Physics Society, in its presidential message, urged health physicists, speak out and make known our position on such issues as nuclear power safety and radiation protection quides and let's put our mouth where our money is."

Thank you.

Mr. Cameron: All right. We took a little bit longer on this particular issue because of its importance. I think that the NRC has heard a lot of information on it, pro and con, and I apologize for our running late and thank you for your patience. We're going to put on a few people from the Sierra Club, beginning with Mark Oncavage, and we're going to go to some people from United Way and the Chamber of Commerce.

Let's go to Mark Oncavage and then we'll go to Barbara -- is it Barbara Lang? And Frank Pitz and also Diane Jacobs who we heard from today.

Go ahead, Mark.

TPD20 Mr. Oncavage: Thank you.

The Miami group of the Sierra Club is calling for safety hearings concerning the license renewal of Turkey Point nuclear reactors. The Miami group also calls for an Environmental Impact Statement that studies site specific health and safety issues.

This past October when Florida Power and Light applied for license renewal, I petitioned the United States, the Nuclear Regulatory Commission, for safety hearings. I quoted a study of spent fuel consequences by Brookhaven National Laboratories, this one right here, that was commissioned by the Nuclear Regulatory Commission. If there was an accident in the spent fuel pool and the cooling water was drained, the spent fuel would heat up and set itself on fire.

The study, I believe, only accounted for one decommissioned reactor with forty years of spent fuel on site. Turkey Point has a combined fifty-seven years of spent fuel with more on the way.

The consequences for this accident of a generic reactor range from 53,800 latent fatalities to 143,000 latent fatalities, and permanently contaminated land estimates range from 869 square miles to 2,790 square miles.

Eight months prior to Florida Power and Light's application for renewal, I asked the Nuclear Regulatory Commission for their safety studies relating to the development of the Homestead Air Base and the commercial airport five miles from Turkey Point. They sent me two studies written by Florida Power and Light. In June, 2000 the Nuclear Regulatory Commission issued a safety assessment saying commercial airport development was safe, but also said, quote, "it should be noted however that the margin between the estimated aircraft crash frequency and the acceptance guidelines of SRP 3.5.1.6 is relatively small."

I asked the NRC for a formula assumption data and line by line calculation so independent experts could verify the conclusions. The NRC denied my request.

20-3

Here's what I asked and here's what looked wrong. The NRC is responsible for public safety, but the NRC's formula wasn't used. It was done using Department of Energy calculations, but the Department of Energy has no responsibility for public safety as the NRC does.

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Bird air strike rates were under-valued. State averages and national averages hardly compared to the birds flying around Biscayne National Park and Everglades National Park.

Caribbean, Central American and South American general aviation rates were totally ignored.

When the formula asked for the height of the structures to calculate crash probabilities, the 400 foot tall smoke stacks mysteriously disappeared from the calculations.

All this air crash safety information should be in the Generic Environmental Impact Statement and the site specific Environmental Impact Statement, but it is not.

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In January of this year an Atomic Safety and Licensing Board met to hear my petition arguments. Administrative Judge Thomas Moore, asked FP&L lawyer and the NRC lawyers to show him in the Generic EIS where air crashes into spent fuel pools have been studied. They had no answer. He asked them, "Where in this GEIS is the safety study for spent fuel pool damage caused by hurricanes?" They still had no answer.

These embarrassing moments did not help my cause because my safety -- my petition for safety hearings were still denied. My petition for these same hearings is on appeal to the NRC Commissioners.

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Meanwhile, my Freedom of Information Act request finally got answered. I received a letter from Katherine Barber, counsel for the NRC staff, and I quote, "Ms. Reed states in her response that the calculation you referred to was performed by Florida Power and Light and consequently that the NRC does not possess the information you requested," end of quote.

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This means that the NRC told the Air Force it was safe, having never seen the data, assumptions or line by line calculations. I assume they have seen the formula.

20-4

This abandonment of responsibility by the NRC did not sit well with me. I wrote a letter to George Mulley, Jr. of the NRC's Inspector General Office. My complaints were: One, isn't there a legal requirement for the NRC, not the licensee, to provide a safety evaluation for a final EIS?

- Two, how can the NRC ignore its own standard review plan?
- Three, how can the NRC insure public health and safety and approve airport development when it doesn't possess all the data and assumptions that were used in the calculations and cannot verify the licensee's conclusions?
- Four, how can a citizen concerned for its own safety get information that's exclusively held by the licensee?
- Five, shouldn't the lead agency, the Air Force, be told that there are major safety discrepancies with the NRC methodology concerning the closeness of the proposed commercial airport to the nuclear plant?
- Six, if the licensee, which is a large land holder in the area, is the only entity with all of the safety-related information, how can the NRC be sure there is no conflict of interest?

  Developing land near a new commercial airport could be an extremely lucrative enterprise.
- Seven, another conflict of interest may arise if the licensee thinks that a negative safety assessment would damage its chances of obtaining a license renewal.

I have never received a response to this letter from the NRC's Inspector General. I do hope that the NRC officials and the Florida Power and Light officials will reconsider their opposition to holding safety hearings on the license renewal for Turkey Point.

Thank you.

Mr. Cameron: Thank you very much, Mark.

Let's go to Diane Jacobs and then to Frank Pitz and then we'll go to some other people and hopefully we'll get you all in.

- Ms. Jacobs: My name is Diane Jacobs. I am a member of the Sierra Club, but also I'm a resident of Miami-Dade County for over fifty years.
- In the GEIS Supplement filed, specifically Section 4.7.1, the statement for Turkey Point criticizes the baby teeth study for not performing environmental testing for strontium 89. We must realize how inconclusive such testing would be. With a half life of 60.5 days, much of this radioactivity would decay while this chemical sits in the rad-waste hold-up tank.

More of the activity would decay as it gets released, deposited and absorbed in the environment. More activity would be lost as it is collected and transported to an independent laboratory. And even more of the activity would be lost as it sits in the lab awaiting testing.

21-2

Much more reasonable and accurate would be for the NRC to, number one, monitor all gasses and liquid effluent for strontium 90; two, put monitors in the places where the unplanned, unmeasured radioactivity gets released to the environment; three, have random samples of food sources measured for strontium 90, such as local vegetables, fish, blue claw crab, Florida lobster, local milk and local drinking water; four, publish the NRC's own measurements and strontium 90 levels in baby teeth; five, correlate all the listed monitoring procedures and cancer statistics to accurately find out if or if not there's a significant relation between nuclear plant operations enhancer.

21-3

The methodology presently used by the NRC is to calculate cancers only by using what comes out of the stack, and this appears to be the weakest method you can possibly use. Whereas the correlation between strontium 90 levels actually found in human bodies and cancer rates seems to be the most reliable method.

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The Generic Environmental Impact Statement published in 1996 is obsolete in light of much more recent study. I believe the NRC should postpone its decision on extending the license of Turkey Point and all other reactors until it has thoroughly evaluated all available information, including recent reports and significant research in progress on nuclear reactor emissions and public health.

Thank you.

Mr. Cameron: Thank you very much, Diane.

Next, let's go to Frank Pitz.

TPD22 22-1

Mr. Pitz: Frank Pitz with the Broward County Sierra Club. And I want to join Mark in that request to call for safety hearings.

22-2

Upon the global environment in health we have a monster waiting to be unleashed and I'm talking about 400 million metric tons of spent nuclear fuel, which is festering like a boil on the face of humanity.

This poses a danger for over a half a million years and no one knows what to do with it or how to contain it. It is certainly not out of sight out of mind, so we cannot ignore it and there's not something tucked away in the depths of the closet so that we forget it. It is here. It is real and it is extremely dangerous to humanity.

In addition to the day to day adverse health affects posed by nuclear power, we also have this gargoyle hanging over our heads waiting to be unleashed.

We are here today to talk about relicensing a twenty-nine year old nuclear power plant, a renewal that isn't even up for another ten to twelve years. When the current renewal is up for review this plant will be forty years old. Longevity in humans is admirable, longevity in nuclear power plants is hazardous.

Add this increase in plant life span to the present day to day perils associated with radioactivity release from it and we have a ticking time bomb right here in South Florida.

Why the rush to relicense? Why not safety hearings?

The current operating permit does not expire for ten to twelve years. Why can't we wait until then? There certainly is not a pressing need to go through this process at this time unless of course it is political expediency.

These aging reactors pose more of a threat to civilization than all of the supposed missiles that President Bush envisions while he lies sleeping in his bed.

The change of billions of dollars to expend to build a missile defense system would best be spent on sustainable energy programs which would wean us from causal fuel, nuclear fuel and consumption as well as the radioactive nightmare of nuclear power.

Leave this license in place until its original expiration date and then come back to the people and talk about renewal. For the sake of political opportunism you would further endanger the health of residents of South Florida. I say no to relicensing at this time.

Thank you.

Mr. Cameron: Thank you, Frank.

Let's go next to Mary Finland and then Mary Donworth and then Dave Friedrichs. Mary Finland from the Homestead Chamber of Commerce, is she still with us in the room?

	Okay, how about Mary Donworth?
TPD23	Ms. Donworth: Good afternoon. My name is Mary Donworth. I am the vice president of Agency Relations and Fund Distributions at United Way of Miami-Dade and I have worked at United Way for eleven years.
	I'm here obviously not to talk about environmental issues or safety, but to talk about the partnership between United Way and FPL's Turkey Point in meeting community needs.
23-1   23-2	In addition to meeting the energy needs in our community, Florida Power and Light, the IBEW and its employees raise over a million dollars for community needs in Miami-Dade County. Turkey Point itself employees contribute over \$150,000.00.
23-3	What does that mean in terms of services? It means quality care and education programs, through programs like the YMCA right here, the Brethrens Christian Association. It means food for the hungry at the Homestead food kitchen. It means therapeutic programs for developmentally disabled children and at the Association for Retarded Citizens.
23-4	In addition, United Way also encourages people in the community to step up to what we call the leadership circle. Those are people who give \$1,000.00 or more to United Way for health and human services. Turkey Point itself has 62 leadership givers which is a tremendous commitment.
23-5	In addition to the very, very significant report, the financial contributions, FPL, the IBEW and its employees contribute thousands of hours of volunteer services in the community, which is tremendous.
23-6	In conclusion, I just want to say that United Way is extremely proud of its partnership with FPL in providing services for those in need in our community.
	Thank you.
	Mr. Cameron: Thank you very much, Mary.
	Let's go to Dave Friedrichs from the Dade County Farm Bureau.
 TPD24   	Mr. Friedrichs: Good evening. My name is David Friedrichs. I'm executive director of the Dade County Farm Bureau, representing a membership of 3,064 members in Dade County.

- The Dade County Farm Bureau stands unanimously in support of Florida Power and Light's relicensing efforts for their Turkey Point Plant.
- In addition to the many other organizations and individuals here this afternoon who have cited to you many different ways in which they actively support the community and are a part of the community, which they are, they also actively support and help and aid and assist in every way possible agriculture in Dade County.
- Despite our loss of revenue sources from other areas and loss of the airport and the Air Force and all that sort of stuff, agriculture still is the main engine of Dade County, Florida, and we find no reason not to support, after due consideration of presentations both from FPL and from other people not in favor of FPL's relicensing, we find no reason not to support them.

On a personal note, I have listened to, this afternoon, a lot of various presentations from the scientific community, obviously pros and cons. These are naive, average American individuals. I have a barometer that I go by. I'm not attempting to be funny, but I'm very serious.

When I tell you that I don't wake up every morning to see the Miami Herald screaming in the biggest headlines it's possible that I'm going to die most any minute from Florida Power and Light's presence in Turkey Point, I have a little problem believing that if that were true they would be letting me know it on a daily basis.

Thank you.

Mr. Cameron: Okay, thank you, Mr. Friedrichs.

Let's go to Mr. Velazquez.

Mr. Velazquez: Thank you for the opportunity. My name is Arnold Velazquez. I'm a resident of Miami-Dade County since 1960.

I'd like to start by thanking Mr. Brown because he woke me up yesterday morning when I read the article in the paper. That was the catalyst that made me come here today and spend five hours listening so I could speak my mind.

Just aside, I was looking at a presentation of Dr. Sternglass, and I just came to the realization that the Cuban immigration and the Haitian immigration have a strong relationship to the peak that he shows in there. So I have a hunch that we could infer that the Cubans and the Haitians are contributors to whatever things were happening. That's statistics for you.

I'm a graduate, electro-mechanical engineer from the University of Miami. I have a Master's in Industrial Engineering, and I'm a navy veteran, electrician, ship electrician. I worked twenty-one years for Florida Power and Light. In 1991 we decide to part company. Still, it's a good company. Still a good neighbor. I'm proud to my association with the company, and today I have no restraints to speak my mind.

Before I was accused, well, you get your paycheck from Florida Power and Light. Today that's not the case. Today I can speak out my mind. And let me tell you, nuclear energy is one of the most reliable source of energy that we have today.

If we're going to look at coal with the same scrutiny that we hold nuclear power plants, we would have a long time ago shut down the coal mines in Kentucky and West Virginia. Black lung is real. We see people today, after all the improvements made in coal plants, and I'm not indicting the coal industry, please. I'm making a point.

Everything has a price. If we would look at the vaccine used for polio and we see that there is a small number of children that die from vaccinations every year. That mean are we going to stop vaccinating the rest of the population because unfortunately some children react adversely to the vaccination? No.

You could find a reason to shut down Turkey Point tomorrow. Would that serve the purpose? Would that be in the best interest of the community? No.

If we look at the airline industry, we would still be looking. In the 1980's if the trains were to come by towns were received the way that we receive some of the power plants today, there would be no railroads in this country. People will be against the railroad, because of the pollution, because of the noise.

So you have to look and weigh what are the benefits and what are the cons against anything you do in life, and by far nuclear power is the most reliable source of energy that we have today. Doesn't contribute to the greenhouse effect. Doesn't pollute?

If anyone wants to go and see a nice family of manatees, you can go to any of the discharge canals in power plants and you're going to see the family of manatees, especially in the winter months. They go there because it's warm. Manatees know better.

So again, there are pros and cons, and I believe that nuclear power far out-weighs the benefits that we derive from it and the proffers of organizing a committee of private citizens, because I think there is a lot of mis-information being pumped into the public today. This article here is one example of that. This is a crying shame that people will lend themselves to these kind of

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mis-information and scare tactics. This is not fair to the public. It's not fair to our community and I would like to see them pack and go somewhere else and go ahead and poison somebody else's mind.

This article here only talks about Turkey Point and St. Lucie. How many of you know another nuclear power plant employer? Crystal River, how come it's not in that study? If you're going to be objective about your analysis, your study, you include all the variables. So take it for what it's worth. All the gentlemen that spoke, spoke very eloquently about it. I don't think I can match his wit and his years of experience, but I tell you one thing, he hit it right on the nail.

I want to thank you for the opportunity. I think it's worth it and you have the strong advocate in nuclear power. Today we are seventy percent dependent on foreign oil, and if you thought that in the 70's we had it bad, wait if we lose the power, the fuel coming from the Middle East. We would have to come up with alternatives for sources of energy, and not next week, not ten years from now. We need today. And in my mind, my professional opinion, nuclear power is the answer.

Thank you.

Mr. Cameron: Thank you, Mr. Velazquez.

Let's hear from Mr. Munns and Mr. Rothschild and then Elvira Williams and Kristy Doyle Bailey. Do we still have Mr. Munns here from Redlands Company?

Unknown Speaker: (Inaudible.)

Mr. Cameron: Oh great. Thank you. Then give our apologies to him that we didn't get to him.

How about -- I know Mr. Rothschild is here and then we'll go to Elvira Williams and Kristy Doyle Bailey.

Mr. Rothschild.

Mr. Rothschild: Good afternoon. My name is Rubert Rothschild. As you can see, I'm here in a dual purpose. I'm a scout leader and I'm an FPL employee.

In my employment with FPL I work in the materials manage department. I'm what they call a technical reviewer. I review purchase documents prior to them going to the agents to make sure that the -- all the requirements are correct, all the engineering is correct, that it meets the current designs and all the regulations, local and State and Federal regulations are met, even before it gets to the buyer.

In my secondary capacity as a scout leader, or as a scouter, not a scout leader, I'm the training chairman for this District, from 152nd Street down to the Monroe County line. In that capacity I have the responsibility to train the leaders for approximately 75 units, Cub Scout, Boy Scout, Adventure Program leaders.

26-1

Because of the facilities at FPL, the Scout Camp that FPL makes available to us, this is the perfect facility to train leaders. Mr. Hovey, who for the past few years has been the chairman of the Friends of Scouting Campaign so that we raise money for our Scout Council, he's been very instrumental in that. He's also been instrumental in allowing the use of facilities to train Boy Scouts in the Atomic Energy Merit Badge. Over the last six years we've trained approximately 36 boys each year. We get to use the facilities of the control room simulator, the dress-out facility and also the survey meters and the boys come away with a very good merit badge that's a pretty tough one to get in most areas, except in areas like this.

Let me step aside a little bit. I just came back from vacation and part of the vacation that I took was out west. I got to drive a little bit on Route 66 in a couple of areas. This morning on the radio they were talking about a Route 66 Association. You heard the report. But part of the report was saying that they were meeting out in California and there was an association of people that cared for Route 66, and there was also an association, when they came out there, they brought their old cars. There was cars from the 40's and 50's that were still running and people were talking about even older cars that they were going to fix up and bring out there.

26-2

Now it seemed to me there's a correlation between those old cars. If they're able to fix an old car and make it continue to work, we should be able to fix this nuclear plant and maintain it in a way that it can keep running safely and efficiently. And that's part of what I do. I make sure that the maintenance department and the haz-mat of spare parts and that the parts they need to maintain this place sufficiently and correctly.

Thank you.

Mr. Camerson: Thank you very much.

Is Elvira Williams still here?

How about Kristy Doyle Bailey?

Okay, let's go to Mr. Luis Dilan.

Mr. Dilan: Good afternoon. My name is Luis Dilan. I'm with the Vision Council and I'm also a Homestead resident here for twenty years.

This is a letter for record.

- "On behalf of the Vision Council we wish to register our support for the relicensing of the Turkey Point Nuclear Power Plant. The Vision Council is an economic development agency here in Homestead, and the mission is to encourage the expansion of existing business and to recruit appropriate new businesses for the local area. We face a number of obstacles in our effort, including remoteness of major markets and a lack of a major technical base of raw materials."
- "One of the things we do have is adequate power. We are fortunate not to be facing brownouts and wondering each day whether we will have lights and cooling. Many of us remember the weeks after Andrew when the sound of generators was a consistent reminder of how much we have taken our normal power sources for granted."
- "In addition to providing needed power to our locale, the Turkey Point facility is an important economic engine in itself. The number of people employed and their wage base is unparallel in our area. Mr. William Fruth, a well known economic development planner, has stated that the best single industry a community can have is a nuclear power plant facility, because it generates capacity for business, it's non-polluting and a tremendous payroll capacity."
- 27-5 "Perhaps as in a community such as ours is the fact that the plants employees are our neighbors, our friends and important contributors to the life of our community. They are active in our little leagues, churches, civic and governmental organizations. FPL at Turkey Point is
  27-6 also a responsible citizen. Just one example is the remarkable job they have done in protecting and increasing the population of the endangered American crocodile."
- "You're aware that much of Europe has directed its present and future power needs to nuclear energy to relieve dependency and import oil. We all should be aware of the proven security record of the nuclear power plant industry and the safeguards and security required at such installations. "
- 27-8 "Thousands upon thousands of South Florida residents are confident of the plant's safety, its management and security they provide every day, because they like us, live in close vicinity to the plant."

Thank you for your attention, Robert Dennison, Chairman."

Thank you.

TPD28

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Mr. Cameron: Thank you, Mr. Dilan, and we'll attach this to the record. Thank you very much.

Let's go to Brian Thompson and then to Steve Showen.

Mr. Thompson: Good evening. My name is Brian Thompson. I'm the business manager for System Council U-4 for the International Brotherhood of Electrical Workers, which represents over 3000 unit employees on Florida Power and Light property throughout the State of Florida.

One of those local unions, Local 359, is located here in Dade County, which represents over 300 of the union employees employed at the Turkey Point nuclear facility. Those employees include very highly skilled and professional craft workers in the operations, maintenance, electrical and instrument and control fields.

I'm here today to speak in favor of the twenty year license renewal and continued operation of the Turkey Point nuclear facility.

As business manager for the union, three of my most important priorities are safety, the safety and well-being of employees, the safety and well-being of the public, training of our employees and the environment in which we all live.

On Florida Power and Light property we have what is known as a Joint Safety Program, which program through committees insures both the company and union have an equal say to provide for the safety of the employees, safe plan operation, safety to the public and environmental protection.

I am proud to say that as business manager I have actively participated on the Corporate Safety Committee for the past eight years in the Nuclear Joint Safety Program. This committee is responsible for studying and consistently reviewing the safety rules, policies and procedures for which the plant employees must adhere to and which the plant must operate under.

As a result of our efforts and the true dedication of these rules, policies and procedures by the employees of Turkey Point, the facility has consistently been recognized as being one of the safest and most reliable nuclear power plants both in the United States and in the world. The only nuclear power plant in the United States to receive three consecutive superior ratings from its regulator, the Nuclear Regulatory Commission, spanning the years of 1994 through 1999.

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Safety performance indicators, consistently in the top percentile of the nuclear plants throughout the United States. And a quest for excellence aware from an independent assessor in 1995, 1998 and the year 2000 for excellence in nuclear plant operation.

In the area of training, both the company and union have developed and consistently oversee some of the most vigorous training programs within the company for its employees. Operators that operate the plant must undergo fourteen months of intense initial training to even qualify for their jobs, and must re-qualify for their position every six weeks through their careers in a one week training course to insure proper and safe plant operation.

Most of the skilled craft workers were trained through a four year apprentice program in which they were taught their skills and technical abilities and must undergo routine annual training to insure outstanding performance skills are maintained to keep the plant reliable and well maintained.

All employees are also trained on a regular basis for even the unlikely event of an emergency. Quarterly the plant employees conduct drills and practice their skills in emergency response and readiness. They also conduct drills which include representatives from local, State and Federal agencies who coordinate activities for the public safety, as well as regular safety training each and every month.

- Environmentally, the plant must meet very strict and stringent radiation safety standards designed to protect the employees and insure the community health and safety.
- The company consistently monitors the air and water quality around the plants and surrounding communities to insure these standards are maintained.
- Over the past 28 years since the plant has been operational, I believe the employees of the Turkey Point nuclear facility and the company have established themselves as good stewards of our environment. They have clearly demonstrated their commitment of managing and achieving a careful balance between the environment and producing a very cost effective, clean, safe and reliable source of electricity that is possible at all time.
- For these reasons and in closing, I'm asking that the license renewal for the Turkey Point nuclear facility be approved so that we can keep this very valuable source of energy for the community well into the future.

Thank you.

Mr. Cameron: Thank you very much, Mr. Thompson. Do you want us to attach that to the record? All right, thank you very much. Mr. Showen, Mr. Rydholm and Mr. Cullen. Mr. Showen? TPD29 Mr. Showen: I am Steve Showen. I'm a concerned citizen having lived in Dade County for nineteen years. The ultimate consequences of environmental health is human health. Before renewing the 29-1 license at any nuclear power facility the first consideration should be public health and safety. Research by the Radiation and Public Health Project indicate a correlation between operation of nuclear power plants and childhood and adult cancer. 29-2 The Federal Government permits FP&L to release radioactive materials into the environment as a function of normal operations. The National Research Council Committee on the biological affects of ionizing radiation has found that there is no safe level of exposure to radiation. 29-3 Strontium 90 is a major component of permitted radioactive emissions. Never having existed in nature, created only in atomic bomb blasts, in nuclear reactors, it is a known carcinogen. There has been no above ground testing for decades. Strontium 90 presence in the environment is increasing rather than declining, as one might expect. Consider a moment the effects of ingesting and retaining in the body radioactive SR 90 over one's lifetime. The Tooth Fairy Project is a national study conducted by the Radiation and Public Health Project which has begun to tackle that very question, by tracking the levels of strontium 90 in the body, in the baby teeth of question. South Florida is proving to have the 29-4 highest levels of strontium 90 in teeth nationwide, and according to RPHP, curiously, among the highest childhood cancer rates as well. 29-5 Extending the operation of the nuclear power plant for years beyond its design life raises a whole host of safety questions, not the least of which is the matter of accumulation of nuclear 29-6 waste. But the question of the safety of normal operations emissions should have been answered a long time ago. We must determine the radiation cancer link before proceeding. Let's find the answer. Let's put public health first. Mr. Camerson: Thank you very much, Steve, for those comments.

Mr. Rydholm?

TPD30 Mr. Rydholm: Good afternoon. My name is Derek Rydholm. I represent the Homestead Air Reserve Station.

We talked a little bit earlier about Hurricane Andrew and the loss of Homestead Air Force Base to the local community. What's left of that is an Air Reserve installation and I can echo the sentiments of the local community, being an active member of the Military First Committee, and the sentiments that we have shared throughout the base, that the impact of the employees and the partnership that we have with Turkey Point are both felt with us, and I can understand recognizing the City of Homestead and the problems they're having are the problems they've had as a result of the loss of the active duty population of Homestead have been very difficult.

We endorse Turkey Point. We have found nothing but strong support in what we've done with them. Prior to Hurricane Andrew we had an Air Force water survival training center that was based right there at the mouth of the cooling canals and I have utilized that. We've utilized the pavilion for functions in our wing and at our base and have been very happy with that.

As a community member, and I've lived in the local community for twelve years, I live in Key Largo right now, I have a number of friends that work out at the plant and they have nothing but good things to say. They're very content and very happy with their jobs.

Once again, from our prospective as a community partner with Florida Power and Light and with Turkey Point, Homestead Air Reserve Station endorses the renewal of their license.

Thank you very much.

Mr. Camerson: Thank you. Is Mr. Cullen still here from Monroe County? Sorry we kept you waiting.

Mr. Cullen: Good evening. I'm the radiological emergency planner for Monroe County Emergency Management. I'm also a former resident of New York City and I was curious to see why, with the slides that were up here, an analysis is being made between the radiation, particularly strontium 90, for Dade County in comparison to Suffolk County. As you all know, there was a nuclear power plant Shoreham up there and I would assume that was the reason for the analogy. I double checked my facts with my boss, Irene Toner, and Shoreham never went on line. So I would think that any of the results that we're showing for Suffolk County would be based on something other than a nuclear power plant.

Ms. Toner worked at that power plant in emergency planning up until the time it was deactivated or shortly before it was deactivated, and the plant never actually went on line. I don't even believe they loaded fuel up there.

31-1

It's strange though how the more things change, the more they stay the same. I've had an opportunity to read your Impact Statement, and I think you've hit the nail right on the head. I think you've done your homework. I read the report from the Florida Bureau of Health. I work with them on almost a daily basis in my job. I trust their methodology. I trust their analysis. I trust their findings.

I have a problem with some of the other reports that I've read. I think we've had enough on that today.

Just a couple of questions for the group. The half life of strontium 90 I believe is almost 29 years. By half life that means that half of what fell is still around and in another 29 years half of that will still be around. So if we're talking about atmospheric stopping in the 1980's, my calculation is that at least half of that is still around.

I'm also curious with Hurricane Andrew, if we had winds of 150 miles an hour, why the dust would fall in Dade County and wouldn't be blown out to Naples or some other place.

31-2

The other dichotomy -- I don't know if there was any planning in this -- today is the day before the release of Jurassic Park III and while some people may be moan the loss of the dinosaurs, if I'm correct we still have some descendants on earth. We have crocodiles. We have alligators. We have manatees. I think it's significant that in the area around the three nuclear power plant locations in Florida, obviously here at Turkey Point, major ground, major habitat for the American crocodile. We certainly have alligators. I believe the State of Florida has a million alligators. They are not dying off.

Manatees are at the Turkey Point plant. Crystal River is a habitat of the manatees. A number of other endangered species are thriving at the nuclear power plant at Turkey Point. And just to show you how you can twist things around and why you have to really analyze it, I think that if you were to listen to what was being said today, an argument could be made that the Sierra Club supports the use of fossil fuels in environmentally sensitive areas, because that is the only viable alternative to nuclear power. I'm not saving that that is what they're doing. I'm just saying that you can twist things around to make it appear that way.

31-3 31-4

I hope that you will take your own reports, your own analysis and grant the license renewal here. I moved from the northeast because I'm sick and tired of the smog and pollution that's up there, and I know that that comes from fossil plants and I don't want to see any more fossil plants down here in South Florida.

Thank you.

Mr. Cameron: Thank you, Mr. Cullen.

I'd like to thank everybody who is here, still on their feet so to speak, and thank you all for your comments today and your patience. I don't think that we missed anybody who signed up for the meeting.

We are going to be here again tonight. Thank you.

# [Introduction, Mr. Cameron] [Presentation by Mr. Grimes] [Presentation by Mr. Wilson] [Presentation by Mr. Brandt] [Presentation by Mr. Snodderly] Ms. Sprinkle: I'm Patricia Sprinkle and I'm a Miami-Dade resident. I just want to know why they're applying in 2001 for something that doesn't expire for ten years? Mr. Cameron: Good question. Chris? Mr. Grimes: The typical time that it takes to design and construct a power plant to replace a plant of this size is on the order of about ten years. And so the planning horizon for additional generating capacity needs to start now and we're seeing license renewal interest for those plants whose licenses expire in the 2010 to 2020 time frame. These applications expire in 2012 and 13 or 13 and 14. Mr. Cameron: Okay, thank you. Anybody else on the process? Yes, sir?

Transcript of the Evening Public Meeting on July 17, 2001, in Homestead, Florida

In the environmental analysis of renewal, would you say you use the latest technology available throughout the developing world, developed world, for this type of analysis?

Mr. Hancock: I'm Ross Hancock from Homestead Sun Newspaper. I have a question for Mr.

Mr. Cameron: Jim, you may want to cover that after. Charlie has some information on that in his presentation. So let's -- I'll mark that on the board so we don't forget it. We'll come back and answer that for you, okay?

Mr. Wilson: I'd like to speak with you after the meeting if you have any questions about Charlie's presentation.

Mr. Wilson: Okay, to summarize, the impacts of license renewal are small in all impact areas. In comparison, the impacts of alternatives to license renewal range from small to large. Therefore, the staff's preliminary conclusion is the license renewal option is worth maintaining for consideration by energy making decision makers.

Wilson.

To recap the current status. We issued the Environmental Impact Statement for Turkey Point in June of this year. We're currently in the middle of a comment period that ends on September 6th, and we anticipate addressing the comments that we receive during the comment period, finalizing the document and issuing it before the end of January, 2002.

This slide gives you information on how to access the Environmental Impact Statement for Turkey Point. You can call me at the number there and I'll send you a copy. The document is at the Homestead Library across the street. It's available on the web and the address is here on the slide.

The final slide is the addresses for how to provide public comments on the Environmental Impact Statement for Turkey Point license renewal. You can send them in writing to the address given here. You can send them to the E-mail address. You can appear in Rockville and deliver your comments in person, or you can give them at tonight's public meeting.

Mr. Cameron: Okay, thanks, Jim.

Charlie, maybe you'd be a good person to initially address this gentleman's question on, are we using the latest technology to evaluate environmental impacts. I think there was some implications that some of the things that you said that tell how technology is used, but could you address that?

Mr. Brandt: Do you still have that question?

Mr. Cameron: If you have anything more to offer, then please do.

Mr. Brandt: What we used was all of the current information, as well as the information that was presented in the Generic Environmental Impact Statement. That's what I wanted to emphasize with the point about the evaluation of new and significant information.

We go through a process, the NRC goes through a process to stay up to date on all of the research with regard to environmental impacts, detection, capabilities, that sort of thing, that we pay attention to. The Florida Power and Light does the same sort of thing. So we're not relying on technology or analyses or data solely that was generated prior to 1996. The stuff we did for Turkey Point uses the best available current data.

Mr. Hancock: Do you use the technology that was not in general use, say ten years ago?

Mr. Brandt: Our analysis doesn't specifically use what you might call technology. We don't go out and collect environmental monitoring samples, for example. We don't collect tissue

samples or soil samples or air samples. That's what the Florida Department of Health does, and that's the kind of technology that's up to date and current. That's what they are using.

Mr. Cameron: Okay, thank you.

How about questions on some of the findings? Joette, and if you could just identify yourself for us.

Ms. Lorion: Joette Lorion, and I had a question actually, I guess I had two questions. So Jim, I think could answer the first one. And when you said the impacts are small, like I read your report and I saw the impacts of building a solar plant, which isn't my idea of how to use solar, but were large, but the impacts of bringing this old nuclear plant are small. That sounds very strange.

So then I found this quote in your -- and maybe you can explain this to me, because I don't understand it. In your summary and conclusion it says that "Table 9-1 says that the significance of the environmental affects of the proposed actions are small for the impact categories." And then in parenthesis it said, "except for collective off-site radiological impact from the fuel cycle and from high level waste and spent fuel disposal for which a single significance level was not assigned."

Well, I don't understand what that means. Does that mean you're not looking at nuclear waste and radiation and things that are really environmental impacts? Could somebody just explain what that means?

Mr. Cameron: Okay, Charlie, are you going to answer?

Mr. Brandt: Well, I'll take a shot at it.

In the Generic Environmental Impact Statement, both of those impact areas or issues are what they call again, Category I. In other words, they apply to all sites and the impact level is the same at all sites. However, they were not comfortable with assigning a small, moderate or large impact to those two areas. The reasons being there is not a scientific consensus on essentially how to do and the value of large population doses, small doses over a large population over a very long period of time. Both of those analyses deal with populations that are essentially without bounds. EPA has taken a shot at doing this for the repository and they have estimates of cancer risk over 1000 years that range over three orders of magnitude.

So the ability to -- the meaning for that means that there is no single significance level that's been assigned to this. It's essentially uncharacterized.

Ms. Lorion: Well then if I understand you, some of the most significant environmental impacts, such as storing nuclear waste right now on site at Turkey Point and that you could have a breach of that -- I mean, are those not assessed?

Mr. Bramdt: No, storage on site was assessed. It's the storage off site at, for example, the nuclear waste repository, that may go into Yucca Mountain eventually. That part is not characterized.

Ms. Lorion: So all of that is assessed, including radiation from nuclear accidents and it's considered small?

Mr. Brandt: Yes. The on site stuff is, yes.

Ms. Lorion: Okay, and solar is considered large. I just want to make sure I have you right.

Mr. Brandt: Again, not all aspects of solar or any of the other alternatives are large. Only a few of them are considered large. Solar was large because essentially it involved new construction.

Ms. Lorion: Right, but it doesn't involve nuclear waste and that's what I'm -- I just find it very bizarre. So okay, I think I understand it, but I don't.

The other question I have is on small -- wait a minute, I'm trying to remember what you called -- severe accident mitigation alternatives, which shows the young man doing all the design basis accident stuff. I notice in the environmental report that FPL did that they looked at -- or I believe they had in it as a SAMA, a -- of the reactor pressure vessel, but that was not in your environmental report. And Turkey Point has a history of issues with the reactor pressure vessels. Being that this is an old plant and that they may have to be in the old -- when we figure out how to do it and how much it will cost and everything -- why was that taken out of the Environmental Impact Statement?

Mr. Snodderly: I don't believe it was taken out.

Ms. Lorion: I couldn't find it. So if you could tell me where it is.

Mr. Snodderly: We evaluated all the -- you're talking about it was one of the 167 alternatives?

Ms. Lorion: It was in the environmental report that FPL did, but I could not find it in the Environmental Impact Statement.

Mr. Snodderly: Chip, perhaps it could be easier if I could -- if you could show me, you know, where in the environmental report, because everything that was -- all the alternatives that were described in the environmental report were addressed and are in the Environmental Impact Statement. I didn't want to go and reiterate every one of the alternatives, so I broke it down into categories, things that were similar.

Ms. Lorion: But do you know what category it would be in so I could find it?

Mr. Snodderly: Yeah.

TPD34 Ms. Lorion: Okay, we'll talk about that later.

Mr. Snodderly: To talk about I think your specific concern about vessel and annealing the vessel and annealing or the need for annealing will be addressed at a certain point based on the -- of the vessel, and that's going to be continued to be tracked as part of the current design basis of the plant. They have samples within the -- on the outside of the vessel that are being exposed to neutrons and are becoming embrittle. Those samples then come out and are tested to see how embrittled the vessel is becoming. Once it gets to a certain limit, whether that happens in the next five years, ten years, or in the period of extended operation, that's controlled by the current operating license. They're going to be watching that embrittlement and when they get to a certain point, they can't go any further and they'll have to anneal. Now if that's in the period of extended operation, they're still going to have to --

Ms. Lorion: But that might make the alternative of license renewable economically unfeasible. Do you see what I'm getting at?

Mr. Snodderly: Okay --

Ms. Lorion: If you had to do that. Plus, they haven't tested. They were supposed to test many years ago and then test in the year 2000. They never answered my question as to when they plan to test the sample in the reactor vessel which would influence the decision.

Mr. Snodderly: Chip, I think we can take it as -- it's on the docket as far as when they have to take those samples and test them, and I think that that's something that we could -- I don't know if we address it in the appendix or take it as a comment or what you --

Mr. Cameron: Let's do two things at a minimum with Joette's questions. One, if you could have an opportunity to talk to Joette about how the annealing issue in the environmental --

Mr. Snodderly: It's an operating -- I think --

Mr. Cameron: Secondly, I think that although Joette framed the last part in the form of a question, I think it comes through pretty clear as a comment that the NRC should evaluate --you're shaking your head affirmatively.

Mr. Snodderly: I'm sorry. Joette, and perhaps it sounds like you have had some correspondence between yourself and FPL or the NRC and maybe we can look at that, but I think the question you're asking is, is something that has been considered as part of the operating design basis and we should be able to get that answer for you.

Mr. Cameron: Okay. We're going to mark that down to make sure that we provide an answer to Joette on that one.

Do we have other questions at this point? Yes, sir?

Mr. Macfarlane: My name is Andrew Macfarlane. I'm a professor at FIU. And I had a couple of different questions.

One question that I had I guess is related to this issue of strontium 90 which was discussed. And I know that from your effluents you have radiation levels that are specified that the effluents have to have below a certain level of radioactivity, but I was wondering if anybody could clarify if strontium 90 is actually released in the effluents. That's the first question I had.

And the second question is, the national high level waste repository is a bust and it's not clear to me how that is going to progress and I wondered if anybody had any comments on what the impact of that would be on the operations for Turkey Point, if in fact it didn't get licensed.

Mr. Cameron: Okay. Two questions. One is related to the strontium 90 issue which is specifically framed in a monitoring context. Trish, would you answer, can you answer that? And this is Patricia Milligan. She's NRC staff, certified health physicist.

### Trish?

Ms. Milligan: Sure. Our licensee's file with us an annual effluent report every year and they characterize the quantity of the isotopes that are released in the waste stream and all the types of isotopes that are released in the waste stream. And when I went back and looked in preparation for this meeting at the effluent released from Turkey Point, some years there was some strontium found in the waste in very, very small quantities, some years the strontium 90 was undetectable, the quantities were so low.

So what's being released is well below regulatory limits and we're very comfortable with the licensee's reports. We have inspectors that inspect the effluent process. We have resident inspectors that live there and then part of the inspection process from the regions, the inspectors go out and examine those issues.

Mr. Macfarlane: Is that -- (Inaudible.)

Ms. Milligan: It's liquid, it's gas, it's solidified waste, that licensee's ship to burial sites. We know what leaves in terms of waste and effluents from our licensees, and that's required to be reported annually. And that information is available, I believe on our website, but I have to double check.

Mr. Camerson: Thank you, Trish. And for your second question, Mr. Macfarlane, we're going to have Chris Grimes address that.

Mr. Grimes: Yes. I'm going to answer the issue about the national repository in two parts.

The first part is from a national legislative strategy. Congress has established that they want a national repository and a place to collect all the high level radioactive materials. And so from a national strategy prospective, a repository is desirable because there's more to nuclear waste than just fuel rots. There are other sources of nuclear waste that need to be consolidated and put into a safe place.

From the standpoint of the practicality of if it doesn't get licensed but it just keeps going and going and going, what becomes the viability of an extended license? And the answer is that there are spent fuel storage designs that we license for on-site use, and even though it wouldn't be as convenient to continue to store them on the site, there is sufficient space in the design to store spent fuel for extended periods of time and then it becomes again, like the extended plant operation, a financial consideration in terms of the cost of maintaining a facility that is not only operating but serving as a spent fuel storage facility.

Mr. Cameron: Okay, thank you very much. Any other questions before we go on for public comment.

Yes, sir?

Mr. Sanders: Charles Sanders. I'm a resident of South Miami.

When you refer to the radiation regulatory limits, when were those standards established, and I'd also like to know how old is the data upon which those standards were based?

Mr. Cameron: We'll go to Trish Milligan again to answer.

Ms. Milligan: In I think it was the early '90's we revised Part 20 and we brought those standards in to line with International Committee. So those standards were revised approximately ten years ago. Is there another part of your question?

Mr. Sanders: Well, my concern is that any time we review acceptable standards of any kind of a lethal substance, whether it's nuclear or chemical, it seems to go down dramatically every time it's looked at and ten years seems like a long time to me. So I wonder how valid those standards are today.

Ms. Milligan: The International Committee on Radiation Protection issues reports, and they issued ICRP Report Number 60 a few years ago that looked at a lot of new information that's come out, information from Chernobyl, revised information based on the Hiroshima bomb during World War II, and the standards that were revised were smaller or lower but not significantly or an enormously different between the standards here looking at the body of information that's out there. And as we go on in society and as we gather more and more time from things like Chernobyl, we can actually get an opportunity to look at this in long term impact as opposed to short term, gather more information.

So we're very comfortable that the standards that we have in place well protect the safety and health, not only of the public but also our workers at our licensed facilities.

Mr. Cameron: You are quite comfortable because I think you said that we continue to evaluate the work of the ICRP and --

Ms. Milligan: And many members of the NRC staff participate in these International Committees as they're evaluating. So we are part of that process as well.

Mr. Cameron: Okay, let's go to Joette for one more question and then we'll

Ms. Lorion: Yes, now that you're on the radiation issue, I did have one more question.

When you did your evaluation and came up with the small category, did you look at biological magnification and bio-cumulation in the food chain and in the sediments in the cooling canals? And I know you say they're a closed system but they're really dug into porous limestone rock and there is a ground water connection. So I wondered if you checked that at all.

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35-3 35-4

TPD36

Mr. Brandt: Yes. As part of Florida Department of Health's monitoring program, they do monitor fish and shellfish in Biscayne Bay. So they do monitor that pathway, and that's part of what this conclusion is based on.

Ms. Lorion: Okay, thank you.

Mr. Cameron: Okay, thank all of you. We're going to move into our second segment, and we have some governmental officials with us and I'd like to ask Commissioner Dennis Moss of the County Commissioners for Miami-Dade to please address us.

Commissioner Moss: Good evening. First of all, welcome to the NRC. And you know you're important when you travel with your own logo.

A gentleman stated earlier, he mentioned the word reaffirm, and I came by this evening to reaffirm, to reaffirm my support for Turkey Point, our good neighbors at Turkey Point. Having said that, we don't need any other nuclear neighbors in this area, but our good neighbors at Turkey Point, and they've been good for this community over the years.

Now of course, issues dealing with the Tooth Fairy Project and other issues were brought to my attention and when that happened, you know, it caused some concern on my part. But I was able to get a hold of information that I feel comfortable with, if you will, that that's not an issue that needs to be concerned about right now.

Having said that, I'm sure that the Commission, the esteemed body who has responsibility for oversight on these kinds of issues, will continue to monitor these kinds of things and in the future if there are any concerns in reference to the health and safety to the people of this community, I'm sure that that information will be brought to the fold.

But having said that, once again I just want to reaffirm my support for Turkey Point. They've been good neighbors in this community for many, many years and I want to certainly ask that you renew, if you will, their license so they continue to provide power to this community.

Thank you very much for this opportunity.

Mr. Cameron: Thank you, Commissioner Moss.

Next we're going to go to Councilman Sean Fletcher.

Councilman Fletcher: Good evening everyone. First of all, I'd like to thank the NRC for the opportunity to be here this evening.

- As a Councilman for the City of Homestead and an employee of Florida Power and Light, I know firsthand how things happen and work out at the plant. The safe operations of the facility out there just continue to be in the foresight on a day in/day out basis. I've worked at the facility for several years now as the environmental compliance coordinator there at the site, so I know exactly, exactly how the safety issues are handled there at the site through Mr. Hovey's guidance. He's even insured, through further training and development classes throughout the facilities that you know, we continue to move forward on the safe operation of the plant.
- I'm here tonight on behalf of the City of Homestead though, because the plant is a necessity to our local economy as well, and we have worked with the City on many different issues throughout the years and the continued support of this facility of Turkey Point to the City is just great and needed very much.

Thank you very much.

36-1

Mr. Cameron: Thank you, Councilman Fletcher, for coming down to talk to us tonight.

We're going to go to Captain Kennedy, Captain Scott Kennedy at this point, and then we're going to go to Joette Lorion and Joe Wasilewski.

Captain Kennedy?

- Captain Kennedy: I appreciate the time. I'm Captain Scott Kennedy. Most of the people in here know me. I've been with the City Police Department for twenty-two years. I'm here to show my support for the renewal of the license of the Turkey Point facility.
- I would like to comment concerning the relationship as far as a good neighbor that the Turkey Point facility has had with our police department over the years. It's been very instrumental in some of the training. They've been very open. They've been very available as far as providing their facilities, their firearms range, some of their training houses and some cross training of their personnel with our personnel, some training as far as tactical -- I should mention that I'm the tactical commander for our local SWAT Team. We work closely with Miami-Dade SWAT Team in some training exercises at that facility. They're always very open, very supportive. They're a good neighbor. They've provided us with some facilities such as the firing range. Our's was destroyed shortly after Hurricane Andrew. They've been so gracious as to let us use their training facility on a regular basis for firearms requalification. We probably utilize the site once a month for tactical training. Their training house is there that they provide along with the range qualification courses that they provide us.

In addition, they're very good neighbors all year long. Through the hurricane season there's always open communication as far as coordinating evacuation routes, different things that we're concerned, obviously the City and that facility, we have a good communication there. And also when we have large race events down here with the Homestead motor sports, the traffic fluctuation and impact of their personnel at shift changes conflicting with the in-going or outgoing traffic flows, it's good to have that open communication and a good working relationship with the facility.

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So on behalf of the police department, it's very good, even knowing that they aren't specifically within our jurisdiction, they're actually about two to three miles outside of our jurisdiction, in my twenty-two years of experience I've had a very good close working relationship with all the personnel out there. They've been very supportive in wanting to interact with local, State and Federal law enforcement. And I would like to affirm my support for renewal of the license.

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Mr. Cameron: Thank you very much, Captain Kennedy.

Next we're going to go to Joette Lorion and then Joe Wasilewski of Natural Selections of South Florida.

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Joette?

TPD34

Ms. Lorion: Good evening. My name is Joette Lorion. I've been living in South Florida for a little over twenty years now.

I remember when the Chernobyl accident happened and I read an article. And I think it was the head of the Atomic Energy Commission in France, was asked about Chernobyl, and he said, and I never forgot this, he said, "They forgot it could be dangerous."

34-2

And it has always stayed in my mind, because when I come in this room tonight and I see the cheerleader like atmosphere and the Boy Scout wings and everything, I just want to remind you that nuclear power plants can be dangerous, and that's why you have the Nuclear Regulatory Commission. How dangerous can they be?

34-3

Well, government studies stay that a full scale accident at Turkey Point could cause 29,000 immediate deaths, 4,000 delayed death, cause 43 billion dollars in property damage, and the melt down of the spent fuel pool, the worse case accident, Government documents in the spent fuel pool can contaminate 224 square miles radius of the area of land.

So you have to remember that of course, we want people to operate these plants safely, but there is always the chance that you could have an accident. In my opinion, as somebody who's been involved in the nuclear watch dog process for probably, gosh, longer than I want to think

about, many lawsuits up to the Supreme Court and back, is that public involvement is the cornerstone to safer -- I won't admit nuclear power is safe because it creates nuclear waste which I can't say is safe because we leave it to future generations -- but public involvement is very important.

And I must sadly tell you that having been out of it for awhile and come back in to the NRC process, I've seen a big change in the Atomic and Safety Licensing Board process, this relicensing process, and the big change has been is that they're going to have meetings like that, meaningful public involvement where you can have hearings, you can question them, you can bring up significant issues about the integrity of the reactor pressure vessel and things like that, the aging of components, what if a hurricane hits the plant.

The Atomic Safety and Licensing Board doesn't want to look at those issues and they denied me a hearing. They even said in their order that issues like Everglades restoration, which are a huge environmental issue in South Florida, do not have to be looked at in the licensee's environmental report or in this Environmental Impact Statement.

Now, I'd like to get to some specific comments on the EIS because I think that's where the Nuclear Regulatory Commission is really going wrong. Because I think that their concept of the National Environmental Policy Act has not evolved at all. I don't know if they're keeping up with the case law. I'm not a lawyer but I'm involved in a number of NEPA cases with people that I work with and I know it quite well and I know the cases quite well. And I'm very concerned about this process.

First of all, it's a bifurcated process in which they are going ahead with the whole relicensing process at the same time they're evaluating the environmental impact. Well, under NEPA you're required to take a hard look at environmental impact, and it's not to be prejudiced, a prejudiced decision that rubber stamps something you've already decided. So by going ahead on this track with the relicensing without evaluating the environmental consequences first, I personally don't think that that complies with the National Environmental Policy Act.

Also, I don't know -- I asked the question about analyzing cumulative impacts in the environment and I understand you said that State of Florida tests some fish and different things like that. But I'm not sure that the kind of analysis you have in your report is extensive enough to meet the requirements of NEPA under the cumulative impact requirement.

Again, I could find nothing about the reactor vessel and the integrity and any mitigation actions or what it would cost to anneal that vessel or whether that would make it cost prohibitive to go ahead with this course of action.

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The study of alternatives I think was very obscure. As I just said, in the report it says that solar 34-9 has a larger environmental impact. And of course it looked at building a solar field instead of using solar power on your roof where it's supposed to be in a small scale application. But even then, solar power does not create all this nuclear waste that some of the -- I mean the standard for disposing of it is ten thousand years. That's the EPA standard to keep it out of the 34-10 environment. Some of it's in the environment for hundreds of thousands of years. That is being stored right now on site at Turkey Point because they don't have any place right now to move it. And until they come up with a solution to that nuclear waste problem, this is my personal opinion here, I don't think they should be creating that nuclear waste. But I think in the 34-11 Environmental Impact Statement you need to look, and I don't think it needs to be generic because I think Turkey Point is a special -- this whole South Florida region is a special place. I think there is significant new information that requires a site specific EIS, not this generic EIS. It's like taking generic medicine. I had a doctor that would never give me the generic because, "Here, you have to go get the expensive stuff."

So I think that under NEPA a site specific EIS that looks at most importantly the Everglades restoration effort, which was not around when Turkey Point was built, and I know many of you don't like the Homestead Air Force Base decision and what's going on, but you do know that crime risk and the Water Resource Development Act of 2000 when they passed that Act which was committing to a 7.8 billion dollar restoration in South Florida region, they even said that the use of Homestead Air Base has to be consistent with Everglades restoration.

So I would think that anything that's going on on future use of Turkey Point or whatever kind of plant would be an alternative to that, should also be looked at in the context of Everglades restoration, and I think that's a significant environmental issue that has a page and a half in that EIS.

I reviewed just yesterday one component of one small restoration project, a Tamiami Trail little project. It was this big. The EIS on renewing the license of Turkey Point that has significant issues is this big.

Now the Everglades restoration document is 4,000 pages. So I think that this EIS is woefully inadequate in looking at the Everglades restoration issue.

I think I just have a few more things. One specific thing that I brought up in my hearing where I was denied a hearing, or my pre-hearing, is that neither in the Generic Environmental Impact Statement nor in the Turkey Point supplement do I find information on a hurricane hitting Turkey Point and the impact that would have on an aging plant, because you have to remember, this is not a new plant. We are part of an experiment here of running a nuclear plant longer than it has ever run in this country.

Now some of you may want to do that. Maybe I don't, but maybe some of you do. But we all want to know what the risks are environmentally and to our health and safety of operating that plant. I personally don't like to fly in old airplanes. Some of you may not care. Okay, but I think I have a right to know, you know, what the shape of that plant is that's in my back yard that can impact my environment, my home and my family.

The Endangered Species Act. I think your scope is again woefully inadequate because you only look at the plant site and transmission corridor. An accident at Turkey Point or a large radiation release could impact a much larger area. An accident could definitely impact almost all of the Everglades or a large part of the central Everglades which has about 64 threatened and endangered species. And I know that you haven't looked at that.

I will be making written comments on this that will mostly be tailored to I don't think you've complied with either the spirit or the intent of the National Environmental Policy Act. And as you know, a Federal Judge may not agree with that. But if a Federal Judge would agree with that, that would of course vacate any decision that was based on something that does not apply with the Act. And if you're lucky I'll be too busy to file a Federal lawsuit, but don't count on it.

Thank you.

Mr. Cameron: Thank you, Joette.

Could we have Joe Wasilewski from Natural Selections of South Florida?

TPD38 Mr. Wasolewski: Good evening, everybody.

I'm a wild life biologist in South Florida since 1973, and work for a contractor who contracts to Florida Power and Light for the last twelve years.

I'm extremely concerned about safety issues as we are all, not only my family, I even have a granddaughter down here now. So we're going to grow her up in hopefully a nice safe atmosphere. In fact, I think it was more dangerous driving to this meeting than what I'm hearing about today.

The cooling canal system which I've worked in the last twelve years, I'm sure wasn't designed for what's happening in there now. I'm sure a lot of you have heard about the crocodile comeback. Excuse me, I'm a little hoarse, three shows today at the Parrot Jungle.

Anyway, I'm sure the engineers didn't design the cooling canal for the crocodile, but the crocodiles have certainly came in. And as early as last night we got our tenth and eleventh nest for the year, caught 36 babies that I should be marking right now, which I will be, and releasing

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probably in the morning. And every year we're producing, or the cooling canal system is producing over 300 crocodile babies. It's really a very good significant environmental story.

Talking about environmental concerns, I see regularly in my twelve years, falcons, bald eagles daily. Standing you can see a manatee, a shark, a bald eagle and a crocodile, not moving. So it's really a special place down here.

38-2

If we were going to talk about building a nuclear facility I would say no, because you can't replicate what's there now. But it's already there. It's working smoothly. With the experts they have that know their field, I say let it go, give them the license renewal and go on from there.

38-3

In fact, talking about environmental concerns, I didn't really hear -- I don't know if you folks know the eighteen mile stretch to the Keys, Florida Power and Light owns a lot of that land and they're restoring 14,000 plus acres to its natural resilience. They're restoring the water flow, taking out exotic injurious plant life and it's coming back.

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So I just want to support the new license. Thank you.

Mr. Cameron: Okay, thank you very much, Joe.

I'd like to take some people that we didn't have a chance for this afternoon and then ask the representatives of Florida Power and Light to talk to us. I'd like to first go to Mary Finland who is executive director of the Homestead Chamber of Commerce. Then we're going to go to Elvira Williams, Kristy Doyle Bailey, Tim Williams and Kim Sovia.

Mary?

TPD39

Ms. Finlan: Thank you. First of all, I feel like we have done this already. I was here in December and I just wanted to reiterate the stand of the Board of Directors of the Greater Homestead Florida City Chamber of Commerce in support of the license renewal, and a resolution that I will submit. I won't read here and bore you further but I will submit it in writing to you here.

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And I just, you know, want to stand up here and say that I live in the community and I work in the community. We are not a large Chamber of Commerce, but with a membership of nearly 600 people we are the largest volunteer organization in the Homestead Florida City community. And as a business community it would just be unconscionable for the Chamber of Commerce to not support the renewal of the license for Turkey Point. I just want to reiterate that and lay this in your paper records and back it up with that.

Mr. Cameron: Okay, thank you very much, Mary. And we'll attach that to the transcript.

Is Elvira Williams here?

Okay, Kristy Doyle Bailey?

Ms. Bailey: Recently many problems have come to light as a result of the relicensing activities for Turkey Point.

- 40-1 One, there are new and significant information about the baby teeth study.
- Two, the commercial airport safety assessment.
- Three, the storage of high level waste.
- Four, the releases of radioactive waste into the environment.
- 40-5 And five, the deterioration of aging plant safety components.

Each of these questions is significant and deserves study and thoughtful consideration. Rushing to complete the process and prevent safety hearings is not in the public interest.

Therefore, the Miami Group of Sierra Club calls for safety hearings and an Environmental Impact Statement that studies site specific health and safety issues.

Thank you.

Mr. Cameron: Thank you very much.

Tim Williams?

Okay, we'll catch him when he comes back. How about Kim Sovia?

TPD41 Ms. Sovia: I don't think I need the podium. I'll just stay back here so I can look at everybody.

For the record, my name is Kim Sovia. I have been a resident of this community, specifically Homestead, for the last twenty-five years. A little bit about my professional background.

I was with the Department of Defense for five years and also the present CEO of the Greater Homestead Florida City Chamber of Commerce. I also hold numerous board positions within Miami and Dade County. I've been heavily involved in a lot of the EIS studies that were done

concerning Homestead Air Force Base closure. I am currently employed by the world's largest communications company, with -- Broadcasting.

But I'm here as a concerned citizen in support of FP&L and Turkey Point. So what I'd like to do is let you all know that I've had numerous occasions to work with them on key community
 environmental issues affecting South Florida. And having the cost effective convenience of Turkey Point has been a huge benefit to Miami and South Dade, and I'm specifically talking

about the cost for electricity.

More importantly, is their on-going strong commitment to sensitive environmental issues as proven in FP&L receiving Environmental Business Practices Award from the Greater Miami | Chamber of Commerce. The Turkey Point property is also a testament to that commitment since most of the property remains in its natural habitat.

What impresses me the most is their safety record. Having received numerous superior ratings through the years from the NRC, plus having been rated as one of the safest and most reliable nuclear power plant in the world gives me a very comfortable feeling having them as a much needed neighbor for the next twenty years, as they have been for the current twenty-five that we've been all living together.

With their record I would like to go on stating that I am -- excuse me.

With their record, I would like to go on record condoning the development of yet another power plant when we have one with such a superior record.

And in closing, the tremendous economic impact that they've been to the community, which is well over 60 million. It's a necessity for the continued survival of an already endangered community, economically endangered community. So I implore you to take a strong look at the renewal license for FP&L and Turkey Point.

Thank you.

Mr. Cameron: Thank you for those comments.

Tim Williams?

TPD42

Mr. Williams: Hello. My name is Tim Williams and I'm speaking tonight as an individual, as a parent and as a resident of the local community all of my life. I'm actually a fourth generation resident of this community.

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I think the Draft EIS so far is an excellent document that obviously has been well put together and covers the items required by law.

Two things, however, remain as my most important reason for supporting the renewal of license at Florida Power and Light nuclear facility. And those two things are:

- 42-2 Number one, the abundance of locally generated affordable power. If that wasn't obvious at the earlier meeting which some of you mentioned that was already conducted here, that should be painfully obvious as we see the situation in California. And also the nuclear power is produced here in an environmentally sound manner.
- Number two, what would happen to the local environment should Florida Power and Light be denied relicensure? I know some of the folks spoke about that component of the GEIS.

On the first subject my comments are based on my involvement with Whiteheart and Community Centers, Inc. In that capacity I've been their past president, I've sat on their Board of Directors, and we administer Head Start and child development services to over 450 children in the local community at five different centers through the cities of Homestead and Florida City.

In that capacity I've been part of the United Way Success by Six Program, and the Success by Six Program took all the available data collected from many studies and reports and came up with a program to effect change in impoverished communities, targeted at the zero to six year old child. The Florida Department of Children and Family Services as well as the Miami-Dade County Department of Community Affairs has the information from those studies and reports. So if anyone is interested they can contact those agencies to receive that information.

Conclusively, the findings prove that a balanced diet and exposure to education and certain types of structure stimulation in the early years contribute dramatically to the child's ability to develop normally. We're talking about the size of the brain, and their ability to function in life. Clearly, affordable power is a key component to that. So when we talk about children, and I know there's been some discussion about some things that have been in the press, beyond a shadow of a doubt, available affordable power is very important to child development.

The second point comes from my personal experience with the Biscayne National Park Property Development and Review Committee, of which actually our chair of that committee is here tonight, and the Biscayne Land –

Now while I'm not speaking on behalf of those groups, let me tell you, because of my experience there I have a first-hand and working knowledge of the restored environment and the continued commitment of Florida Power and Light to maintaining the pristine environment out there surrounding Turkey Point nuclear power plant.

The vast expanse of primitive wetlands, the natural areas that Florida Power and Light are responsible for, we must keep that in mind when it comes to license renewal. By renewing the license it is my opinion that they're going to be able to continue to maintain and improve what they've already started. And they are exemplary in the field. I don't think there's any other ongoing active restoration -- there's some contemplated, the Everglades restoration -- that's being done at the level they're currently working at.

42-4 So please continue and I hope the NRC finds favorably for license renewal.

In conclusion, the Draft looks at the affects of relicensing in three categories, small, medium and large. It's my opinion that if you don't relicense this facility, obviously the impacts are going to be huge.

So thank you very much.

Mr. Cameron: Okay, thank you, Mr. Williams.

Let's now hear from the representatives of Florida Power and Light at this point. First we're going to hear from Mr. Robert Hovey who's the vice president for the Turkey Point plant.

Mr. Hovey?

Mr. Hovey: Good evening and thank you, Mr. Cameron.

My name is Bob Hovey and I'm the vice president of Florida Power and Light Company's Turkey Point nuclear power plant. I appreciate this opportunity to speak to you today about FPL's application for renewal of the Turkey Point operating licenses.

Assisting me is Liz Thompson. Liz is our license renewal project manager who will address more specifically the findings contained in the Draft Supplemental Environmental Impact Statement.

I would like to thank the Nuclear Regulatory Commission for arranging and holding the meeting today. FPL strongly supports the openness of this process and during the last two years we have been involved in dialogue with the community surrounding Turkey Point. We've met with

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more than a thousand homeowners, community groups and Government officials. Our purpose was to share the information about license renewal and plant operations.

We believe that the community interests and priorities should be incorporated into not only our license renewal of Turkey Point, but overall operations. Community input is an integral part of the license renewal process. The application we prepared consisted of two parts, a safety analysis and an environmental report. Our application has been open to public review for some time and the Nuclear Regulatory Commission has requested comments from interested parties.

Just as the process has been open for reviewing the environmental aspects of license renewal, the safety analysis is following a parallel path. The safety analysis is going to go through a series of open meetings and the NRC is currently conducting an intensive review of the plant systems to insure safe operation for an additional twenty years.

The public meeting and the scoping of NRC's environmental review of our license renewal application was held here in this room back in December of last year. Today's meeting continues the open process of seeking public input on license renewal. We welcome this opportunity to gain additional community input on the environmental aspects of license renewal.

I would like to thank the members of the community represented here today for taking time out of your busy schedules to share your views and ideas on this Draft Supplemental Report with the NRC. And we appreciate the support provided us by the South Dade community. And I'd also like to thank the NRC staff and the members of National Laboratories, the review teams, for the work in preparing the Supplemental Evaluation Impact Statement and Turkey Point license renewal.

I believe the report reflects a comprehensive assessment of the environmental impacts of license renewal. With that said, let me provide a little bit about my background.

I came to Florida Power and Light in 1995 as the site vice president for Turkey Point nuclear plant with a Master's Degree in Business Administration, a Bachelor of Science in Nuclear Engineering, and a Bachelor of Art's Degree in Business Administration. I also spent time at other nuclear facilities and utilities around the United States and with the U.S. Navy in the Submarine Service.

On a personal level, my wife and I have six children and we live here in the South Dade area. As vice president at Turkey Point my first job and my primary focus is the health and safety of my family, the Turkey Point employees, my friends and this community. Their well being comes

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before all else. And when I look at the evidence presented in the Supplemental Environmental Impact Statement and other license renewal documents, I'm assured of the plant's safety and positive impact on our environment.

I believe the case for continued operation of Turkey Point is strong. And let me now address four areas; our performance, the economics of Turkey Point electricity, environmental stewardship, and community presence.

43-4

First, the performance of our plant is top notch, thanks to our employees. Their time and effort and dedication have resulted in Turkey Point consistently being recognized as safe and one of the most reliable and efficient plants in the industry. Our employees have also worked diligently through effective maintenance programs to sustain the option for continued plant operation well beyond the initial forty year license.

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Not only does the NRC monitor our performance, other independent agencies also agree that our operations are safe and have no adverse impacts on the surrounding community. This includes the State of Florida's Department of Health, which conducts monitoring and sampling of the South Dade area around Turkey Point.

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Today you may hear claims by an activist group opposed to nuclear power called the Tooth Fairy Project, and that Turkey Point is harming people in Miami-Dade County. Let me assure you that their claims are just not true. As a parent I understand that we all want to protect our children's health and we want answers when any child is suffering from cancer or any type of illness.

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The group organized against Turkey Point claims the answers for some types of cancer are found in the plant's operation. That is not the case. I could not in good conscience work at a facility that could be harmful to any child. Having worked at Turkey Point for many years I'm convinced that the environment around Turkey Point is safe for your children and mine.

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The group's claims have been repeatedly rejected by Federal and State health agencies as well as by leading scientists in the radiation protection field, some of which are in this room here tonight.

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For example, in 1990 the National Cancer Institute conducted an independent study of 62 communities around the United States, U.S. nuclear facilities in operation for at least ten years. The agency confirmed that there was no increase in health risk of living in proximity to nuclear power plants. The NRC also appropriately addressed these claims in the Draft Supplement Environmental Impact Statement and concluded that the Tooth Fairy study shows no link to adverse health affects.

So the bottom line, forget the fairy tale; Turkey Point is safe.

Another factor to consider is our ability to help meet Florida's energy needs. Turkey Point power helps sustain our economic growth and maintain our quality of life. Our plant is strategically located in the FPL generating system to help maintain that system and Turkey Point is among the lowest cost producers of electricity in the FPL system, so we'll help keep the electric bills low for all of our customers. And that's good news for our customers.

From an environmental standpoint, Turkey Point remains a guardian of our natural resources. I was going to say some more but I think Bill Wasilewksi said it better than I'm going to be able to say it, so I'll skip through that. But leave it at recognizing that we placed over 14,000 acres of sensitive wetlands and permanent conservation where the land is being restored and preserved to the natural condition.

Finally, what does Turkey Point mean to our community? We asked our neighbors and they told us that we're an important part of the economic factor in the community, one that they want to see remain as a viable contributor. The payroll for 800 some employees, tax dollars, purchases and contributions to local United Way agencies help in this area.

But perhaps more importantly is the role our people play in the community. Our employees are active in churches, scout organizations, PTA's, little leagues and even local Government. And you heard some of our local Government representatives here today.

I have heard testimony to our community role. Many members of the local community spoke in support of the Turkey Point license renewal in the December 2000 public scoping meeting.

In summary, I believe that renewing the licenses of FPL Turkey Point nuclear power plant is in the best interest of our community in continuing to provide safe, clean, reliable and low cost electricity to our customers. That's my professional opinion as the vice president of Turkey Point and my personal conviction as a parent and an active member of this community.

Now I'd like to turn it over to Liz Thompson, our license renewal project manager, to provide some additional details on FPL's license renewal efforts and comments on the Draft Environmental Impact Statement.

Ms. Thompson: Thank you, Bob. Good evening, everyone. I would also like to thank the Nuclear Regulatory Commission and each of you here today for taking time and your involvement in the license renewal process.

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It's a pleasure to be here today to share some thoughts about the Supplemental Environmental Impact Statement for Turkey Point license renewal.

As Bob said, my name is Liz Thompson and I'm the project manager for the Turkey Point license renewal efforts. I've worked at the site for about fourteen years and been personally involved, not only in license renewal, but in operations, maintenance and engineering. I have first-hand experience of the team work that has enabled the plant to become a top performer in its class and a viable candidate for license renewal.

License renewal was not a process that we entered into lightly. We realize we have a responsibility to the community in which we're located. In preparing our license renewal application we were extremely careful to insure that programs and procedures are in place to assure safe operations and that the plant is having a positive impact on the environment. That process is not something new. It's how we run our business every day.

The NRC has now evaluated the environmental aspects associated with our license renewal application. The Supplemental Environmental Impact Statement for Turkey Point license renewal provides a thorough evaluation of the 92 environmental issues addressed in the regulations.

This very broad approach has been thoughtfully designed and is intended to cover a wide spectrum of consideration that need to be evaluated in renewing our operating license.

The Supplemental Environmental Impact Statement concludes that the environmental impacts from operating Turkey Point for an additional twenty years would be small and less than the impacts of other energy source options. This conclusion is based on the detailed analysis of the impact areas.

The analysis in the Supplemental Environmental Impact Statement also looked at replacing the two reactors with equivalent electricity producers, new nuclear reactors, oil or gas burning generators and even solar panels, and concluded that those options would produce greater pollution and ecological impact.

We have been told by our neighbors that clean energy is important to them and we believe Turkey Point provides that benefit.

But another reason I believe that Turkey Point should operate for an additional twenty years is to be able to continue the award winning conservation work that was initiated almost thirty years

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ago. I'm proud of the work we do to preserve and protect the environment. We believe in our responsibility to operate in harmony with the environment. Turkey Point's unique location successfully combines modern technology with a strong environmental commitment.

In recognition of our efforts in land preservation FPL was presented with the Edison Electric Institute Environmental Award for Turkey Point's land management work this year, and the Greater Miami Chamber of Commerce Environmental Award in 2000, recognizing FPL's efforts for preservation and education on the endangered American crocodile. These efforts have attracted world wide attention, being featured in National Geographic Magazine and on television, CNN and the Discovery Channel. This preservation of the site and the species present there will continue through the renewed operating license period.

Aside from the very important environmental benefits of continued Turkey Point operation, license renewal is also important for meeting the energy needs of South Florida. Florida is growing approximately two percent per year and the electricity consumed per customer is also increasing. FPL must provide power plants to keep up with this growing demand and insure an ample supply of electricity.

This means keeping solid performers like Turkey Point as a viable option as part of FPL's generation network, one that uses a diverse energy mix to insure that when our customers flip that light switch the electricity is there.

As Bob Hovey mentioned, there are many additional benefits that Turkey Point provides to the community. Our neighbors have told us that taking away Turkey Point would have a big impact on this community and we agree with that conclusion.

The Turkey Point employees want to remain a part of this community and as your neighbors. I believe extending our operations is more than renewing our license. It's about renewing the future of South Florida. We're committed to safely and reliably operating the Turkey Point power plant long into the future to meet the area's energy needs while protecting the environment.

Thank you.

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Mr. Cameron: Thank you, Liz. Thank you, Bob.

Let's go next to Noreen Surge, and I apologize if I pronounced that incorrectly, and Norma Martin. Okay, well maybe they'll return.

How about Stewart Maloney and Dan Cutler. Dan Cutler?

I know these two people are here. Harlan Keaton from the State of Florida and then we're going to go to Dr. Dade Moeller.

Harlan?

Mr. Keaton: Thank you. I'll make this kind of brief.

My name is Harlan Keaton. I'm with the Department of Health. And we are the people who do the sample collection and analysis around the nuclear power plants there at Turkey Point. We also do St. Lucie and we also do Crystal River.

And basically what we want to do is to get across to you that the analysis that we do there at those facilities, through all of the years before the plant and since the plant's been in operation, we do things like test water, fish, crustacea, sediment, sand, various other environmental samples there, and basically what we look for is a base line of any increase in radioactive materials, any increase in environmental dose there that the public might pick up, and to date we have found a stable environment, no increases in radiation and no increases in radionucliodes that can be found in the environment.

Another thing, our Department of Epidemiology in Tallahassee has been reviewing a study that was done called the Tooth Fairy Study and to that they have done an analysis which I would like to read the summary of. It's several pages, about seventeen pages. I'm not going to read it all. It has been presented to the NRC. And the summary goes like this.

"In summary, we reconstructed the calculations made by the RPHP" -- that's the Tooth Fairy people -- "using the same data from" -- I messed up earlier so I'm not going to repeat that mistake -- "using the same data from which they base their claims. RPHP claims that there are striking increases in cancer rates in Southeastern Florida counties and attributes these increases to radiation exposure from nuclear reactors.

Given the data to reconstruction calculations and graphing out our findings, we have not been able to identify unusually high rates of cancers in these counties. As we would expect, just by chance, some county rates appear higher than State and national trends and some appear lower. These rates fluctuate from year to year and in some situations large fluctuations occur with a small number of cases in small underlying county populations.

One has to use careful scientific and objective evaluation of these fluctuations to avoid misinterpretation. Careful analysis and observation of the date presented here does not

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support the alarming claims made by the RPHP regarding cancer mortality rates and trends in Southeastern Florida counties when compared with the rest of the State of Florida and the nation."

That's the summary review, this report, it's available. And there are the graphs there for everybody to see.

I'd also like to quickly read the cover letter that goes out with this.

"Dear Interested Parties: Much concern has been relayed to us about statements made by the Radiation and Public Health Project Incorporated, and the March 28, 2001 announcement. RPHP has implied that there are large increases over time in cancer rates in Southeastern Florida counties and they attribute these increases to radiation exposure to the Turkey Point and St. Lucie power plants.

The Florida Department of Health takes these assertions seriously and has reviewed the data used by RPHP regarding cancer rates in Southeast Florida. Using this data to reconstruct calculations and graphing the results we have not been able to identify any unusually high rates of cancers in these counties. Attached is the Bureau of Environmental Epidemiology report addressing this data and the RPHP findings. Should you need any further clarification please feel free to contact me at 850-245-4299," and it's signed "Sincerely, David R. Johnson, Medical Doctor, Master of Science, Bureau Chief of Environment Epidemiology."

These reports are available if anybody would like to see them. With that I conclude this presentation.

Mr. Cameron: Okay, thank you, Harlan, and thanks for putting in the effort today to bring us news of that study.

Next we're going to go to Dr. Dade Moeller. Dade?

Dr. Moeller: My name is Dade Moeller. I was born and reared in Florida. I went to twelve years of public school here. After I finished school I enlisted in the Navy. World War II was going on and I served in the Navy and then fortunately had the G.I. Bill and could go to college.

This afternoon we had a similar meeting and Dr. Ernest Sternglass and Dr. Jerry Brown were here and presented the results of the Tooth Fairy Project, and I know a number of you are very interested in that.

You'll notice though that they're not here tonight. Their primary objective is one of deception. Their primary objective is to breeze into town, appear before the T.V. cameras and then dash on their way, and hopefully they'll get out of town before anyone can catch up with this misleading information they have provided you.

I came down here on my own. I don't live in Florida at the moment. I live in North Carolina. But I'm a senior citizen and so I can get, you know, frequent flyer tickets at a very reasonable price. I can fly round trip anywhere for \$300.00. So I flew down here on my own. And why did I come down here? Well, because I'm up to my eyeballs in the misleading and distorted information that these gentleman present. And my time is limited so let me get to the bottom line. I know it's late. I'm going to try to move along very rapidly.

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The Tooth Fairy Project is exactly as we've heard from several of the preceding speakers. It's a fairy tale. And what is my opinion of it? Well, it's unadulterated gobbely-goop. That report is one of the worse examples of junk science that I have ever seen in my career. Now I hope if there are any newspaper reporters here that you don't mis-quote me, because I said what I meant to say.

Now why can I say that? Well, let's look at the Tooth Fairy Project in some of the technical detail, and as I move along I'll relate to you some of my technical qualifications.

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The data they present is in terms of picocuries per gram of calcium in the teeth. Why didn't they report it in terms of the dose? The dose is what's important. The reason they didn't report it in terms of the dose is because the dose is so low. I calculated the dose and it is in the range that is below the value of the annual dose rate that the National Council on Radiation Protection and Measurements deems as a negligible dose. They say such a dose is so low you should forget about it and get on with something important.

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Now who is the National Council on Radiation Protection and Measurements? They are a group chartered by the U.S. Congress with the express duty to analyze information on the health affects of radiation and to present in reports and to present to the public in reports that the public can understanding by reading and so forth, and Dr. Sternglass and Dr. Brown said, "Oh, we need the study about the teeth, because no one knows anything about the health affects of strontium 90."

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Well here's Report 110 of the National Council on Radiation Protection and Measurements. Why don't they read the report? It's some aspects of strontium radio-biology. It gives all of -- a summary of all of the information on the health affects of strontium 90.

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Furthermore, they say send us \$50.00 -- you know, send us a tooth and \$50.00 and if we can get 1000 teeth from Dade County we can confirm the clinical relationship between strontium 90 and its health affects. That's hog wash. Why do I say that? I say that because if the doses that are involved, any good epidemiologist, and they're pseudo-epidemiologist, they're practicing in a field they don't understand, anyone who had bat brains about epidemiology would know that it takes over a million, you'd have to follow a million children for over a hundred years to demonstrate whether there was any relationship.

Now why can I stand up here and say this, say these harsh things about them? Well, I used to work for the Public Health Service, United States Public Health Service, and I could have never stood up and said anything like this. After finishing with the Public Health Service I was a Professor at a small college in Boston, Harvard, and I couldn't speak out then. But today I can.

As I say, I paid my own way down here. I'm beholden to no one. I'm not for Florida Power and Light. I'm not for the State of Florida. The main reason I came here is because I love the State of Florida and I was born and reared here and I want to come back and recompense them -- is that the word -- reimburse them for what they've given me.

Okay. I was in the Public Health Service for eighteen years. What did I do? I worked as a laboratory radio-chemist at the Oak Ridge Laboratory from 1956 to 1957. For five years I directed the Northeastern Radiological Health Laboratory, which monitored the strontium 90 in children in the fourteen Northeastern States of the United States. The Public Health Service divied the nation up into groups and I was responsible with roughly 100 strongly motivated supporting employees to monitor for strontium 90 in those states. And they're always saying, "Oh, no one's ever monitored for strontium 90." Hog wash. They do it all the time.

I was also for five years director for Radiation Protection Training for the U.S. Public Health Service. Then I went to Harvard. For twelve years I was chairman of the Department of Environmental Sciences. And for the last decade I was Associate Dean at a Harvard School of Public Health. I think that counts for something.

Okay, what have they done? They distort. I'm pressed for time. Let me give you a couple of examples.

Sternglass and his cohorts said the Prairie Island plant in Minnesota was responsible for increased breast cancer. Well, the Minnesota Department of Public Health, just as the Florida Department of Health, used their data. And what did they find out?

They found out that in analyzing whether the plant could possibly have had any impact on breast cancer, if they found one of the neighboring states had a low frequency of breast cancer,

they moved the county out. If they found the county a little farther away than their limit and it had a high breast cancer rate, they moved it in. Well, they are just a very deceptive group of people.

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At Millstone Plant, they said the Millstone Plant in Connecticut was responsible for the strontium in the milk, you know, in some dairy farms, 50, 100 miles away. Well, bless EPA. The U.S. Environmental Protection Agency went in and did what -- to explain it to you, it's like DNA test. You know, you can convict a person who murdered someone ten years ago because of DNA. They went in and analyzed the strontium and it showed it was not from any nuclear power plant anywhere. It was from fallout.

46-2

Well, why doesn't the Tooth Fairy group just pay someone to analyze the strontium the cesium in the environment around here. You'd find it's not from Turkey Point.

So, let me wrap it up. Don't be taken in by this group. They have absolutely no shame whatsoever. In 1971 I was president of the Health Physics Society and the past presidents were so disturbed by Sternglass and his group -- they've been in this business over thirty years -- so disturbed by them that they issued a press release which was signed by every living past president of the Health Physics Society, which is a premier radiation protection society in the United States, and they all said Dr. Sternglass is an embarrassment to the field of radiation protection and we wish he would just shut up.

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Then in 1980 -- but what did the National Academy of Sciences do? They -- EPA financed a committee to evaluate the doses from radiation and the health affects. We invited in Sternglass. I was on the committee. I'm not talking hearsay. I was there. I've been there. We invited in Dr. Sternglass and said tell us. He said, "I'm going to follow up with some data." Twenty years later no data.

If you'll read that committee's report you'll find they said the gentleman did not know anything he was talking about.

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Okay. If you had your faucet in the kitchen is leaking, would you call in an anthropologist or a physicist to fix it? That's what Dr. Brown and Dr. Sternglass are. No, you'd call in a licensed plumber and get it fixed right. In a similar manner, if your spouse or your child or if you yourself were sick, you'd want a medical specialist, wouldn't you? And if it involves anything that was the least complicated, you'd want that person to be Board Certified, you know. And there are certification boards for people in the radiation protection field, it's the American Board of Health Physics. I took the exam. I'm Board Certified. There is board certification for environmental health people. I took the exam. I worked hard, I studied, I took the exams, I passed, and I'm Board Certified.

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This morning, because I didn't think about it until then, I looked up Dr. Brown and Dr. Sternglass. They're not in the list, no where. So please, don't send them any money.

We're all interested -- as I close out -- we're all interested in anyone who can bring to our attention some unrecognized hazard from radiation. But we're not interested, I personally have no patience with the people who breeze in this town, pass out false information, then catch their plane home. Next month they'll be in another state. They've done this for over thirty years and we're not going to stop them today.

Thank you.

Mr. Cameron: Thank you very much, Dr. Moeller. And Dr. Moeller referred to this afternoon's session. If anybody is interested in seeing what was said at that session, the transcript will be placed on the web from that meeting.

What I'd like to do now is send -- we'll try to come back and answer some questions perhaps, if we have time, but I do -- yes?

Dr. Moeller: Could I mention that there is a hand-out of my technical comments in that next room. If you want them, please let us know.

Mr. Cameron: Okay. Thank you.

We're going to go to Mary Jonckheere, then Mary Donworth, Ralph Andersen and Mark Oncavage next.

Mary?

Ms. Jonckheere: Hello. My name is Mary Palazuelos Jonckheere. I'm an ex-professor of mathematics at Miami-Dade Community College and a Green Party member and a Sierra Club member, and a home schooling mother.

And the things that I want to say about -- I wasn't here in the afternoon, but the things that I want to say about this issue is that I know the country of Germany has completely decided to phase out nuclear power. My husband is from Belgium and I often go to Europe with him and I have deep respect for the citizens of Europe. They're I think much more publicly aware of the dangers of the food supply and the dangers of nuclear energy than we are here in the United States.

I think the issue of nuclear energy has a kind of a clouded vision with people in the United States, especially the people that stand to make a lot of money from nuclear power, including the administration that's in Washington right now. And what I feel like is, I come from a kind of dysfunctional family where my father enjoyed watching my sister and I have fights, physical fights, and we had once a fight at our country club and my sister was like pushing me down under the water and I decided I would start screaming since my father wasn't stopping this, he was enjoying it. And I realized that there were strangers coming and helping me. And that was something that I suddenly found a survival skill, and that's something that I'd like to happen here. I think that there's something happening in the United States, there's some kind of conspiracy, and it seems like there's a pro-nuclear and then there's the Green people that are against, and I think that for the citizens to be truly sure that the facts we're getting are true, because I read this beautiful glossy thing put out by Florida Power and Light, and they say how it's very safe around the nuclear power plants, but they didn't mention how maybe fifty miles away in Miami Beach, that's where the highest level of strontium 90 are being found, which is from where the gasses are released by Turkey Point because the pressure builds up. Those gasses contain the nuclear isotopes and that's where the children of Miami Beach are finding that.

So you know, yes, maybe the smoke stacks are safe. I'm happy I live in Homestead. I'm safer than the people in Miami Beach, but the clouds are bringing up those radioactive isotopes.

47-3

But I really feel is that there needs to be a panel of scientists that are analyzing all the research done by the NRC, by the Tooth Fairy, and that panel of experts has to be kind of the way a jury is selected, that there's the environmentalists and there's the nuclear people and we're going to agree on the scientists, because I'm sure that the NRC, you guys can find scientists that are going to support you, and you're saying that we're finding scientists that support us. Well, there would have to be some kind of a jury selection and it has to be not only American scientists, but scientists from all over the world, where maybe some clouds with nuclear power is not affecting them as the country of Germany has completely decided to shut them down.

I'd like the data of Germany to be looked at and included in the study for the relicensing of Turkey Point. Why did that country decide to phase those out? We know German people are very intelligent.

47-4

The other thing I wanted to say as a mathematician, this generic study takes, from what I've been told, it takes about 102, the data from 102 power plants, and adds up the numbers and divides by 102. And that's not really very good mathematics when you're talking about different places in the country. You know, somebody said that the smoke stacks, the number of birds that fly into the smoke stacks is the same all over the country, so you can just kind of average that out. But Turkey Point is close to the Everglades so I'd think there would be more birds flying there than there would be in some other part of the United States where there are not that

many birds and maybe -- that's just an example. But us people here in Homestead and in South Florida would be very concerned about the number of birds that would be flying into our smoke stacks, just like we're concerned about the number of children that are dying of brain cancer here in South Florida and the number -- and the levels of strontium 90.

So I would like the data that is included in this study not to be generic but to be site specific to South Florida. And again, I would like it to be reviewed by an independent panel of scientific experts from all over the world, not just the United States. It's very sad that I have to say this, but this is the health of our children and our grandchildren and I'd like to pass on the earth in a better condition than we have it right now to my daughter and her children.

Thank you.

Mr. Cameron: Thank you, Mary.

Mary Donworth, and then we're going to go to Ralph Andersen and Mark Oncavage.

Mary?

Ms. Donworth: Good evening. My name is Mary Donworth. I am the vice president of Agency Relations and Fund Distributions at the United Way of Miami-Dade. I've worked at United Way for eleven years and I'm here to talk about FPL's commitment to the community.

Each year FPL, the IBEW and its employees raise over a million dollars for health and human services in our community. Of that amount, Turkey Point employees raise over \$150,000.00 for services here in the Homestead Florida City area and those services include scouting, mentoring, youth programs, early childhood development programs, therapeutic programs, et cetera.

Some of those agencies that receive funding are Central Capacino Farmworkers Center, Homestead Food Kitchen, the YMCA and the Redlands Christian Association.

In addition to the tremendous financial support that we get from FPL, we also receive thousands of hours of volunteer time from the employees, which is tremendous in our community.

In conclusion, because I want to be brief, it is late, I just want to say that United Way is tremendously proud of our partnership with FPL and its employees in our community.

Thank you.

Mr. Cameron: Okay, thank you, Mary.

Ralph Andersen?

TPD49

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Mr. Andersen: My name is Ralph Andersen. I'm a Board Certified health physicist at the Nuclear Energy Institute.

I am pleased to have the opportunity to join this discussion tonight.

Nuclear energy provides electricity for one out of every five homes and businesses in America, and here in Florida electricity customers get about seventeen percent of their electric power from five nuclear reactors, including Turkey Point, at Florida Power and Light St. Lucie plant and Progress Energy Crystal River plant.

I'm going to abbreviate my comments in the interest of time, but I would like to give you a copy of the full comments if you would assess those.

With the extension of the license at Turkey Point there will be twenty more years of environmental and economic benefits and continued reliable electricity for consumers and businesses in South Florida. I think it's a necessary option and I'd like to suggest three reasons why.

49-1 | First, license renewal will maintain economic electric generation that does not produce | greenhouses gasses or other air pollutants, such as sulphur dioxide, nitrogen oxide and particulates.

Second, license renewal will preserve good jobs for this area and will continue to support the economy.

Thirdly, renewal of Turkey Point's license is far more economical with less environmental impact than building a new power plant or in pursuing other energy alternatives.

Nuclear energy is the largest source of emission free electricity generation in America. It represents nearly seventy percent of our nation's emission free generation. Hydro-electric power is second at twenty-nine percent, and the remaining one percent is divided essentially between -- PXL's, also known as solar energy, and wind power.

It's obvious from these figures that nuclear energy provide vital clean air benefits to Florida and to the United States, considering that each state must control emissions from electric generating sources through the Clean Air Act. In this community Turkey Point also provides stable jobs, a strong tax base, and safe, reliable and affordable energy.

I mentioned earlier that I am a health physicist, which means that my profession is in radiation safety. So I'd like to talk for a moment about radiation.

During the course of the day we've heard a lot of speculation about radiation from the Turkey Point plant. What I'd like to do is, using some of the facts that are presented in the Draft Generic Environmental Impact Statement, give you some prospective with a simple comparison.

The Draft GEIS for Turkey Point includes an assessment of environmental impacts associated with radiation from plant operations. The results of this assessment can be found on Page 2-34 in the GEIS. The NRC characterizes the impact as small. In drawing on that information I'd like to offer a simple comparison to illustrate what the NRC means by small.

The subject meeting tonight is scheduled to last about three hours. During the time of this meeting the amount of radiation that each of us will receive from natural sources of radiation will be more than anyone living near the Turkey Point power plant will receive in the entire twenty years of operation associated with license renewal. That's because during the time we are in this meeting each of us is receiving natural radiation from our own bodies, from the food we eat and the water we drink, from the air we breathe and the ground we're standing on and the materials used to construct this building and even cosmic radiation reaching us from the stars and distant galaxies.

- I want to close by saying that the Draft GEIS is factual and complete and should contribute to a fair and objective review of the environmental impacts of license renewal at Turkey Point.
- I'd also like to commend Florida Power and Light and the nuclear professionals at Turkey Point for the continued excellent record of safety performance and commitment to protecting the health and safety of their community and the surrounding environment. Together these are the key factors in the NRC's conclusion in the Draft GEIS that support the positive decision of renewing the license for an additional twenty years.

Thank you very much.

Mr. Cameron: Thank you, Ralph, and we'll enter that on the transcript.

Let's go to Mark Oncavage, and then we'll go to Dave Peyton and Darwin Brown.

Mark?

TPD50

Mr. Oncavage: There are a number of deficiencies in the alternative section of the Draft SEIS. This interim report from the Governor's Energy Study Commission is completely missing from the Draft SEIS. It's available on the State of Florida website. I suggest you download it to take a look at it. It's going to play a large part in our lives.

The final report is due in December, well in time for the 2002 Florida Legislative Session. This deregulation plan says, and I quote, "Investor owned serving utilities should no longer be in the business of owning and operating generation."

In simple language that means that Florida Power and Light, Tampa Electric, Florida Power Corp. will sell their power plants to other companies.

A Governor's committee is working on a plan where retail sales of electricity is done by a different company that operates the transmission grid, and that is separate from the other companies that generate electricity. Basically, they are breaking up the monopolies that utilities now have.

This proposal changes the whole character of the Draft SEIS. No longer would FP&L be concerned with the alternatives to relicensing Turkey Point. FP&L would sell or trade all their plants, sell their transmission lines to grid Florida and concentrate on their new business model of buying electricity to sell to their customers.

Alternatives become meaningless. There are now 56 new merchant power plants proposed to come on line in Florida, 56 plants. These plants are natural gas. Some are simple cycle, some combined cycle. The electricity will be more expensive, but there will be no shortages of generation in Florida with or without Turkey Point. There is no time table on this restructuring. The disaster in California has everyone moving very cautiously, if not backing up.

In this new light, license renewal all changes its character. Why would FP&L spend so much money if they can't keep the plant? Well, the book value and the market value would go up when they sell Turkey Point. It becomes a money game.

In the Draft SEIS, FPL concludes that Turkey Point would not be a reasonable site for a natural gas plant since it would necessitate laying 150 mile pipe line through Everglades habitat.

It seems that the NRC has missed work to build a new gas pipe line from Grand Bahama Island to Ft. Lauderdale, Project Calypso. To serve the west coast of Florida another pipe line is proposed from Mobile Bay to Tampa under the Gulf of Mexico. That's called Project Gulfstream.

I'm sure when this information is considered it will have a marked affect on the alternatives to relicensing.

The Draft SEIS also needs to look at the conversion of the Fort St. Vrain (sic) reactor to natural gas. All the expensive infrastructure was reviewed and plant now produces electricity. I've heard that the conversion of the Fort St. Vrain plant costs 250 million dollars.

Natural gas conversion along with Project Calypso should be the strongest alternative to the license renewal in the Final SEIS.

One of the most troubling aspects of deregulation is the disposition of the millions of dollars held for the decommissioning of Turkey Point. I urge the NRC to become significantly involved in this issue. If private companies are allowed to get control of this money and the usual activities of mergers and acquisitions and spin-offs and selling of assets and bankruptcies all occur, we may never see this money again. That would be a real environmental impact, new and significant.

Thank you for the opportunity to speak.

Mr. Cameron: Thank you, Mark.

Mr. Peyton:

Mr. Peyton: My name is Dave Peyton and I've lived and worked in Homestead for about twenty-five years and I don't have any fancy qualifications for science or anything like that. I am not a part of any of those special clubs and groups and all that. I'm thinking now after having heard some of these called the Friends of Thomas Edison, but I don't know whether -- I have to work on my dues and stuff like that.

I have no financial interest in FP&L. I am not employed there. I don't -- I'm not related to anybody who works there. I casually know four or five people who work at Turkey Point but their hours are so long that I don't particularly hang out with them very much either.

I do though live in a house here in Homestead that has electric water heater and electric stove and a microwave oven and I'd much rather be home tonight consuming electricity, but I heard

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about this sort of thing and I don't see anybody else that just likes to use electricity coming over here. I learned my distinct appreciation of it in the summer of 1992 when I went for three or four months without any electricity and took cold showers when I finally got water again. I like electricity. I like the people who make electricity. I think electricity is a good thing.

I used to live up north and I have some experience with coal and oil and burning and all that. I lived in Cleveland when the Cayahoga River caught on fire and you wouldn't walk along the beach of the Lake Erie, let alone eat anything that came out of it, and I took prescription antihistamines to such an extent when I lived up there that I had an enlarged prostrate at 25, but that's more information than you need to know, I suppose.

But I like the fact that this nuclear stuff, I don't have to breathe all that junk. I don't have soot around. I learned that everybody has notes here, so I'm trying to look at mine that I formally prepared here. You don't have the abbreviated version of these to put in your record there. And I'm not trying to be flippant about this. I recognize that this is a serious issue with a lot of folks.

51-2

I never even considered this thing about Biscayne Bay and the need to camouflage Turkey Point. I've lived down here a long time. I've been stuck out on the bay in a boat at night and in bad rain storms. It's my favorite landmark to stay out of the shallows, so don't camouflage it too much.

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And so I just want to say that I'm here in support of clean electricity and I hope that they renew the license, and now I'm going to go home and sit in my recliner chair and burn electricity.

│ │ Mr Cameror

Mr. Cameron: Thank you, Mr. Peyton. And there he goes.

Mr. Brown, Darwin Brown?

How about Mr. Chris Doherty?

TPD52

Mr. Doherty: How you guys doing? My name is Chris Doherty and I represent South Florida Motor Sports and we're comprised of 54 members in the South Dade area, including business and community leaders. Our non-profit organization supports racing events out at the race track throughout the year.

52-1 52-3 We strongly support Turkey Point's application for license renewal. Besides being one of the largest employers in the immediate area, we have found Turkey Point to be a good neighbor, conscious of the environment and generous to our community.

For years Turkey Point and its employees have contributed to the United Way, Boys Scouts and Girl Scouts, little league, South Florida Blood Bank and many more. We applaud Turkey Point's endless efforts in contributing to our community and being environmentally conscious, providing safe and economical power to our community.

Therefore, on June 26th our board of directors passed a resolution supporting the license renewal for Turkey Point to continue producing electricity for another twenty years.

Mr. Cameron: Thank you.

Next we're going to go to Mike Richardson, First National Bank. And thank all of you for your patience.

Mr. Richardson: I am Mike Richardson and I work for the First National Bank of South Florida, used to be Homestead, now it's South Florida.

I've learned one thing tonight, and that is it doesn't make any difference if you come an hour early and sign up to speak, you still end up being the last speaker on the agenda.

I am among a group of people that was here last December also and urged you all to extend the operating license for Turkey Point, and with some caveats, and certainly those caveats still exist, but I still have the good feeling that Turkey Point can operate into the future safely and efficiently.

There's a distinct different flavor in tonight's meeting as opposed to the meeting back in December. In December we heard from an overwhelming voice from the local community about the value of Florida Power and Light and Turkey Point in our local community, whether it was economics, whether it was the contribution that the Turkey Point staff makes to our community, whether it was the low cost power, minimal environmental impact that Dave Peyton's just gone home to take advantage of. You need to know that I work with Dave at the bank and he is never that funny when he's at the bank.

You also heard tonight and before too about the impact of Turkey Point on the local environment, the crocodile breeding grounds and the threatened and endangered species that live within the compounds out there.

So it was with particular gratitude, I guess is the right word, that I was able to look at the Draft Supplement Environmental Impact Statement and see virtually across the board the impact that relicensing Turkey Point is characterized as small, and in many cases as virtually negligent -- negligible. Sorry about that.

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I do want to emphasize though, as I did last December, that you've mentioned the fact that you have a parallel course, one is looking at the environmental impact, the other is the safety impacts. And I mentioned then that we as a community are depending upon your technical expertise for that safety impact. And we can talk about how the company impacts us here, but most of us don't have the technical expertise to be able to talk to the safety aspects of the plant and its ability to operate safely for another twenty years.

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Joette Lorion brings up valid points that need to be addressed and either confirmed or denied, as the case may be. I don't think there's anybody in our community, I said this last December, I don't think there's anybody in our community that would object to the continued operation of the nuclear facility at Turkey Point for an additional twenty years as long as we all felt very comfortable that it can be done safely and it will continue to general low cost, environmentally low impact electrical power to support our community and provide us with the quality types of people and activities that FP&L contributes to Homestead, Florida City and the Greater South Dade area.

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Thank you very much.

Mr. Cameron: Thank you.

Let's go to Mr. Broom and Mr. Shomar.

TPD54

Mr. Broom: I'd have somebody turn off the lights for five minutes just so we understand the importance of what we're talking about tonight. I'd also like to say good evening.

My name is Chuck Broom. I am with Florida International University in the Center for Environmental Technology. I'm the associate director there.

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I've been in the nuclear and environmental field for over twenty-one years, with some emphasis in nuclear construction and engineering maintenance and actually reactor decommissioning and dismantlement.

But tonight I want to speak as a private citizen and a resident of South Florida. I was here for the afternoon session also, so I got to see the view graphs up there that no matter whether I live in Broward or I work in Miami, I'm going to get hit by the air plume that's coming my way.

First, I'd like to recognize the NRC and thank them for the job that they do. I've been involved with them on again and off again most of my career. I'd also like to recognize National Laboratories and my friends at PNNL, where I've had a twenty year association with, the professional colleagues at Florida Power and Light and many of you who are here that work there. I don't think anybody, if you haven't ever dressed up and walked down a reactor and

been in the middle of it, really understand what it takes, the commitment it takes to run that machine. And that's what a reactor is, it is a machine.

And then lastly but most importantly, I'd like to recognize all of the community members here that have an interest.

I wrote but my notes were unprepared, maybe they're even more extraneous than prepared, would be short. I endorse the license extension of the Turkey Point 3 and 4 and why, because in my view power plants are a national resource.

More importantly, power plants are a national -- are an issue of national security, for this country, for this state, for this community. In my opinion the stability of that resource is paramount to any national security element that is considered locally or in Washington, D.C. or any place in the world.

I've had the privilege of having a tour that has taken me across this great land. I've seen, like you, the ransoming of our national resources by foreign oil interest. I have seen our aged and underprivileged citizenry die when I was working in Chicago. I have seen and I have friends that are experiences the brown outs in California right now.

On an international assignment, I can tell you -- our good friend has already left -- I can tell you what it's like to get stuck in an elevator somewhere between the first and fourteenth floor, because about that time the Uranian Government pulled the plug on that quadrant and you're stuck in a four by four elevator for four hours because you couldn't get out, because they didn't have enough power.

Where are we going to get the power if we don't have our own sustainable resource? We're going to ransom this country and the resources we have if we don't have it.

Our standard of living, nationally and here in Florida, is dependent upon safe reliable power and our future as a nation depends upon it. But when looking at these issues you have to look at performance. Florida Power and Light has a history and a reputation for quality performance. Those of you that were with us earlier this afternoon got to hear the representative from the IBEW speak about the national recognition and the industrial recognition that FP&L has received and that Turkey Point has received.

I'm a businessman. That's my job. My job is to help that center grow. In business I like to look my potential partners in the eye and know that they are as dedicated to the challenge ahead as I am. And since 1997 I have had an indirect professional relationship with FP&L. They haven't given me any work, but I've had an opportunity to know them and to know their management team. And I have been to the plant.

54-4

When you walk to the Turkey Point plant, from the security guard that meets you, to the radiation control technicians who escort you around, to the project managers and to the facility managers, you find a commitment to excellence at that plant. It is an organizational culture at that plant. So I don't care if I'm talking to a craftsman or I'm talking to Bob Hovey, I'm going to get the same commitment and the same straightforward response and pride in their operation that I would want in my own business affairs.

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I know of no other finer team of professionals than what they have out at that plant, and I have been at all -- I have been at nine of the Federal nuclear reservations and I have been at about four other plants besides Turkey Point.

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The thing that I would leave you with is that they are our neighbors and for some of us they are family. And I know that they can and will do the job safely and efficiently. And knowing them, they have my trust to do the right thing, whether it's an environmental issue, a safety issue or business issue. I expect on time, on demand power at the cheapest cost in a safe way, and I know that Bob Hovey and Florida Power and Light and his team will do that.

Thank you.

Mr. Cameron: Okay, thank you, Mr. Broom.

We have a few speakers left. Mr. Shomar and Mr. Randles and Jennifer Balfe and Bob Vandorser.

TPD55

Mr. Shomar: It's about an hour past my bedtime so this is a big sacrifice for me, but it's a pleasure for me to be here.

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Good evening. My name is Wasin Shomar and I have lived in this area since 1983. I speak before you today not only as a concerned citizen, but also as a person that holds a Ph.D. in Electrical Engineering, as a previous Dean of Engineering at Miami-Dade Community College, and also as the current present of Miami-Dade Community College, and I'm only two weeks in this job, so if you haven't heard the news, that's why.

What brings me here today is my concern for safety and efficiency, my love for the environment and my concern for our local economy and the preservation of jobs for our local residents.

It has been proven and documented time and time again that nuclear energy is unquestionably the safest and the most efficient effective and environmentally friendly means of producing electricity. To guarantee the safety of the residents one must insure that all safety procedures at Turkey Point are fully adhered to and that the employees at Turkey Point are well educated and well trained.

The fact that Turkey Point is the only plant in the United States to receive three consecutive superior ratings from the NRC in the recent years leaves me no doubt that Turkey Point is one of the safest and most reliable nuclear power plants in the U.S. and even in the world.

In terms of the qualifications of the employees, almost half of Turkey Point's employees hold advanced degrees. That education is further enhanced by the training they receive. There are more than twelve training programs offered to employees. Some are so specialized that they are certified by an independent training organization.

The Turkey Point management even went further in terms of training where they set up a rigorous training program with Miami-Dade Community College and Bob Hovey and I and our teams work very, very closely together on that. And the purpose of this was to further advance the knowledge of the Turkey Point employees and to allow us to create a home grown pool of talent for future job openings at the plant.

FPL confirmed their commitment to quality training by creating an endowment scholarship fund that produces twenty full tuition scholarships every year to community residents to participate in this specialized training program at the college.

I must point out that I do have a lovely wife and two lovely young boys that live within a few miles away from Turkey Point and I would not be standing before you today if I was not 100 percent sure that Turkey Point is absolutely and definitely safe and vital to our community.

As a concerned neighbor and somewhat of a self proclaimed field expert, I'm here to tell you that it would be a great disservice to our community and a grave mistake if the license is not renewed. I urge you to renew Turkey Point's license for twenty more years, thus renewing our hopes for a safe and strong future economy for our beloved community.

Thank you.

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Mr. Cameron: Thank you, Mr. Shomar.

Mr. Randles?

TPD56

Mr. Randles: Good evening. My name is Johnny Randles. I'm the business manager and president of Local Union 359, International Builders of Electrical Workers here in Dade County, and just about everything that's been said is on my notes.

| | I come from a small town up in Southern Illinois and I graduated out of high school in 1962, all seventeen of us did. On Saturday night I used to take my date to Sears and watch them unload the Sears truck. That was the highlight of the week.

So I went -- after I got out of the service I went to work for the railroad and I worked for them for fifteen years, went to an apprenticeship program with them, and it's a great apprenticeship

program. It's probably one of the best ones that I recognize in the country.

things that we do. This is not part of my speech in here.

56-1

Through that whole thing, safety was not part of that apprenticeship program. Eighteen years ago I come to Florida and went to work for Florida Power and Light. I found out what safety is all about. They completely changed the way you think about safety by how they do things. Bob Hovey and myself here work very closely on safety. That's one of the things we agree upon wholeheartedly. We have no disagreements with that. We work well together. You heard the business manager here earlier today talk about the safety that we do throughout the state. We're setting records on safety out there. We have programs out there where we're looking at each other. We actually go and check each other, have a check sheet to go check off on

56-2

And one of the things that we do produce is 693 million watts of electricity per each unit, and that approximately covers everything from Miami Airport south. So if we loose them units we'd be watching T.V. in the dark down here. That's one of the bad things that we'd be doing.

56-3

Turkey Point's done a lot of things for us. We hear about the impact it has -- that we've had on our environment to crocs and everything else. I've been out there and looked at -- they don't allow us out there any more because they're afraid of some impact we may have going out there. You used to go out there and it used to be good fishing back in the back canals out there, but they don't allow us to do that any more. Which we understand why they do it, because they are protected out there. And I hear some of the stories about some of the National Geographic people that's come down and actually taken movie and stuff. There's one photographer there that talked about coming out and taking pictures and they take him out in the air boat and they got up real close on this bird and he was taking pictures out there. They said he was so excited when he come back he just couldn't hardly -- he couldn't even sleep that night because he had never seen that bird before, whatever that bird is out there. But I heard the story and I thought it was real swell.

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- And one of the things I've learned at Florida Power and Light is, is a lot of things they do for us. They do a lot for the community. As you heard, United Way, we work a lot with United Way. They support United Way quite a bit. When I first started this job here I went up and we had a United Way meeting and I was sitting up front and I didn't realize the significance of sitting up front. Up front was the million dollar contributors and I didn't realize it. I was sitting up where all the million dollar contributors are. I don't know how much a million dollars is. Except I did see in Washington, D.C., I went mint up there and seen a million dollars up personal. That's as close as I've ever come to a million. But I do bank at First National Bank.
  - -- is growing about two percent a year for electricity and if we don't continue growing and using our resources we have right now, we're going to wind up just like California is.

I go to a nuclear conference every year and all the utilities from IBEW that we have in nuclear send representatives to Las Vegas out there and we meet out there every year. And I had been to Yucca Mountain and that's quite a project out there. The study that they're doing out there, they took a twenty-five foot drill and drilled into the side of Yucca Mountain and there's a twenty-five foot hole they dug five miles back into that.

South Florida went out there. Thought it was going to be nice and warm out there. I found out it was cold. Of course every place north of the airport is cold to me.

- There's some of the things that we gain by having this plant. You take all the businesses and all the people that support it. There are several thousand businesses, or several thousand people that support it in this business that we do, that support us, the support that we get. Homestead here would be really impacted. I know a lot of business we use in here, because at one time I purchased -- I worked on the fossil site also when it was all combined, it was all one thing. They separated the fossil and the nuclear right now. And I did some purchasing for a couple of years. And I was surprised at the amount of money and stuff that's spent just for the products and things that we buy and the number of people that come in here and support our business.
- Florida Power and Light didn't tell me what to say or what to do up here. I volunteered to come up here because I think it's a safe plant to work at. I'm an electrician out there. I've been an electrician out there for eighteen years. I go to training every year. It's part of my job to go to training, to go to learn, to find out about the environmental impact, the studies that they have at the other plants that we go over. We have to sign and verify that this is what we've done. Everything -- these people from the NRC right here, they regulate us. They do an excellent job of it, and I never realized how well NRC does until I come down to Florida and started working

for FP&L. They're a good agency. They're a good agency, they help us a great deal. They help us run that plant out there and without them we'd be hurting. And I'm not saying that to make any points, because I don't make any points.

56-7

The power that we produce out there, we strive to make cheaper power. The employees there -- I represent about 300 plus employees there at that plant. I have about 1200 all together and I represent Lake Worth, Homestead and Dade County. And the -- most of the people that know me, know about this plant that work for FP&L. They know it's a safe plant. They know it's a safe place to work.

56-8

If there is anything that I ever thought was unsafe, we got several mechanisms we could go to to do that.

56-9

And you talk about -- you was talking about the cancer rates in Dade County. I am a survivor. A year ago, almost a year ago today, I found out that I had a problem and I had cancer. Where did I get that cancer out? I got that in 1969 when I guit smoking and guit drinking. Every doctor that I've been to, including the ones in New York that found it, first question they asked me was, did you smoke. That's what we ought to be looking at, if you're looking for safety. That plant out there is safe. I'd be glad to work at that until 2010 when I retire.

That's all I've got to say, and thank you all. Thank you, appreciate it.

Mr. Cameron: Thank you, Mr. Randles.

TPD57

Jennifer? Is it B-A-L-F-E? F-E. Jennifer Balfe, B-A-L-F-E.

Ms. Balfe: Good evening. My name is Jennifer Balfe. I'm a concerned daughter and future mother in this community. I live in Miami.

57-1 57-2

I'd like to just say a few simple quick points. Number one, it's an old facility. That concerns me. The EIS report is weak. I notice quite often it mentions small impacts, but what exactly is small when we're speaking of humanity, endangered animals? It's kind of important. I don't know exactly what small is.

57-3

FP&L is sensitive to the environment. I understand you do a lot of work. You restore things, you're helping out crocodiles, but what if the nuclear power plant would just explode and all your work would just go to dust? Modern technology, there's plenty of modern technology that seems to be being ignored. One thing mentioned is fear of the economy dropping. But if we focus on new energy there will be a new economy that will come about.

57-4 57-5 The commendable safety record seems to be -- holding back a pack of hungry wolves from children with a shredded rope. This safety aspect that we're keeping up. How about out with the old and in with the new?

I'm a concerned citizen and I'm not for nuclear energy at all. Thank you.

Mr. Cameron: Thank you, Jennifer, for being with us tonight.

Could we have Bob, is it Bob Vandorsen?

Mr. Anderson: Bob Anderson.

M. Cameron: Bob Anderson. It could be my eyes. Welcome.

Mr. Anderson: My name is Bob Anderson and earlier today Luis Delan of the Vision Council, and I'm the chairman of the Vision Council which is an economic development agency here in Homestead, Luis presented our support for the relicensing of the nuclear plant.

And I hadn't planned to speak tonight, but a couple of comments just came to mind that I thought might be shared. I've had the opportunity, whether it's fortunate or not, to spend as a business consultant some time, several months over the past couple of years, in Eastern Europe. And when you go to a country like Bulgaria, first of all the whole country seems to be lit by a 40 watt bulb. I mean it's dark.

But I was walking along the street with a business associate over there and stuff was falling on my head. And I thought perhaps it was snow, but it was ashes. We looked around and here's this plant spewing stuff and we're in downtown, main street. And I said, "What in the world were they thinking of when they built the plant there?"

The guy turns to me and says, "We didn't vote on it."

And I think that's an important distinction. Chernobyl was mentioned earlier. Chernobyl was built by a communist government, inspected by the same government, run by the same government. There was no union that could look at safety. There was no FP&L and NRC regulating it. There was no public as to whether it was good, safe, bad, anything else. To compare Chernobyl with any power plant in the United States with the oversight that we have, with the possibility of participation by citizens to put in their input, their concerns. You talk to somebody in Eastern Europe who's sitting there with some monster facility that was built under communism.

They never got a chance to say, "Hey, I don't want it here," whether it's safe or anything else. And the legacy that those people are living under will go on a long time, in the power plants, in the terrible architecture. The same people that built Chernobyl build a car called a Lada, and if you ever want to see a bum of an automobile, that is it.

58-2

This is a wonderful system we have here. We're relying on the NRC to technically oversee it. We're relying on the good folks at FP&L who live here with us not to be sacrificing their families just as ours. And it's really a remarkable procedure that we go through here in this country and when you go spend some time in some of these dismal places in Eastern Europe, the gentleman talked about being stuck in an elevator, it happens. And you greatly appreciate the process that we have here and the regulation that we have here and the companies that we have here that provide this thing, because there's a lot of places in this world that never had a choice and got some pretty bad stuff from where they live, the buildings they live in, the cars they drove and what the power was and what got sprayed around their neighborhood.

So I say right on, and thank you very much.

Mr. Cameron: Thank you, Mr. Anderson.

We have one final speaker. I don't think I missed anybody, but hopefully someone will remind me if I did, someone who signed up. But we'll close with Mr. Rothschild.

TPD59

Mr. Rothschild: Thank you. My name is Rubin Rothschild. I'm an employee of FP&L and as you can see I'm also a Boy Scout.

I was not asked by FPL to do this. I asked FPL if I could. I wanted to be part of this process. I wanted to see this process and I wanted to have a little say in this process as an adult, as a citizen of this country and an employee of FP&L.

59-1

A little bit about myself. I graduated high school in 1957 and went to the Navy in 1958. In 1960 I went to nuclear power school and since then I have spent twenty-eight of the last forty odd years in nuclear power in one form or another. I've also spent some time in some other industries and as has been said before, this plant has a culture, an atmosphere, an attitude of safety. Other plants that I've been in, they don't care about the employees, they kill to keep the product going. And I'm pleased to say that I'm part of that process and that I'm glad to be involved in that process.

I am a technical reviewer. I review purchase documents for technical adequacy, spelling adequacy, whether they meet the current design requirements, whether the evaluations are correct and current, and that they meet all the regulations for the State, the City and the Federal Government.

I also assist in reviewing changes to the material. If there's a change, because we're so old and a lot of the companies that we originally bought equipment from, they're out of business, they're obsolete, they don't make this equipment any more, and I'm part of the process that reviews and gathers the information and does the engineering to make sure that if widget A is no longer available, widget B will fit and meet those requirements and it will meet out design basis problem -- design basis and maintain the quality of the plant.

Also, I want to thank FPL for supporting me and the Boy Scouts with funds. Mr. Hovey is chairman of the Friends of Scouting Campaign for the District, the Thunderbird District. FPL supports the Boy Scouts, the facility. There's a marvelous scout camp out at the plant that we use for training and it's a scouts camp and it's right on the bay and the boys have a good time and it's also a Girl Scout camp too.

FP&L provides facilities for the Atomic Energy Merit Badge. We have the poster out there. For the last six years we've been able to get approximately thirty-six boys a year for the Atomic Energy Merit Badge and those boys appreciate that Merit Badge.

Also, I get personal encouragement from management for what I do for the scouts, and that's very gratifying.

Earlier I said that I was on vacation the last couple of weeks and on that vacation I took some trips on old Route 66 and it was quite an experience going through some of those old roads. And yesterday, I think or this morning on NPR, they talked about the Route 66 Association and their meetings in California. And one of the things they talked about was the old cars that have been restored that are still driving nowadays that the people are bringing out to California and they maintained these cars.

So I think there's a relationship between maintaining the car that's over fifty or sixty years old and maintaining a plant that's only thirty some years old for another twenty years or thirty years. So I think there's a causal relationship there that we can maintain this plant and I'm pleased and proud to be part of that process, to say that we can get the parts that the plant needs on time and when they need them.

59-4

I was looking at the report, part of the report that says okay, if we do fossil we can do this, if we go solar we can do that. But all of those processes say that we have to close this plant. So that means we have to become a disposable society. We have to throw away this plant and build a new one, and I don't think that's the way to go.

So I want to thank FPL and I want to thank the NRC and thank you all.

Mr. Cameron: Thank you, Mr. Rothschild.

Did I miss anybody who signed up?

Okay. We do have an evaluation form on the meeting. If you could fill it out we'd appreciate that.

I want to thank you from all of the NRC staff for all the good information tonight and all the heartfelt comments that we heard. And you have a contact information, Jim Wilson. Feel free to contact any of us any time and we'll try to provide information or whatever.

Thank you very much. We're adjourned.