Environmental Impact Statement Scoping Process

Summary Report

Indian Point Nuclear Generating Station
Unit Nos. 2 and 3
Village of Buchanan, New York

December 2008

U.S. Nuclear Regulatory Commission
Rockville, Maryland

Introduction

On April 30, 2007, the Nuclear Regulatory Commission (NRC) received an application from Entergy Nuclear Operations dated April 23, 2007, for renewal of the operating licenses of Indian Point Nuclear Generating Station Unit Nos. 2 and 3 (IP2 and IP3), Village of Buchanan, New York. As part of the application, Entergy Nuclear Operations submitted an environmental report (ER) prepared in accordance with the requirements of Title 10, Part 51 of the *Code of Federal Regulations* (10 CFR Part 51). Part 51 of 10 CFR contains the NRC requirements for implementing the National Environmental Policy Act (NEPA) of 1969 and the implementing regulations promulgated by the Council on Environmental Quality (CEQ). Section 51.53 outlines requirements for preparation and submittal of environmental reports to the NRC.

Section 51.53(c)(3) was based upon the findings documented in NUREG-1437, "Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants," (GEIS). The GEIS, which identified and evaluated the environmental impacts associated with license renewal, was first issued as a draft for public comment. The staff received input from Federal and State agencies, public organizations, and private citizens before developing the final document. As a result of the assessments in the GEIS, a number of impacts were determined to be small and generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts, absent new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be evaluated in the applicant's ER.

The Commission has determined that the NRC does not have a role in energy planning decision-making for existing plants, which should be left to state regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power, or the economic costs and economic benefits of the proposed action. Additionally, the Commission has determined that the ER need not discuss any aspect of storage of spent fuel for the facility that is within the scope of the generic determination in 10 CFR 51.23(a) and in accordance with 10 CFR 51.23(b). This determination was based on the Nuclear Waste Policy Act of 1982 and the Commission's Waste Confidence Rule, 10 CFR 51.23.

On August 10, 2007, the NRC published a Notice of Intent in the *Federal Register* (72 FR 45075), to notify the public of the Staff's intent to prepare a plant-specific supplement to the GEIS (SEIS) regarding the renewal application for the IP2 and IP3 operating license. The SEIS will be prepared in accordance with NEPA, CEQ guidelines, and 10 CFR Part 51. As outlined by NEPA, the NRC initiated the scoping process with the issuance of the *Federal Register* Notice. The NRC invited the applicant, federal, state, local, and tribal government agencies, local organizations, and individuals to participate in the scoping process by providing oral comments at scheduled public meetings and/or submitting written suggestions and comments no later than October 12, 2007. The scoping process included two public scoping meetings, which were both held on September 19, 2007, at Colonial Terrace, 119 Oregon Road, Cortlandt Manor, New York. The NRC issued press releases and distributed flyers locally. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. Following the NRC's prepared statements, the meetings were open for public comments. Approximately 50 attendees provided oral comments that were recorded and transcribed by a certified court reporter. The meeting summary, which was issued on October

24, 2007, and the associated transcripts are available for public inspection in the NRC Public Document Room (PDR), located at One White Flint North, 11555 Rockville Pike, Rockville, Maryland, 20852, or from the NRC's Agencywide Documents Access and Management System (ADAMS). The ADAMS Public Electronic Reading Room is accessible at http://www.nrc.gov/reading-rm/adams/web-based.html. The meeting summary can be found in ADAMS at Accession No. ML072851079. The transcripts of the meetings can be found in ADAMS at Accession Nos. ML072830682 and ML072890209. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR reference staff by telephone at 1-800-397-4209, or 301-415-4737, or by e-mail at pdr@nrc.gov.

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

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

At the conclusion of the scoping period, the NRC staff and its contractor reviewed the transcripts and all written material received, and identified individual comments. Each set of comments from a given commenter was given a unique alpha identifier (Commenter ID), allowing each set of comments from a commenter to be traced back to the transcript, letter, or email in which the comments were submitted (publicly available on ADAMS).

Comments were consolidated and categorized according to the topic within the proposed SEIS or according to the general topic if outside the scope of the SEIS. Comments with similar specific objectives were combined to capture the common essential issues that had been raised in the source comments. Once comments were grouped according to subject area, the staff and contractor determined the appropriate action for each comment. Table 1 identifies the individuals providing comments and the Commenter ID letter associated with each person's set(s) of comments. The Commenter ID letter is preceded by IPEC.

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

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ADAMS Accession Nos.
IPEC-A	Riverkeeper	Riverkeeper Staff Attorneys	Written Comments	ML071730115
IPEC-B	FUSE	Friends United for Sustainable Energy (FUSE)	Written Comments	ML071990093
IPEC-C	Susan Shapiro, Esq.	Friends United for Sustainable Energy (FUSE)	Written Comments	ML071930400
IPEC-D	John J. Sipos	New York State Assistant Attorney General	Written Comments	ML072050210
IPEC-E	Chris Hogan	Project Manager for NYSDEC	Afternoon Scoping Meeting	ML072830682
IPEC-F	Taylor Palmer	Representative for Congresswoman Nita Lowey	Afternoon Scoping Meeting	ML072830682
IPEC-G	Jim Knuebel	NY AREA	Afternoon Scoping Meeting	ML072830682
IPEC-H	Sherwood Martinelli	FUSE, Green Nuclear Butterfly	Afternoon Scoping Meeting	ML072830682
IPEC-I	Elizabeth Segal	Resident, Tarrytown	Afternoon Scoping Meeting	ML072830682
IPEC-J	Gary Shaw	Local Resident	Afternoon Scoping Meeting	ML072830682
IPEC-K	Phillip Musegaas	Riverkeeper	Afternoon Scoping Meeting	ML072830682
IPEC-L	Lloyd Douglas	Association of Minority and Women Entrepreneurs	Afternoon Scoping Meeting	ML072830682
IPEC-M	Glenn Rickles	Riverkeeper	Afternoon Scoping Meeting	ML072830682
IPEC-N	Mike Otis	Professor of Engineering at SUNY New Paltz	Afternoon Scoping Meeting	ML072830682
IPEC-O	Charlie Donaldson	Environmental Protection Bureau	Afternoon Scoping Meeting	ML072830682
IPEC-P	John Kelly	Local Resident, Retired from Indian Point	Afternoon Scoping Meeting	ML072830682
IPEC-Q	Marilyn Elie	Westchester Citizens Awareness Network, Indian Point Safe Energy Coalition (IPSEC)	Afternoon Scoping Meeting	ML072830682
IPEC-R	Marie Quinten	Pace Litigation Clinic	Afternoon Scoping Meeting	ML072830682
IPEC-S	Susan Shapiro	President, FUSE	Afternoon Scoping Meeting	ML072830682

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-T	Hazel Dukes	New York State NAACP	Afternoon Scoping Meeting	ML072830682
IPEC-U	Michel Lee	Council on Intelligent Energy & Conservation Policy	Afternoon Scoping Meeting	ML072830682
IPEC-V	Ron Carpino	Indian Point Senior Reactor Operator	Afternoon Scoping Meeting	ML072830682
IPEC-W	Dan Durett	African American Environmental Association	Afternoon Scoping Meeting	ML072830682
IPEC-X	Ulrich Witte	Citizen	Afternoon Scoping Meeting	ML072830682
IPEC-Y	Tom Hallsel	Citizen	Afternoon Scoping Meeting	ML072830682
IPEC-Z	Susan Peale	Resident, Phillipstown	Afternoon Scoping Meeting	ML072830682
IPEC-AA	Bill Maulmeister	Entergy	Afternoon Scoping Meeting	ML072830682
IPEC-BB	Radmila Miletich	Independent Power Producers of New York	Afternoon Scoping Meeting	ML072830682
IPEC-CC	Laura Seitz	Resident, Croton-on-Hudson	Afternoon Scoping Meeting	ML072830682
IPEC-DD	Chris Hogan	Project Manager for NYSDEC	Evening Scoping Meeting	ML072830646
IPEC-EE	Frank Giancimilli	Office of Congressman John Hall	Evening Scoping Meeting	ML072830646
IPEC-FF	Dan O'Neill	Mayor of the Village of Buchanan	Evening Scoping Meeting	ML072830646
IPEC-GG	Manna Jo Greene	Clearwater, Rosendale Resident	Evening Scoping Meeting	ML072830646
IPEC-HH	Patrick Moore	Greenspirit	Evening Scoping Meeting	ML072830646
IPEC-II	Susan Shapiro	President, FUSE	Evening Scoping Meeting	ML072830646
IPEC-JJ	Norris McDonald	African American Environmental Association, Founder and President	Evening Scoping Meeting	ML072830646
IPEC-KK	Lisa Rainwater	Policy Director, Riverkeeper	Evening Scoping Meeting	ML072830646
IPEC-LL	Jerry Kremmer	Chairman of Advisory Board, NY AREA	Evening Scoping Meeting	ML072830646

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-MM	Andy O'Connell	Senior Business Agent, Utility Workers Union of America Local 1-2	Evening Scoping Meeting	ML072830646
IPEC-NN	Mark Jacobs	IPSEC	Evening Scoping Meeting	ML072830646
IPEC-OO	Mark Cooperman	Resident, Cortlandt Manor	Evening Scoping Meeting	ML072830646
IPEC-PP	Melvin Burruss	President, African American Men of Westchester	Evening Scoping Meeting	ML072830646
IPEC-QQ	Audrey Roberts	Raging Grannies	Evening Scoping Meeting	ML072830646
IPEC-RR	Maureen Ritter	FUSE	Evening Scoping Meeting	ML072830646
IPEC-SS	Tom Johnson	President, Cortlandt Engine Co.	Evening Scoping Meeting	ML072830646
IPEC-TT	Karen Kahn	Resident, Westchester	Evening Scoping Meeting	ML072830646
IPEC-UU	Frank Fraley	Mount Vernon Hospital	Evening Scoping Meeting	ML072830646
IPEC-VV	Margo Schepart	Westchester Citizens Awareness Network	Evening Scoping Meeting	ML072830646
IPEC-WW	Laurent Laurence	NY AREA, on behalf Marcia Gordon, President of the Business Council of Westchester	Evening Scoping Meeting	ML072830646
IPEC-XX	Tom Klein	Boilermakers Local 5	Evening Scoping Meeting	ML072830646
IPEC-YY	Dorice Madronero	Rockland County Conservation Association	Evening Scoping Meeting	ML072830646
IPEC-ZZ	Speaker on behalf of Al Samuels	Rockland Business Council	Evening Scoping Meeting	ML072830646
IPEC-AAA	Bob Seeger	Business Manager, Millwright local 740	Evening Scoping Meeting	ML072830646
IPEC-BBB	Patrick Carlino	Student, SUNY New Paltz, NYPIRG	Evening Scoping Meeting	ML072830646
IPEC-CCC	Barbra Homyk	Chemistry Specialist, Indian Point	Evening Scoping Meeting	ML072830646

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-DDD	David Green	On behalf of Phillip Banks, President, One Hundred Black Men	Evening Scoping Meeting	ML072830646
IPEC-EEE	Amanda Sisenstein	NYPIRG	Evening Scoping Meeting	ML072830646
IPEC-FFF	Novia Butler	Entergy	Evening Scoping Meeting	ML072830646
IPEC-GGG	Judy Allen	IPSEC, Resident, Putnam County	Evening Scoping Meeting	ML072830646
IPEC-HHH	Paul Richards	Resident, Rockland County	Evening Scoping Meeting	ML072830646
IPEC-III	Kathryn Wylde	President and CEO, Partnership for New York City	Written Submittals, Afternoon	ML072830629
IPEC-JJJ	Allan A. Samuels	President/CEO, Rockland Business Association, Inc.	Written Submittals, Afternoon	ML072830629
IPEC-KKK	Paul J. Vitale	Vice President, Government & Community Relations	Written Submittals, Afternoon	ML072830629
IPEC-LLL	Melvin Burruss	President, African American Men of Westchester	Written Submittals, Afternoon	ML072830629
IPEC-MMM	Patrick J. Curran	Executive Director, The Energy Association of N.Y. State	Written Submittals, Afternoon	ML072830629
IPEC-NNN	Radmila Miletich	Independent Power Producers of New York	Written Submittals, Afternoon	ML072830629
IPEC-OOO	Michael Otis	Lecturer, SUNY-New Paltz	Written Submittals, Afternoon	ML072830629
IPEC-PPP	Sherwood Martinelli	Vice President, FUSE USA	Written Submittals, Afternoon	ML072830629
IPEC-QQQ	Dan Durett	Director, African American Environmentalist Association	Written Submittals, Afternoon	ML072830629
IPEC-RRR	John Hall	Congressman	Written Submittals, Evening	ML072830613
IPEC-SSS	Michael R. Edelstein	President, Orange Environmentalist, Inc.	Written Submittals, Evening	ML072830613
IPEC-TTT	Norris McDonald	Founder and President, African American Environmentalist Association	Written Submittals, Evening	ML072830613
IPEC-UUU	Marc Jacobs	Resident, Garrison, NY	Written Submittals, Evening	ML072830613

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-VVV	Lisa Rainwater	Policy Director, Riverkeeper	Written Submittals, Evening	ML072830613
IPEC-WWW	Mark Cooperman	Resident, Courtlandt Manor, NY	Written Submittals, Evening	ML072830613
IPEC-XXX	Phil Banks	President, One Hundred Black Men, Inc	Written Submittals, Evening	ML072830613
IPEC-YYY	Resident	Resident of Peekskill and Courtlandt Manor	Written Submittals, Evening	ML072830613
IPEC-ZZZ	Amanda Sisenstein	NYPIRG	Written Submittals, Evening	ML072830613
IPEC-A4	Allan Samuels	President/CEO, Rockland Business Association	Written Submittals, Evening	ML072830613
IPEC-B4	Paul Vitale	Vice President, Government & Community Relations	Written Submittals, Evening	ML072830613
IPEC-C4	Kathryn Wylde	President/CEO, Partnership for New York City	Written Submittals, Evening	ML072830613
IPEC-D4	Patrick Curran	Executive Director, The Energy Association of N.Y. State	Written Submittals, Evening	ML072830613
IPEC-E4	Linda Conte	Raging Grannies	Written Submittals, Evening	ML072830613
IPEC-F4	John Venier	Sr. QA Engineer, Parsons	Written Comments	ML072820254
IPEC-G4	Danieala Nieto	Delaware Nation of Oklahoma Environmental Programs	Written Comments	ML072560367
IPEC-H4	Paul Vitale	Vice President, Government & Community Relations	Written Comments	ML072820244
IPEC-I4	Kathryn Wylde	President/CEO, Partnership for New York City	Written Comments	ML072700254
IPEC-J4	Patrick Curran	Executive Director, The Energy Association of N.Y. State	Written Comments	ML072820237
IPEC-K4	Melvin Burruss	President, African American Men of Westchester, Inc.	Written Comments	ML072700561
IPEC-L4	Lloyd Douglas	Association of Minority Enterprises of New York	Written Comments	ML072820252
IPEC-M4	William Mahlmeister	Entergy	Written Comments	ML072820270
IPEC-N4	Joan Etzweiler	Entergy	Written Comments	ML072820267
IPEC-O4	Thomas Pulcher	Entergy	Written Comments	ML072820266

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-P4	Lisa Timm	Resident	Written Comments	ML072820257
IPEC-Q4	Scott Vanderhoef	County Executive, Rockland County	Written Comments	ML072820274
IPEC-R4	Doreen Constabile		Written Comments	ML072820263
IPEC-S4	Joan Matthews	Senior Attorney for Special Projects, NYSDEC	Written Comments	ML072820746
IPEC-T4	Carolyn Cunningham	Federated Conservationists of Westchester County, Inc.	Written Comments	ML072841121
IPEC-U4	Kathleen Vorwick		Written Comments	ML072841164
IPEC-V4	Bob Seeger	Business Manager, Millwright and Machinery Erectors Local No. 740	Written Comments	ML072841167
IPEC-W4	Stephen Ballou		Written Comments	ML073100204
IPEC-X4	Elizabeth Bernard	Resident, Westchester County	Written Comments	ML073100209
IPEC-Y4	Edmund Haffmans		Written Comments	ML073100322
IPEC-Z4	Jeannie Sunshine	Resident	Written Comments	ML073100212
IPEC-A5	Al Hemberger		Written Comments	ML073100987
IPEC-B5	Jeff Young	IPEC Chemist	Written Comments	ML073100328
IPEC-C5	Sharon and Chris Nolle	Residents	Written Comments	ML073100314
IPEC-D5	Dorice Madronero	President, Rockland County Conservation Association	Written Comments	ML073100308
IPEC-E5	Brian Skretney	US Congressional Representatives	Written Comments	ML073030401`
IPEC-F5	Phillip Musegaas	Riverkeeper	Written Comments	ML072960455
IPEC-G5	Paul Richards	Professor, Columbia University	Written Comments	ML073100319
IPEC-H5	Dan Doinger		Written Comments	ML073100313
IPEC-I5	Michel Lee, Esq.	Chairman, Council on Intelligent Energy & Conservation Policy	Written Comments	ML073100964
IPEC-J5	Gary Shaw		Written Comments	ML073100310
IPEC-K5	Sherwood Martinelli	Vice President, FUSE USA	Written Comments	ML073100331
IPEC-L5	Manna Jo Greene	Hudson River Sloop Clearwater	Written Comments	ML073090657

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-M5	Richard Blumenthal	Attorney General, State of Connecticut	Written Comments	ML072960359
IPEC-N5	Christopher Crane	Westchester County Board of Legislators	Written Comments	ML073100317
IPEC-O5	Gary Shaw		Written Comments	ML073100311
IPEC-P5	Susan Maggiotto	Village of Hastings – on – Hudson	Written Comments	ML073100327
IPEC-Q5	Danieala Nieto	Delaware Nation of Oklahoma Environmental Programs	Written Comments	ML072820232
IPEC-R5	Aaron Virgin		Written Comments	ML073100753
IPEC-S5	Abigail Jones		Written Comments	ML073100518
IPEC-T5	Adam Holland		Written Comments	ML073100913
IPEC-U5	Adrian Shanker		Written Comments	ML073100607
IPEC-V5	Alan Weiss		Written Comments	ML073100700
IPEC-W5	Aleta Chappelle		Written Comments	ML073100940
IPEC-X5	Alex Matthiessen		Written Comments	ML073100722
IPEC-Y5	Alexandra Siltow		Written Comments	ML073100669
IPEC-Z5	Alexi Griebsch		Written Comments	ML073100956
IPEC-A6	Alison Sussman		Written Comments	ML073100499
IPEC-B6	Allen Regar		Written Comments	ML073100906
IPEC-C6	Allie Bohm		Written Comments	ML073100548
IPEC-D6	Alma Evans		Written Comments	ML073100507
IPEC-E6	Amy Benesch		Written Comments	ML073100613
IPEC-F6	Amy Chender		Written Comments	ML073100549
IPEC-G6	Amy Goldsmith		Written Comments	ML073100727
IPEC-H6	Amy Harlib		Written Comments	ML073100208
IPEC-I6	Ana Cruz		Written Comments	ML073100735
IPEC-J6	Angelica Carrubba		Written Comments	ML073100657
IPEC-K6	Angela Garrone		Written Comments	ML073100557
IPEC-L6	Anita Ward-D'Amico		Written Comments	ML073100608
IPEC-M6	Ann Sprayregen		Written Comments	ML073100658

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-N6	Anne Drennen		Written Comments	ML073100938
IPEC-O6	Anne Pope		Written Comments	ML073100690
IPEC-P6	Annette Lindbergh		Written Comments	ML073100916
IPEC-Q6	Annie Berkery		Written Comments	ML073100759
IPEC-R6	Barbara Abramowitz		Written Comments	ML073100564
IPEC-S6	Barbara Ladd		Written Comments	ML073100207
IPEC-T6	Barbara Lubell		Written Comments	ML073100603
IPEC-U6	Barbara Nelson		Written Comments	ML073100695
IPEC-V6	Barbara Riso		Written Comments	ML073100705
IPEC-W6	Barbara Tanguay		Written Comments	ML073100597
IPEC-X6	Barry Spielvogel		Written Comments	ML073100667
IPEC-Y6	Belgica Gonzalez		Written Comments	ML073100718
IPEC-Z6	Bettina Utz		Written Comments	ML073100662
IPEC-A7	Bill Murawski		Written Comments	ML073100923
IPEC-B7	Bob and Donna Janusko		Written Comments	ML073100654
IPEC-C7	Bobbie Flowers		Written Comments	ML073100571
IPEC-D7	Bonnie Stein		Written Comments	ML073100712
IPEC-E7	Bonnie Yassky		Written Comments	ML073100514
IPEC-F7	Brad Martin		Written Comments	ML073100676
IPEC-G7	Brenda Martin		Written Comments	ML073100714
IPEC-H7	Brian Martin		Written Comments	ML073100914
IPEC-I7	Carl W. Braun		Written Comments	ML073100948
IPEC-J7	Carol Brown		Written Comments	ML073100496
IPEC-K7	Carol Carson		Written Comments	ML073100926
IPEC-L7	Carol Goodwin		Written Comments	ML073100537
IPEC-M7	Carolyn Adessa		Written Comments	ML073100625
IPEC-N7	Carolyn Cunningham		Written Comments	ML073100947
IPEC-O7	Cas Trap		Written Comments	ML073100634
IPEC-P7	Catherine Tice		Written Comments	ML073100951
IPEC-Q7	Cathy Canepa		Written Comments	ML073100909

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-R7	Cecelia Byrnes		Written Comments	ML073100594
IPEC-S7	Charles Triolo		Written Comments	ML073100716
IPEC-T7	Cheri Morreale		Written Comments	ML073100528
IPEC-U7	Chris Cunniffe		Written Comments	ML073100748
IPEC-V7	Chris Hunt		Written Comments	ML073100653
IPEC-W7	Chris Saia		Written Comments	ML073100590
IPEC-X7	Christopher Grunke		Written Comments	ML073100649
IPEC-Y7	Christopher Meyer		Written Comments	ML073100509
IPEC-Z7	Clarice Guttmann		Written Comments	ML073100645
IPEC-A8	Curt Epstein		Written Comments	ML073100503
IPEC-B8	Cynthia Anderson		Written Comments	ML073100652
IPEC-C8	Damon Bishop		Written Comments	ML073100694
IPEC-D8	Dan Cohn		Written Comments	ML073100490
IPEC-E8	Dan Doniger		Written Comments	ML073100614
IPEC-F8	Dani Glaser		Written Comments	ML073100936
IPEC-G8	Daniel Wolff		Written Comments	ML073100206
IPEC-H8	Danielle Gerard		Written Comments	ML073100917
IPEC-I8	Dannah Ressler		Written Comments	ML073100907
IPEC-J8	David Block		Written Comments	ML073100659
IPEC-K8	David Dunkleberger		Written Comments	ML073100569
IPEC-L8	David Perle		Written Comments	ML073100960
IPEC-M8	David Wieder		Written Comments	ML073100704
IPEC-N8	Deborah DeWan		Written Comments	ML073100585
IPEC-O8	Denise Edelson		Written Comments	ML073100624
IPEC-P8	Denise Lytle		Written Comments	ML073100633
IPEC-Q8	Denise Romano		Written Comments	ML073100697
IPEC-R8	Diane Ennis		Written Comments	ML073100540
IPEC-S8	Diane Napolitano		Written Comments	ML073100589
IPEC-T8	Dinda Evans		Written Comments	ML073100606
IPEC-U8	Don Devine		Written Comments	ML073100922

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-V8	Donna Ostrau		Written Comments	ML073100744
IPEC-W8	Doreen Tiganelli		Written Comments	ML073100721
IPEC-X8	Dorothy Shays Dangerfield		Written Comments	ML073100910
IPEC-Y8	Dwight Author		Written Comments	ML073100205
IPEC-Z8	E. Risch		Written Comments	ML073100515
IPEC-A9	Ed Soph		Written Comments	ML073100581
IPEC-B9	Eddie Scher		Written Comments	ML073100534
IPEC-C9	Edith Kantrowitz		Written Comments	ML073100511
IPEC-D9	Edward Schreiber		Written Comments	ML073100698
IPEC-E9	Elanor Herman		Written Comments	ML073100517
IPEC-F9	Elizabeth Maucher		Written Comments	ML073100530
IPEC-G9	Elizabeth Phillips		Written Comments	ML073100637
IPEC-H9	Elizabeth Ronan		Written Comments	ML073100510
IPEC-I9	Elizabeth Segal		Written Comments	ML073100552
IPEC-J9	Ellen O'Connell		Written Comments	ML073100562
IPEC-K9	Emilee Drobbin		Written Comments	ML073100556
IPEC-L9	Emily Scaife		Written Comments	ML073100728
IPEC-M9	Erica Chambers		Written Comments	ML073100541
IPEC-N9	Ethel Bock		Written Comments	ML073100927
IPEC-O9	Eve Propp		Written Comments	ML073100924
IPEC-P9	Gail Frank		Written Comments	ML073100599
IPEC-Q9	Garrick Bryant		Written Comments	ML073100903
IPEC-R9	Gene Binder		Written Comments	ML073100946
IPEC-S9	George Stadnik		Written Comments	ML073100729
IPEC-T9	Greg Simmons		Written Comments	ML073100646
IPEC-U9	Gregory Durniak		Written Comments	ML073100531
IPEC-V9	Gwendolyn Chambers		Written Comments	ML073100961
IPEC-W9	Heidi Jellinghaus		Written Comments	ML073100739
IPEC-X9	Helen Chayefsky		Written Comments	ML073100750

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-Y9	Helen Scholfield		Written Comments	ML073100638
IPEC-Z9	Helga Klessen		Written Comments	ML073100699
IPEC-A10	Henry Kelly		Written Comments	ML073100650
IPEC-B10	Holly Everts Bartow		Written Comments	ML073100755
IPEC-C10	Howard Tarragon		Written Comments	ML073100602
IPEC-D10	James Baretta		Written Comments	ML073100644
IPEC-E10	James Davis		Written Comments	ML073100561
IPEC-F10	James Marsh		Written Comments	ML073100943
IPEC-G10	James Mulder		Written Comments	ML073100615
IPEC-H10	James Prudden		Written Comments	ML073100930
IPEC-I10	James Schmitt		Written Comments	ML073100573
IPEC-J10	Jan Blaire		Written Comments	ML073100555
IPEC-K10	Jan Haber		Written Comments	ML073100572
IPEC-L10	Janet Baller		Written Comments	ML073100621
IPEC-M10	Janet Castle		Written Comments	ML073100920
IPEC-N10	Janet Connor		Written Comments	ML073100738
IPEC-O10	Janice Bernard		Written Comments	ML073100632
IPEC-P10	Jay Rosen		Written Comments	ML073100904
IPEC-Q10	Jeanne Perkins		Written Comments	ML073100678
IPEC-R10	Jeanne-Noel Mahoney		Written Comments	ML073100643
IPEC-S10	Jeff Washel		Written Comments	ML073100211
IPEC-T10	Jeffery Kalman		Written Comments	ML073100655
IPEC-U10	Jeffery Wright		Written Comments	ML073100745
IPEC-V10	Jeremy Scheinder		Written Comments	ML073100629
IPEC-W10	Jillian Mulvihill		Written Comments	ML073100640
IPEC-X10	Jim Gross		Written Comments	ML073100497
IPEC-Y10	Jimmy Bromer		Written Comments	ML073100925
IPEC-Z10	Joan Gussow		Written Comments	ML073100969
IPEC-A11	Joan Katen		Written Comments	ML073100610
IPEC-B11	Joann Keenan		Written Comments	ML073100952

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-C11	JoAnn Myers		Written Comments	ML073100493
IPEC-D11	JoAnn Pedersen		Written Comments	ML073100627
IPEC-E11	Joe Seeman		Written Comments	ML073100563
IPEC-F11	Joel Breitkopf		Written Comments	ML073100491
IPEC-G11	Joel Resnick		Written Comments	ML073100741
IPEC-H11	John Norman		Written Comments	ML073100715
IPEC-I11	John Prusinski		Written Comments	ML073100671
IPEC-J11	John Tiffany		Written Comments	ML073100533
IPEC-K11	Jonathan Rubin		Written Comments	ML073100565
IPEC-L11	Joni Mercado		Written Comments	ML073100213
IPEC-M11	Josefina Vidal		Written Comments	ML073100725
IPEC-N11	Joseph Chamberlin		Written Comments	ML073100908
IPEC-O11	Joseph Montuori		Written Comments	ML073100547
IPEC-P11	Joyce Bressler		Written Comments	ML073100915
IPEC-Q11	Judith Simon		Written Comments	ML073100588
IPEC-R11	Judith Yarme		Written Comments	ML073100203
IPEC-S11	Judy Allen		Written Comments	ML073100214
IPEC-T11	Judy Miller-Lyons		Written Comments	ML073100693
IPEC-U11	Judy W. Soffler		Written Comments	ML073100544
IPEC-V11	Julia Rellou		Written Comments	ML073100570
IPEC-W11	Julie Kessler		Written Comments	ML073100911
IPEC-X11	June Muller		Written Comments	ML073100504
IPEC-Y11	Karen Browning		Written Comments	ML073100743
IPEC-Z11	Karen Wells		Written Comments	ML073100663
IPEC-A12	Karin Greenfield-Sanders		Written Comments	ML073100620
IPEC-B12	Karl Volk		Written Comments	ML073100611
IPEC-C12	Katherine Babiak		Written Comments	ML073100622
IPEC-D12	Kathleen Kourie		Written Comments	ML073100635
IPEC-E12	Kathleen Schmaltz		Written Comments	ML073100505
IPEC-F12	Kathleen Vorwick		Written Comments	ML073100958

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-G12	Kathy Burpee		Written Comments	ML073100931
IPEC-H12	Kenneth Okin		Written Comments	ML073100526
IPEC-I12	Kerry Kennelly		Written Comments	ML073100578
IPEC-J12	Kimberly Lowe		Written Comments	ML073100711
IPEC-K12	Kimberly Vaughn		Written Comments	ML073100935
IPEC-L12	L. Lawrence		Written Comments	ML073100919
IPEC-M12	Larry Garner		Written Comments	ML073100575
IPEC-N12	Larry Siegel		Written Comments	ML073100601
IPEC-O12	Laura Bassi		Written Comments	ML073100740
IPEC-P12	Laura Ferran		Written Comments	ML073100592
IPEC-Q12	Laura Miner		Written Comments	ML073100677
IPEC-R12	Laura Sedlack		Written Comments	ML073100757
IPEC-S12	Laurie Lehay		Written Comments	ML073105520
IPEC-T12	Laurie Puca		Written Comments	ML073100546
IPEC-U12	Laurie Sholinsky		Written Comments	ML073100941
IPEC-V12	Laurie Spigel		Written Comments	ML073100595
IPEC-W12	Leslie Raicer		Written Comments	ML073100720
IPEC-X12	Lester LeViness		Written Comments	ML073100593
IPEC-Y12	Lillian Gruver		Written Comments	ML073100651
IPEC-Z12	Lisa Petek		Written Comments	ML073100560
IPEC-A13	Louis Albino		Written Comments	ML073100524
IPEC-B13	Lyn Borek		Written Comments	ML073100577
IPEC-C13	Lynn Teger		Written Comments	ML073100730
IPEC-D13	Marc Weber		Written Comments	ML073100567
IPEC-E13	Marcy Lynn		Written Comments	ML073100933
IPEC-F13	Margaret Leonard		Written Comments	ML073100959
IPEC-G13	Maria Ragucci		Written Comments	ML073100612
IPEC-H13	Marnie Andrews		Written Comments	ML073100539
IPEC-I13	Mary Cronin		Written Comments	ML073100661
IPEC-J13	Mary Maley		Written Comments	ML073100508

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-K13	Mary Noll		Written Comments	ML073100942
IPEC-L13	Mary Phillips		Written Comments	ML073100681
IPEC-M13	Maryanne Mullany		Written Comments	ML073100513
IPEC-N13	Maureen Ritter		Written Comments	ML073100618
IPEC-O13	Merry Mcloryd		Written Comments	ML073100682
IPEC-P13	Michael Heimbinder		Written Comments	ML073100905
IPEC-Q13	Michael Shimkin		Written Comments	ML073100558
IPEC-R13	Michael Weiss		Written Comments	ML073100668
IPEC-S13	Michelle Kassan		Written Comments	ML073100710
IPEC-T13	Michelle Squires		Written Comments	ML073100210
IPEC-U13	Mitchell Maricque		Written Comments	ML073100686
IPEC-V13	Moly McCoy Straus		Written Comments	ML073100732
IPEC-W13	Nancy Andreassi		Written Comments	ML073100492
IPEC-X13	Nancy Kennedy		Written Comments	ML073100723
IPEC-Y13	Nancy Maloy		Written Comments	ML073100724
IPEC-Z13	Nancy Syrop		Written Comments	ML073100656
IPEC-A14	Nancy Thomas		Written Comments	ML073100506
IPEC-B14	Natasha Shpiller		Written Comments	ML073100691
IPEC-C14	Nfn Esmee		Written Comments	ML073100672
IPEC-D14	Nick Alba		Written Comments	ML073100525
IPEC-E14	Nils Osterberg		Written Comments	ML073100600
IPEC-F14	Nina Carlson		Written Comments	ML073100949
IPEC-G14	Noel Kropf		Written Comments	ML073100583
IPEC-H14	Nora Prentice		Written Comments	ML073100666
IPEC-I14	Pamela Kray Gallivan		Written Comments	ML073100523
IPEC-J14	Pamela Slater		Written Comments	ML073100538
IPEC-K14	Pamela Thye		Written Comments	ML073100554
IPEC-L14	Patricia Chernoff		Written Comments	ML073100928
IPEC-M14	Patricia Korn		Written Comments	ML073100709
IPEC-N14	Pauline Juckes		Written Comments	ML073100689

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-O14	Peggy Harrington		Written Comments	ML073100746
IPEC-P14	Peter Bobrow		Written Comments	ML073100675
IPEC-Q14	Peter Kassan		Written Comments	ML073100550
IPEC-R14	Peter Lampke		Written Comments	ML073100542
IPEC-S14	Phyllis M. Andrews		Written Comments	ML073100707
IPEC-T14	Priscilla Liebowitz		Written Comments	ML073100516
IPEC-U14	Qiana Quartararo		Written Comments	ML073100628
IPEC-V14	Randi Childs		Written Comments	ML073100591
IPEC-W14	Randy Tashjian		Written Comments	ML073100579
IPEC-X14	Raquel Vidal-Chan		Written Comments	ML073100574
IPEC-Y14	Ray Tartaglione		Written Comments	ML073100747
IPEC-Z14	Renee Cho		Written Comments	ML073100954
IPEC-A15	Richard Heaning		Written Comments	ML073100756
IPEC-B15	Rob Moore		Written Comments	ML073100706
IPEC-C15	Robert Braun		Written Comments	ML073100953
IPEC-D15	Robert Evangelista		Written Comments	ML073100587
IPEC-E15	Robert Gold		Written Comments	ML073100494
IPEC-F15	Robert Lesko		Written Comments	ML073100495
IPEC-G15	Robert Rainer		Written Comments	ML073100660
IPEC-H15	Robin Hoffmann		Written Comments	ML073100630
IPEC-I15	Rocco Rizzo		Written Comments	ML073100713
IPEC-J15	Ron Wish		Written Comments	ML073100566
IPEC-K15	Roseanne Brumley		Written Comments	ML073100535
IPEC-L15	Roy Fuller		Written Comments	ML073100559
IPEC-M15	S. Rebecca Holland		Written Comments	ML073100692
IPEC-N15	Sally Espinosa		Written Comments	ML073100733
IPEC-O15	Sally Freeman		Written Comments	ML073100688
IPEC-P15	Sandy Bihn		Written Comments	ML073100731
IPEC-Q15	Sarah Gallagher		Written Comments	ML073100619
IPEC-R15	Sarah West		Written Comments	ML073100598

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-S15	Shannon Shea		Written Comments	ML073100551
IPEC-T15	Sharon Goodman		Written Comments	ML073100586
IPEC-U15	Sidney Goodman		Written Comments	ML073100616
IPEC-V15	Stasia Kay		Written Comments	ML073100950
IPEC-W15	Stephen Blot		Written Comments	ML073100719
IPEC-X15	Stephen Donnelly		Written Comments	ML073100945
IPEC-Y15	Stephen Safran		Written Comments	ML073100934
IPEC-Z15	Steve Fondilller		Written Comments	ML073100487
IPEC-A16	Steven Libby		Written Comments	ML073100944
IPEC-B16	Sue Casanova		Written Comments	ML073100596
IPEC-C16	Susan Fischer		Written Comments	ML073100737
IPEC-D16	Susan Goldfarb		Written Comments	ML073100527
IPEC-E16	Susan Groner		Written Comments	ML073100684
IPEC-F16	Susan Rukeyser		Written Comments	ML073100626
IPEC-G16	Teri Gibson		Written Comments	ML073100648
IPEC-H16	Theresa Matuck		Written Comments	ML073100580
IPEC-I16	Toby Shimin		Written Comments	ML073100749
IPEC-J16	Tomas Simon		Written Comments	ML073100674
IPEC-K16	Tracy Brown		Written Comments	ML073100520
IPEC-L16	Vicki Blucher		Written Comments	ML073100929
IPEC-M16	Vitalah Gayle Simon		Written Comments	ML073100681
IPEC-N16	Vivian Bergenthal		Written Comments	ML073100623
IPEC-O16	Wayne Burkey		Written Comments	ML073100932
IPEC-P16	Wilder Bellamy		Written Comments	ML073100685
IPEC-Q16	William Abranowicz		Written Comments	ML073100647
IPEC-R16	William Burgess		Written Comments	ML073100687
IPEC-S16	William Sipper		Written Comments	ML073100736
IPEC-T16	Zac Nicholson		Written Comments	ML073100501
IPEC-U16	Susan Shapiro	President, FUSE USA	Written Comments	ML072960457
IPEC-V16	Thomas N. McKee	Indian Point Employee	Written Comments	ML072960365

Table A-1. (cont'd)

Commenters ID	Commenter	Affiliation (If Stated)	Comment Source	ML Number
IPEC-W16	Jaroslav P. Bubniak	Indian Point Employee	Written Comments	ML072960366
IPEC-X16	Dr. Muzaffer Karasulu	Indian Point Employee	Written Comments	ML072960370
IPEC-Y16	John Bencwinga		Written Comments	ML072960368
IPEC-Z16	Joseph L. Barnes		Written Comments	ML072960375
IPEC-A17	John Hausner		Written Comments	ML073110127
IPEC-B17	Daria Zaluckyj	Indian Point Employee	Written Comments	ML073110156
IPEC-C17	Robert J. Dolansky	Indian Point Employee	Written Comments	ML073110161
IPEC-D17	Thomas Pulcher	Indian Point Employee	Written Comments	ML073110131
IPEC-E17	Grace Musumeci	US Environmental Protection Agency	Written Comments	ML072960360
IPEC-F17	Daniel Ropson	Indian Point Employee	Written Comments	ML072960373
IPEC-G17	Randy Murray	Fitzpatrick Employee	Written Comments	ML072960372
IPEC-H17	Robert L. Brown		Written Comments	ML072960362
IPEC-I17	Eliot Engel, John Hall, Maurice Hinchey, Nita Lowey	Members, U.S. House of Representatives	Written Comments	ML073030401
IPEC-J17	Z. Cerry	Indian Point Employee	Written Comments	ML072960465
IPEC-K17	Phillip Musegaas	Riverkeeper	Written Comments	ML072960455
IPEC-L17	Richard Blumenthal	Attorney General, State of Connecticut	Written Comments	ML072960359
IPEC-M17	David & Anne Yeadon		Written Comments	ML073030402
IPEC-N17	Joan Matthews	NYSDEC & NYSAG	Written Comments	ML073090588
IPEC-O17	William M. Mooney, Jr.	President, Westchester County Association	Written Comments	ML072960374
IPEC-P17	John Jawor	Indian Point Employee	Written Comments	ML072960460
IPEC-Q17	Susan Shapiro	President, FUSE USA	Written Comments	ML073100985
IPEC-R17	John J. Sipos	Assistant Attorney General, State of New York	Written Comments	ML073600658

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

1. License Renewal and Its Processes
2. Support of License Renewal
3. Opposition to License Renewal
4. Water Quality, Hydrology, and Use
5. Aquatic Ecology and related Issues: Critical/Important Habitat
6. Threatened and Endangered Species
7. Socioeconomic Impacts
8. Human Health
9. Air Quality and Global Warming
10. Cumulative Impacts
11. Monitoring Programs
12. Postulated Accidents
13. Alternatives
14. Uranium Fuel Cycle and Waste Management
15. Refurbishment
16. Decommissioning
17. Outside the Scope of License Renewal: Emergency Response and Preparedness, Security and Terrorism, Operational Safety, Aging Management, Energy Costs, Energy Needs, and Miscellaneous

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

The preparation of the SEIS will take into account all the relevant issues raised during the scoping process. The SEIS will address both Category 1 and 2 issues, along with any new information identified as a result of scoping. The SEIS will rely on conclusions supported by information in the GEIS for Category 1 issues, and will include the analysis of Category 2 issues and any relevant new and significant information. The draft SEIS will be made available for public comment. The comment period will offer the next opportunity for the applicant, interested federal, state, and local government agencies, local organizations, and members of the public to provide input to the NRC's environmental review process. The comments received on the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with the staff's Safety Evaluation Report, NRC Region I inspections, and independent review by the Advisory Committee on Reactor Safeguards, will be considered by the NRC in reaching a decision on the IP2 and IP3 license renewal application.

Indian Point Nuclear Generating Unit Nos. 2 and 3
Public Scoping Meeting
Comments and Responses

The comments and suggestions received as part of the scoping process are discussed below. The alphanumeric designator in parentheses after each comment includes the Commenter's ID letter (from Table 1) and the comment number. More than one comment number after a comment indicates that the same comment was made on different occasions. In some cases, comments included in one section may be similar to comments addressed in other sections of the report.

1. Comments Regarding License Renewal and Its Processes

Comment: NEPA directs that federal agencies, such as the NRC, must study certain issues and that the reviewing agency must take a "hard look" at these issues, but does not direct what result an agency must reach. Federal appellate courts have been very clear, that NEPA is an important federal law and compliance is mandatory. "NEPA was created to ensure that agencies will base decisions on detailed information regarding significant environmental impacts and that information will be available to a wide variety of concerned public and private actors . . . ." (IPEC-F5-10, IPEC-L17-5, IPEC-M5-5)

Comment: "NEPA was intended to ensure that decisions about federal actions would be made only after responsible decision-makers had fully adverted to the environmental consequences of the actions, and had decided that the public benefits flowing from the actions outweighed their environmental costs." Jones v. District of Columbia Redevelopment Land Agency, 162 U.S. App. D.C. 366, 499 F.2d 502, 512 (D.C. Cir. 1974). (IPEC-F5-11b)

Comment: NEPA directs that federal agencies, such as the NRC, must study certain issues and that the reviewing agency must take a "hard look" at these issues, but does not direct what result an agency must reach. Federal appellate courts have made it clear that NEPA is an important federal law and compliance is mandatory. "NEPA was, created to ensure that agencies will base decisions on detailed information regarding significant environmental impacts and that information will be available to a wide variety of concerned public and private actors. Morongo Band of Mission -Indians v. Federal Aviation Administration, 161 F.3d 569, 575 (9th Cir. 1998)" (quoted in Mississippi River Basin Alliance v. Westphal, 230 F.3d 170, 175 (5th Cir. 2000)). (IPEC-K17-10)

Comment: As the District of Columbia Circuit has held:
"NEPA was intended to ensure that decisions about federal actions would be made only after responsible decision-makers had fully adverted to the environmental consequences of the actions, and had decided that the public benefits flowing from the actions outweighed their environmental costs." (IPEC-K17-11b , IPEC-L17-7, IPEC-M5-7)

Comment: Of particular relevance to the NEPA review of NRC license renewal applications is federal guidance stating that the content of an EIS should be reviewed every five years to determine if a Supplemental EIS is necessary. Forty Most Asked Question Concerning CEQ's

National Environmental Policy Act Regulations, 46 Fed. Reg. 18,036. As demonstrated below, the NRC has more than doubled this five-year period for review of the EIS governing nuclear power plant license renewal matters, with particular and alarming consequences for Indian Point. (IPEC-N17-9)

Comment: The generic analysis of particular issues "may be adopted in each plant-specific review." Id. For Category 2 issues, the Generic EIS analysis "has shown that one or more of the criteria of Category 1 cannot be met, and therefore, additional plant-specific review is required." Id. These Category 2 issues include, among other issues, impacts on aquatic ecology from the once-through cooling system, impacts on groundwater use and quality, socio-economic impacts, impacts on threatened and endangered species, impacts on historic resources, and aesthetic impacts.

As demonstrated below, the NRC's bifurcation of the analysis of environmental impacts into Category 1 and Category 2 does not comply with NEPA, particularly as the NRC has applied those requirements to the Indian Point license renewal application. (IPEC-N17-11)

Comment: The Generic EIS for Re-licensing Should Be Rejected by NRC, and an Indian Point Specific EIS Must Be Required. (IPEC-N17-12)

Comment: In 1996, the NRC conducted a review and issued a Generic EIS for nuclear power plant license renewal. The world, and our understanding of it, has changed considerably since then. A tacit acknowledgement of such change appears in the NRC's own regulations. As the regulations note, "on a 10-year cycle, the Commission intends to review the material in this appendix and update it if necessary." Footnote 2, 10 CFR Part 51, Subpt. A, App. B at 47. Based upon the Generic EIS review and the regulations, a number of critical Category 1 issues are fully excluded from review in the Supplemental EIS for license renewal applications. In addition, Council on Environmental Quality ("CEQ") and NRC regulations require that the Commission's NEPA review examine new and significant information. (IPEC-N17-13)

Comment: NRC regulations limit the issues to be addressed in the Supplemental EIS to those issues that it has denoted as Category 2 issues. The Generic EIS is now over 11 years old, and the information on which many of its conclusions were drawn is now dated. Therefore, the NRC should expand the scope of its environmental review for the Indian Point license renewal and consider issues beyond those identified as Category 2. (IPEC-N17-24)

Comment: Further underscoring New York's concern is that the NRC has been "considering" Generic EIS revisions for at least three years, but has not yet released a proposed revised Generic EIS. By way of comparison, the entire proposed time frame for the Indian Point license renewal Supplemental EIS and application is less than three years (if no hearing is conducted) and only a few months more than that if a hearing is conducted. This apparent incongruity of timelines does not justify precluding New York and other members of the public from meaningful and legally relevant comment on the Generic EIS. The NRC must prepare an Indian Point-specific Supplemental EIS that examines all the environmental impacts occasioned by a 20-year renewal of the facility. As part of that review, the NRC should expand the scope of its review

and consider issues beyond those that were identified as Category 2 issues back in 1996 and commence a full NEPA EIS review of the Indian Point license renewal application. As it now stands, the NRC has formalistically, and without due consideration to Indian Point's peculiarities, determined that a number of critical issues cannot even be looked at in the environmental review. (IPEC-N17-26)

Comment: THE SUPPLEMENTAL EIS MUST ANALYZE ALL ENVIRONMENTAL IMPACTS AS REQUIRED BY NEPA. (IPEC-N17-27)

Comment: CATEGORY 1 ISSUES MUST BE ADDRESSED IN THE NEPA EIS FOR THE INDIAN POINT LICENSE RENEWALS.

The NRC's rigid adherence to its Category 1 and Category 2 impacts for license renewal applications does not adequately account for site-specific impacts and new and significant information available since the initial license. (IPEC-N17-75)

Comment: FUSE requests that certain GEIS scoping issues, classified as Category 1, be included in a Site Specific EIS, as Category 2 issue. (IPEC-U16-2)

Comment: Define the proposed action, which, to date, has not been adequately done by the NRC. . . . Determine the scope of the supplement to the GEIS and identify significant issues to be analyzed in depth, including (a) category 1 issues that have changed significantly in the aftermath of September 11, 2001. (b) the determination that Yucca Mountain, or any other long term storage facility, has not to date been approved . . . . (IPEC-U16-10a)

Comment: Describe how the supplement to the GEIS will be prepared, and what steps will be taken to assure adequate public inclusion from the onset of the EIS scoping. (IPEC-U16-16)

Comment: The Fifth Circuit underscored the important role that the NEPA process plays in allowing a meaningful exchange of information between the agency and the public:

This case arises under the network of NEPA, a statute drafted to ensure that federal agencies "carefully consider detailed information concerning significant environmental impacts," and at the same time "guarantee that the relevant information will be made available to the larger audience that may also play a role in both the decision making process and the implementation of that decision." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 109 S.Ct. 1835, 1845, 104 L.Ed.2d 351 (1989); accord North Buckhead Civic Ass'n v. Skinner 903 F.2d 1533, 1540 (11th Cir. 1990). This procedural statute was promulgated to insure that the decision to go forward with a federal project which significantly affects the environment be an environmentally conscious one. (IPEC-U16-22)

Comment: Therefore the NRC under administrative law has a fiduciary obligation to include significant new circumstances or information and must guarantee that the affected public‘s concerns are included within scope. (IPEC-U16-24)

Comment: Public health and safety cannot, and must not, be grandfathered in for an additional 20 year period of licensed operation without properly evaluating the siting of the plant under NRC regulations. (IPEC-U16-244)

Comment: In the event of acceptance of Entergy's LRA, the NRC will issue a 20 year new superseding license, hence retiring the current license.

Therefore all the regulatory Environment citing criteria for a new license must be reviewed as a Category 2 issue in the EIS. (IPEC-U16-245)

Comment: In the event Entergy's LRA is approved, under the NRC regulations, the NRC will be retiring the current license and issuing a new superseding license for a twenty year period. Therefore, all Environmental citing criteria promulgated in the NRC regulations for a new license must be included in the EIS as they have LARGE significant Impacts and Environmental Costs, including, but not limited to, seismology, population density, water quality, emergency evacuation plans (etc). (IPEC-U16-381)

Comment: All the original siting criteria for a new license must be considered, as delineated in Regulatory Guide 4.7 - Appendix A - Site Safety Considerations for Assessing Site Suitability for Nuclear Power Stations. The criteria includes the following Regulations and Regulatory Guides which must be considered by the NRC prior to the issuance of a new license. (IPEC-U16-382)

Comment: Due to the significant LARGE impacts on health and the environment during the term of a New Superseding License, all citing issues must be comprehensively evaluated as plant-specific, as Category 2 issues. (IPEC-U16-388)

Response: *The NRC performs its license renewal environmental review in accordance with NEPA and the NRC's requirements of 10 CFR Part 51. The impact evaluation performed by the staff, as presented in the GEIS, identified 92 environmental issues that were considered within the scope of a license renewal review. For each of the 92 issues, the staff evaluated existing data from the nuclear power plants throughout the U.S. From this evaluation, the staff determined which issues were amenable to generic consideration and which issues can only be resolved on a site-specific basis. Sixty nine of the issues were found to be generic to all sites, whereas, 23 of the issues would require a site-specific analysis. Generic issues are termed Category 1 because the conclusions related to their environmental impacts were found to be common to all plants, or all plants with certain design features (e.g., cooling towers). Mitigation of adverse impacts was considered, and it was determined that additional mitigation measures are likely not to be sufficiently beneficial to warrant implementation. Absent "new and significant information" that the NRC obtains during its independent site-specific review, which includes public comments in the scoping process, Category 1 issues are not reevaluated in the SEIS. Generic conclusions from the applicable 69 Category 1 issues are adopted (using a NEPA concept known as tiering) in the site-specific SEIS. The GEIS is available on the NRC's website at http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/.*

Category 2 issues are those that require a site-specific review, and are prepared as part of the staff's site specific supplement to the GEIS. The NRC staff evaluates site-specific data provided by the applicant, other Federal Agencies, State agencies, tribal and local governments, as well as information from members of the public.

The comments generally disagree with the NRC's approach, as described above, in performing its environmental review, and do not provide any new specific information with respect to environmental impacts; therefore, the comments will not be evaluated further. NRC regulations in 10 CFR part 51 implement NEPA and provide the framework for NRC's environmental review.

Comment: Too often, representatives from Indian Point and Entergy are not presented with a balanced platform from which to offer expert opinions on operational safety, security, emergency planning, air quality and the economic viability of a well-run Indian Point and its positive effect on the surrounding communities. (IPEC-D17-3, IPEC-J17-3, IPEC-X16-3)

Comment: We thank you for the opportunity to comment on the environmental scoping process at Indian Point. As you can see, the environmental impacts of Indian Point on the surrounding areas are significant and substantial. It is our continued hope that the NRC will fully consider the serious concerns that we and others have raised regarding the environmental impacts of Entergy's application for renewal of operating licenses at Indian Point Nuclear Generating Unit Nos. 2 and 3. (IPEC-E5-1)

Comment: My name is Dan O'Neill. I am the Mayor of the Village of Buchanan where the Indian Point nuclear power plants are located. I want to thank the NRC for giving myself and other members of the public to comment on the environmental impact of Indian Point. (IPEC-FF-1)

Comment: Thank you for the opportunity to submit comments on the scope of the Environmental Review to be conducted as part of the consideration of a license renewal for two nuclear power reactors at Indian Point, Buchanan, New York. (IPEC-G5-1)

Comment: Everything in our environment is interconnected. I ask the NRC to maintain as holistic approach as possible. They have wide discretion and should use it to be inclusive and not exclude any relevant information. Just a moment of history, and that is when these plants all over the country that have been licensed for 40 years were first licensed, they were simply licensed for 40 years.

About 18 years into the process they realized that, you know, they could maybe get another 20 years out of their investment and prevailed upon the NRC to promulgate regulations for relicensing. However, over the recent past, or over time, the issues that can be considered in relicensing, and the public's ability to have input has been systematically narrowed. This is part of a whole tendency that we see for individual and community rights to be usurped by corporate power. And it's a question of where the most money is to protect interests. But for the NRC to do its job, the more public input they have, and the more they listen to it, the more effective they will be. (IPEC-GG-2)

Comment: My name is Judy Allen from Putnam Valley, member at large of IPSEC and a mother, and thank you very much to the NRC for providing this opportunity to bring to your attention the environmental impacts of continued plant operation.

The purpose of this hearing is to make the public aware of what the NRC includes in your environmental considerations for relicensing Indian Point for another 20 years, and what the public stakeholders think about these standards. In a few words, your standards are inadequate. (IPEC-GGG-1)

Comment: We thank you for the opportunity to comment on the environmental scoping process at Indian Point. As you can see, the environmental impacts of Indian Point on the surrounding areas are significant and substantial. It is our continued hope that the NRC will fully consider the serious concerns that we and others have raised regarding the environmental impacts of Entergy's application for renewal of operating licenses at Indian Point Nuclear Generating Unit Nos. 2 and 3. (IPEC-I17-17)

Comment: If people stop coming to your meetings, if people stop submitting comments to your federal agency, if people stop raising concerns about Indian Point, the only nuclear plant in the country to be leaking strontium-90 into public waterways, a plant that has a five- to six-time emergency plant unplanned shutdown rate than any in the country, a plant that continues to have incredulous accidents, mishaps, and breakdowns, it's not because they're not afraid of Indian Point, it's because they're afraid of you. (IPEC-KK-7)

Comment: Background of Relicensing Regulations: A bit of historical background may help here. When nuclear power plants were first sited and built, they were permitted for forty years. After about 18 years, the nuclear power industry realized that their investment was time limited and prevailed upon the NRC to promulgate regulations to assure an extension of their facilities' lifespans. Over the years, the industry has lobbied to successfully narrow the issues that can be considered under the relicensing process, and, in fact, NRC has never denied any relicensing application. In one case, Maine Yankee decided to withdraw their application and close the plant, due to the high costs of meeting NRC's requirements for re-permitting the facility. A few years ago, the NRC also changed its rules to limit meaningful public participation in the relicensing process by eliminating the right of interveners to (1) have public on-the-record hearings with sworn testimony or (2) to cross-examine or challenge witnesses of plant operators/NRC, despite the fact that it is to the NRC's advantage to have the best available information by which to develop appropriate criteria and on which to base their final decision. (IPEC-L5-3)

Comment: RESOLVED, that the Westchester County Legislature urges the NRC to hold hearings in Westchester County at a time and place that will allow for maximum input from Westchester residents, and be it further

Resolved, that NRC representatives coordinate these meetings with this Honorable Board. (IPEC-N5-7)

Comment: The New York State Department of Environmental Conservation submits to the United States Nuclear Regulatory Commission, on behalf of all New York State Executive Agencies and the New York State Department of Law (collectively "the State"); the following comments related to the scope of the Supplemental Environmental Impact Statement for the license renewal of the Indian Point Units 2 and 3. (IPEC-N17-1)

Comment: The State will also be submitting a Request for Hearing and Petition to Intervene in the license renewal proceeding. These comments and those future documents further supplement the public comments provided by this Department and the Attorney General's Office at the recent public hearing on September 19, 2007, regarding the license renewal application for Indian Point. (IPEC-N17-2)

Comment: The State appreciates the opportunity to provide scoping comments to the NRC and to their acceptance into the public record in this matter. If NRC staff requires any additional information or clarification regarding any of the above referenced issues please contact either of the undersigned. (IPEC-N17-3)

Comment: I respectfully and formally request that the issues I have cited become part of the considerations of the NRC Relicensing process for Indian Point. (IPEC-O5-17)

Comment: I'm Melvin Burruss, President of the African-American Men of Westchester. I want to thank you for giving us the opportunity to voice our views also. (IPEC-PP-1)

Comment: I know the NRC will cut me off because the NRC does its best to circumvent citizen involvement in the process by limiting our time to make our complaints known; I have taken the liberty of memorializing my concerns in writing, and am submitting them to be included in their entirety into the official transcript of this public meeting. (IPEC-PPP-13)

Comment: I am writing in regard to your letter dated August 24, 2007 requesting comments concerning the Indian Point Nuclear Generating Unit Nos. 2 and 3 license renewal application review. As mentioned in the environmental report, the Delaware people were one of the aboriginal "entities located in the Hudson- Mohawk Basin in the early" century and should have been one of the initial consulting parties. As one of the aboriginal entities, we are very interested in being a part of the review process not only for cultural preservation but for environmental protection as well. (IPEC-G4-1)

Comment: I am writing in regard to your letter dated August 24, 2007 requesting comments concerning the Indian Point Nuclear Generating Unit Nos. 2 and 3 license renewal application review. As mentioned in the environmental report, the Delaware people were one of the aboriginal "entities located in the Hudson- Mohawk Basin in the early." century and should have been one of the initial consulting parties. As one of the aboriginal entities, we are very interested in being a part of the review process not only for cultural preservation but for environmental protection as well. (IPEC-Q5-1)

Comment: FUSE reserves the right to amended the attached comments as permitted in 10 CFR 51.45. (IPEC-Q17-15)

Comment: Good evening. I want to talk to you and share with you briefly why I came here tonight. I'd like to thank the NRC for giving this opportunity to talk about environmental impacts as well as just the plant in general and what it means to us in greater society here in the Hudson Valley. (IPEC-SS-1)

Comment: Michel Lee, Council on Intelligent Energy and Conservation Policy.

Upton Sinclair once said it is difficult for a man to understand something when his job and salary depend upon him not understanding it.

Now I've come in at these meetings, now, for going on six and a half years, and what I see in every single one, there's a very clear divide among people who have a financial self-interest in keeping this plant operating, and those that do not.

But the real problem is not the financial interest of Entergy employees, and other groups that may depend on its financial largesse. The real problem is that the NRC is in bed with them. It is not a real regulator in any sense of the word, and for my money, that is why I left my law practice, representing large corporations, 20 years, so I'm fully aware of how large corporations and the profit motive work. But I left that area because of the shock and disgust I felt when I started doing research in this area on the NRC. And let me give you one example, cause we would spend here all day long and well into next week, if I started listing them, but it's a key one and it relates to this proceeding. (IPEC-U-1)

Comment: As outlined by NEPA, the NRC initiated the scoping process with the issuance of the Federal Register Notice on August 10, 2007. 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 by submitting written suggestions and comments no later than October 12, 2007. (IPEC-U16-8)

Comment: The scoping process is the singular opportunity for the public to participate in identifying issues that Stakeholders request the NRC to address in the plant-specific supplement to the GEIS. The Intent, as 10 CFR and NUREG guidance lays out, of the Scoping Process should include the following objectives. (IPEC-U16-9)

Comment: I have attended several public forums on the subject of Indian Point, and am disappointed by the lack of factual information communicated to the public about the benefits of nuclear power for this region. Too often, representatives from Indian Point and Entergy are not presented with a balanced platform from which to offer expert opinions on operational safety, security, emergency planning, air quality and the economic viability of a well-run Indian Point and its positive effect on the surrounding communities. (IPEC-V16-2)

Comment: [A]nd the other that goes to the heart of our democratic society - the right to communicate with our government agencies without fear of intimidation and harassment. Neither issue, under current NRC regulations, is taken seriously - but nonetheless I use this opportunity to shine a spotlight on these issues that have been left in the darkened corners of the NRC's regulatory process. (IPEC-VVV-2)

Comment: If people stop coming to your meetings; if people stop submitting comments to your federal agency; if people stop raising concerns about Indian Point -- the only nuclear power plant in the country to be leaking strontium-90 into public waterways; a plant that has 5-6 times more emergency shutdowns than the national average; a plant that continues to have incredulous accidents, mishaps, and breakdowns - it's not because they're not afraid of Indian Point. It's because they're afraid of you. (IPEC-VVV-7)

Comment: I almost feel I should ask you to please stand, stretch. You've been very patient. You can see from my approach to the podium, that I am quite aware that there is a very serious timekeeper here.

First, I'd like to applaud each of the speakers who have stood at this podium. While I may not concur with each speaker's comments, I believe that meetings like this give real meaning to the phrase, we, the people. We, the people, fully engage in decision making that impacts the public. (IPEC-W-1)

Comment: Too often, personnel from Indian Point and Entergy are not presented with a balanced platform from which to express their views. Expert opinions on IPEC operational safety, security, emergency planning, and air quality held by knowledgeable Entergy employees and/or supporters of Indian Point are not heard with the same level of attention as are the opinions of IPEC detractors. (IPEC-W16-3)

Response: *The NRC has established an open process to allow members of the public to participate in the environmental scoping process. Comments can be provided to the NRC in person, by mail, and by e-mail. The NRC conducts public meetings during the scoping process to ensure that interested parties have an additional opportunity to gain access to information about the project and the process in order to effectively participate. In addition, further opportunity will be provided to the public to provide comments on the draft SEIS once it is published. These scoping comments are general in nature regarding the scoping process or are introductory comments to more detailed comments elsewhere in this document and do not provide new information with respect to environmental impacts. Therefore, the comments will not be evaluated further.*

Comment: Environmental analysis does not necessarily end with the production of a legally compliant EIS. The agency must prepare a SEIS if "[t]here are significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts." Agencies are advised to reexamine the original EIS every five years to determine whether a SEIS is needed. (IPEC-F5-13, IPEC-K17-13)

Comment: WHEREAS, this Honorable Board has passed numerous Resolutions regarding the Indian Point Nuclear Power Plants, calling for, among other things, the NRC to change their siting regulations as stated in 10 CFR Part 54 to require nuclear power plants applying for license renewal to be held to the same standards as a new plant. (IPEC-N5-3)

Comment: RESOLVED, that the Westchester County Legislature urges the immediate passage of H.R. 2162, which would mandate the criteria for license renewal of a nuclear power plant be the same as that required for a new plant. (IPEC-N5-5)

Comment: First I would like to thank you for speaking with me at the last NRC public hearing at the Colonial Terrace in Cortlandt Manor. I would like to take you at your words (which I paraphrase) that you have no predisposition towards the continuing operation of Indian Point, and that you are simply following the "letter of the law" by making all judgments based on existing regulations. That is encouraging, but truly insufficient. The relicensing regulations were largely written with consideration of the industry's lobbying arm, the NEI, and consequently are woefully lacking in a common sense approach of weighing the benefits derived from a relatively large nuclear generating plant (about 2000 MW and its tangential financial benefits) versus the potential downside risk of having an aging nuclear plant located in the most densely populated area of the United States. (IPEC-O5-1)

Comment: A recently published report by the Office of the Inspector General confirms related weaknesses in the Commissions role in license renewal. In particular, three of the five findings are relevant including: (1) license renewal reporting efforts need improvements; (2) consistent evaluation of operating experience would improve NRC reviews; (3) license renewal issues need evaluation for back fit application. (IPEC-Q17-12)

Comment: The privatizing of yet another industry that answers to no-one should be reversed. A utility like nuclear energy is one that should be strictly controlled, not allowed to lobby and get tax write-offs and push for unlimited permission to be re-licensed for another 20 years without controls. (IPEC-R11-8)

Comment: We are requesting, and adamantly asking, that the entire siting criteria of a new plant be looked at regarding the relicensing of Indian Point, because you have to know that this is not a license extension. This is a new superseding license that will be given to Indian Point. It's a brand new license. The old license gets retired and they get a new license. (IPEC-S-9)

Comment: The President's Council on Environmental Quality (CEQ) governing implementation of NEPA are binding on all federal agencies (40 CFR Section 1500.3) and entitled to substantial deference underscoring the importance of an agency addressing new, site specific information. —c) Agencies . . . 1. Shall prepare supplements to either draft or final environmental impact statements if: (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts . . . ." (IPEC-U16-23)

Comment: Previously approved EIS are based upon assumptions that will no longer be valid if Entergy's Renewal Application to operate the facility for an additional 20 years is granted. (IPEC-U16-319)

Comment: Okay. That's question one. And I'm going to repeat it. Why is the NRC superseding to a new license under a trade guidance document, such as NEI 95-10, Rev 6, or their own new reg 1800, or new reg 1801, Rev 1, instead of 10 CFR 54? The latter is law, and the former is guidance from trade organizations. Why are we doing business like that? (IPEC-X-2)

Comment: I want to endorse the AG, Charlie Donaldson's comments. We need to know this business. It has to be a transparent business, and I ask again, Why is the NRC working towards trade documents instead of law. (IPEC-X-3)

Response: *The regulations for license renewal were developed through a rulemaking process. The rulemaking process for license renewal started in the early 1980s when the NRC staff recognized that it needed to identify the information required and the process to be used to determine whether or not to issue renewed licenses for nuclear power reactors. The staff recognized this need because the Atomic Energy Act of 1954 specified that licenses for commercial nuclear reactor facilities would be for 40 years and could be renewed for an additional period of time.*

The comments disagree with or express a general desire to change the regulations established by the NRC for conducting its license renewal review. The comments are, therefore, beyond the scope of the environmental review and should be addressed through the rulemaking process. The comments will not be evaluated further.

Comment: Why does the established voice of resident protest against Indian Point, the voice of those who would be most affected by your decision consistently take a backseat to corporate interest? As the nuclear age has evolved, isn't it time to question the licensing criteria of the NRC as potentially outmoded? Given that in your history a renewal license has never been denied, the question has import. Indeed, given the documented biases -- both personal and political -- that have informed the decisions of former Atomic Energy Commissioners since the 1940s, such skepticism is warranted. The exigency of Indian Point offers an opportunity to reverse the precedence of misguided thinking and act in a politically courageous manner, as well as protect American lives. (IPEC-C5-3)

Comment: I'd like to thank the NRC for letting me speak. My name is Barbara Homyk. I'm a Chemistry Specialist at Indian Point.

And in response to what I've heard here tonight, I just had a couple of comments. First of all, it seems as though -- the way people talk, it sounds as though we spend lots of time with the NRC and that we're buddies. Well, that isn't exactly the way, at least for people at my level. The NRC is there to regulate us. They set the rules for us, and it's not like we're friends. We do

what they tell us, and we respect their judgment. So I'm hoping the NRC will give us a fair, reasonable evaluation. (IPEC-CCC-1)

Comment: The original 40-year operating licenses for IP 2 and IP 3 expire in September 2013 and December 2015, respectively, the maximum period authorized by the Atomic Energy Act. If issued, the requested operating licenses will supersede and displace the original operating licenses. (IPEC-D-5)

Comment: On April 30, 2007, two separate, but related, limited liability corporations, Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC (collectively, "Entergy") filed a single License Renewal Application ("Application" or "LRA") for the renewal of two separate Operating Licenses, Nos. DPR-26 and DPR-64, for the Indian Point Nuclear Generating Unit Nos. 2 and 3, respectively. The present licenses were issued 34 and 32 years ago. As required by 10 C.F.R. § 51.53(c) Entergy included an Environmental Report (or "ER") as part of the License Renewal Application. The Application also included a Final Safety Analysis Report (or "FSAR") as part of its application. (IPEC-D-6)

Comment: My name is Chris Hogan, and I am the Project Manager for the DEC for the relicensing of Indian Point Units 2 and 3. The purpose of my statement this evening is to clarify the Department's role in relicensing and other matters related to the facility.

With regard to scoping, Department staff are currently reviewing Entergy's environmental report, as well as historical information, and will be submitting written comments on the scope of the draft EIS before the close of the comment period on October 12th. (IPEC-DD-1)

Comment: I'm Chris Hogan and I am the project manager for the New York State Department of Environmental Conservation for the relicensing of Indian Point's units 2 and 3. Department staff are currently reviewing Entergy's environment report as well as historical information and will be submitting written comments on the scope of the draft supplemental EIS before the close of the comment period on October 12th, 2007. The purpose of my statement today is to clarify the department's role in the relicensing and other matters related to the facility. (IPEC-E-1)

Comment: Good afternoon. My name is Taylor Palmer. I'm representing Congresswoman Nita Lowey. I'm actually not going to make a statement. We just wanted to have a quick question answered. This might be something the NRC wants to answer behind, but essentially the question that we have for today, we wanted to, first of all, thank the NRC for granting the extension on the intervening petitions. That was very important to the congresswoman, for one, and it will allow proper evaluation of all these environmental impact statements and everything that needs to be considered for Indian Point. (IPEC-F-1)

Comment: Thus, the fundamental goal of an evaluation under NEPA is to require responsible government agencies involved with a given project to undertake a careful and thorough analysis of the need for that project and its impacts before committing to proceed with the project. As the Tenth Circuit has held:

The purpose of NEPA is to require agencies to consider environmentally significant aspects of a proposed action, and, in so doing, let the public know that the agency's decision making process includes environmental concerns. (IPEC-F5-11a, IPEC-K17-11a , IPEC-L17-6, IPEC-M5-6)

Comment: It is not only the government decision-makers who are to be served by an EIS, but the citizens of this nation as well. As one court noted: "The purpose of an EIS is to 'compel the decision-maker to give serious weight to environmental factors' in making choices, and to enable the public to 'understand and consider meaningfully the factors involved.'" (IPEC-F5-12, IPEC-K17-12, IPEC-L17-8, IPEC-M5-8)

Comment: Thank you for contacting the Delaware Nation to be included in the review of this application renewal. We look forward to your quick response and receipt of the documents requested to continue a productive relationship with your organization. (IPEC-G4-3, IPEC-Q5-3)

Comment: I'm Manna Jo Greene, Environmental Director for Hudson River Sloop Clearwater, and I serve on the Town Council in the Town of Rosendale in Ulster County.

The NRC's primary mandate is to protect public health and safety and the environment, and, further, it is required to incorporate any new and significant information into its findings. In a democracy, the role of government, industry, and the public has to be carefully balanced. And for free enterprise to work, there have to be checks and balances, and that demands that our regulatory agencies exercise the utmost rigor and err on the side of protection, not on leniency. (IPEC-GG-1)

Comment: You can't grandfather in the site. Our congressional delegates are trying to get the laws amended, but you can use your discretionary power. You can tell your attorneys to find out how you can include information, not how you don't need to include information. (IPEC-GG-4)

Comment: It is pointed out here, that the NRC takes deliberate omissions and falsehoods in communications with the NRC by their licensees very seriously. (IPEC-H-12)

Comment: The focus of the September 19, 2007 on the relicensing of Indian Point will be the scope of the environmental issues that NRC should address in the Draft EIS it is preparing, under requirements of the National Environmental Protection Action (NEPA), on Entergy's application to relicense Indian Point 2 & 3 for an additional 20 years. These plants were built in 1974 and 1976; their current license will expire in 2013 and 2015, respectively.

In addition, NRC will be accepting written comments on environmental issues and safety issues related to the effects of aging on safety-related components and structures by mail or email through October 12, however the deadline for filing a formal intervenor petition on either safety or environmental concerns ("contentions") is October 2. Many requests to extend the comment period or the filing deadline for this hugely complicated issue have been denied.

Under current law, the NRC interprets the concepts of environmental and safety issues related to the requested 20-year extension extremely narrowly. (IPEC-L5-2)

Comment: Out of Scope: Here is a list of some of issues the NRC will NOT be likely consider in the relicensing process under present regulations. You may still raise your concerns, but it will take a change in regulations to get these included. (IPEC-L5-34)

Comment: "NEPA was created to ensure that agencies will base decisions on detailed information regarding significant environmental impacts and that information will be available to a wide variety of concerned public and private actors."

When we consider the purposes that NEPA was designed by Congress to serve, what was done here is inadequate. Congress wanted each federal agency spearheading a major federal project to put on the table, for the deciding agency's and for the public's view, a sufficiently detailed statement of environmental impacts and alternatives so as to permit informed decision making. The purpose of NEPA is to require disclosure of relevant environmental considerations that were given a "hard look" by the agency, and thereby to permit informed public comment on proposed action . . . . (IPEC-L17-44, IPEC-M5-44)

Comment: I also see that safety on a daily basis. On behalf the Utility Workers Union of America Local 1 2, I ask that both the NRC and the community at large not be swayed by well-funded anti-nuclear groups, but rather look at the facts objectively when passing judgment on the plant. (IPEC-MM-3)

Comment: The Westchester County Board of Legislators has long monitored the operation of the Indian Point Energy Center (IPEC), and has actively engaged the Nuclear Regulatory Commission (NRC) and the plant owner, Entergy, to promote the safety and welfare of Westchester County residents. The Committee on Environment & Energy and the Board of Legislators will continue to maintain this high level of interest during the review of Entergy's application for the re-licensing of IPEC. (IPEC-N5-1)

Comment: WHEREAS, on May 3. 2007, U.S. Representatives Nita Lower, John Hall and Maurice Hinchey, introduced the Nuclear Power Licensing Reform Act of 2007 (H.R. 2162) which, if passed, would amend Section 103 of the Atomic Energy Act of 1954, section c. by adding at the end the following: 'Any such renewal shall be subject to the same criteria and requirements that would be applicable for an original application for initial construction, and the Commission shall ensure that any changes in the size or distribution of the surrounding population have not resulted in the facility being located at a site at which a new facility would not be allowed to be built.' (IPEC-N5-4)

Comment: A FULL ENVIRONMENTAL REVIEW OF THE INDIAN POINT LICENSE RENEWAL APPLICATION MUST BE REQUIRED. (IPEC-N17-7)

Comment: I work for a fellow named Andrew Cuomo, is the attorney general of this state, so I'm here for the state attorney general's office, and I will, unlike most lawyers, try to be brief. My name's Charlie Donaldson, Environmental Protection Bureau. We appreciate the opportunity to provide oral comments regarding the scope of the environmental review proceeding under the National Environmental Policy Act. (IPEC-O-1)

Comment: There is a great safe future here at IPEC and men like you have the difficult job to make the correct decision for New York State and our Country. (IPEC-P17-4)

Comment: It is pointed out here, that the NRC takes deliberate omissions and falsehoods in communications with the NRC by their licensees very seriously. (IPEC-PPP-10)

Comment: In accordance with the above notice as well as the federal rules promulgated under 10 C.F.R. §51.26 , and §51.28, Friends United for Sustainable Energy (FUSE) sets forth comments regarding the scope of the environmental impact statement submitted under Appendix E by Entergy.

The review by FUSE examines federal regulations including NRC regulations contained in CFR 51, 10 CFR 54, the National Environmental Protection Act contained in 36 CFR 800.8, as well as the President‘s Council on Environmental Quality, and applicable case law.

FUSE examined guidance documents promulgated by the Commission including NUREG 1850, "Frequently asked questions on License Renewal of Nuclear Power Reactors," NUREG 1437, "Generic Environmental Impact Statement," NUREG 1550, "Standard Review Plan for sealed sources and applications", and Supplement 1 to Regulatory Guide 4.2, "Preparation of Supplementary Environmental Reports. (IPEC-Q17-1)

Comment: An examination of Entergy’s License Renewal Application Appendix E first for in scope issues and the second in specific criteria derived from federal regulations in particular 10 CFR 51.20. CFR 51.20 was completed. Criteria provided in regulatory guidance and federal rules were verified for those items that are required to be addressed were confirmed as actually included in the appendix, and the commitments made by Entergy were confirmed and reviewed against the reasonable assurance standard provided by NEPA. (IPEC-Q17-6)

Comment: I would like to begin by thanking the NRC for holding this meeting today. As I'm sure the Commission can see from today's turnout and the passion shown by Indian Point's neighbors, the environmental impact of Indian Point is critically important to the Hudson Valley and must figure prominently in the NRC's consideration of Entergy's license renewal application. (IPEC-RRR-1)

Comment: You have sworn an oath to protect the public. Stand by it, even if the revolving door jams on you. (IPEC-S10-2)

Comment: We have been told that many of our reasons for vehemently objecting to the relicensing of these nuclear plants are "outside the scope" of your September 26, 2007 hearing.

We strenuously object to this narrowing of the scope to eliminate many legitimate concerns that should be weighed in your decision to relicense. (IPEC-T4-2)

Comment: We support the suit to try to make you broaden your review and also support the call of the Westchester County executive for an independent evaluation of the safety of these plants as well as the concerns of our congresspersons. (IPEC-T4-3)

Comment: Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC (hereafter referred to as "Entergy") has submitted an Environmental Report (ER) in conjunction with the License Renewal Application (LRA) to the U.S. Nuclear Regulatory Commission (NRC) to renew the operating licenses for Indian Point Units 2 and 3 (IP2 and IP3) for twenty years beyond the end of the current license terms. AAEA will comment on the contents of the ER and provide its own environmental perspective about the LRA. (IPEC-TTT-3)

Comment: Section 51.53(c)(3) is based upon the findings documented in NUREG-1437, Generic Environmental Impact Statement for License Renewal of Nuclear Power Plants, (GEIS). The GEIS, in which the staff identified and evaluated the Environmental Costs and Impacts associated with license renewal, was first issued as a draft for public comment. The NRC received limited input from Federal and State agencies, public organizations, and private citizens before developing the final document.

As a result of the assessments in the GEIS, a number of Impacts were determined to be generic to all nuclear power plants. These were designated as Category 1 impacts. An applicant for license renewal may adopt the conclusions contained in the GEIS for Category 1 impacts, absent new and significant information that may cause the conclusions to fall outside those of the GEIS. Category 2 impacts are those impacts that have been determined to be plant-specific and are required to be evaluated in the applicant‘s ER. (IPEC-U16-5)

Comment: In addition, the Commission determined that the NRC does not have a role in energy-planning decision making for existing plants; decisions for existing plants should be left to State regulators and utility officials. Therefore, an applicant for license renewal need not provide an analysis of the need for power or the economic costs and economic benefits of the proposed action. (IPEC-U16-6)

Comment: However, if, in the interest of supporting the nuclear industry, in fact the role of the NRC is to follow the intricate series of regulations, which will never lead to any conclusions that reflect reality, then it makes sense for them to conduct themselves the way that they do. (IPEC-VV-2)

Comment: Bringing the environmental justice perspective into these proceedings is new. We are being engaged at the front end, participating in this forum, and in others, as partners, fully credited, and realizing that we are not participating after the fact of decision making, but we are standing here, voices raised, presence noted, that we intend to be part of "We, the people," when these kind of focusing meetings are taking place. (IPEC-W-6)

Comment: Whether you hear from 5 million people or 500 people on this important issue, it does not change your responsibility to ensure that either Indian Point is a safe, secure, non-polluting source of energy, or if these minimum standards cannot be met, it should not be approved for relicensing. (IPEC-X4-9)

Response: *The comments are noted. However, the comments are general in nature regarding the license renewal review process, or are introductory to more detailed comments covered elsewhere, and provide no new information, and therefore will not be evaluated further.*

Comment: Applicants Have Failed to Meet the Mandates of NEPA, of 10CFR 51.53 Post Construction Environmental Reports or of 10CFR 51.21 Actions Requiring Environmental Assessments in Their Applications. (IPEC-B-3)

Comment: The National Environmental Policy Act, 42 U.S.C § 4321, et seq. ("NEPA"), mandates that federal agencies involved in activities that may have a significant impact on the environment must complete a detailed statement of the environmental impacts and project alternatives. NEPA provides, in pertinent part, as follows:

The Congress authorizes and directs that, to the fullest extent possible . . .
(2) all agencies of the Federal Government shall -- . . .
(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the
quality of the human environment, a detailed statement by the responsible official on --
(i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action,
(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. (IPEC-F5-9)

Comment: It is absolutely necessary that the NRC relicensing procedure take into account the environmental impacts that Indian Point does have on not only Buchanan but the entire Hudson Valley, and, indeed, the New York City metropolitan area. Let's face it, any way that electricity is made there are going to be serious adverse environmental impacts. And I'm not going to shy away from the problems that occur when Indian Point -- when nuclear power is used to make electricity. There are problems with the spent fuel pools, the leaks should not have happened, although I do want to assure everybody that there was absolutely no impact on the local water -- drinking water. In fact, the river water temperature increases should also be taken into account. I agree that the NRC should focus on these issues. (IPEC-FF-2)

Comment: I think you have to look at air quality, water quality, aesthetics, the economy, employment, taxes, cost and reliability of power, and all of those factors as well as the water quality issues have to be addressed. (IPEC-G-4)

Comment: In addition, I support consideration of the broad areas requested by members of the public and public interest groups during the September 19, 2007 public EIS meeting, including:

Wildlife and Fish
Water and Air Resources
Historic or Cultural Resources
Taxes, Community Development
Environmental Justice
Land Use
Human Health

(IPEC-I5-11)

Comment: The National Environmental Policy Act, 42 U.S.C § 4321, et seq. ("NEPA"), mandates that federal agencies involved in activities that may have a significant impact on the environment must complete a detailed statement of the environmental impacts and project alternatives. NEPA provides, in pertinent part, as follows:

The Congress authorizes and directs that, to the fullest extent possible…
(2) all agencies of the Federal Government shall
(C) include in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment, a detailed statement by the responsible official on --
(i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action,
(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
(v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. (IPEC-K17-9)

Comment: Environmental considerations include, but are not limited to:

•Wildlife and Fish
•Water and Air Resources
•Historic or Cultural Resources
•Taxes, Community Development
•Environmental Justice
•Land Use
•Human Health
•Hydrology
•Seismic Hazards

(IPEC-L5-5)

Comment: The National Environmental Policy Act of 1969 ("NEPA") "places upon an agency the obligation to consider every significant aspect of the environmental impact of a proposed action," and "ensures that the agency will inform the public that it has indeed considered environmental concerns in its decision making process." Baltimore Gas & Elec. Co. v. Natural Res. Def. Counsel. NEPA requires that federal agencies take a "hard look" at the environmental impacts of proposed actions, specifically
(i) the environmental impact of the proposed action,
(ii) any adverse environmental effects which cannot be avoided should the proposal be implemented,
(iii) alternatives to the proposed action,
(iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and
(v) any irreversible and irretrievable commitments of resources which would be involved if the proposed action should be implemented. 42 U.S.C. § 4332. Federal agencies must prepare an Environmental Impact Statement ("EIS") for "all major Federal actions significantly affecting the . . . environment."

42 U.S.C. § 4332(2)(C). The requirements of NEPA are mandatory and apply to the NRC. Calvert Cliffs Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971)(holding that NEPA applies to NRC's predecessor). In addition, "significant new circumstances or information relevant to the environmental concerns that bear on the proposed action or its impacts" must be reviewed by the agency in a Supplemental EIS. 40 C.F.R. § 1502.9 (c)(1)(ii). Given the NRC's regulations, 10 CFR Part 51, a Supplemental Environmental Impact Statement ("Supplemental EIS") is required as part of this license renewal proceeding. (IPEC-L17-4, IPEC-M5-4, IPEC-N17-8)

Comment: Separate and apart from New York's request that the NRC prepare a thorough Indian Point specific EIS, the Supplemental EIS that the NRC is required to prepare must account for a number of environmental impacts specific to Indian Point. These include impacts on aquatic ecology from the once-through cooling system, impacts on groundwater use and quality, socioeconomic impacts, impacts on threatened and endangered species, impacts on historic, resources, and aesthetic impacts. Each one of these Category 2 impacts is discussed in more detail below. (IPEC-N17-28)

Comment: As to specific issues, we'd like to offer a couple of preliminary comments concerning particular areas.. . . . the review should include a rigorous evaluation of all the impacts of the plants. (IPEC-O-3)

Comment: Please use common sense instead of the cover of "following regulations" in your considerations of the advisability of keeping Indian Point running until 2033 and 2035 for the two operating reactors. (IPEC-O5-12)

Comment: For a permit to be issued for the Indian Point Reactors, the NRC must weigh and balance data of environmental, economic and social impact. As lead agency, the NRC must first demand a level of review that will produce information capable of informing that judgment. And, key to this crucial decision will be revisiting the central question of acceptable risk in the context of Indian Point. (IPEC-SSS-43)

Comment: Identify other environmental review and consultation requirements and ways in which we, the public, can be actively involved in these processes . . . . (IPEC-U16-13)

Comment: NRC Staff must address these concerns in the Draft ER. Federal case law underscores the duty of the NRC Staff to fully discuss, at the earliest point in the process, information brought to its attention regarding the potential environmental impacts of its proposed actions. (IPEC-U16-21)

Comment: I've heard speakers approach you and say "I live" and give a particular neighborhood. I'll first say that I live in the United States, and that I'm from Brooklyn. I have stood in many cities and many countries to talk about environmental justice, to talk about conservation, to talk about fish hatcheries, to talk about our forests, lakes and streams. But this meeting here today is quite important. It is important because several speakers have the advantage of speaking sort of towards the end of these kind of meetings, as it gives you a chance to hear the perspectives of others. It also puts the onus on you to sort of change your presentation a little. (IPEC-W-2)

Comment: Mitigations that are suggested must be explored in depth and established with contingencies should they fail to be implemented or work. (IPEC-SSS-35)

Comment: So thank you for having us here, and I hope the NRC does really take a look at all of those areas, the health issues, the Homeland Security issues, and come up and do a good job as far as relicensing Indian Point, because we want it to be safe. (IPEC-PP-10)

Response: *As part of the environmental review process, the NRC evaluates site-specific data provided by the applicant, other Federal Agencies, State agencies, tribal and local governments, as well as information from members of the public. In addition, the NRC performs independent reviews of the plant-specific environmental impacts of license renewal in accordance with NEPA and the NRC's requirements of 10 CFR Part 51. The following technical areas are commonly included in the review: land use, ground and surface water use, ground and surface water quality, air quality, aquatic resources, terrestrial resources, threatened and endangered species, radiological impacts, socioeconomic factors, environmental justice issues, historical and archaeological resources, related Federal project activities, postulated accidents, uranium fuel cycle and solid waste management, decommissioning, and alternatives to license renewal. Other areas may be included as a result of information obtained during the NRC staff's review or from public comments during or following meetings that are held in the vicinity of the nuclear power reactor. Environmental impacts associated with license renewal will be addressed in Chapters 1, 2, 3, 4, 6, and 7 of the SEIS.*

Comment: And the last thing I will say is I think the NRC needs to stick to the template that they've used in other plants. I see a lot of political pressure to the NRC, to try to change the process from a template that's been used at 40 some odd other plants, used successfully, and I am disappointed, actually, that they've extended the comment period and the period for intervention, and there was no basis given for that, just people want more time.

I think that's just a method to extend the cost and the time of this whole process, and I don't appreciate kibitzing from the audience, and so thank you very much. I appreciate your efforts. (IPEC-G-6)

Comment: I live in Tarrytown, New York, which is about 13 miles from the Indian Point plant, and first of all, I want to say that obviously I think all the environmental concerns are tremendously important, and I'm very grateful that serious consideration of them is a part of this process. And I know that that's the focus of this meeting, but I'm going to be very brief because that isn't what I want to speak to. (IPEC-I-1)

Response: *These comments are supportive of the license renewal process and do not provide any new information. Therefore, they will not be further evaluated.*

Comment: It has been 11 years since the GEIS was written. In that time the United States has experienced the worst terrorist attack on American soil in our history, leading to a heightened risk of a terrorist attack on a nuclear power plant. In addition, the earliest likely completion date for the Yucca Mountain waste repository has been delayed by two decades, to 2017. The total volume and density of spent fuel stored in Indian Point's spent fuel pools continues to increase as a result. In the past 11 years the amount of spent fuel being stored in the already packed onsite pools has increased. The population around Indian Point power plant has nearly doubled, resulting in significant traffic congestion that would prevent authorities from evacuating the residents living within the ten-mile Emergency Planning Zone (EPZ) in the event of an accident or terrorist attack. The NRC has failed to update the GEIS within the ten year period prescribed in Appendix B to Subpart A of Part 51. The most recent revised schedule for the issuance of the draft GEIS has been altered since it was proposed in a NRC Policy Issue Information Notice on June 9, 2006. The environmental review process for Indian Point's license renewal should not continue to rely on the GEIS until the NRC has completed the required ten year review and determined whether or not the GEIS will be updated. (IPEC-F5-6)

Comment: The NRC published a Notice of Intent to Prepare an Environmental Impact Statement for the License Renewal of Nuclear Power Plants and to Conduct Scoping Process on June 3, 2003. In the Notice, the Commission stated: "[I]n the introductory remarks to Appendix B to Subpart A of Part 51, 'Environmental Effects of Renewing the Operating License of a Nuclear Power Plant,' the Commission stated that, on a 10-year cycle, it intends to review the material in Table B-1 and update it, if necessary." The first 10-year cycle ended in 2006, and contrary to NRC's statements at the four public scoping meetings held in July of 2003 the GEIS Update Project is not close to being complete.

On October 3, 2005 the Commission published a Notice of Extension of the Public Comment Period for Scoping Process to Prepare an EIS for the License Renewal of Nuclear Power Plants which extended the public comment period for the scoping process through December 30, 2005. The NRC's summary of the scoping comments has yet to be published. (IPEC-F5-7, IPEC-K17-7)

Comment: The problem is the NRC is relying on a very outdated 1996 generic environmental impact statement that does not reflect the realities of today's world. It does not reflect 9/11, does not reflect the advances in renewal energy, does not reflect the failure of Yucca Mountain to open in any foreseeable timeframe.

As a matter of fact, this generic EIS, which I hope the NRC explained a little bit in the introduction, it was passed in 1996. It was required under the NRC regulations to be updated every ten years. So far, it hasn't been updated. We're unable to get an answer, clearly, from the NRC, as to when there might be an update to this GEIS, and so in fact they're relying on nearly 12 year old data to support this limited environmental review, and we don't think that's acceptable. That's it. Thank you. (IPEC-K-5)

Comment: The Generic EIS Deprived the Public of Substantive and Procedural Due Process. (IPEC-N17-21)

Comment: In 1996, it was unclear whether Indian Point Units 2 and 3 would operate for their full 40-year terms, let alone request license renewals. Thus, it was highly unlikely that all concerned residents of New York, Connecticut, New Jersey, or Pennsylvania would have participated in the Part 51 Appendix B regulatory rulemaking process, as is their right under NEPA. The public has the right to both procedural and substantive due process in such rights. Whether renewals for Indian Point would be requested, or when, if ever, that date would arrive, was neither planned nor foreseeable 11 years ago, which means that the public had no real motivation' to participate. In short, the public in the vicinity of Indian Point was effectively denied the right to participate in the 1996 Generic EIS process. (IPEC-N17-22)

Comment: The Generic EIS, Which Has Not Been Updated in over 11 Years, Is Legally Stale, and Is Therefore Void. (IPEC-N17-23)

Comment: The guidance statement in the NRC regulations makes clear that the regulator views the 10-year window in the Generic EIS as appropriate for review. It has been 11 years, however, since the Generic EIS has been updated. The intervening years have seen a number of changes -- ranging from increased knowledge of environmental issues and sciences, the availability of energy alternatives and conservation strategies to terrorist attacks and threats, emergency planning failures, groundwater degradation, and long-term on-site storage of nuclear waste. The failure of the NRC to update the Generic EIS in light of these developments renders it legally void under NEPA's requirement that "every significant aspect of environmental impact" be considered. (IPEC-N17-25)

Comment: The NRC has failed to update the GEIS within the ten year period prescribed in Appendix B to Subpart A of Part 51. The most recent revised schedule for the issuance of the draft GEIS has been altered since it was proposed in a NRC Policy Issue Information Notice on June 9, 2006. The environmental review process for Indian Point's license renewal should not continue to rely on the GEIS until the NRC has completed the required ten year review and determined whether or not the GEIS will be updated. (IPEC-K17-6a)

Response: *The GEIS for license renewal, originally issued in 1996 as NUREG-1437, is currently being updated. A notice of intent to update the GEIS was published in the Federal Register on June 3, 2003 (68 FR 33209). Public scoping meetings were held in July 2003 at four regional locations (Atlanta, Georgia; Oak Lawn, Illinois; Anaheim, California; and Boston, Massachusetts), and the comments obtained from these meetings and from letters and emails sent to the NRC are being evaluated to determine whether and how the GEIS should be updated. The scoping process helps the NRC staff identify and eliminate from a detailed study those issues that are peripheral, that are not in scope, or that have been covered by other environmental reviews. The NRC is considering these scoping comments and will factor the appropriate issues into a draft updated GEIS and into the proposed rule, if necessary. After interested stakeholders (including the public) have had an opportunity to comment on the draft GEIS and the proposed rule, the NRC will issue a final GEIS and a final rule. The NRC staff conducts its environmental reviews in accordance with the regulations of 10 CFR Part 51, and adopts the findings in the GEIS for Category 1 issues. However, new and significant information is sought as part of the review to ensure that such Category 1 conclusions are still valid. To the extent that the comments are critical of the NRC's use of the GEIS, the comments are beyond the scope of the environmental review and should be addressed in the rulemaking process.*

Comment: The environmental impacts of Indian Point on public health, local environmental resources, and water quality are very serious concerns that must be fully scrutinized during the license reapplication process. Additionally, the facility's impact on the safety and security of its host communities must be addressed. We urge you to consider the following issues and require their inclusion in scoping for the Draft Environmental Impact Statement (DEIS). (IPEC-E5-2)

Comment: When Entergy filed its license renewal application on April 30th of this year, it raised the possibility that IP 2 and IP 3 could continue to operate for another 20 years. If that is to be the case, then the relicensing process discussed here today must result in fundamental changes in the way the plant is operated and the environmental damage created by the plant is mitigated. It is for that reason that I vehemently believe that the NRC must keep one fundamental fact in mind throughout this process. The relicensing of Indian Point cannot be conducted in an environmental vacuum. This process cannot be subjected to a regulatory runaround that examines some systems and excludes others. (IPEC-EE-3)

Comment: If there is an incident involving an operating system, or a spent fuel pool, or another aspect of the plant, that incident will have an environmental impact on surrounding communities, regardless of whether or not the regulatory framework required them to be studied. The environmental scope of the NRC's review must reflect that reality by encompassing the entirety

of operations at Indian Point. With that said, I believe there are several vital issues that must be considered by the NRC as it goes about the work of creating its draft environmental impact statement, or DEIS. (IPEC-EE-4)

Comment: If Indian Point is to receive a license renewal for another 20 years of operation, the communities of the Hudson Valley deserve to know that the NRC relicensing process has been thorough, open, and has guaranteed that Indian Point will operate in a more environmentally responsible manner in its next 20 years than it has in its first 30. To do that, the process must encompass the full environmental impact of Indian Point on its host communities. Indian Point's reactors do not operate in a vacuum, and neither should the relicensing process that will determine their future. (IPEC-EE-15)

Comment: The NRC should also expand its scope of issues beyond, you know, non-moving parts, and the review should also reflect what is happening now, the realities that we're facing now and not those of some time ago. The plant, if it is to be relicensed, we really need to see a fair and accurate review, including, you know, all of the problems that are dealing with right now, and the potential of the problems in the future. (IPEC-EEE-3)

Comment: Indian Point is a unique plant in a unique location, the most densely populated metropolitan region of the United States. The NRC must make every effort to ensure that the environmental review process for the Indian Point license renewal fully complies with NEPA and affords the public every opportunity to provide well-informed comments at each step in the review. Anything less will further degrade public confidence in the NRC's ability to independently regulate Indian Point's operation. (IPEC-F5-3)

Comment: The Nuclear Regulatory Commission (NRC) must include “new and significant information” regarding the environmental impacts of spent fuel storage, potential impacts of a terrorist attack, and use of renewable energy alternatives at Indian Point in its draft Supplemental Environmental Impact Statement (SEIS) for the Indian Point license renewal rather than relying on an outdated Generic Environmental Impact Statement (GEIS) conducted in 1996. (IPEC-F5-4)

Comment: The GEIS is inadequate if evidence exists of material changes affecting the baseline environment since the GEIS was written. The heightened risk of a terrorist attack on a nuclear plant, especially Indian Point, constitutes a material change affecting an assessment of future environmental impacts during the extended license term. In addition, the failure of the Yucca Mountain repository, the resulting spent fuel disposal crisis, and significant progress in the implementation of renewable energy technologies are all material changes that must be assessed in the NEPA review for Indian Point. The NRC’s continued reliance on the 1996 GEIS, coupled with its refusal to consider the aforementioned changes, violates the fundamental requirements of NEPA. (IPEC-F5-5)

Comment: What I want to speak to is just as a citizen of this area, I know, cause I was also at the meeting in June, I'm following this as closely as I can, that the relicensing process is limited, as I understand it, to looking at aging equipment and these environmental issues, and that as

things currently stand, that means a lot of other concerns that people have about whether Indian Point should continue to exist just don't fall under this process. (IPEC-I-2)

Comment: The environmental impacts of Indian Point on public health, local environmental resources, and water quality are very serious concerns that must be fully scrutinized during the license reapplication process. Additionally, the facility's impact on the safety and security of its host communities must be addressed. We urge you to consider the following issues and require their inclusion in scoping for the Draft Environmental Impact Statement (DEIS). (IPEC-I17-2)

Comment: Indian Point is a unique plant in a unique location, the most densely populated metropolitan region of the United States. The NRC must make every effort to ensure that the environmental review process for the Indian Point license renewal fully complies with NEPA and-affords the public every opportunity to provide well-informed comments at each step, in the review. Anything less will further degrade public confidence in the NRC's ability to independently regulate Indian Point's operation. (IPEC-K17-3)

Comment: The Nuclear Regulatory Commission (NRC) must include "new and significant information" regarding the environmental impacts of spent fuel storage, potential impacts of a terrorist attack, and use of renewable energy alternatives at Indian Point in its draft Supplemental Environmental Impact Statement (SEIS) for the Indian Point license renewal rather than relying on an outdated Generic Environmental Impact Statement (GEIS) conducted in 1996. (IPEC-K17-4)

Comment: The GEIS is inadequate if evidence exists of material changes affecting the baseline environment since the GEIS was written. The heightened risk of a terrorist attack on a nuclear plant, especially Indian Point, constitutes a material change affecting an assessment of future environmental impacts during the extended license term. In addition, the failure of the Yucca Mountain repository, the resulting spent fuel disposal crisis, and significant progress in the implementation of renewable energy technologies are all material changes that must be assessed in the NEPA review for Indian Point. The NRC's continued reliance on the 1996 GEIS, coupled with its refusal to consider the aforementioned changes, violates the fundamental requirements of NEPA. (IPEC-K17-5)

Comment: I'm here to address two issues tonight --one that remains of great importance to those living in the shadows of Indian Point evacuation planning, and the other that goes to the heart of our democratic society -- the right to communicate with our government agencies without fear of intimidation and harassment.

Neither issue, under current NRC relicensing regulations, is taken seriously. But, nonetheless, I use this opportunity to shine a spotlight on these issues that have been left in the darkened corners of the NRC's regulatory process. (IPEC-KK-2)

Comment: Furthermore, NEPA mandates that federal agencies contemplating "major federal actions significantly affecting the quality of the human environment," 42 U.S.C. § 4332(2)(C), are obligated to include in the recommendation or report on the anticipated action an

environmental impact statement ("EIS"), as "evidence that an agency has considered the reasonably foreseeable environmental effects of a proposed major action before making a decision to take the action." (IPEC-L17-36)

Comment: The required EIS must identify and discuss all anticipated adverse impacts in a clear and comprehensive fashion, including any adverse unavoidable environmental effects resulting from the implementation, alternatives to the proposed action, the relationship between short-term uses and the long-term maintenance of the environment, and any irretrievable commitments of resources involved in the proposed action. § 4332(2)(C). Such a detailed statement "insures the integrity of the agency process by forcing it to face those stubborn, difficult-to-answer objections without ignoring them or sweeping them under the rug" and serves as an "environmental full disclosure law so that the public can weigh a project's benefits against its environmental costs." (IPEC-L17-37, IPEC-M5-37)

Comment: Furthermore, NEPA mandates that federal agencies contemplating "major federal actions significantly affecting the quality of the human environment," 42 U.S.C. § 4332(2)(C), are obligated to include in the recommendation or report on the anticipated action an environmental impact statement ("EIS"), as "evidence that an agency has considered the reasonably foreseeable environmental effects of a proposed major action before making a decision to take the action." (IPEC-M5-36)

Comment: The express requirements of NEPA, the facts of this case, and the unique location of Indian Point in such close proximity to one of the world's largest cities, however, require that a full and comprehensive environmental review of all adverse impacts -- even those addressed in 1996 -- be undertaken specifically for this facility. Simply stated, this case necessitates a de novo review, and New York State requests that this review be undertaken by the NRC in accord with these scoping comments. (IPEC-N17-5)

Comment: In other words, the artificial and arbitrary bifurcation of the environmental review thwarts a full and fluid environmental review that adapts to new information and changing circumstances at Indian Point, as NEPA requires. Several issues fall within this environmental "no man's land" of Category I issues that the NRC, via regulation, denies New York State from participating in for Indian Point by refusing to consider in the environmental review of license extension . . . (2) terrorist attacks on the facility, particularly the spent fuel pools, (3) accidental release/emergency response and evacuation, (4) radionuclide air dispersion, (5) appropriate no action" alternatives, and (6) on-site long-term storage of spent fuel. (IPEC-N17-76a)

Comment: Indian Point is a unique facility on the Hudson River located nearby to twenty million people. Full compliance with NEPA requires the NRC to set aside the 1996 generic review, and initiate a new environmental review process that addresses every impact of the license renewal request as they specifically relate to Indian Point. The environmental review must incorporate many things that could not have been incorporated in 1996 - including advancement in understanding of our environment and the realities of a post-9/11 world. Absent a full Indian Point specific environmental review, the NRC must fully and thoroughly

analyze all issues set forth in these comments as part of the license renewal process Supplemental EIS. (IPEC-N17-116)

Comment: The scope of these comments include emergent issues relevant to previously approved EIS based upon assumptions that will no longer be valid if based upon Entergy's Renewal Application to operate the facility under a new license for an additional 20 years. An example of this is the dry cask storage pad design, and proposed configuration of the spent fuel casks considered as a Category 1 issue in 10 CFR51. However, given the multiple emergent issues, including (1) long term permanent storage issues remaining unresolved, (2) known multiple spent fuel pool leakage issues,(3) requiring design load changes to the pad and cask storage changes, (4) closing of the Barnwell storage facility, (5) fissures in the pad that were unanticipated, (6) potential mixing of fuels from different units including Unit 1, and finally the extent of contaminated soil requiring remediation and removal, as well as new seismology studies are each relevant to the EIS for the renewal license itself and probable environmental consequences associated with these issues are germane to the SEIS process. (IPEC-Q17-5)

Comment: When Entergy filed its license renewal application on April 30th of this year, it raised the possibility that IP2 and IP3 could continue to operate for another 20 years. If that is to be the case, then the relicensing process discussed here today must result in fundamental changes in the way the plant is operated and the environmental damage created by the plant is mitigated.

It is for that reason that I vehemently believe that the NRC must keep one fundamental fact in mind throughout this process: The relicensing of Indian Point cannot be conducted in an environmental vacuum. This process cannot be subjected to a regulatory run-around that examines some systems and excludes others. (IPEC-RRR-3)

Comment: If there is an incident involving an operating system or a spent fuel pool, or another aspect of the plant that incident will have an environmental impact on surrounding communities regardless of whether or not the regulatory framework required them to be studied. The environmental scope of the NRC's review must reflect that reality by encompassing the entirety of operations at Indian Point.

With that said, I believe that there are several vital issues that must be considered by the NRC as it goes about the work of creating its draft environmental impact statement (DEIS). (IPEC-RRR-4)

Comment: If Indian Point is to receive a license renewal for another 20 years of operation, the communities of the Hudson Valley deserve to know that the NRC relicensing process has been thorough, open, and has guaranteed that Indian point will operate in more environmentally responsible manner in its next 20 years than it has in its first 30. To do that, the process must encompass the full environmental impact of Indian Point on its host communities. Indian Point's reactors do not operate in a vacuum, and neither should the relicensing process that will determine their future. (IPEC-RRR-16)

Comment: The review of Indian Point 2 and 3 reactors must attain a level of criticality and thoroughness if there is any chance of justifying a permit renewal. In this regard, the review, for each of the issues raised for scoping, must thoroughly evaluate the critical issues of NEPA. Specifically . . . Need for the plant renewals must be examined in a comprehensive manner, both from the perspective of the public and Entergy. It is noted here, that unless issues such as the lack of any long term nuclear waste disposal options can be addressed and unless the entire nuclear cycle is thoroughly included in the analysis, nuclear power cannot be justified as a greenhouse friendly technology. (IPEC-SSS-33)

Comment: The NRC has made out of scope, I would say about 70 percent of what any logical person would say should be looked at, and some of these points have been brought up earlier, such as a change in population, the roadway structure, the inability of people to evacuate, the risk of terrorism after 9/11, and so on, and so forth. All these have been gone on and deliberate, ad nauseam. The NRC says it will not look at that, those issues, as part of the licensing process because it has considered them at other times during its other year by year review of Indian Point. (IPEC-U-2)

Comment: Identify and eliminate peripheral issues, or where necessary bring into the process peripheral issues that are site specific to IP2 LLC and IP3 LLC. (IPEC-U16-11)

Comment: Indicate the schedule for preparation of the supplement to the GEIS, and, in a timely fashion at the beginning of the scoping process, provide the host community Stakeholders with a list of all items NRC staff will not include in the process, with their specific reasoning and justifications for said decision. (IPEC-U16-14)

Comment: FUSE requests that certain GEIS scoping issues classified as Category 1, be included in the Site Specific EIS as Category 2 issues. FUSE submits for inclusion in the GEIS Scoping process the following concerns, and accident pathways which can lead to potentially significant off site Environmental Costs. (IPEC-U16-25)

Comment: FUSE asserts that all of the above issues, must be included in the scope of the EIS, for it to be meaningful and for Entergy to fulfill the requirements of NEPA. The NRC has the obligation to the Stakeholders, and to its own regulations and originating mandate, to include any and all issues that significantly impact the environment and/or public health safety. (IPEC-U16-389)

Comment: The NRCs review must include the safety and security issues facing us today using 2007 data. The analysis from 30 years ago, addressing realities from 30 years ago is insufficient for a complete and accurate review of the Indian Point facility. (IPEC-ZZZ-3)

Comment: Resolved, that the NRC should modify, through its GEIS process, its siting regulations to reflect current considerations including that of terrorism. (IPEC-N5-26)

Response: *These comments raise general concerns with the license renewal process, or are introductory comments to more detailed items covered later in this scoping summary. During*

the plant-specific environmental review, technical areas that are commonly included in the review include: land use, ground and surface water use, ground and surface water quality, air quality, aquatic resources, terrestrial resources, threatened and endangered species, radiological impacts, socioeconomic factors, environmental justice issues, historical and archaeological resources, related Federal project activities, postulated accidents, uranium fuel cycle and solid waste management, decommissioning, and alternatives to license renewal. Issues such as emergency response and planning, security, and terrorism are specifically not within the scope of the license renewal process and are part of the ongoing regulatory oversight process; in addition, waste management and onsite storage of spent nuclear fuel issues were evaluated in the GEIS and determined to be Category 1 issues. The safety and environmental effects of long-term storage of spent fuel onsite has been evaluated by the NRC. The Waste Confidence Rule (10 CFR 51.23) established the Commission's determination that spent fuel can be stored onsite for at least 30 years beyond the licensed operating life of a nuclear power plant, which may include the term of a renewed license.

Comment: In every license renewal that has been granted so far, the NRC and the licensee, as a part of the license extension agreement, agreed to a set of commitments that the licensee will take care of before the term of the license renewal begins. Problem is, most of those commitments made, usually as a part of the EIS, are reneged upon, never kept. There is documented proof of this already happening as early license renewal applicants prepare to file letters to be submitted to the NRC, seeking relief from the very commitments contained in the license renewal that was granted.

This reason, more than any other, is why it becomes so important to define what is or should be within the scope of the EIS. In 10 CFR 54.4 scope, we are told what is or is not allowed to be IN SCOPE. (IPEC-H-5, IPEC-PPP-3)

Comment: As an initial matter, we would request that the various oral and written comments concerning the scope of the environmental review be addressed, one way or the other, whenever the NRC puts out the draft environmental impact statements. In other words, what we're saying is if somebody says something, you folks decide that it doesn't belong under the environmental impact statements, then say it doesn't and then say why not. What that would allow us to do is take a look at all of the issues and we could get some transparency in this proceeding, rather than waiting for the final environmental impact statement and find out there were issues that were left out. (IPEC-O-2)

Comment: First, FUSE examined each of the 92 issues contained in CFR 51 Appendix A subpart B, regardless of how the issue was originally classified. This in part was predicated on generic issues contained in the GEIS report having not substantially changed since 1996. The approach taken was to use then invoked criteria provided in 10 CFR 51 to confirm exclusion from scope, or, based upon our findings, request that the Commission address certain generic issues by including, as a minimum, that the issue be included in the site specific environmental statement, and by sufficient coordination and substantial clarity to the stake holders indicate precisely how the issue was being addressed if Commission excluded the issue in favor of it being handled by another agency. Where possible, due to the limited time the format under

NUREG 1850, including issue numbers or FAQ numbers are used to assist in more clearly communicating the specific content of the requested scope addition. (IPEC-Q17-3)

Comment: Further, FUSE formally requests a timely response by the Nuclear Regulatory Commission during the initial EIS Scoping process specific to each scope issue in writing, reasons for denying inclusion in the EIS any of the issues set forth by FUSE or others within 30 days of the closing of Scoping Comment acceptance. The NRC simply stating something is out of scope, or fails to bring up new information are inadequate answers in explaining their reasoning for denial. (IPEC-Q17-13)

Comment: I'm Susan Shapiro. I'm the president of FUSE, Friends United for Sustainable Energy, and we are members of IPSEC, Indian Point Safe Energy Coalition.

We've been to many of these meetings, and are involved, right now, preparing intervenor petitions, as I know other people in this room are. This EIS scoping session is very important, that it's on the record, and I agree with the AG's office, that we want to know if comments are not included as to why they are not included. What we would be asking for in the scoping of the environmental impact statement is a comprehensive study of the effects Indian Point 1, 2, and 3, have on our environment in the Hudson Valley. (IPEC-S-1)

Response: *The comments are related to the environmental scoping process. The Staff has reviewed and considered all scoping comments. This Scoping Process Summary Report indicates where issues relevant to the environmental review will be addressed in the SEIS. For issues that will not be addressed further, an explanation is provided.*

Comment: Finally it is observed that Entergy‘s site specific environmental analysis is actually word for word identical in content to other Entergy plants regardless of the distinct site specific characteristics. For example, the final SEIS report for Vermont Yankee and Pilgrim and preliminary SEIS for Indian Point are confirmed identical. In fact a brief examination of seven plants contained word for word precisely the same language. An equally troubling concern, is that in each case, no changes were made from preliminary SEIS to final SEIS. The regulatory authorities apparently were satisfied with the generic versions of what was supposed to be a site specific SEIS for each site as was originally submitted.

As stated above, the final SEIS report for Vermont Yankee and Pilgrim and preliminary SEIS for Indian Point are confirmed identical. In fact a brief examination of seven plants contained word for word precisely the same language.

Equally troubling is that in each case, no changes were made from preliminary SEIS to final SEIS. The regulatory authorities apparently were satisfied with the generic versions what was supposed to be a site specific SEIS for each site as submitted.

FUSE asserts that Entergy‘s site specific environmental analysis is not site specific, and is actually word for word identical in content to other Entergy plants regardless of the distinct site

specific characteristics. (IPEC-Q17-8, IPEC-Q17-26, IPEC-Q17-27, IPEC-Q17-28, IPEC-U16-61, IPEC-U16-62)

Response: *The comments are noted. The Environmental Report (ER) is a document submitted by the applicant that provides the applicant's input into the NEPA environmental review process. The draft and final SEIS are documents prepared by NRC staff and contractors to document the NRC staff's evaluation. In many cases, the NRC staff uses certain standardized text in documenting its draft and final SEISs. However, each document is a separate evaluation of environmental impacts associated with each individual application. These comments provide no new information and will not be evaluated further.*

Comment: Identify any cooperating agencies . . . . (IPEC-U16-15)

Response: *The environmental scoping process invites interested parties to participate, including other governmental agencies and affected Indian tribes. During scoping, no party requested to be designated as a Cooperating Agency by jurisdiction or special expertise.*

Comment: In addition to our participation in scoping, the Department has been designated by Governor Spitzer to take the lead for state executive agencies for the relicensing of Indian Point. Acting in this role, the Department intends to file a request for a hearing and a petition for leave to intervene in the relicensing proceeding. And at this time, the Department would like to thank NRC for extending the time period to submit those documents. (IPEC-DD-2)

Comment: Now, in addition to our participation in scoping, the department has been designated by Governor Spitzer to take the lead for the state executive agencies for the relicensing of Indian Point. Acting in this role, the department intends to file a request for a hearing and a petition for leave to intervene in the relicensing proceeding, and the department would like to thank NRC at this time for the extension to submit those documents. (IPEC-E-2)

Comment: My name is Frank Giancamilli. I'm from the office of Congressman John Hall. The Congressman cannot be here tonight, so I will be reading a statement on his behalf.

I'd first like to thank the NRC for extending the deadline for submittal and for having this meeting tonight. As I'm sure the Commission can see from today's turnout, and the passion shown by Indian Point's neighbors, the environmental impact of Indian Point is critically important to the Hudson Valley and must figure prominently in the NRC's consideration of Entergy's license renewal application. (IPEC-EE-1)

Comment: My name is Amanda Sisenstein with NYPIRG, the New York Public Interest Research Group. I'm a Project Coordinator at the SUNY New Paltz campus.

NYPIRG is calling for an extension of the public comment period by at least 60 days due to the numerous safety issues surrounding Indian Point, including unplanned shutdowns due to emergencies, spent fuel rod pool leaks, a complete lack of a functional evacuation plan, and,

you know, system failures, and, you know, all of the other things that we've been talking about and hearing about all night long. (IPEC-EEE-1)

Comment: These are really, really, very, very significant concerns for not just people in the immediate areas but people as far away as New Paltz who are still in the peak injury zone. So they really, really need time to express these concerns and provide meaningful comments. So again, please, you know, to extend the public comment period by at least 60 days. (IPEC-EEE-2)

Comment: So, you know, thank you very much for having this and allowing people to speak, but, you know, please do extend that public comment period. This is a very serious issue for people from many surrounding counties, and some who maybe couldn't make it. I mean, we came from about an hour and a half away, and, well, we got a little bit lost on the way. So there's -- you know, for everybody who is here, there is hundreds of people who couldn't be but would have liked to be. So please keep that in mind. (IPEC-EEE-4)

Comment: I'd like to point out to him, because he said he did not appreciate the extension of time, one reason for that extension of time, as a clarification, was the fact that the department at Entergy sent a FOIA request letter to us telling us that they would not be able to fulfill their obligations under FOIA until October 27th, which meant that documents absolutely necessary to review the Entergy LRA were not and will not be available until 26 days after the original deadline for filing of our contentions. (IPEC-H-2)

Comment: Lisa Rainwater, Policy Director at Riverkeeper. And I have a written statement that I can hand in for the record after I have completed my talk. I'd like to first thank the NRC for granting the 60-day extension for the submittal of the petitions to intervene in Indian Point's relicensing proceedings. (IPEC-KK-1)

Comment: I would like to request a one or two week extension past 10/12 for Clearwater's more extensive public comments. I believe you said in a few cases this would be possible, if requested. (IPEC-L5-1)

Comment: The State of New York respectfully requests an extension until October 31, 2007, in which to file written Scoping Comments on the draft Supplemental Environmental Impact Statement (SEIS) that the Nuclear Regulatory Commission (NRC) is preparing in conjunction with the relicensing application filed by Entergy Nuclear Operations, Inc., for the Indian Point nuclear power plants (Indian Point 2 and Indian Point 3) in Buchanan, New York.

The State has been working diligently to prepare its comments. As you know, the Department of Environmental Conservation has assumed the role of coordinating with other State Executive Agencies on the relicensing application. The Executive Agencies are also working closely with the State Attorney General's Office on the relicensing application. The additional time will allow for more efficient coordination on the scoping comments. (IPEC-S4-1)

Comment: Moreover, the NRC has extended the deadline until November 30, 2007, in which to file a Request for a Hearing/Petition for Leave to Intervene on the relicensing application. The State is thus in the process of identifying environmental issues to raise as contentions. Without question, that process is related to the drafting of comments on the SEIS. Extending the deadline to file Scoping Comments will more closely coordinate with the State's efforts on the Request for a Hearing/Petition for Leave to Intervene. (IPEC-S4-2)

Comment: NYPIRG the New York Public Interest Research Group is calling for an extension of the public comment period by at least 60 days. Due to the consistent safety problems including unplanned shutdowns, due to emergencies, spent-fuel rod storage pool leaks, siren system failures, and complete lack of a functional evacuation plan, the public must have more time to submit meaningful comments to express their concerns. (IPEC-ZZZ-1)

Response: *The comments are noted. NRC continued to accept written scoping comments related to the relicensing of Indian Point through October 31, 2007.*

Comment: Finally, the regulations require a complete analysis on available alternatives for reducing or avoiding adverse environmental effects and such analysis must "include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements." (IPEC-A-7, IPEC-F5-115, IPEC-K17-115)

Response: *As part of the environmental review, the NRC will evaluate the environmental impacts of continued operation in Chapters 1, 2, 3, 4, 6, and 7 of the SEIS. Environmental impacts of alternatives will be discussed in Chapter 8.*

2. Comments Regarding Support for License Renewal

Comment: IPPNY believes that not relicensing the Indian Point Energy Center is simply unworkable, in the context of the critical electricity outlook facing the City of New York and the lower Hudson Valley over the next several years. Thus, IPPNY hereby wholeheartedly supports and petitions for the relicensing of the Indian Point facility. (IPEC-NNN-8)

Response: *The need for power is outside of the scope of license renewal, pursuant to 10 CFR 51.95(c)(2). The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of the current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decision makers. These comments provide no new and significant information and will not be evaluated further.*

Comment: For these reasons, we believe the facility should be re-licensed. (IPEC-A4-5)

Comment: Having stated the above, we feel we would be remiss to not acknowledge there are those in our community who oppose this action. While we sympathize with their concerns, we note that Entergy has an on-going program to address issues of safety and potential terrorist threat we encourage the company to maintain those efforts in the most aggressive manner. (IPEC-A4-6, IPEC-JJJ-6)

Comment: I'm Bill Maulmeister. I've been working at the plant for the better part of 30 years. I was actually a welding inspector for a lot of years too.

And it was kind a interesting. A lotta times you talk to people that used to work at a power plant or something. Whatever he told you, it wasn't true. That I can guarantee you, because I would go get the boss and it would be over. It doesn't work that way. There's a lotta fear in the public. I bring my children there. I hope when they're grown that they work there. I won't be relying on the plant for a paycheck when its relicensed cause I'll be retired. I don't have a lot of financial gain to make from that. But it's a safe place. I had no qualms with my kids working there.

That's all I got to say. We're family people. We have a lot to lose too. We know what we're working with, and I hope my kids go to work there too. Thank you. (IPEC-AA-1)

Comment: My name is Bob Seeger. I'm the Business Manager from Millwright Local 740. We are the group of people that does the steam turbines and generators that create the lights that are now blinding me . . . I happen to believe in nuclear power . . . .

I would like to thank the NRC for the opportunity to come up here and speak. With regard to Indian Point closing -- and I'll get this out of the way real quick -- yes, my members get jobs from Indian Point. They get paid very good salaries for working at Indian Point for approximately 43 days out of every year. Then, they go on to another powerhouse that we've probably built and do the maintenance on. If Indian Point was closed, I would probably get more work out of it,

because they'd have to build powerhouses to replace the 2,000 megawatts of power that come from there.

I worked in Indian Point myself for the first 28 years . . . get a physical every year. So far, they tell me that I am perfect physical condition, other than the ice cream that I eat. I think there's a great many misconceptions about Indian Point and about nuclear power. And I sit here and I sit in the back of the room, and I watch people that look like they're ready to leap at somebody that should speak positively about nuclear power. It's a very emotional issue, and I doubt that emotions are going to get the job done. And I'm sure that the NRC is going to see, on an unemotional level, that Indian Point is necessary. (IPEC-AAA-1)

Comment: I've heard some pretty, I think, careless statements about what goes on in Indian Point as far as it being safe. I've stated here once before that the members of my local are like family to me, and I wouldn't put my family in an unsafe environment to work. To say that that place is an unsafe place to work is to tell several hundred people that work there on a daily basis that they are suicidal.

There are many families that have been born and raised throughout that plant. I've seen many women in that plant that were pregnant, carried their kids to term, and have very healthy children, that have gone to college, all from that one plant. (IPEC-AAA-3)

Comment: For the aforementioned reasons, The Business Council of Westchester hereby supports and petitions for the re-licensing of the Indian Point Energy Center. We look forward to hearing from you regarding this matter. (IPEC-B4-5)

Comment: As an employee of Entergy Nuclear Northeast and a Hudson Valley resident, I implore you to approve the relicensing of the Indian Point Energy Center in Buchanan, NY. (IPEC-B17-1)

Comment: For the good of the region, and in light of the need for more environmentally friendly sources of electricity, I ask you to support the relicensing of Indian Point. (IPEC-B17-3)

Comment: Good afternoon. Thank you for your attention and your patience. Some of the points that I wanted to discuss today have been covered by other speakers, so I'll summarize the written statement that I've submitted.

My name is Radmilla Miletich and I am the legislative and environmental policy director for the Independent Power Producers of New York. Our organization, IPPNY, represents the competitive power supply industry in the state, including companies involved in the development of electric generating facilities, the generation, sale and marketing of electric power, and the development of natural gas facilities. . . . Our mission is to assist our member companies in becoming the premier providers of electricity in the state.

IPPNY firmly believes that Indian Point nuclear facility is a positive asset for the state, and we support the continued operation of Indian Point as a critical component of the state's electric energy supply system. (IPEC-BB-1)

Comment: The Partnership for New York City represents the city's business leadership and its largest private sector employers. It is committed to working in partnership with government, labor and the non-profit sector to enhance the economy and create jobs.

I am writing in support of Entergy Corporation's application for relicensing of the Indian Point Energy Center. (IPEC-C4-1, IPEC-III-1)

Comment: Indian Point Energy Center provides safe, clean, reliable and cost-effective energy to the downstate region. (IPEC-C4-5)

Comment: As a long time Indian Point employee, I am dismayed by many of the comments I hear made about the safety and security of this facility by those opposed to its continued operation beyond its current license. (IPEC-C17-1)

Comment: Even though I am an Engineer at Indian Point, my job is the same as every other employee's - to protect the health and safety of my fellow co-workers and the community at large by maintaining a safety conscious work environment. (IPEC-C17-2)

Comment: I ask that you relicense the Indian Point Energy Center for the good of the community. (IPEC-C17-3)

Comment: And I just wanted to say that I support relicensing at Indian Point as a proud employee of Entergy. (IPEC-CCC-3)

Comment: In conclusion, the Energy Association of New York State wholeheartedly supports and petitions for the relicensing of the Indian Point facility. (IPEC-D4-12)

Comment: As both an Indian Point employee and resident of the Hudson Valley, I implore you to approve the relicensing of the Indian Point Energy Center in Buchanan, New York. (IPEC-D17-1)

Comment: There is no question that the site's "safety first" philosophy has placed Indian Point in the top tier of commercial operating nuclear plants in the U.S., and both management and front line employees share the same goal - achieving even higher levels of safe operational performance. (IPEC-D17-4)

Comment: For the good of the region, and in light of the need for more environmentally friendly sources of electricity I ask you to support the relicensing of the Indian Point Energy Center. (IPEC-D17-5)

Comment: I am in support of decisions concerning Indian Point license renewal. (IPEC-F4-1)

Comment: I also want to applaud the NRC and some of the utility based companies who now want the nuclear power industry to thrive again, which it should, it is a clean, safe, and efficient alternative to the power this country requires. I believe without nuclear power this country will not be the great country in which it is now. (IPEC-F4-3)

Comment: I am writing to encourage you to approve the relicensing of the Indian Point Energy Center in Buchanan, New York. As an Entergy employee and a resident of the Hudson Valley for the past 6 years, I have lived and worked just minutes from Indian Point in complete safety and security. (IPEC-F17-1)

Comment: When armed with the correct facts, the public citizenry will come to the correct conclusion: "Indian Point is Right for New York." It is incumbent upon you to ensure the decision makers are presented with balanced and correct information regarding the decision to relicense Indian point. (IPEC-F17-2)

Comment: Without Indian Point, there would be more fossil fuels burned and more of these adverse consequences. So if you add up the benefits and liabilities of nuclear power compared to burning fossil fuels, it is obvious that nuclear power stands pretty tall. (IPEC-FF-5)

Comment: And I am asking the NRC and the DEC to take the impact of Indian Point in benefitting the environment of the Hudson Valley, the entire area, into account when they conduct the EIS. (IPEC-FF-8)

Comment: My name is Noiva Butler, and I'm a proud employee of Entergy. I'd like to read a statement to keep Indian Point operating. We, the undersigned, respectfully request that you renew the license for Indian Point for another 20 years of safe, reliable, and environmentally clean operation. As employees and supporters of Indian Point, we know that nuclear power remains one of the most affordable and predictable sources of energy for our region and our country. (IPEC-FFF-1)

Comment: Good afternoon. My name is Jim Knubel. I live in Putnam Valley. I'm a member of New York Area which is an association of businesses, labor leaders, and individuals that support the relicensing of Indian Point. I'd like to start by thanking the men and women that work at Indian Point for the continued safe operation of that unit. (IPEC-G-1)

Comment: There is no question that the site's "safety first" philosophy has placed Indian Point in the top tier of commercial operating nuclear reactors in the U.S., and both management and frontline employees share the same goal - achieving even higher levels of safe, operational performance. (IPEC-G17-2)

Comment: On behalf of my fellow Entergy co-workers - and by extension - the thousands of families, friends, neighbors and businesses that take great pride in calling Indian Point "good neighbor, trusted community partner and home," I ask that you relicense the Indian Point Energy Center for the good of the community. (IPEC-G17-4)

Comment: For the aforementioned reasons, The Business Council of Westchester hereby supports and petitions for the re-licensing of the Indian Point Energy Center. We look forward to hearing from you regarding this matter. (IPEC-H4-5)

Comment: It's reliable: Nuclear plants are a highly reliable, primary source of base load electric power. The two Indian Point plants have operated about 95% of the time since Entergy purchased them. (IPEC-H17-9)

Comment: Thank you for the opportunity to take part. My name is Patrick Moore. I am a co-founder and 15-year former Director of Green Peace. I am now Chair and Chief Scientist, Green Spirit Strategies, Limited, focused on sustainability. And I am presently an advisor to New York area.

One day when I was doing my Ph.D. in ecology at the University of British Columbia I read about a little group of people meeting in a church basement in Vancouver, planning a protest against U.S. hydrogen bomb testing. I joined that group and ended up being in the planning and on the first voyage of what became Green Peace. We convinced President Nixon at the time to end those hydrogen bomb tests. As a matter of fact, that was the last time the United States ever detonated a hydrogen bomb. With that victory behind us, we went on -- I went on -- to spend the next 15 years full-time in the front lines of the movement around the world.

We got a lot of things right -- stop the bomb, save the whales, stop toxic discharge, etcetera. But I think we made one serious error -- in our enthusiasm, focused on nuclear weapons testing and the threat of all-out nuclear holocaust between the Soviet Union and the United States.

We made the mistake of lumping nuclear energy in with nuclear weapons, as if they were all part of the same holocaust. I think we failed to differentiate between the peaceful and beneficial uses of the technology and the destructive and even evil uses of the technology. If we banned all technologies that could be used for evil purposes, we would never have harnessed fire. (IPEC-HH-1)

Comment: A car bomb is made with a car, diesel oil, and fertilizer. Is the best way to stop car bombs to ban diesel oil, fertilizer, and automobiles? No. Think of nuclear medicine for a minute. Nuclear medicine successfully diagnoses and treats millions of people every year. Many of the isotopes used in nuclear medicine come from nuclear reactors -- cobalt-60, technetium, and others. (IPEC-HH-2)

Comment: The only way to get -- to keep the air as clean as it is in this state is to keep Indian Point operating safely, cost effectively, and clean, just like it has been for the last 35 years. Thank you very much. (IPEC-HH-9)

Comment: The Partnership for New York City represents the city's business leadership and its largest private sector employers. It is committed to working in partnership with government, labor and the non-profit sector to enhance the economy and create jobs.

I am writing in support of Entergy Corporation's application for relicensing of the Indian Point Energy Center. (IPEC-I4-1)

Comment: Indian Point Energy Center provides safe, clean, reliable and cost-effective energy to the downstate region. (IPEC-I4-5, IPEC-III-5)

Comment: Therefore, the Partnership of New York City hereby supports and petitions the Nuclear Regulatory Commission for the relicensing of the Indian Point Energy Center. (IPEC-I4-7, IPEC-III-7)

Comment: In conclusion, the Energy Association of New York State wholeheartedly supports and petitions for the relicensing of the Indian Point facility. (IPEC-J4-12)

Comment: As a both an Indian Point employee and Hudson Valley resident, I implore you to approve the relicensing of the Indian Point Energy Center in Buchanan, New York. (IPEC-J17-1)

Comment: For the good of the region, and in light of the need for more environmentally friendly sources of electricity - not less of them - I ask you to support the relicensing of the Indian Point Energy Center. (IPEC-J17-6)

Comment: Good evening. My name is Norris McDonald, and I'm Founder and President of the African-American Environmentalist Association. And I have to make an admission here first thing, and that is that I love Indian Point. We also, obviously, support the license renewal, but let me get down to business here. (IPEC-JJ-1)

Comment: The trash transfer stations, most of the bus depots, and I'm sure hopefully NRC will look at those items. But also, within the environmental report, and in the development of the EIS, I would hope that you would spend more time looking at the benefits, the great benefits of Indian Point. That's what I love -- the great benefits. That is a fact that it's emission-free. (IPEC-JJ-8)

Comment: And I'll stand up to any hate and any prejudice for this plant, for that issue, for those children. We will be their representative. I love Indian Point (IPEC-JJ-11)

Comment: For these reasons, we believe the facility should be re-licensed. (IPEC-JJJ-5)

Comment: When determining whether Indian Point Energy Center should qualify for license renewal, consider how the plant improves the quality of life of all New York residents, both directly and indirectly. Indian Point provides our state with an energy source that is unmatched in potential, a clean energy alternative, and a deeply community invested partner in Entergy.

For the aforementioned reasons, the African-American Men of Westchester hereby supports and petitions for the relicensing of the Indian Point Energy Center. (IPEC-K4-12)

Comment: For the aforementioned reasons, The Business Council of Westchester hereby supports and petitions for the re-licensing of the Indian Point Energy Center.

We look forward to hearing from you regarding this matter. (IPEC-KKK-5)

Comment: And we also believe that this is another option in terms of the environment. We respect the NRC's judgment and its scoping process in terms of its review, in terms of renewal process, and based upon these and other factors, we're requesting or we're supporting the renewal. Thank you. (IPEC-L-4)

Comment: In closing, the Association of Minority Enterprises of New York fully supports Entergy in its effort to relicense the Indian Point Energy Center. If Indian Point does not remain open, we believe this will greatly impact many of the women and minority owned businesses in the region through the loss of a major purchaser of their goods and services. (IPEC-L4-7)

Comment: The Association of Minority Enterprises of New York hereby supports and petitions the Nuclear Regulatory Commission to relicense Indian Point. (IPEC-L4-10)

Comment: Not only is nuclear power safe, but it is much safer than the coal or natural gas. (IPEC-LLL-4)

Comment: If we really want to make progress in New York State; real progress improving the air we breathe every day; real progress cleaning up the environment for our children and their children, and making sure that we have affordable electricity into the future, then nuclear power must have a role in our energy future.

We should realize how fortunate we are to have Indian Point's power working for us every day. Because it is safe, clean, and reliable, I fully support the operation and license renewal of the Indian Point power plants. (IPEC-LLL-9)

Comment: In closing, I would like to say that I believe in the job we are doing here. I would never sacrifice my credibility or the welfare of my family just for a paycheck. I, and many others like me would be the first to know if things were not good here at the plant. We are also not afraid to speak up if there is a problem. (IPEC-M4-4)

Comment: So, as an Environmentalist, as a parent, a stakeholder in the community, and as an employee, I would like to reinforce the position that true environmentalists are not anti-nuclear, they are pro-environment. Please let logic prevail and re license Indian Point for another 20 years. (IPEC-M4-5)

Comment: My name is Andy O'Connell. I'm the Senior Business Agent for Utility Workers Union of America Local 1-2. We represent members in all of the fossil fuel SID plants in the inner city, as well as the members in the Indian Point plant. We're intimately involved in generation, transmission, and distribution of electricity. I'd like to stand up here and give an

eloquent speech, but it's just not my style. I'd like to -- I've heard a lot of acronyms over the years from the different agencies and Indian Point itself. Who out there knows what KISS stands for? Keep It Simple. Keep It Simple, Stupid, in military terms. That's what I'd like to do. On behalf of approximately 450 members that are working at the Indian Point Energy Center -- local residents from the Hudson Valley, mothers, fathers, sisters, brothers, sons, daughters, taxpayers, and voters. I'm here to offer our support for the Indian Point Energy Center, which we all know to be safe, secure, and necessary. (IPEC-MM-1)

Comment: Unlike the anti-nuclear, anti-industry, naysayers who at most have toured the plant, we are the ones who tighten every bolt. We check every meter, and we run every wire and every pipe in that plant. Like my union brothers and sisters, I would not enter that facility or send other workers into that facility if it was not safe. (IPEC-MM-2)

Comment: In conclusion, the Energy Association of New York State wholeheartedly supports and petitions for the relicensing of the Indian Point facility. (IPEC-MMM-12)

Comment: [F]rom both an environmental and reliability standpoint, Indian Point couldn't be in a better location. (IPEC-N-8, IPEC-OOO-8)

Comment: For all my reasons mentioned above, I strongly support the application for renewal of Indian Point's operating license as a benefit to the region and hope to continue work with Entergy to train and mentor our young engineers. Thank you. (IPEC-N-11)

Comment: Good afternoon. On behalf of the Independent Power Producers of New York, Inc. (IPPNY), I appreciate the opportunity to provide these comments to the U.S. Nuclear Regulatory Commission (NRC), in relation to the environmental scoping for the renewal of Indian Point's license. My name is Radmila P. Miletich, and I am IPPNY's Legislative and Environmental Policy Director.

IPPNY is a trade association representing the competitive power supply industry in New York State, including companies involved in the development of electric generating facilities, the generation, sale, and marketing of electric power, and the development of natural gas facilities . . . .

IPPNY firmly believes that the Indian Point nuclear facility is a positive asset for the State of New York and for its millions of residents, and we support the continued operation of Indian Point as a critical component of the state's energy supply system. (IPEC-NNN-1)

Comment: I am a strong proponent of nuclear power, and Indian Point and its relicensing efforts. (IPEC-O4-1)

Comment: Numerous special interest groups will push their agenda to try and prevent the relicensing of Indian Point. However when the needs of the region are considered along with the safe operating history of the units I know that cooler heads and reason will prevail and both

the region and Indian Point can look forward to 20 more years of partnership and growth. (IPEC-O4-7)

Comment: At a recent Board of Directors meeting, the Westchester County Association's Board of Directors voted unanimously to support Entergy's application to renew operating licenses of Indian Point Nuclear Power Plants. The Board of Directors cited the facility's importance to the area's economic vitality and significant investments to bolster the security and safety of the plant. (IPEC-O17-1)

Comment: The Westchester County Association's (WCA) Board of Directors recently voted unanimously to support Entergy Corporation's application with the Nuclear Regulatory Commission to renew its licenses to operate two Indian Power Point nuclear power plants in Buchanan, NY. (IPEC-O17-2)

Comment: The vote came following a presentation that Larry Gottlieb, Director of Communications, for Entergy Nuclear Northeast, had given to WCA Board members on the significance of nuclear power in meeting energy demand and the increased investments that Entergy has made to bolster safety and security.

WCA President William M. Mooney, Jr., asked Board members-who represent a cross section of Westchester's business leaders-to vote on the motion at the close of an in-depth discussion with Gottlieb. Stanley E. Freimuth, WCA Chair, said: "This meeting not only underscored the importance of nuclear energy in sustaining the area's economic vitality but it also demonstrated that Entergy has made substantial investments to address safety and security issues." (IPEC-O17-3)

Comment: WCA Board Co-Chair Mark Rollins, CEO of the Rollins Agency, noted: "As a Westchester business owner with family, friends, clients and colleagues who love working and living here, it's reassuring to learn just how Entergy intends to continue to provide the nuclear power we need-safely and securely in the years ahead." (IPEC-O17-5)

Comment: My name is Mark Cooperman. I'm a resident of Cortlandt Manor, have been a resident for nearly 20 years. I'd like to consider myself just an average citizen of the community, and I want to kind of speak up for us average citizens who kind of get pushed out of the way by special interest groups. I support the plant. (IPEC-OO-1)

Comment: I have also seen, you know, people saying, "You shut down the plant, because the facilities are aging." Well, about a month ago in New York City there was a steam pipe explosion. Are we to shut down the streets of New York to guard against future steam pipe explosions?

There's a certain of risk we're all going to live with. (IPEC-OO-4)

Comment: For all my reasons mentioned above, I strongly support the application for renewal of Indian Point's operating license as a benefit to the region and hope to continue to work with Entergy to train and mentor young engineers. (IPEC-OOO-11)

Comment: As a long-time Indian Point employee and Hudson Valley Resident, soon to retire after 30 years at Indian Point, I'am compelled to write and encourage you to Relicense the Indian Point units. (IPEC-P17-1)

Comment: My name is Dan Durett and I am the Director of the African American Environmentalist Association New York Office (AAEA-NY). AAEA, founded in 1985, is an organization dedicated to protecting the environment, enhancing human, animal and plant ecologies and promoting the efficient use of natural resources. AAEA includes an African American point of view in environmental policy decision-making and resolves environmental racism and injustice issues through the application of practical environmental solutions. The New York Office was established in 2003.

AAEA New York supports the 20-year License Renewal for the Indian Point nuclear power plant located in Buchanan, New York. (IPEC-QQQ-1)

Comment: AAEA expressed public support for nuclear power for the first time in 2001 after a two-year internal process of studying and debating the issue. (IPEC-QQQ-2)

Comment: AAEA-NY specifically supports the Indian Point 2 and 3 nuclear power facilities because these facilities provide significant electrical capacity to the State of New York with minimal human, animal, air, water, and land impacts. (IPEC-QQQ-4)

Comment: 6 NYCRR § 624.5(b) allows a person to obtain party status by timely filing a petition, (i) identifying the proposed party together with the name(s) of the person or persons who will act as representative of the party; (ii) identifying the petitioner's environmental interest in the proceeding; (iii) identifying any interest relating to statutes administered by the department relevant to the project; (iv) identifying whether the petition is for full party or amicus status; and (v) identifying the precise grounds for opposition or support. Additionally, a petitioner must (i) identify an issue for adjudication which meets the criteria of 6 NYCRR § 624.4(c) and (ii) present an offer of proof specifying the witness(es), the nature of the evidence the person expects to present and the grounds upon which the assertion is made with respect to that issue. AAEA's Petition for Full Party Status met these criteria. As discussed above, this Petition was brought by AAEA, and the President of AAEA, Norris McDonald, will act as its representative.
. . . .
AAEA has a strong environmental interest in this proceeding because AAEA is an environmental action group, with a chapter in Long Island, New York, with a stated goal of promoting clean air in low-income and minority communities by, among other things, supporting the safe use of nuclear energy. (IPEC-QQQ-35)

Comment: AAEA also has approximately 1,000 members in the New York area whose air quality may be impacted by the DEC's Permit for Indian Point 2 and 3. Further, AAEA has

publicly supported Indian Point 2 and 3, due to its positive impact on New York's air quality, for several years. (IPEC-QQQ-36)

Comment: For instance, in May 2002, AAEA President Norris McDonald presented testimony before the Committee on Environmental Protection in opposition to Chairman James F. Gennaro's Resolution 64, which called for the immediate shutdown of Indian Point. AAEA also presented testimony on February 28, 2003, before the New York City Council's Committee on Environmental Protection, again opposing efforts to shut down Indian Point. And most recently, AAEA participated in the DEC's legislative hearing relating to Indian Point's Draft SPDES Permit. (IPEC-QQQ-37)

Comment: AAEA New York supports the 20-year License Renewal (ESP) for the Indian Point nuclear power plant located in Buchanan, New York. We support this renewal because the facility is a positive structure for mitigating ground level air pollution, global warming and environmental injustice. (IPEC-QQQ-46)

Comment: This is America, and everyone is entitled to an opinion. However, if you don't like or are afraid of nuclear power, then don't move near a nuclear power plant. Don't move in and think, "Now that I'm here, the plant needs to close." Indian Point was there first, and as long as the plants are run safely, they should be allowed to continue to run. (IPEC-R4-2)

Comment: We are proud to be a partner with Entergy, and look forward, and this is why today I come and ask that when you look at all the points that you hear today, that you look at what is realistic for our communities, not just people of color, but for all Americans in relicensing nuclear power. (IPEC-T-5)

Comment: My name is Norris McDonald and I am the founder and president of the African American Environmentalist Association (AAEA). AAEA, founded in 1985, is an organization dedicated to protecting the environment, enhancing human, animal and plant ecologies and promoting the efficient use of natural resources. AAEA includes an African American point of view in environmental policy decision-making and resolves environmental racism and injustice issues through the application of practical environmental solutions.

AAEA supports the 20-year License Renewal for the Indian Point nuclear power plant located in Buchanan, New York. (IPEC-TTT-1)

Comment: AAEA expressed public support for nuclear power for the first time in 2001 after a two-year internal process of studying and debating the issue. (IPEC-TTT-2)

Comment: Of particular import to AAEA is the promotion of clean air in African American communities. Because nuclear power is emission-free and has a demonstrated safety record, whereas fossil-fuel power contributes to numerous health issues, AAEA seeks to promote the safe use of nuclear power. AAEA specifically supports the Indian Point 2 and 3 nuclear power facilities because these facilities provide significant electrical capacity to the State of New York

with minimal human, animal, air, water, and land impacts. This public support started in 2001 and continues to this day. (IPEC-TTT-4)

Comment: The proposed action of renewing the operating license for Indian Point would lead to continued environmental benefits for the region. (IPEC-TTT-25)

Comment: The ER comprehensively covers the environmental issues related to the physical and chemical environments in the area. The ER also includes helpful information generated from years of environmental impact statements generated by the New York Department of Environmental Conservation. The report provides extensive coverage of the endangered species in the area. The NRC Generic Environmental Impact Statement is utilized to establish characterization methods for fish populations and other environmental characteristics. (IPEC-TTT-33)

Comment: The NRC performs environmental justice analyses utilizing a 50-mile radius around the plant as the environmental "impact site" and the four states (New York, New Jersey, Pennsylvania & Connecticut) individually when all or part of a block group is in those states as the "geographic area" for comparative analysis. The NRC Procedural Guidance for Performing Environmental Assessments and Considering Environmental Issues indicates that a minority population is considered to be present if either of the two following conditions exists: (1) The minority population in the census block group exceeds 50 percent. (2) The minority population is more than 20 percentage points greater in the census block group than it is in the minority percentage of the geographic area chosen for the comparative analysis. The NRC defines "minority" population as American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, Black, other, multi-racial, the aggregate of all minority races, or Hispanic ethnicity. The ER includes significant demographic information related to minority and low-income populations.

Indian Point is, and has been, a positive environmental structure for minority and low-income people. This positive influence should be allowed to continue. (IPEC-TTT-34)

Comment: The description of the history of the Indian Point site is illuminating. The construction and operation of the facility has added to the fine history of this site. The NRC should provide the license renewal requested so that the excellent emission free electricity can continue to flow throughout the region. (IPEC-TTT-36)

Comment: The work force at Indian Point consists of approximately 1,255 persons. The ER gives a comprehensive description of this workforce: where they live and how many employees live in a particular jurisdiction. AAEA wants these employees and future employees to have the opportunity to work at this electric power facility for an additional 20 years beyond 2013 and 2015. They probably do not consider themselves to be environmental justice activists, but by their functions, they are fighting environmental injustice. (IPEC-TTT-39)

Comment: The license should be renewed. There are not environmental considerations that would merit refusal of the renewal. AAEA supports the License Renewal. The facility is an environmental asset for the local area, the state and the planet. (IPEC-TTT-50)

Comment: My name is Ron Carpino. I live in Peekskill, about three miles away from here, and I am a licensed senior reactor operator. I am licensed to be senior reactor operation to protect the general health and safety of the general public. So what does that mean? That means, although I do get paid by Entergy, no denying that, that means I'm held to a higher standard, that if I make an incorrect decision, I can be personally held liable through fines or imprisonment. So I'd like you to keep that in mind with what else I have to say today. The facility is operated safely, be it nuclear safety, radiological safety, personnel safety, and in this case, environmental safety. (IPEC-V-1)

Comment: As a representative for Millwrights Local 740, acting on behalf of my members, I want to express my support for the relicensing of Indian Point. (IPEC-V4-1)

Comment: Millwright Local 740 does not support closing Indian Point Energy Center, and furthermore, petitions the Nuclear Regulatory Commission to support the relicensing of the Indian Point Energy Center facility. (IPEC-V4-4)

Comment: As a both an Indian Point employee and Putnam County resident, I urge you to approve the relicensing of the Indian Point Energy Center in Buchanan, New York. (IPEC-V16-1)

Comment: For the good of the region, and in light of the need for more environmentally friendly sources of electricity - not less of them - I ask you to support the relicensing of the Indian Point Energy Center. (IPEC-V16-5, IPEC-W16-7, IPEC-X16-6)

Comment: But I'm just really interested in the impact on communities. As director of the African American Environmental Association's New York office, this organization is dedicated to protecting the environment, enhancing human, animal and plant ecologies, and promoting, yes, the efficient use of natural resources. As an African American in these deliberations today, I proudly stand and ask and request that the license be renewed. (IPEC-W-3)

Comment: As both an Indian Point Energy Center employee and a Hudson Valley region resident, I urge you to approve the renewal of the IPEC license. (IPEC-W16-1)

Comment: For the aforementioned reasons, the Business Council of Westchester hereby supports the petition for the relicensing of the Indian Point Energy Center. We look forward to the hearing from -- we look forward to hearing from you regarding this matter.

Sincerely, Marcia Gordon, President, The Business Council of Westchester. (IPEC-WW-5)

Comment: As a both an Indian Point employee and Hudson Valley resident, I implore you to approve the relicensing of the Indian Point Energy Center in Buchanan, New York. (IPEC-X16-1)

Comment: Good evening. My name is Tom Klein. I represent Boilermakers Local 5. We cover a jurisdiction from Kingston, New York, to New York City and Long Island. We work in the powerplants. What we do is we built from new construction, we do maintenance work, and we do emergency repair work.

I really don't have too much prepared for tonight for this speech, but what I'd like to mention is that Indian Point is the safest and cleanest plant we work in, that all of the other powerhouses that we've been in are much more pollutant type and that -- no, I haven't heard anyone mention tonight about the plant that's right next door, Charles Point -- it's a garbage burner. And I don't see where that's, as a pollutant -- I'm sorry, I think there's more pollution from that plant than comes from Indian Point. I know the restrictions are different, but I think that the scrutiny should be both the same on them both. (IPEC-XX-1)

Comment: We understand that Entergy is committed to improving the health, social and economic conditions of communities of color by providing safe, affordable reliable and clean energy. (IPEC-XXX-2)

Comment: I urge you to support the relicensing of Indian Point. (IPEC-Y16-4, IPEC-Z16-4, IPEC-A17-4, IPEC-F17-4, IPEC-H17-10)

Comment: For these reasons, we believe the facility should be relicensed. Having stated the above, we feel we would be remiss to not acknowledge that there are those in our community who oppose this action. While we sympathize with their concerns, we note that Entergy has an ongoing program to address safety to address issues of safety and potential terrorist threat. We encourage the company to maintain those efforts in the most aggressive manner. Sincerely, Al Samuels, President, Rockland Business Association. (IPEC-ZZ-4)

Response: *The comments are noted. The comments are supportive of license renewal at Indian Point, and are general in nature. The comments provide no new information and will not be evaluated further.*

Comment: I am appalled and disappointed by the lack of factual information communicated to the public about the benefits of nuclear power for this region. (IPEC-D17-2)

Comment: [H]ave never thought that a Nuclear Plant is unsafe for operation. I would feel safe with one near my home and have lived with them in my back yard before. I have been involved with the construction, startup and operation of nuclear power plants and I as a Quality Control Professional have seen the quality workmanship, care for the public safety, worker safety consciousness, and the awareness to bring concerns to management without reprisal in the industry. I assume now that there are people out there who don't work in the industry who have, to an extent, educated themselves to know that the atom can be used for good will now allow themselves to have a sense of easiness when it comes to nuclear power. (IPEC-F4-2)

Comment: It's safe: Hundreds of millions of dollars have been invested in facility equipment and training upgrades over the years. The plant is practically new on the inside with an exterior that can withstand the most severe natural or man-made disasters. (IPEC-H17-7)

Comment: During several public forums on the subject of Indian Point, I am continually appalled and disappointed by the lack of factual information communicated to the public about the benefits of nuclear power for this region. (IPEC-J17-2)

Comment: There has never been a radiological death in the 50-year history of the U.S. commercial nuclear power generating industry. (IPEC-LLL-3)

Comment: Indian Point and nuclear power -- nuclear power is one of the fastest-growing energy sources in the world. Why do you think Switzerland is all nuclear power? Why do you think France is all nuclear power? Why do you think China, which is one of the most pollutant countries in the world, is now with a revolution to go towards nuclear? There's a reason. It saves lives. It saves the environment. It saves our future, our world. (IPEC-PP-8)

Comment: What goes on there is not a public safety hazard. It's a steam generator. Steam is generated at 212 degrees Fahrenheit, not 20,000 degrees. The reaction that is there is safe. Yes, there are some environmental concerns, but you have to weigh out the whole preponderance of the evidence and not focus on this one leak or that one situation. You have to look at the whole picture. (IPEC-SS-7)

Comment: During several public meetings on the subject of Indian Point, I was very disappointed by the lack of factual information communicated to the public about the benefits of nuclear power for the region. (IPEC-W16-2)

Comment: During several public forums on the subject of Indian Point, I am continually appalled and disappointed by the lack of factual information communicated to the public about the benefits of nuclear power for this region. (IPEC-X16-2)

Response: *The comments are noted. The comments are supportive of nuclear power and, by inference, supportive of license renewal. The comments provide no new information and will not be evaluated further.*

Comment: So let's look at more of the benefits. Let's look at the benefits in terms of smog, which is our big issue. I'm a chronic acute asthmatic. I've almost died twice. Now, many people in this room would say, "Hey, you're not dead yet?"

Or would like to see me dead, and that's fine, because let's address hate and its progeny, prejudice. There's a prejudice against Indian Point. But I'll tell you what: I love Indian Point. And the main reason I love Indian Point -- and it's not about me -- it's about the four-year old child in Harlem in a high-rise apartment on a non-attainment day without air conditioning, the suffering of children from smog, and that makes me angry. (IPEC-JJ-10)

Comment: AAEA's Petition made clear that it opposes the DEC's Draft SPDES Permit for Indian Point 2 and 3 to the extent the Permit imposes substantial limits on the facilities' ability to generate electricity, as these limitations will translate into increased levels of generation - and increased levels of air emissions - at nearby facilities, most of which are fossil-fuel facilities located in or near minority and low-income communities. (IPEC-QQQ-39)

Comment: Again, this is critical for an American neighborhood right here in New York State with one of the highest asthma rates ever documented, according to an article by New York Times Reporter Richard Perez-Pena. A Harlem Hospital Study found that 25 percent or one of every four children in central Harlem suffered from asthma, which is double the rate researches expected to find. The Harlem Hospital study suggests that this is certainly one of the highest rates attributed in the United States, if not the highest. With this level of vulnerability being felt by the most helpless among us, are we willing to lose a committed community advocate like Entergy if Indian Point were closed? We say absolutely not. (IPEC-L4-6)

Response: *The comments are noted. The comments, in general, express concerns that if Indian Point is closed other alternate energy sources (such as coal) will be used to replace the power generated at Indian Point. The NRC staff will evaluate environmental impacts of a range of viable energy alternatives in Chapter 8 of the SEIS. The comments further express concerns that these alternative energy sources present an air quality concern, specifically to minority and low income individuals. The environmental justice issues associated with the continued operation of Indian Point for an additional 20 years will be evaluated and presented in Chapter 4 of the SEIS. The potential environmental justice issues associated with the no action alternative (plant closure)—as well as a range of viable energy alternatives—will be addressed in Chapter 8 of the SEIS.*

Comment: As owner and operator of Indian Point, the Entergy Corporation remains a critical, major employer and corporate philanthropist - donating millions of dollars to a myriad of worthy causes, hospitals, educational institutions, regional associations and municipalities (IPEC-A4-4, IPEC-JJJ-4)

Comment: Since completing its purchase of Indian Point from the New York Power Authority and Consolidated Edison, Entergy has invested millions of dollars into improving Indian Point.

I have seen dramatic improvements in the areas of security, emergency planning and overall operations. Entergy places a major emphasis on safety, and I often attend training sessions and pre-job briefings specifically about safely performing tasks and goals.

Indian Point, has certainly seen its share of challenges over the years, but we have remained on an upward performance trend since being purchased by Entergy, and I expect this to continue well into the future. (IPEC-A17-1, IPEC-Y16-1, IPEC-Z16-1)

Comment: Entergy is also a good community neighbor, sponsoring many important events out in the neighborhoods around Indian Point. Many of my neighbors and friends comment about Entergy being everywhere they go . . . and that's a good thing. (IPEC-A17-2)

Comment: My other comment is that I'm a mother, and I've heard other people say things about being mothers in the area. I was a chemistry supervisor at Indian Point. I actually oversaw the radiochemical analysis when I was pregnant with my older son. I was at the plant up until I was eight months pregnant, and that baby is now going to be graduating in May with Honors from Georgetown University. So it's not all bad.

We are careful with what we do. We know we have some problems. We're working hard to solve them, and hopefully this relicensing will come about. (IPEC-CCC-2)

Comment: Moreover, as owner and operator of Indian Point, the Entergy Corporation has been exemplary - winning numerous awards for its performance as a nuclear operator and community partner. Indian Point has seen significant improvement under Entergy's ownership and we look forward to seeing them at the helm for many years to come. (IPEC-D4-11, IPEC-J4-11, IPEC-MMM-11)

Comment: I'm David Green, and I'm reading the record -- reading the statement of Phillip Banks for the record.

I am Phillip Banks, President of One Hundred Black Men. . . . In keeping with our mission of improving the quality of life for African-Americans, we often partner with corporate entities that are supportive of our goals. Entergy Nuclear Northeast has been an ardent supporter of our initiatives. Entergy has provided us with support that will enable us to provide opportunities for educating -- for education mentoring, and small business expansion, and development throughout the New York metropolitan area. We understand that Entergy is committed to improving the health, social, and economic conditions of communities of color by providing safe, affordable, reliable, and clean energy. (IPEC-DDD-1)

Comment: These factors negatively contribute to the quality of life for many African-Americans in New York. The One Hundred Black Men supports the creation and distribution of safe, affordable, reliable, and clean energy for not only our communities but the greater community that is New York. We believe that Entergy is a good corporate citizen, and we support any efforts to balance the delivery of safe energy with initiatives that will soften the burden of these costs on our communities and the environment. (IPEC-DDD-5)

Comment: Entergy has invested hundreds of millions of dollars in equipment upgrades and security enhancement and training to ensure that the plant can operate safely for many years. Thank you. And I encourage you to sign our petition. Thank you. (IPEC-FFF-3)

Comment: As a long-time employee of the James A. FitzPatrick Nuclear Power Plant in upstate New York, I am dismayed by many of the comments I hear made about the safety and security of the Indian Point Energy Center by those opposed to its continued operation beyond its current license.

Even though I am a Senior Nuclear Instructor in Radiation Protection at FitzPatrick, my job is the same as every other employee's and IPEC- to protect the health and safety of my fellow co-workers and the community at large by maintaining a safety conscious work environment. This is an abiding commitment by all members of the Entergy nuclear community, both here at JAF and at Indian Point. It is a basis for operation of all of Entergy Nuclear. (IPEC-G17-1)

Comment: Indian Point has certainly seen its share of challenges over the years, but the plants have remained on an upward performance trend since being purchased by Entergy, and there is no reason not to expect this to continue well into the future. (IPEC-H17-1)

Comment: Entergy is also a good community neighbor, sponsoring many important events out in the neighborhoods around Indian Point. Many of my neighbors and friends comment about Entergy being everywhere they go . . . and that's a good thing. (IPEC-H17-2, IPEC-Y16-2)

Comment: One of the three prongs of the mission of the African American Men of Westchester is "to focus attention on social issues which have a disproportionately negative impact on the' African American community." Accordingly, the issue of energy usage and how it affects the finances, health and environment of the African American community is a major concern of our organization due to the potential implications of the Indian Point Energy Center not receiving their license renewal.

Entergy has a long history of serving as a generous corporate citizen and advocate for the well-being of minority communities, which has made it an ideal partner for our outreach program. Our organization feels that it is in the best interest of the Nuclear Regulatory Commission to relicense Indian Point because Entergy values investment in our community and the daily operation of the plant protects our quality of life. (IPEC-K4-1)

Comment: The Association of Minority Enterprises of New York, Inc. (AMENY) is a minority and women business enterprise (MWBE) non-for profit trade organization dedicated to the development and enhancement of its constituents, and the economic viability of disadvantaged communities.
. . . .
Our mission is also to establish a working relationship with the private and public sectors to foster procurement, employment opportunities and timely economic data.

Since Entergy's arrival in New York with the purchase of the Indian Point Energy Center in 2001, the company has been a model corporate citizen and partner to New York's minority community. While a broad section of New York's population has benefited from Entergy's corporate community involvement, communities of color in particular, have gained a committed partner whose approach to empowerment is economic, social and environmental. Our community can not afford to lose such a model corporate citizen. (IPEC-L4-1)

Comment: Entergy's award winning supplier diversity program is an example of commitment to advancing economic participation and empowerment of minorities. Entergy was the first electric utility holding company in the nation to commit to the National Association for the Advancement

of Colored People's (NAACP) Fair Share Principles, and has exemplified a solid commitment to creating and maintaining a diverse workforce in which every employee is provided with an equal opportunity to contribute to the success of the corporation. The company continues to receive recognition for demonstrating leadership and commitment to ensuring the active participation of minority and women-businesses in the American economic system. In 2006 alone, Entergy spent almost $190 million with diverse suppliers- nearly $22 million of which was through the Indian Point Energy Center for procurement with minority and women owned business. (IPEC-L4-2)

Comment: Entergy demonstrates its commitment to and respect for our community in other ways also. An example is its charitable contributions to important programs and activities that strengthen the capacity of the African-American and Latino community and our ability to provide for the less privileged among us. The company is a partner in strengthening organizations throughout our community that provide much needed assistance and support to our families, neighborhoods and businesses. Entergy continues to show its commitment to our well-being. (IPEC-L4-4)

Comment: I am employed by Entergy at Indian Point in the Engineering department. I first started working at Unit 2 in 1980 and with the exception of two years have worked here ever since. I have seen many changes here at the plant over the last 27 years. The improvements are more that anyone could have dreamed of back in 1980. There is always room for improvement but I would like it to be known that I am proud to have been a part of this change. (IPEC-M4-1)

Comment: As a parent I have brought my children here on several occasions. When I have grandchildren I plan to bring them here. I as a parent would not hesitate for one second to bring those that are most dear to me here on site for any period of time. My youngest son has worked here for a short time and I hope he comes back again. This is a great opportunity for young people. It gets them away from bad influences, random testing helps to keep them straight, and the quality of leadership is outstanding. Safety seminars, human performance talks and the constant peer coaching leads to better citizens. You can't help but take it home with you. (IPEC-M4-3)

Comment: Good afternoon. My name is Mike Otis. I'm a professor of electrical engineering at SUNY New Paltz. I am also an active member or active with members of the New Paltz Foundation, SUNY New Paltz Foundation, who along with myself and other faculty, have taken a special interest in trying to do as much as we can to bring along the next generation of engineers that this country so desperately needs. Our shared special passion is to develop more diverse engineering students at the college level and to help create career paths and hands-on experience for these bright young people.

It is in that capacity that I've had the pleasure of working with Entergy and some of the senior managers to help provide pathways for engineering students at SUNY New Paltz, as we try to build our program and pave the way for new students and recruits. Therefore, I know firsthand that Entergy, the operators of Indian Point and many other nuclear power plants, is a committed

and socially responsible corporate citizen. I also interface with many business people on our engineering advisory board, who understand the needs and demands of small business and entrepreneurs. (IPEC-N-1)

Comment: I have worked at Indian Point for 30 years and have first hand knowledge of the operation of all aspects of the plant and its people. I have seen many changes, both in the nuclear industry and at Indian Point, and believe that we have achieved remarkable improvements in our safety culture, emergency response, and plant material condition. All of which has contributed to the two Indian Point plants operating about 95% of the time since Entergy purchased them. (IPEC-O4-2)

Comment: Entergy has more than 85 years of experience and is the second largest nuclear generator company in the U.S. Entergy owns and operates 12 power plants with approximately 30,000 megawatts of electric generating capacity, and boasts a proven track record of safety. Hundreds of millions of dollars have been invested in Indian Point's facility equipment and in training upgrades over the years. The plant is practically new on the inside with an exterior that can withstand the most severe natural or man-made disasters. (IPEC-O4-3)

Comment: My name is Michael Otis. I am a lecturer at the State University of New York at New Paltz School of Science and Engineering.

I am also active with members of the SUNY New Paltz Foundation, who along with myself and other faculty, have taken a special interest in trying to do as much as we can to bring along the next generation of engineers that this country so desperately needs. Our shared special passion is to develop more diverse engineering students at the college level and help create career paths and hands on experience for these bright young people.

It is in that capacity that I have had the pleasure of working with Entergy and some of its senior managers to help provide pathways for engineering students at SUNY New Paltz, as we try to build our program and pave the way for new students and recruits. Therefore, I know first hand that Entergy, the operators of Indian Point and many other nuclear powered electric plants, is a committed and socially responsible corporate citizen. (IPEC-OOO-1)

Comment: I think it's important to share some of this information with you so you can better understand why we are successful. It's simple if I work as a team to meet all the goals I personally profit and we collectively move ahead.

We have held seven Refuel Outages under Entergy each one executed better each time with shorter durations and better Industrial Safety performance. I personally worked long hours to complete two Power Uprates within short outage windows. Believe it or not we only received two of seven Refueling Outage Financial Incentive awards in seven outage attempts, even though we preformed very well.

Entergy cares about Work Quality; if the unit should need to be shut down or trips within 60 days after a successful refuel outage due to a maintenance activity in the outage the incentive

award is not distributed. I have personally felt that pain too many times. All this said, to prove how one of many a cultural shifts to incentify every worker at IPEC has been accomplished and how you attain a 98.85 % Availability Factor at IP2 and 83.25% Availability Factor at IP3. (IPEC-P17-3)

Comment: You know, Entergy has been very good to a lot of people in the First Responders. Not just did they help buy us equipment, equipment that was used at -- that helped on 9/11, like a cascade system, but they -- we train there on hazardous material training. And when you realize that the hazard of what's going on underneath that dome pales in comparison to most of the environmental hazards that are out there, like chlorine and mercury and all of these other things that don't have a half-life, they live forever and ever and ever and never go away. (IPEC-SS-4)

Comment: My name is Hazel Dukes. I'm president of New York State NAACP branches across this great state. The NAACP is a national preeminent social justice organization working to make our country and our state a better place for all Americas to live and work, and the capacity--I have the unique opportunity and pleasure to work with Entergy on the front line, as if it were New York and in fact across the country.

I've been impressed with Entergy and its work, which I've seen firsthand. I'll point out that I'm not the only one who see or seem to recognize Entergy's significant contribution to the family of New York and other communities across the country. The Dow-Jones substantial index, which measures not only exceptional financial results but also environmental, and social responsibilities, Fortune 500 companies have recognized Entergy as the only U.S. utility company to be included in their index for the sixth running year. (IPEC-T-1)

Comment: So Entergy is not required to develop the environmental justice analysis, but the NRC will conduct an environmental justice review based on information provided by Entergy in the ER. Regardless, we agree with Entergy's assessment that, "there can be no disproportionately high and adverse impacts or effects on members of the public, including minority and low-income populations, resulting from the renewal of the IP2 and IP3 Operating Licenses." (4.22.6) We have one caveat. This section did not include the great environmental benefits that Indian Point provides to minority communities. (IPEC-TTT-18)

Comment: Entergy is enhancing environmental justice and is fighting environmental injustice. It should be allowed to continue doing so for another 20 years. (IPEC-TTT-19)

Comment: My name is Frank Fraley. I'm from Mount Vernon Hospital. I'm the Vice President for Advancement. The hospital is located in Mount Vernon, New York. Our core patient population comes from the Mount Vernon area and the surrounding communities, Yonkers, Bronx, New Rochelle. Our hospital has many challenges, and we are honored to be associated with Entergy. We approached them many months ago and explained the need for a new emergency department there at the hospital in lower Westchester, and they were gracious and stepped to the plate and helped us a great deal. Our emergency department serves over

20,000 visits a year. It is the primary care for many in that population, and the assistance of Entergy will help us a great deal.

There's another reason why I'm here tonight. The city of Mount Vernon is not unlike many major cities, major mid-sized cities. It's the eighth largest city in the State of New York. It has a great deal of affluence, and scattered among it are deep economic challenges. Living in a modern city like that comes with the opportunity -- many opportunities and many conveniences. It also comes with significant health care challenges. The city has multiple highways running through it, alongside it. There's the Bronx River Parkway, Hutchison River Parkway, Interstate 95, Cross County Parkway, to name a few. And the city is home to a very large industrial and manufacturing population. (IPEC-UU-1)

Comment: I'm proud to be a representative of Mount Vernon Hospital, and I'm proud to partner with this fine corporation. Partnering with Entergy is the -- is in the best interest of the residents of Mount Vernon, and in the best interest of the patients that we serve. (IPEC-UU-4)

Comment: The Millwrights philosophy is that with skilled, safe, productive employees, our contractors will continue to win the contracts that keep our members working. We share Entergy's "safety first" philosophy, and strongly believe their investment of hundreds-of millions of dollars into equipment upgrades for Indian Point and training for its employees has lead the site to an unprecedented level of operational performance. (IPEC-V4-3)

Comment: I am Phil Banks, President of One Hundred Black Men, Inc. (OHBM). . . . In-keeping with our mission of improving the quality of life for African Americans we often partner with corporate entities that are supportive of our goals. Entergy Nuclear Northeast has been an ardent supporter of our initiatives. Entergy has provided us with support that will enable us to provide opportunities for education, mentoring and small business expansion and development throughout the New York metropolitan area. (IPEC-XXX-1)

Comment: Entergy is also a good community neighbor, sponsoring many important events out in the neighborhoods around Indian Point. Many of my neighbors and friends comment about Entergy being everywhere they go . . . and that's a good thing. (IPEC-Z16-2)

Response: *The comments are noted. The comments are in support of Entergy and/or their philanthropic activities. However, the comments are not within the scope of the environmental review process and will not be evaluated further.*

Comment: It's American Technology that creates American Energy: This is a source of energy that does not depend on international production and is not affected by international pressures or politics. As an educator at an engineering school whose focus is on educating and training more diverse engineering students to help move our state forward, what could be more important than continuing to develop and utilize "home grown" technology rather than just exporting our best engineers for other countries to benefit? (IPEC-N-7, IPEC-OOO-7)

Comment: Nuclear power has an excellent quarter century safety record. (IPEC-TTT-10)

Response: *The comments are noted. The comments are supportive of nuclear power and, by inference, supportive of license renewal. The comments provide no new information and will not be evaluated further.*

3. Comments Regarding Opposition to License Renewal

Comment: Please, please, please stop being so foolish and crazy. Shut it down. (IPEC-A5-5)

Comment: I'm a firm believer in Murphy's Law. If something bad can happen, it eventually will, particularly when human beings are involved in it. There have been a number of accidents. So far, they have not caused a catastrophic catastrophe. It strikes me that we are rather lucky that we have "dodged the bullet" for 35 years. I'm very unhappy with the thought of hoping for the best and hoping that for another 30 years we will dodge the bullet, because we just happen to be good folks. The same problems remain and they remain unsolved. (IPEC-CC-8)

Comment: The Rockland County Conservation Association (RCCA) has opposed the Indian Point facility since Indian Point 1 was first proposed. (IPEC-D5-1)

Comment: Please, tell us what issues that involve Indian Point and the potential release of any radioactivity are not environmental issues. (IPEC-GGG-6)

Comment: I have twenty more concerns of which I will deliver at this evening's meeting, and I thank you for your time this afternoon. (IPEC-H-17)

Comment: I think it is unconscionable for anyone to even consider renewing Entergy's contract for another 20 years! Besides, why 20 years? A lot happens in 20 years. By then, we may be using safer sources of energy (IPEC-L11-9)

Comment: The constant Entergy refrain of "We admit we have a few problems, and we're working hard to resolve them," just won't work anymore. The company has been given more and more time to 'solve them' and all we get are tired excuses and new 'unforeseen' problems. (IPEC-M17-6)

Comment: Huge opposition to re-licensing by non-partisan politicians and all three congressional representatives from the evacuation zone should reinforce public protests. (IPEC-M17-25)

Comment: Despite massive subsidies and other inducements ”there has-not been a single order for a new nuclear power plant in the USA for three decades." (New York State Public Service Commission). That should certainly warn us about the inadvisability of re-licensing! (IPEC-M17-27)

Comment: It is a worn out, corrosive, outdated, inefficient disaster just waiting to happen! (IPEC-M17-36)

Comment: Resolved, that the Westchester County Board of Legislators opposes re-licensing of Indian Point 2 and Indian Point 3 when their current licenses expire in 2013 and 2015, respectively, and that the NRC prohibit Entergy Corp.’s Indian Point 2 and 3 from being re-licensed, and to make this finding as soon as possible so that all concerned and involved parties

can devote their time and recourses to finding alternatives to the existing nuclear power plants. (IPEC-N5-25)

Comment: RESOLVED, that this Honorable Board does hereby reaffirm anew its wishes that the Indian Point Nuclear Power Plants be decommissioned at the earliest possible date in accordance with guidelines specified in Resolution NO. 142-2002. (IPEC-N5-35)

Comment: Resolved, that an orderly closure and decommissioning of the Indian Point Nuclear Power Plants begin at the earliest possible time. (IPEC-N5-43)

Comment: Re-license? CRAZY. (IPEC-R11-12)

Comment: There are many issues to talk on that will be entered into the record, but as a mother I -- just coming here tonight, just like the gentleman who spoke from Cortlandt Manor, that I don't want Indian Point in my backyard. I feel that you need to open up your -- I think you need to open up other considerations when reconsidering the relicensing. It's not something I want until I'm 90. (IPEC-RR-9)

Comment: Without reservation, I request that the Nuclear Regulatory Commission examine itself and instead of promoting the usage of Nuclear energy in densely populated areas such as NY, do what it was designed to do, and rather protect the population of Westchester and the surrounding 100 mile radius of Indian Point Nuclear Power Plant and shut it down, decommission it and convert it to another energy source within which the population can without question, safely co-habitate! (IPEC-T13-1)

Comment: Please add my name to the long, long list of those opposed to the relicensing of this facility. (IPEC-U4-1)

Comment: [Attachment to letter dated September 28, 2007]

Staten Island Advance
"The Top Terror Target"
Saturday, September 22, 2007
(IPEC-U4-4)

Comment: Since the NRC cannot take enforcement actions solely on the basis of whether licensees fulfill commitment, a failure to meet a commitment in itself does not constitute a violation of a legally binding requirement. However, when failure to meet a commitment results in violation of the Commission‘s health and safety regulations, the Staff will take the appropriate enforcement actions. Due to the fact that the NRC has granted seemingly endless exemptions, exceptions and deviations from its regulations, and the fact that Indian Point was built to industry guidance, instead of NRC regulations, the standard of REASONABLE ASSURANCE OF ADEQUATE PROTECTION OF PUBLIC HEALTH AND SAFETY is meaningless at Indian Point. (IPEC-Q17-247)

Comment: Failure to fulfill your commitments is a serious violation of 10 CFR Rules and Regulations, but more importantly, failure to keep major commitments to the community erodes public trust in the licensee, and in the NRC charged with oversight. (IPEC-Q17-364)

Comment: Should local residents, their children, grandchildren and beyond - for countless future generations - expect to be living under the shadow of this nuclear dump for their natural lifetimes? What happened to the tradition of leaving a better world for our children and those who come after us? (IPEC-W4-3)

Comment: Nuclear Power, especially a plant so close to a major city, is an outrageous example of corporate greed coupled with a public be damned attitude. (IPEC-Y4-1)

Comment: But Idiot Point is far from the best. It has been plagued with accidents and shutdowns.

This plant should be shut down when its current load of fuel is expended, and the exorbitant sums of money used to keep it and other nukes going should be spent on conservation, and solar power. (IPEC-Y4-5)

Comment: The Rockland County Conservation Association has opposed Indian Point facilities since Indian 1 was first proposed. (IPEC-YY-2)

Comment: There are many concerned residents who feel they definitely want Indian pt to be closed, but they feel they can't possibly win against such a huge organization.

Years ago there was a powerful successful project builder Mr. Robert Moses. He was strong, wealthy, powerful and was always used to getting his way with every project he announced. Well, one day he decided to create a project in Central Park. Well- there were a group of young mothers who took their baby carriages to this spot and spent endless enjoyable time there. This little group of young mothers protested so much that they, as small as their group was- was able to win against the big magnet Mr. Robert Moses and the project was discarded.

Please let’s close this plant so our children and grandchildren can live out their lives to the fullest and be safe. (IPEC-YYY-1)

Comment: The other thing comes as in a post-9/11 world, when we're asked regularly, as citizens, to come forward with what we've seen and what we've heard, that might impact our safety, I want to just recount something I heard on a plane.

I was flying out from New York to a destination, and this was several years ago, and the man sitting next to me and I struck up a conversation, and in it he told me he was just coming back from Buchanan, New York. He had been a--he was in the nuclear industry, and, you know, it's idle talk. I said what kind of thing do you do? And he said I was called out to get a plant back up before they sell it. This was before Entergy bought the plant. And, you know, I said, oh, what kind of things do you look at? And he said, well, there are all these welds, and you have to

x-ray every one of the wells, you have to make sure the reactor's working. And I said, well, it's good to know you're on the job. I feel a little bit better, knowing that I live in that area.

And then he went on to say, well, I don't know if I'd feel too safe too soon, because he said he was merely just--merely getting the plant up and running, one particular reactor for a period of hours, so that the sale could go through.

And there'd been a lot of trouble with this particular reactor, and he just--that was his mission. He wasn't supposed to make sure the plant was safe, only that the reactor would work for the sale, that anything beyond that would be the new owner's responsibility.

So what I'd like to say is, in terms of relicensing this plant, I wouldn't like to see it relicensed. I wouldn't feel it safe with it relicensed until some of these issues are addressed that concern safety of the human population. Thank you. (IPEC-Z-5)

Response: *The comments are noted. The comments oppose license renewal at Indian Point, but do not provide new information with respect to environmental impacts. These comments are not within the scope of 10 CFR Part 51 for the environmental review associated with the license renewal application for Indian Point. Therefore, these comments will not be evaluated further.*

Comment: The undersigned, organizations and individuals, Stakeholders, separately and jointly, do hereby allege that the aforementioned application is inaccurate and incomplete and the NRC must reject the application due to applicant's failure to disclose significant information and attempt to mislead the aforementioned Stakeholders by knowingly withholding crucial material facts. (IPEC-B-2)

Comment: Neither the application for license renewal of IP2 nor the application for license renewal of IP3 fulfill the legal obligations as delineated in NEPA and the Code of Federal Regulations to prepare and submit, as part of their applications, a description of the proposed action, including each applicant's plans 'to modify the facility' and describe in detail the modifications affecting the environment or affecting plant effluence that affect the environment 10CFR 53(c)(1)(2). (IPEC-B-4)

Comment: Entergy intentionally picked specific information to go into the environmental report of the re-licensing application. Ignoring significant information is in contradiction to the NRC regulations which requires applications to be compete and accurate. Therefore, the NRC must not accept Entergy's application as complete. (IPEC-B-8)

Comment: Overall, the NRC has reduced its assessment of risk to fit the profit needs of the nuclear industry. (IPEC-C-31)

Comment: THE ENVIRONMENTAL REPORT FAILS TO INCLUDE A SUBSTANTIAL AMOUNT OF SIGNIFICANT NEW INFORMATION THAT IS, OR SHOULD BE, KNOWN TO THE APPLICANT. (IPEC-D-32)

Comment: INCORPORATION OF ADDITIONAL COMMENTS SUBMITTED BY RIVERKEEPER, INC.

The State has received a copy of a June 4, 2007 letter from Riverkeeper identifying other deficiencies and inadequacies in the License Renewal Application. The State hereby adopts and incorporates those comments.

We understand that the NRC staff currently is considering Riverkeeper's comments. (IPEC-D-40)

Comment: The public is compelled to file its contentions based on the Application and any failure to file the contentions within the time provided triggers severe additional filing requirements to prove that a delay in filing the contention was justified. If incomplete applications are accepted for filing, the public is forced to file more of its contentions under the severe restrictions of the "late-filed contentions" provisions of the NRC regulations or to fIle contentions based solely on an incomplete Application. An incomplete Application can be corrected by Entergy even after a determination of "completeness," but only after forcing all the parties to go through the process of fIling contentions based on the lack of information and then filing new contentions, if any, when the missing information finally arrives. This is inefficient and such a result would be contrary to the public interest, essentially rewarding the Applicant for submitting an incomplete application. (IPEC-D-42)

Comment: It is unreasonable for the NRC to rely on Entergy's inadequate, fatally flawed ER to prepare the SEIS. (IPEC-K17-70, IPEC-F5-70)

Comment: Unless the evaluation proves convincingly that all of these risks can and will be overcome, NRC must deny the relicensing. (IPEC-L17-3)

Comment: Unless the evaluation proves convincingly that all of these risks can and will be overcome, NRC must deny the relicensing. (IPEC-M5-3)

Comment: WHEREAS, this Honorable Board has passed numerous Resolutions regarding the Indian Point Nuclear Power Plants, calling for, among other things, the NRC to deny the applications for license renewal for Indian Point 2 and Indian Point 3. (IPEC-N5-6)

Comment: It is noted herein and on record that the New York State Attorney General's Office made a similar request at the public EIS Scoping meeting held on September 19th, 2007. FUSE supports and endorses the comments on scope of Environmental Impact Statement and Scoping Process Indian Point Entergy Center Unit 2 and Unit 3 by Riverkeeper and Gary Shaw, a member of FUSE. (IPEC-U16-14)

Comment: The environmental impact of Indian Point on public health, local resources, and water quality continues to be one of the most serious issues facing our region. Indian Point

already exacts a heavy toll on our local environment in ways I will elaborate on in a moment, and presents a constant threat to the well-being of its host communities. (IPEC-RRR-2)

Comment: In the very deepest part of my being I KNOW THAT NUCLEAR IS NOT THE WAY! Close this plant! Do not license more! Renewable resources (wind, solar, geothermal) may put you out of work, but HEY, what about your kids? What about the future of our earth? Don't you care? (IPEC-S6-7)

Comment: Entergy's site specific environmental analysis is not site specific, and is actually word for word identical in content to other Entergy plants regardless of the distinct site specific characteristics. (IPEC-Q17-60)

Comment: Regarding relicensing, if it is the NRC's role as regulators to protect public safety, it really defies reason for them to hide behind this toilet paper roll of regulations in order to avoid considering the multitude of features surrounding Indian Point that make it totally unsuitable for relicensing.

We all know what they are -- the proximity to New York, the population growth, no evacuation, the history of mechanical problems, the unplugged leaking of radiological materials, ongoing unknown health effects, prime terrorist target. And it's very frustrating that every question or objection that is raised is always answered by, "Oh, that is --that's covered on page 980, Section 3, page 6, of our rulebook, paragraph 6." It's frustrating. (IPEC-VV-1)

Comment: Now, we were called upon again to believe that all is safe and well with a facility that is leaking strontium-90 and tritium and has unplanned shutdowns -- otherwise, I guess accidents. (IPEC-YY-4)

Comment: Taking all these factors into account, it is inconceivable that the Nuclear Regulatory Commission could consider the Indian Point Nuclear Power Plant for re-licensing. I strongly urge that the best and most effective way to protect the public in the event of an emergency at Indian Point is for the NRC to order the plant decommissioned immediately. (IPEC-Q4-10)

Comment: I am President of a 501C3 organization, Orange Environment, Inc. that for the past 25 years has been deeply involved in the crucial environmental, community and sustainability issues affecting Orange County, New York and its region … I took the position, which I still hold, that the reactors in question today represent a hazard for the residents of Orange County and should be closed and deactivated . . . . (IPEC-SSS-1)

Comment: Since we are told that our legitimate concerns (such as the entirely inadequate response and evacuation capability, risk from terrorist attack, etc.) will not be heard, we conclude with the plea that the plants NOT be relicensed, which-we believe indefensibly increases the risk to all Westchester residents and to the entire region. (IPEC-T4-5)

Comment: Entergy must stop boasting about its 'generous subsidies' to community resources such as schools and hospitals when the company itself is already subsidized to the maximum by our public funds. What right does Entergy have to 'donate' our tax dollars to anybody and then claim 'philanthropic actions' when these subsidies are only supposed to be used to reduce energy costs for the taxpayers' benefit. (IPEC-M17-8)

Comment: Entergy's press releases and presentations feature local union members and other company employees as anecdotal spokespeople ("I've worked here for years and I'm still alive!"). These are blatantly unconvincing, manipulative and unethical strategies, and beneath rational contempt. (IPEC-M17-10)

Comment: As mentioned at the Cortlandt Manor meeting on 9/19/07 - Entergy has become a master of evasive, 'double-think' attitudes and blatant 'bullshitism' in its complacent, redundant and invariably misleading/untrue PR statements and publications (none of which seem to be able to deal directly and honestly with most of the points raised here and by local citizen protests). (IPEC-M17-13)

Response: *The comments are noted. Environmental impacts associated with license renewal will be addressed throughout the SEIS. The comments oppose license renewal at Indian Point, but do not provide specific information with respect to environmental impacts. The comments will not be evaluated further.*

Comment: Throughout the years of reviews and assurances of compliance and safety our confidence in the safety of the facility has been greatly challenged by radioactive leaks, personnel literally sleeping at the switch, and failed promises to meet deadlines of a fully functioning siren system (IPEC-D5-2)

Comment: Now we are called upon again to believe that all is safe and well with a facility that is leaking strontium 90, tritium and has unplanned shutdowns. (IPEC-D5-3)

Comment: We submit these comments on environmental scoping for Entergy Nuclear Operations, Inc.'s application for renewal of operating licenses at Indian Point Nuclear Generating Units Nos. 2 and 3. As you know, we continue to have serious concerns regarding Entergy's application for license renewal and the ability of Indian Point to operate safely based upon the facility's poor performance record in recent years, and the increasing likelihood of additional problems due to aging infrastructure at the facility. (IPEC-E5-1)

Comment: NRC must closely scrutinize this application to determine if it is even possible for a facility with its lengthy history of systems failures to be granted an additional 20 years operation past its original design. (IPEC-L17-16, IPEC-M5-16)

Comment: SAFETY! The implications of a badly run, poorly equipped terrorist target being located 20 air miles from the greatest city in the world, and a vast and rapidly increasing suburban and regional population (combined total of over 20 million), are utterly catastrophic and also apparently illegal based on current NRC standards. (IPEC-M17-1)

Comment: According to the New York Times, this is one of the worst-managed, most dangerous and inefficient plants (in terms of capacity availability after repeated closures) in the USA and should be closed immediately. (IPEC-M17-2)

Comment: Whereas, this Honorable Board reiterates its resolve, based on the potential of a terrorist attack on the plants, a concern about the age of the plants, and the potential results of a failure of equipment or human error in the operations of the plants. (IPEC-N5-23)

Comment: Thank you for allowing us to come and speak with you tonight. We are the Raging Grannies and their friends of Westchester. We believe in the saying that we don't own the Earth; we are only borrowing it for our children. We want to leave this area in good shape for them. Now, you can ask us what it's like to get old, and we can tell you. But there are some issues, a lot of them. We have pollution, we have leaks, we have the chance of a terrorist attack, we have air quality, we have its site, we have the fact that so many people live so close, we have an evacuation plan that cannot work.

So as grannies, because we know about what happens when we get old, we believe that Indian Point is too old, has too many problems to keep going. We hope the NRC will be very careful with the world we will leave to our kids and to our grandkids. And now we'd like to sing a song that one of our grannies has written about Indian Point. Thank you for your tolerance. (IPEC-QQ-1)

Comment: (Whereupon, a song was sung by the Raging Grannies. Sung to the tune of "My Bonnie Lies Over the Ocean.") [ML072830613]
Thank you, NRC, for this meeting, we know what you don't want to hear.
Don't dare to extend this plant's license by even as much as one year.
Yes, Entergy promises safety, but sometimes their sirens don't blow.
And strontium leaks are polluting, so Indian Point has to go.
No nukes, no nukes, Indian Point has to go right now. No nukes, no nukes, yes, Indian Point has to go.
This plant is unsafe for employees, but we don't want anyone fired.
Retrain them for alternate energy, and make sure that they get rehired.
This plant is a terrorist target, why not use much less toxic fuels.
Convert to a natural gas plant; secure those nuclear waste pools.
No nukes, no nukes, Indian Point has to go right now. No nukes, no nukes, yes, Indian Point has to go.
Once Indian Point was reviewed by an expert whose name was James Witt.
He proved that evacuation by Entergy's plan was worth... Nada.
Thanks, NRC, for your attention, we're glad that you all stayed awake.
We care about our environment; please care for others' sake.
Shut it down, shut it down, Indian Point is unsafe, we know. Shut it down, shut it down, Indian Point has to go. (IPEC-QQ-2, IPEC-E4-1)

Comment: We are writing to express our strong disapproval of the proposed license renewal on the Indian Point Power plant. Apart from the already main well-known arguments regarding the plant's age, history of leakage problems, questionable storage waste facilities, and danger posed in such a dense exurban area, the renewal could be denied on the basis of safety alone during an emergency. (IPEC-C5-1)

Comment: We submit these comments on environmental scoping for Entergy Nuclear Operations, Inc.'s application for renewal of operating licenses at Indian Point Nuclear Generating Unit Nos. 2 and 3. As you know, we continue to have serious concerns regarding Entergy's application for license renewal and the ability of Indian Point to operate safely based upon the facility's poor performance record in recent years, and the increasing likelihood of additional problems due to aging infrastructure at the facility. (IPEC-I17-1)

Comment: Opposition to Relicensing: Notwithstanding, Riverkeeper, Clearwater, the Indian Point Safe Energy Coalition is and the entire Lower Hudson Valley NY Congressional delegation are opposed to the relicensing of facility, without an Independent Safety Assess, a viable evacuation plan, and or a workable proposal to contain and remediate its planned and unplanned releases of radionuclides into the environment. (IPEC-L5-49)

Comment: To demonstrate the Board of Legislature’s continuing resolve in this matter, please see the enclosed resolutions. As shown the Board of Legislators has consistently sought alternatives to the Indian Point nuclear power plant, as well as safe operations and evacuation procedures. (IPEC-N5-2)

Comment: Throughout the years of reviews and assurances of compliance and safety, our confidence in the safety of this facility has been greatly challenged by radioactive leaks, personnel literally sleeping at the switch, and failed promises to meet deadlines of a fully functioning siren system. (IPEC-YY-3)

Comment: The bottom line is that this nuclear facility must go. It's not run safely, there is too much complacency from it's owners and workers and it is way too close to too many people (including NYC). (IPEC-Z4-4)

Comment: When even the smallest 'fix-it' tasks, such as the siren warning systems, the ground water contamination, nuclear waste storage and disposal, underground pipe corrosion, dumping of irradiated water (Strontium 90 and Tritium) etc. etc., cannot be resolved by Entergy, how can we area residents feel in the least bit confident of their ability to run this plant safely for another 20 years! (Or even another week!) (IPEC-M17-5)

Comment: The obvious reasons have been stated repeatedly by many people and many times: lack of ability to perform adequate evacuation procedures; abominable safety record at this facility, as well as the environmental contamination caused by "accidents" at this facility. (IPEC-U4-2)

Comment: That being said, we need to make a reasonable alternative to place -- find a plant that is in a less populated area, and make it economically worthwhile to since this is a business proposition, to place a plant in a less populated area, make it economically advantageous for a company to invest in transmission wires from a more isolated area, to provide us with the electricity we need. (IPEC-TT-3)

Response: *The comments are noted. The comments oppose license renewal at Indian Point for reasons related to the plants' operating history. The NRC's environmental review is confined to environmental matters relevant to the proposed extended period of operation. Operational safety, plant maintenance, security, and emergency preparedness are all part of the NRC's ongoing oversight process, and outside the scope of 10 CFR Part 51. The comments will not be evaluated further.*

Comment: After conducting an initial review of the License Renewal Application for Indian Point 2 and 3 submitted to the Nuclear Regulatory Commission (NRC) on April 30, 2007 by Entergy Nuclear Northeast (hereinafter "Entergy"), Riverkeeper hereby requests that the NRC reject Entergy's application as incomplete pursuant to 10 CFR 2.101 (a)(4), due to numerous inaccuracies and omissions of material fact. Riverkeeper hereby reserves the right to raise these same issues as well as additional concerns in subsequent correspondence and future proceedings involving the NRC review of Entergy's license renewal application for Indian Point 2 and 3.

Pursuant to NRC's regulations implementing the Atomic Energy Act, information provided to the Commission by an applicant for a renewed license must be "complete and accurate in all material respects." Additional regulations implementing the National Environmental Policy Act (NEPA) require the applicant's Environmental Report to address the impacts and any adverse effects of the proposed action on the environment, and the reasonable alternatives available. The applicant's assessment of future environmental impacts must be objective, and include even "adverse information."

Entergy's Indian Point application does not comply with these regulatory requirements in the following areas: impacts on aquatic ecology and the analysis of groundwater contamination under "New and Significant Information." (IPEC-A-1)

Comment: Relying on the 1999 Draft Environmental Impact Statement regarding the renewal of the SPDES permit for Indian Point (hereinafter 1999 DEIS) - prepared by the prior owners of these stations-instead of consulting current information on this matter, such as the 2003 Final Environmental Impact Statement regarding the renewal of Indian Point's SPDES permit hereinafter NYSDEC's FEIS) - prepared by the NYSDEC-, the ER contains inaccurate and incomplete information. (IPEC-A-10, IPEC-F5-73, IPEC-F5-118, IPEC-K17-118)

Comment: Given the fact that much of the Hudson River habitat in which these fish exist is designated as significant or essential under state and federal law, the omission of this data from the ER renders it incomplete. (IPEC-A-52, IPEC-F5-73, IPEC-K17-73)

Comment: For the foregoing reasons, Riverkeeper reiterates its request to NRC to reject Entergy's Indian Point license renewal application as incomplete. We look forward to your timely response to this request. (IPEC-A-56)

Comment: As noted . . . there is substantial new and significant information on evacuation, population, intentional acts, earthquakes, energy conservation, and land use that is not discussed or even disclosed in the ER. As the owner of these two and many other nuclear plants, Entergy is particularly well-equipped to provide important information that may not otherwise be available to the NRC Staff or the general public and that bears on the proposed action. Except for disclosures of new information that support the position it is urging or that Entergy does not believe justifies any changed outcome (e.g., the leaks from the spent fuel storage pools and the pipes between Unit 2 and Unit 3), Entergy has chosen to ignore much additional information in its possession that is relevant to the pending application. (IPEC-D-33)

Comment: [T]he obligation to file a complete Application is particularly relevant with regard to environmental issues covered by the ER because the NRC is compelled by NEPA to fully investigate environmental implications of proposed major federal actions. This affirmative duty imposed upon the NRC cannot be fulfilled effectively if the party with the best access to the most relevant information is allowed to file an ER with significant gaps in it. (IPEC-D-43)

Comment: Riverkeeper urges the Nuclear Regulatory Commission (NRC) staff to fully consider the following comments in its preparation of the draft Supplemental Environmental Impact Statement for Indian Point 2, and 3. Riverkeeper's members, local elected officials and the general public. continue to have grave concerns regarding the continued operation of this facility, due to the environmental damage caused by its antiquated once-through cooling system, and leaking spent fuel pools, the vulnerability of the plant's spent fuel pools to terrorist attack and the failure of the federal government to resolve the question of spent fuel disposal at Yucca Mountain. (IPEC-F5-2, IPEC-K17-2)

Comment: CLOSE THE INDIAN POINT NUCLEAR NIGHTMARE AND INVEST IN SOLAR AND WIND POWER INSTEAD! (IPEC-H6-1)

Comment: The Attorney General of Connecticut fully supports the scoping comments of the Attorney General of New York . . . . (IPEC-M5-17, IPEC-L17-17)

Comment: The environmental impact of Indian Point on public health, local resources, and water quality continues to be one of the most serious issues facing our region. Indian Point already exacts a heavy toll on our local environment in ways I will elaborate on in a moment, and presents a constant threat to the well being of its host communities. (IPEC-EE-2)

Response: *The comments are noted. The comments oppose license renewal at Indian Point and relate to general environmental impacts, or are introductory comments to more detailed issues covered elsewhere. Environmental impacts associated with license renewal will be addressed throughout the SEIS.*

Comment: Indian Point, upon information and belief, is not in compliance with the 10 CFR rules and regulations and/or the original Design Basis ("DB") due to a litany of problems, including those set forth . . . . (IPEC-C-1)

Comment: WHEREFORE: The signatories hereof contend that ALL the above iterated and all other problems that affect the safe operation of IP MUST BE fully investigated and repaired in order to maintain intended function, and bring Indian Point into FULL COMPLIANCE with the 10 CFR rules and regulations, as well as its original DB prior to the NRC accepting the licensee's license renewal application, or being granted a new superceding license by the NRC pursuant to the license renewal process. (IPEC-C-57)

Comment: As the NRC Staff has recognized, it must first ascertain whether an applicant "has submitted sufficient information in accordance with 10 C.F.R. §§ 54.19, 54.21, 54.22, 54.23, and 51.53(c)," before it can determine that "the application is acceptable for docketing." Additionally, 10 C.F.R. § 54.13 mandates that information submitted by an applicant for a renewed license "must be complete and accurate in all material respects." Furthermore, 10 C.F.R. § 2.101(a)(4) requires that the NRC determine whether or not an application is complete. That regulation also anticipates that license applications may be incomplete and "therefore not acceptable for processing." Id.

The NRC already has identified one inadequacy in the application. In a June 18, 2007 letter, the NRC informed Entergy that the current licensing basis for Unit 2 was not fully represented in accordance with 10 C.F.R. § 54.4(a)(3). Specifically, during its acceptance review, the NRC staff determined that Entergy's application did not include information concerning those systems, structures, and components relied on in the safety analyses or plant evaluations to comply with the requirements for station blackout ("SBO") required by 10 C.F.R. § 50.63 and safe shutdown required by 10 C.F.R. § 50.48. In this regard, the LRA did not include information on the gas turbines that Entergy currently represents it relies upon as an alternate power supply for the Appendix R and SBO events.

In several additional respects the Application, the ER, and the FSAR are seriously incomplete or inaccurate. Until these deficiencies are corrected, the NRC should not accept the Tendered Application for docketing or processing. (IPEC-D-7)

Comment: THE APPLICATION DOES NOT IDENTIFY WHICH VERSION OF THE GENERAL DESIGN CRITERIA APPLIES TO THE INDIAN POINT UNIT 2.

The State is concerned that the Application does not properly reflect or commit to the General Design Criteria (or "GDC") established by the NRC. The General Design Criteria establish minimum requirements for the principal design criteria for water-cooled nuclear power plants similar in design and location to plants for which construction permits have been issued by the Commission. In turn, the principal design criteria establish the necessary design, fabrication, construction, testing, and performance requirements for structures, systems, and components important to safety. Compliance with the General Design Criteria ensures that a nuclear plant's

structures, systems, and components provide reasonable assurance that the facility can be operated without undue risk to the public's health and safety. 10 C.F.R. Part 50, Appendix A. The General Design Criteria were initially proposed in 1967 and revised in 1971.

As the NRC has recognized, the General Design Criteria constitutes one of the basic regulatory standards for a nuclear power plant. Absent a definitive representation as to which version of this core regulation applies, the public is left to speculate as to this point. Similarly, clarification of this central issue would provide Entergy, its employees, investors, and insurers as well as Federal and State inspectors and emergency service personnel with an objective standard by which to conduct their activities.

The LRA and the FSAR should be revised to make clear which version of the General Design Criteria applies to the Indian Point Unit 2. In its current form, the LRA and the FSAR do not comply with 10 C.F.R. § 54.13. (IPEC-D-8)

Comment: IN CERTAIN INSTANCES, WHERE THE APPLICATION DOES MENTION THE GENERAL DESIGN CRITERIA, IT REVISES THE TERMINOLOGY TO AVOID THEIR REQUIREMENTS.

Instead of applying the General Design Criteria as written in the Code of Federal Regulations, Entergy's application provides a watered-down version of certain criteria or modifies their substance.

In a number of instances, the LRA and the FSAR adds the phrase "where practical" when purporting to describe the General Design Criteria. The addition of this qualifying language changes the criteria. (IPEC-D-9)

Comment: Besides adding conditional and qualifying language, the FSAR also appears to revise other general design criteria by restating their very substance. By way of example, Section 5.1.1.1.7 of the Unit 2 USFAR states: "The selection and use of containment materials shall be in accordance with applicable engineering codes. (GDC 50)." In comparison, Criterion 50 of the GDC's as published in 1967 reads: "Principal load carrying components of ferritic materials exposed to the external environment shall be selected so that their temperatures under normal operating and testing conditions are not less than 30 degrees F above nil ductility transition (NDT) temperature." The LRA's descriptions of other GDC's reflect similar departures from the actual text of the GDC.

In its current form, the LRA and the FSAR do not comply with 10 C.F.R. § 54.13. The LRA and FSAR should be revised to remove such qualifying and conditional language and to quote the actual text of the General Design Criteria. This is particularly important because it is through these filings with the NRC (which are subject to the requirements of 18 U.S.C. § 1001) that Entergy represents the commitments it accepts and will meet during its operation of IP 2 and IP 3. The commitments need to be unequivocal to facilitate later reviews to determine whether Entergy is operating IP 2 and IP 3 in compliance with its commitments. (IPEC-D-10)

Comment: IN CERTAIN INSTANCES, THE APPLICATION DOES NOT ADDRESS CRITERIA CONTAINED IN THE GENERAL DESIGN CRITERIA.

The Application and the FSAR do not mention or address General Design Criteria numbers 8, 21, 22, 35, 51, 53, 64, and 65. Accordingly, the LRA and the FSAR do not comply with 10 C.F.R. § 54.13.

The LRA and FSAR should be revised to specifically reference, accurately quote, and substantively discuss these criteria. As noted, this is important because it is through these filings with the NRC that Entergy represents the commitments it accepts and will meet during its operation of IP 2 and IP 3. The commitments need to be unequivocal to facilitate later reviews to determine whether Entergy is operating IP 2 and IP 3 in compliance with its commitments. (IPEC-D-11)

Response: *The comments are noted. The comments, in general, oppose acceptance of Entergy's license renewal application (LRA) for Indian Point based on issues related to the plants' current licensing basis (CLB). The Commission has determined that issues related to the adequacy of the CLB are outside the scope of license renewal. Additionally, CLB issues are not within the scope of the environmental review. The comments do not provide any new information relevant to the environmental review and will not be evaluated further.*

Comment: The State of New York respectfully requests that the NRC determine that Entergy's recently-filed application to renew its operating licenses for the Indian Point nuclear reactors does not comply with 10 C.F.R. § 54.13. Accordingly, the State of New York requests that the NRC not docket or process this application and require Entergy to supplement the application. (IPEC-D-1)

Comment: There are several reasons why the NRC Staff should require that this Application be as complete as possible before it is accepted for docketing.
. . . .
[T]o the extent the Application fails to include information that will eventually be needed, its full review by the Staff will be delayed, and valuable and necessary information critical to the NRC decision-making process will be lacking. Accordingly, the Application should be complete before it is docketed. (IPEC-D-41)

Comment: For all the reasons stated, the State of New York urges the NRC Staff to reject the current Application as incomplete and compel Entergy to submit a new or amended Application that fully addresses the significant issues identified in this letter.

We will be happy to discuss our concerns with the Staff at any mutually convenient time. We respectfully request a written response to the concerns expressed in this letter in advance of any final decision by the Staff on whether it will docket the Application. (IPEC-D-44)

Response: *The comments are noted. The comments, in general, oppose acceptance and docketing of Entergy's license renewal application. However, they do not provide specific*

issues related to the environmental review. The comments do not provide any new information and will not be evaluated further.

4. Comments Regarding Water Quality, Hydrology, and Use

Comment: The potential health and environmental consequences of 20 additional years of dumping radionuclides into the Hudson River, combined with an analysis of the synergistic interaction of such radionuclides with other known Hudson River pollutants like PCBs, endocrine disruptors (including dioxins) and mercury. (IPEC-I5-4)

Comment: [S]erious PCB contamination occurred upriver and there are currently plans for mitigation. (IPEC-TTT-30)

Comment: In terms of the river, poison runoff from urban, suburban and rural sources is the principle threat to the river. (IPEC-TTT-32)

Comment: The potential health and environmental consequences of 20 additional years of additional releases of radiation and other chemical toxins into the atmosphere, combined with an analysis of the synergistic interaction of such elements with other known pollutants such as mercury. (IPEC-I5-5)

Comment: The potential health and environmental consequences of 20 additional years of dumping radionuclides into the Hudson River, combined with an analysis of the synergistic interaction of such radionuclides with other known Hudson River pollutants like PCBs, endocrine disruptors (including dioxins) and mercury. (IPEC-Q17-173)

Comment: The potential health and environmental consequences of 20 additional years of additional releases of radiation and other chemical toxins into the atmosphere, combined with an analysis of the synergistic interaction of such elements with other known pollutants such as mercury. (IPEC-Q17-174)

Response: *Water quality issues applicable to Indian Point are Category 1 issues and have been generically addressed in the GEIS. The NRC staff will evaluate information related to water use and quality to determine whether the information is new and significant. The staff will discuss these issues in Chapters 2 and 4 of the SEIS.*

Comment: A proposal for a desalinization plant along the Hudson in a location not yet disclosed, though it is anticipated to be in Stony Point or Haverstraw, has been submitted for review by United Water of New York (UWNY). As the proposed facility is anticipated to be in use by UWNY within the proposed license period of Indian Point 2 & 3, we ask that this exposure be considered in Entergy's environmental impact study. Further if it is deemed that it is not appropriate until approval for a desalination plant is granted, we ask the Indian Point facility be required to assess its potential impacts to the desalinization plant. Given the leakage of strontium 90 and tritium we do not believe that this is unreasonable. Further, it would be unreasonable for UWNY customers to have to pay related costs to remove, if possible, radionuclide's emanating from Indian Point. (IPEC-D5-7)

Comment: The potential health and environmental consequences of using the Hudson River as a source of public drinking water (as per the plan of Rockland County). (IPEC-I5-3)

Comment: I'm a resident of Rockland County. Rockland County is directly across from Indian Point. We are only allowed, by law, to get our drinking water from within the county. So our water supplier is looking into desalinating the river. We're downriver from Indian Point and directly across. I am--the people of my county are very concerned. For another 20 years, this plant will be leaking radioactive waste into the river, that we will be drinking and bathing in.

That's unacceptable and a comprehensive study must be included in the EIS. (IPEC-S-18)

Comment: First and foremost, Entergy fails to adequately address the public‘s use of the Hudson River as both a primary and secondary source of water supply. As one example, we reference United Water’s announcement in the Journal News of their plans to build a new desalination water processing plant for Rockland County drinking and tap water down the Hudson River directly across from Indian Point, in either Stony Point or Haverstraw. Further, Indian Point fails to identify effects of ongoing leaks and of allowed releases at the plant on both the potable and public waters of our community, both from the individual and the cumulative perspective. (IPEC-Q17-55)

Comment: Water quality of the groundwater and river has a direct effect on Environmental Costs and therefore such comprehensive site specific analysis must be included as Category 2 issues of the EIS. (IPEC-Q17-84)

Comment: A proposal for a desalinization plant along the Hudson in a location not yet disclosed, although it is anticipated to be in Stony Point or Haverstraw due to the salinity of the water in those locations, has been submitted for review by United Water of New York (UWNY). As the proposed facility is anticipated to be in use by UWNY within the proposed 20 year superseding license period of Indian Point 2 & 3, it must be fully evaluated and considered in Entergy‘s environmental impact study. (IPEC-Q17-196)

Comment: Given the leakage of strontium 90, cesium 137, and tritium into the Hudson it would be unreasonable to not consider the full environmental impact of the desalinization plant and the other River intake sites of water for human consumption such as the Croton Station, which is New York City‘s emergency water source. This will have a LARGE impact on human health and the environment. (IPEC-Q17-197)

Comment: Due to the radioactive releases from Indian Point, the costs and impacts of removal of radioactive nuclides from the water for human consumption must be included as a Category 2 issue in the EIS, as new information and circumstances. (IPEC-Q17-198)

Comment: Contamination of ground water and surface water by radioactive materials discharged from nuclear stations could cause public health hazards. 10 CFR Part 20, "Standards for Protection Against Radiation"; 10 CFR Part 50, "Licensing of Production and Utilization Facilities". (IPEC-Q17-241)

Comment: And then, the other one is we have a desalination plant that has been proposed by United Water New York that will be placed either in Stony Point or Haverscroll, exact location yet to be determined. And we ask that, although it doesn't exist now, that it be considered in the review process because that is intended to be drinking water for over 260,000 people. (IPEC-YY-9)

Comment: Additionally, if at this point you suggest it's not appropriate, if it's not built, when it is built, if it is built, we would ask that there be some caveat in the system that would require an assessment of the impacts of this fugitive leakage of strontium-90 and tritium and other radionuclides that are in the Hudson River, and what the impacts would be, because the ratepayers of United Water certainly should not be paying for the reclamation of radionuclides coming from -- potentially coming from Indian Point 2 or 3. (IPEC-YY-10)

Comment: We also know that prior test wells found concentrations of contamination many times the EPA level for drinking water, but since the leaks are not currently going into known drinking water sources, the NRC has dismissed them as nonhazardous. I would like to know what specific radiological readings would define an unacceptable level that is not going directly into a known drinking source. In other words, if the NRC cannot provide a well-defined set of metrics, how can they establish standards that must be met to warrant 20 additional years of operations for this aging and leaking facility?

We've already seen the NRC's idea of reasonable assurance. With the potential danger of radiological contamination, how can we accept this Agency's judgments if they cannot define their standards and prove the validity of their metrics? Thank you. (IPEC-J-7)

Response: *The comments, in general, pertain to the use of the Hudson River as a drinking water source and the potential impacts of discharges from Indian Point. Water use and water quality issues are Category 1 issues and have been generically addressed in the GEIS. The NRC staff will evaluate site-specific information in Chapters 2 and 4 to determine whether any information is new and significant.*

Comment: Finally, there is no mention that in 2002, certain petitioners, including the Hon. Richard L. Brodsky, an assemblyman in the New York State Legislature, commenced a proceeding in Albany County Supreme Court, pursuant to Article 78 of the New York Civil Practice Law and Rules ("CPLR"), to mandate action by NYSDEC on the Indian Point SPDES permit renewal applications. See Matter of Brodsky v. Crotty, Sup. Ct. Albany County, Keegan, J., Index No. 7136-02. On April 8, 2003, upon review of the renewal application, NYSDEC staff proposed to modify the SPDES permit to require reduction of impacts to aquatic organisms and completion of a water quality review that would result in adjustments to certain limits in the existing SPDES permit. (IPEC-A-43)

Comment: Further, given the 2003 draft permit, any claim that the effectively outdated, but "administratively" extended, permit will remain valid for the next 20 years is simply inaccurate. Such a claim does not meet the basic intent of NEPA because it does not reflect actual

environmental conditions, and reliance on it would not promote or reflect a full and necessary environmental review. (IPEC-N17-48)

Comment: The ER states, "NYSDEC has taken the position that it will require submission of an application for a new state water quality (401) certification in conjunction with the license renewal application, rather than relying on the SPDES permit as evidence of continued certification. To initiate the approval process, Entergy will file the Joint Application for Permit with the NYSDEC for the water quality certification at a date determined by the NYSDEC. The SPDES permit for discharges at the site expired on October 1, 1992. However in accordance with the New York State Administrative Procedures Act, Entergy filed a timely SPDES permit renewal application 180 days prior to the current permit's expiration date on April 3, 1992. Therefore, the SPDES permit has been administratively continued." This summary of the current status of Entergy's Indian Point water permit illustrates that the company is in compliance with the Clean Water Act. AAEA intends to participate in the future adjudication of this issue. There is also the matter of EPA finalizing regulations for determination of best available technologies for power plants. (IPEC-TTT-49)

Comment: This information is important because before the NRC can relicense at Indian Point, the Clean Water Act requires that New York State must certify that the state water quality standards will be met during the new license term. This approval is referred to as a water quality certification. (IPEC-DD-5, IPEC-E-5)

Response: *The comments relate to The New York State Department of Environmental Conservation's (NYSDEC's) water permits for IP2 and IP3. NYSDEC is responsible for the review and issuance of New York State's water permits under the Clean Water Act. The NRC's license renewal environmental review considers the status of such permits, however, the NRC does not have regulatory authority in matters concerning the Clean Water Act. The comments are noted, though they do not provide any new information and will not be evaluated further.*

Comment: Therefore the ER is incomplete and the issue [groundwater contamination] must be considered a Category 2 issue that must be fully analyzed in the EIS. (IPEC-Q17-155)

Comment: Section 5.1 of the Environmental Report contains Entergy's analysis of groundwater contamination at Indian Point under the rubric of "New and Significant Information." In the ER, Entergy classifies Groundwater Contamination as "new information, but not necessarily significant." The ER relies on the Council on Environmental Quality (CEQ) definition of "significant," which requires consideration of the context in which the proposed action is situated, and the intensity of the impacts. The regulations list ten different factors to be used in evaluating intensity. Factor 3 requires evaluation of "Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas (emphasis added). Despite this requirement, Entergy fails to evaluate the potential impacts of the groundwater contamination on either Essential Fish Habitat or Significant Coastal Fish and Wildlife Habitat, particularly Haverstraw Bay. . . . These are clearly within the scope of "ecologically critical areas" described in the CEQ regulations. As such, the groundwater contamination must be assessed as both "New" and

"Significant" under NEPA. Entergy's conclusions in the ER regarding the sources and potential environmental impacts of the Indian Point groundwater contamination are unsupported by the facts and at odds with the publicly stated opinions of both NRC and New York State DEC staff involved in the ongoing groundwater leak investigation. As such, Section 5.1 of the ER is incomplete for purposes of the NRC's acceptancy review. (IPEC-A-45)

Comment: Generally, the EIS should include known significant leak issues and the resultant environmental contamination risk scenarios and costs. This includes all three spent fuel pools, underground piping, the main reactor sealant pump seals, as well as the entire reactor coolant system and turbine piping systems. (IPEC-PPP-11)

Comment: The impact of these leaks on Hudson River ecosystem must be assessed, especially by increased sampling of fish, shellfish and sediment to determine if strontium-90 and cesium-137 are bioaccumulating in the environment. (IPEC-F5-65)

Comment: Would the ongoing, and undefined current leakage not portend a degradation of the larger system so that an assumption of viability for an additional twenty years would be simply unwarranted optimism? (IPEC-O5-9)

Comment: The NRC must comprehensively assess the environmental impacts of the Indian Point 1 and 2 Spent Fuel Pool Leaks (IPEC-F5-62, IPEC-K17-62)

Comment: Highly radioactive water has been found leaking from Indian Point spent fuel pools into the groundwater underneath the plant and leaching into the Hudson River for years. (IPEC-F5-63, IPEC-K17-63)

Comment: The potential environmental impacts of the continuation of spent fuel pool leaks for an additional twenty years is alarming. Entergy and the NRC have confirmed that Indian Point 1 spent fuel pools might also be leaking in addition to Indian Point 2 & 3, and contributing strontium-90 to the groundwater contamination. The NRC has also stated that the radioactive contamination has reached the Hudson. (IPEC-F5-64, IPEC-K17-64)

Comment: [F]ailing to address the environmental effects, including cumulative environmental impacts of planned and unplanned radiation releases and leaks; (IPEC-F5-105, IPEC-K17-105)

Comment: Riverkeeper is also concerned with the adequacy of Entergy's analysis of the potential effects on federally listed species caused by groundwater contamination at Indian Point. The Indian Point 1 and 2 spent fuel pools are confirmed to have leaked strontium-90 and tritium into the groundwater around the plant. (IPEC-F5-143, IPEC-K17-143)

Comment: Presently, those reactors are contaminating groundwater and leaking radioactive wastes into the Hudson River. (IPEC-H5-2)

Comment: The impact of these leaks on Hudson River ecosystem must be assessed, especially by increased sampling of fish, shellfish and sediment to determine if strontium-90 and cesium-137 are bioaccumulating in the environment. (IPEC-K17-65)

Comment: Radioactive Leaks: Unplanned, unmonitored leaks of liquid radioactive effluents, including tritium, strontium 90 and cesium 137, are leaking from Indian Point into the groundwater and Hudson River. They raise concerns in both areas: safety and environment/public health. (IPEC-L5-7)

Comment: The issue of whether this leak is ongoing is critical to the license renewal review, since the spent fuel pools qualify as “systems, structures and components” that fall within the scope of aging management review for license renewal. The omission of these soil sample results and the above-referenced section of the NRC Special Inspection Report render this section of the ER incomplete. The NRC must conduct a rigorous, objective analysis of both the onsite and offsite environmental impacts of these leaks. (IPEC-K17-69, IPEC-F5-69)

Comment: Entergy's omission of this crucial reality from its license renewal application must result in the NRC abrogating its legal responsibilities under NEPA. (IPEC-N17-16)

Comment: Groundwater Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-51)

Comment: Another Category 2 issue required to be addressed in the Supplemental EIS is groundwater impacts. Radioactive material has been leaking from the spent fuel pools at both Unit 1 and Unit 2 at Indian Point. Neither the applicant nor the NRC know when the leaks began. This leaking radioactive material includes strontium 90, tritium, and cesium, known collectively as "radionuclides." (IPEC-N17-52)

Comment: In addition, the State is aware of recent reports confirming leaks in the transfer canal between Unit 2's reactor and spent fuel pool as well as in a pipe running between Unit 2 and Unit 3. Entergy's license renewal application recognizes that the plumes of tritium and strontium leaking from the plant's spent fuel pools have reached the Hudson River. See Environmental Report, at 4-87. These radionuclides can present a number of public health concerns. For example, strontium 90 has been linked to bone cancer, cancer in soft tissues near bone, and leukemia. (IPEC-N17-53)

Comment: The NRC and various New York State agencies have been engaged in an ongoing groundwater investigation of these leaks. This investigation required drilling a number of test wells, which generated new information regarding the geology and groundwater resources of the site. While the Final Environmental Statement prepared for the original licenses for Units 2 and 3 indicated that groundwater flow was from north to south, the groundwater investigation has determined that groundwater flow is actually east to west -- toward the Hudson River. The Supplemental EIS should thus provide greater detail regarding the consequence of this newly understood parameter for evaluating the broader impacts to the site, and to the River, of groundwater contamination emanating from Indian Point. (IPEC-N17-54)

Comment: Specifically, the following information of groundwater contamination by radionuclides should be included in the Supplemental EIS:

1) the extent of the contamination;
2) the chronology of events associated with the contamination;.
3) the anticipated flow of the plume;
4) ongoing monitoring activities and results;
5) a discussion of the probable source of the leaks; and
6) the environmental impacts caused by the leaks. (IPEC-N17-55)

Comment: In addition, the Supplemental EIS should fully discuss how license renewal could lead to continued or additional future leaks or discharges from operations or storage of spent fuel in the spent fuel pools. Of particular importance is the possibility of exceeding groundwater and surface water standards for these pollutants at some point during the 20 year license extension. (IPEC-N17-56)

Comment: Would the dye testing done by Entergy that showed linkage of leaks from the IP2 spent fuel pool into the leaking plume of IP1 not constitute a potential environmental impact? (IPEC-O5-8)

Comment: [W]hich include the water quality in the ground, and in the river, which at this point is compromised by the leaks. (IPEC-S-11)

Comment: The abominable record regarding plant integrity that has plagued Indian Point, as evidenced by tritium leakage and other threats to the Hudson River, groundwater and the surrounding population and biota. (IPEC-SSS-11)

Comment: Section 5.1. of the Environmental Report contains Entergy‘s ground contamination analysis at Indian Point. Entergy classifies Groundwater Contamination as "new information, but not necessarily significant". (IPEC-Q17-151)

Comment: Clearly, the issue of Groundwater Contamination is a plant-specific issue, and therefore not a Category 1 issue, but a Category 2 issue. (IPEC-Q17-153)

Comment: Further, said radiological contaminants are migrating towards the Hudson River. It is only a matter of a few years, if not months, before the underground plumes migrate off site, and reach the Hudson River, thus creating a serious risk of contaminating the river, a key fresh water resource. (IPEC-Q17-157)

Comment: Large releases of radioactive particulates are a key accident pathway that results in significant off site release of radiological contaminants into the air, water and ground that must be investigated. These releases result in associated significant LARGE Environmental costs and impact that must be included in the EIS as Category 2 issues. (IPEC-Q17-169)

Comment: Ongoing radioactive leaks and the build-up of high-level radioactive waste are unacceptable to the residents of this community. (IPEC-X4-6)

Response: *The comments are related to the identified spent fuel pool leaks associated with Indian Point. The environmental impacts of known leaks associated with Indian Point will be discussed in Chapters 2 and 4 of the SEIS.*

Comment: Entergy claims the tritium contamination found in numerous onsite monitoring wells is "the result of historical pool leakage in the 1990s which has since been repaired," based on the assertion that Entergy has not been able to identify leaks in the IP2 pool liner, and the contamination is not consistent with active leakage. However, Entergy failed to note that only about 60% of the IP2 pool liner has actually been examined for leaks, due to the high density of the spent fuel storage racks and the minimal clearance between the bottom of the racks and the floor of the pool. Entergy has failed to provide any explanation in the Environmental Report as to the feasibility of examining the remainder of the pool liner for leaks. Nor does the Environmental Report address what other steps Entergy could take to find the source of the IP2 leak, if in fact it is not feasible to examine the remaining 40% of the pool liner. On the contrary, the Report suggests that because Entergy has looked for the leak and not found it, the pool must not be leaking. This is an arbitrary and illogical conclusion without adequate factual support. (IPEC-A-46)

Comment: As of the date of this submission, upon information and belief, the Radiation Leaks result from separate, and a multitude of onsite systems, structures and components, including, the following:

(A) Failed or degraded pipes (including pipes that transport liquids and pipes which transport steam);
(B) Cracks in spent fuel pools;
(C) Failed or degraded valves;
(D) Reactor vessel failed welds in the bottom or vessel (which inspectors have been unable to adequately view and reach);
(E) Pinhole leaks around weld joints (which may continuously keep cropping up due to age or repeated repairs to equipment which result in said equipment becoming out of compliance with DB.)
(F) Failed or degraded gauges;
(G) Failed or degraded fuel transfer tube sleeves;
(H) Failed or degraded steam generator tubes;
(I) Inadequate or improperly operating drain systems;
(J) Cracks and fissures in reactor domes. (IPEC-C-4)

Comment: Moreover, at an April 26, 2007 public NRC meeting in Cortlandt, N.Y. ("April NRC meeting"), NRC representatives conceded that they did not even know the metallurgic composition of much of the underground piping. (IPEC-C-7)

Comment: Inaccessibility has also limited the inspection and testing of substantial segments of these aged and leaking pipes. It is thus difficult to understand how the NRC can have confidence that the effects of aging, soil elements, the intake of brackish water from the Hudson River and/or storm surges have not resulted in dangerous corrosion of Indian Point's entire piping, valve and gauge system. (IPEC-C-8)

Comment: Just last month, another pin-hole sized leak was discovered in the fuel transfer canal. These leaks have dispersed radioactive materials for several years, and Entergy has been unable to specifically identify the source of these leaks or offer a concrete plan to stop or prevent them. This ongoing situation constitutes an environmental and public health threat that must be addressed in this relicensing process. (IPEC-E5-4, IPEC-I17-4)

Comment: Just two weeks ago, another pin-hole sized leak was discovered in the fuel transfer canal. The fact that these leaks have continued to disperse radioactive materials for years with no sure knowledge of their source or concrete plan to stop them should make it clear that they constitute a significant environmental threat that must be addressed in this relicensing process. (IPEC-EE-6, IPEC-RRR-6)

Comment: Is the corrosion of underground piping that transports radioactive steam, which was not supposed to be radioactive, not an environmental issue? Is the vast amount of inaccessible underground piping that carries saltwater and irradiated water not a potential environmental issue? (IPEC-GGG-5)

Comment: Generally, the EIS should include known significant leak issues and the resultant environmental contamination risk scenarios and costs. This includes all three spent fuel pools, underground piping, the main reactor sealant pump seals as well as the entire reactor coolant system and turbine piping systems. (IPEC-H-13)

Comment: Now the NRC is considering extending the operating licenses of Indian Point's Units 2 and 3 for 20 more years beyond their expirations in 2013 and 2015, respectively, and will cite reasonable assurance that the plants will remain safe and environmentally benign for that 20 year extension. We know that there are an undetermined number of leaks of radioactive elements into the environment and that the sources of those leaks remain uncertain.

Consequently, there are no known plans to stop the leakage. Especially disturbing is that large sections of pipes are not accessible to inspection, and the only way for the NRC to evaluate whether those pipes have corroded or will remain viable for 20 more years is to dig test wells, and declare that there is not currently a leak at that site, at that time. (IPEC-J-4)

Comment: If the NRC is not capable of stating how many linear feet of piping are inaccessible, or how many 35 year old welds are inaccessible, and where each of them is located, how will they define reasonable assurance that those pipes and welds will be viable until the years 2033 and 2035?

Since we already know that this is the only nuclear plant in the country leaking Strontium 90 and Cesium 137, wouldn't that information be important? (IPEC-J-6)

Comment: Actual and possible sources include failed or degraded pipes which transport liquids or steam, cracks in spent fuel pools, failed or degraded valves, failed welds, pinhole leaks, failed or degraded gauges, failed or degraded fuel transfer tube sleeves, failed or degraded steam generator tubes, inadequate or improperly operating drain systems, or cracks and fissures in reactor domes. (IPEC-L5-9)

Comment: The fact that these leaks were determined by accident, rather than on routine inspection, indicates that routine inspections alone do not guarantee plant safety. (IPEC-L5-10)

Comment: Spent fuel pools are not designed to meet the basic minimum requirements for structural stability and integrity, as is outlined in the citing criteria for new reactors in place at the time the NRC granted the original license. It thus becomes imperative that the structural degradation indicated by the leaks of both Spent Fuel Pools 1 and 2 be addressed and remediated before the license renewal application is allowed to move forward. (IPEC-Q17-146)

Comment: Additionally the NRC must require Entergy to make all plume maps and leak reports available to elected officials and the public, even though Entergy has claimed such materials to be proprietary, as the information contained in the plume maps and leak reports directly impact Environmental Costs which must be included in the EIS. (Plume Maps have not been released to Public because Entergy has claimed them as proprietary) (IPEC-Q17-166)

Comment: Entergy has been unable to locate and identify the leaks associated with reactor cooling systems which were only accidentally discovered when workers saw steam rising through the black top. (IPEC-Q17-267)

Comment: Cracks in spent fuel pools must be remediated in order for the spent fuel pools to comply with DB. Further, failed or degraded spent fuel assemblies within the spent fuel pools present an unacceptable risk. Pieces of spent fuel assemblies that have broken off may impinge upon the structural stability and reliability of pool liners. This, added to the densely packed stacking system (which is not within the original DB of the IP plants), and combined with overstressed racks and pads, have pushed the pools far beyond their originally designed carrying loads. In the event of an accident involving, or attack upon, the spent fuel pools, radiation leaking from failed or degraded assemblies substantially increases the risk of the release of radiation into the environment and/or a spent fuel fire. (IPEC-C-10)

Comment: The pools are not designed to meet the basic minimum requirements for structural stability as is outlined in the siting criteria for new reactors that were in place at the time the NRC granted the original license, and it thus becomes imperative that the structural degradation indicated in the leaks of both Spent Fuel Pools 1 and 2 be addressed and remediated before the license renewal application is allowed to move forward. (IPEC-C-17)

Comment: Indeed, the ER states "tritium, Strontium-90, Cesium-137, and Nickel-63 have been detected in low concentrations in some onsite groundwater monitoring well samples," and confirms that "[b]ased on the results of the preliminary hydrogeologic characterization of the site, Entergy has concluded that some contaminated groundwater has likely migrated to the Hudson River. (IPEC-A-33)

Comment: In addition, the claim that the contamination is not consistent with active leakage is not correct. Analysis of soil samples taken in the vicinity of the cracks in the IP2 pool wall in September 2005 indicate high levels of Cobalt-60, Cesium-134 and Cesium-137 consistent with the activity of these radionuclides in the spent fuel pool water. (IPEC-A-47)

Comment: Another apparent contradiction between the ER and the NRC's inspection results can be found in the March 16, 2006 NRC Special Inspection Report assessing the groundwater contamination at Indian Point. Page 1 of the report states that "Entergy sampled existing "Due Diligence" wells that were developed in 2000. One of these wells, MW-111 (last sampled for tritiurm in 2000 with no activity detected) was sampled on September 29, 2005. The analytical result, reported on October 5, 2005, indicated 211,000 pCi/l, tritium." MW- 111 is located in the IP2 transformer yard, near the IP2 fuel storage building. If the tritium in the groundwater is indeed from "'historical pool leakage in the 1990s" as Entergy claims in the Environmental Report, why was it not detected in MW-111 in 2000? These results clearly indicate that a tritium leak occurred at IP2 between 2000 and 2005. Neither NRC nor Entergy has suggested that there could be another source of tritium leakage at IP2 besides the IP2 spent fuel pool. These facts simply do not support Entergy's assertion that the IP2 pool is no longer leaking or has not leaked since the 1990s. NRC staff involved in the Indian Point groundwater investigation indicated their disagreement with Entergy on this issue, at the NRC Annual Assessment Meeting for Indian Point held on April 26, 2007. (IPEC-A-48)

Comment: The issue of whether this leak is ongoing is critical to the license renewal review, since the spent fuel pools qualify as "systems, structures and components" that fall within the scope of aging management review for license renewal. The omission of these soil sample results and the above-referenced section of the NRC Special Inspection Report render this section of the ER incomplete. (IPEC-A-49)

Comment: [T]he ongoing radioactive leaks originating from at least two spent fuel pools. (IPEC-A6-4, IPEC-A7-4, IPEC-A8-4, IPEC-A9-4, IPEC-A10-4, IPEC-A11-4, IPEC-A12-4, IPEC-A13-4, IPEC-A14-4, IPEC-A15-4, IPEC-A16-4,IPEC-B6-4, IPEC-B7-4, IPEC-B8-4, IPEC-B9-4, IPEC-B10-4, IPEC-B11-4, IPEC-B12-4, IPEC-B13-4, IPEC-B14-4, IPEC-B15-4, IPEC-B16-4, IPEC-C6-4, IPEC-C7-4, IPEC-C8-4, IPEC-C9-4, IPEC-C10-4, IPEC-C11-4, IPEC-C12-4, IPEC-C13-4, IPEC-C14-4, IPEC-C15-4, IPEC-C16-4, IPEC-D6-4, IPEC-D7-4, IPEC-D8-4, IPEC-D9-4, IPEC-D10-4, IPEC-D11-4, IPEC-D12-4, IPEC-D13-4, IPEC-D14-4, IPEC-D15-4, IPEC-D16-4, IPEC-E6-4, IPEC-E7-4, IPEC-E8-4, IPEC-E9-4, IPEC-E10-4, IPEC-E11-4, IPEC-E12-4, IPEC-E13-4, IPEC-E14-4, IPEC-E15-4, IPEC-E16-4,IPEC-F6-4, IPEC-F7-4, IPEC-F8-4, IPEC-F9-4, IPEC-F10-4, IPEC-F11-4, IPEC-F12-4, IPEC-F13-4, IPEC-F14-4, IPEC-F15-4, IPEC-F16-4, IPEC-G6-4, IPEC-G7-4, IPEC-G8-3, IPEC-G9-4, IPEC-G10-4, IPEC-G11-4, IPEC-G12-4, IPEC-G13-4, IPEC-G14-4, IPEC-G15-4, IPEC-G16-4, IPEC-H6-5, IPEC-H7-4, IPEC-H8-4, IPEC-H9-

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Comment: Unplanned, unmonitored leaks of liquid radioactive effluents, including tritium, strontium 90 and cesium 137, are leaking from IP into the groundwater and Hudson River ("Radiation Leaks"). In most cases, the duration, extent, flow paths, and/or source of the Radiation Leaks, remain unknown. (IPEC-C-2)

Comment: To date, Radiation Leaks have been discovered throughout the IP 1, 2, and 3 complex and thus place all IP plants out of regulatory compliance and DB. The Radiation Leaks manifestly can neither be repaired nor remediated until sources have been identified and/or located. (IPEC-C-3)

Comment: The existence of the Radiation Leaks provides direct evidence of underground pipe failure and/or degradation that has not been adequately assessed by either the licensee (hereinafter referred to as "the licensee") or the NRC. It is clear ordinary maintenance failed to reveal the specific locations of numerous Radiation Leaks. Certain Radiation Leaks, including tritium leaks allegedly from underground pipes on the "non-radioactive" side of plant were

discovered purely by random accident rather than via a coordinated, intelligent aging management plan. (IPEC-C-5)

Comment: Other leaks were discovered, only because special excavation work being done by a contractor led to investigations after tritiated water was found seeping from surface cracks in spent fuel pool number 2. (IPEC-C-6)

Comment: The first, and perhaps most disturbing of these issues is the continued existence of uncontrolled leaks of radioactive material from Indian Point's spent fuel pools. For nearly two years, Indian Point has been leaking tritium and the cancer-causing strontium-90 into the soil and water surrounding the plant. Alarmingly, some of this material might be migrating into the Hudson River. (IPEC-E5-3, IPEC-I17-3)

Comment: [A]nd Entergy should be required to identify and stop or prevent these leaks. (IPEC-E5-7, IPEC-I17-7)

Comment: An evaluation of the leaks from the spent fuel pools, including the possible impacts to groundwater, and future actions to ensure that the leakage is stopped. (IPEC-E17-4)

Comment: The first and perhaps most disturbing of these issues is the continued existence of uncontrolled leaks of radioactive material from Indian Point spent fuel pools. For almost two years, Indian Point has been leaking tritium and the cancer-causing strontium-90 into the soil and water surrounding the plant. Alarmingly, it is possible that some of this material may even be making its way into the Hudson River. (IPEC-EE-5)

Comment: [A]nd that a condition of relicensing should be a requirement that Entergy find and stop these leaks. (IPEC-EE-9, IPEC-RRR-9)

Comment: In addition, the unlined, leaking IP 1 spent fuel pool will remain full until after the transfer of spent fuel from IP2 is complete. The NRC must assess the current and future environmental impacts of the IP I pool leak, regardless of Entergy's projected plans to empty the pool and alleviate the contamination. (IPEC-F5-37, IPEC-K17-37)

Comment: In its Environmental Report (ER), Entergy claims the tritium contamination found in numerous onsite monitoring wells is "the result of historical pool leakage in the 1990s which has since been repaired," based on the assertion that Entergy has not been able to identify leaks in the IP2 pool liner, and the contamination is not consistent with active leakage. However, Entergy failed to note that only about 60% of the IP2 pool liner has actually been examined for leaks, due to the high density of the spent fuel storage racks and the minimal clearance between the bottom of the racks and the floor of the pool. Entergy has failed to provide any explanation in the Environmental Report as to the feasibility of examining the remainder of the pool liner for leaks. Nor does the Environmental Report address what other steps Entergy could take to find the source of the IP2 leak, if in fact it is not feasible to examine the remaining 40% of the pool liner. On the contrary, the Report suggests that because Entergy has looked for the leak and not found it, the pool must not be leaking. This is an arbitrary and illogical conclusion

without adequate factual support, and cannot be relied on by NRC in assessing the leaks in the SEIS. (IPEC-F5-66, IPEC-K17-66)

Comment: In addition, the claim that the contamination is not consistent with active leakage is not correct. Analysis of soil samples taken in the vicinity of the cracks in the Indian Point 2 pool wall in September 2005 indicate high levels of Cobalt-60, Cesium-134 and Cesium- 137 consistent with the activity of these radionuclides in the spent fuel pool water. (IPEC-F5-67, IPEC-K17-67)

Comment: Another apparent contradiction between the ER and the NRC's inspection results can be found in the March 16, 2006 NRC Special Inspection Report assessing the groundwater contamination at Indian Point. Page 1 of the report states that "Entergy sampled existing "Due Diligence" wells that were developed in 2000. One of these wells, MW-111 (last sampled for tritium in 2000 with no activity detected) was sampled on September 29, 2005. The analytical result, reported on October 5, 2005, indicated 211,000 pCi/l, tritium." 3 MW-111 is located in the IP2 transformer yard, near the IP2 fuel storage building. If the tritium in the groundwater is indeed from "historical pool leakage in the 1990s" as Entergy claims in the Environmental Report, why was it not detected in MW- 111 in 2000? These results clearly indicate that a tritium leak occurred at IP2 between 2000 and 2005. Neither NRC nor Entergy has suggested that there could be another source of tritium leakage at Indian Point 2 besides the Indian Point 2 spent fuel pool. These facts simply do not support Entergy's assertion that the Indian Point 2 pool is no longer leaking or has not leaked since the 1990s. NRC staff involved in the Indian Point groundwater investigation indicated their disagreement with Entergy on this issue, at the NRC Annual Assessment Meeting for Indian Point held on April 26, 2007. (IPEC-F5-68, IPEC-K17-68)

Comment: Also, to say that radioactive material that is leaking into the groundwater and into the Hudson River is being handled by an ongoing monitoring and investigation, which is definitely necessary, but these are also symptomatic of an aging and deteriorating facility. And the leaking absolutely must be taken into consideration, and, further, it must be contained and remediated before a relicensing is allowed. (IPEC-GG-6)

Comment: The first big question is: what on earth that happens at Indian Point would be beyond the scope of having potential impact on the environment? Are the ongoing leaks that migrate to the Hudson not an environmental issue? (IPEC-GGG-2)

Comment: The basic premise relied upon here is ALARA, or As Low As Reasonably Attainable. Keeping an eye on leaks is not fixing leaks and thus, the licensee fails in this task. (IPEC-H-8)

Comment: And since Indian Point 1 has been nonoperational for decades, and that plant is leaking, with no plan for stopping the leakage, wouldn't the discovery of additional leaks at some point in the future simply mean that we have more uncorrectable problems? (IPEC-J-5)

Comment: Much of the duration, extent, flow paths, and/or source of the leaks, remain unknown. To date, leaks have been discovered throughout the IP 1, 2, and 3 complex, from reactors, fuel pools, storage tanks, etc. This problem cannot be remediated until all sources have been identified and/or located. (IPEC-L5-8)

Comment: Let's talk about the environmental issues. The environmental impact of Indian Point has to do with the environment of Indian Point itself. What is the environment at the Indian Point nuclear powerplant? It's an environment where we have ongoing leaks, leaks that have been going on for over two years, that we don't know the source of, we don't know the extent of, we don't know when they started, we don't know more -- much more than we do know about those leaks. (IPEC-NN-2)

Comment: The issues that I want to talk about with -- directly with respect to the environment -- environmental impact has to do with two or three things. First of all, the leaks -- the problem of the leaks have to be solved. It is absolutely irresponsible to consider relicensing this plant until the leaks -- the sources of the leaks are identified, they are stopped, and it's all cleaned up. That's absolutely clear. (IPEC-NN-5)

Comment: The language is clear . . . the licensee in their License Renewal Application must show the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures. The basic premise relied upon here is ALARA, or As Low As Reasonably Attainable. Keeping and eye on leaks is not fixing leaks, and thus the licensee fails in this task. (IPEC-PPP-6)

Comment: The first, and perhaps most disturbing, of these issues is the continued existence of uncontrolled leaks of radioactive material from Indian Point's spent fuel pools. For almost 2 years Indian Point has been leaking tritium and the cancer-causing strontium-90 into the soil and water surrounding the plant. Alarmingly, it is possible that some of this material may even be making its way into the Hudson River. (IPEC-RRR-5)

Comment: We are requesting a comprehensive study, and remediation of the leaks before the plant can be relicensed. A normal business, whether it be a dry cleaners, or whether it be a gas station, if it leaked into the ground, it would be closed until it was fully remediated. Right now, there are unknown amounts of radioactive effluent under the plant, and that is leaking into our tidal river, and is affecting our public health. Therefore, we are asking that a comprehensive study which includes captured fish, captured species, includes testing of the silt, a comprehensive study which DEC should be involved in, along with Indian Point and Entergy, and the NRC--it must be done independent and done properly, and completely. (IPEC-S-13)

Comment: A government agency relicensing a facility leaking lethal radioactivity into the environment, when the source and amount of that pollution is unknown, might represent a first (and new governmental low). The plant has polluted the environment. The only question is, how much? How could you consider relicensing it when you don't know? (IPEC-S10-1)

Comment: AAEA believes that any leakage of radiation into the groundwater is unacceptable. The site does not use groundwater in its operations or as a source of drinking water. Groundwater is not the source of drinking water for Peekskill or Buchanan. Current conditions of the radiological contamination appear to be largely limited to the general area beneath the facility. The ER provides extensive coverage of this issue. The information is satisfactory to AAEA and should be comforting to the public. (IPEC-TTT-44)

Comment: The ER also states, "The investigation of the radionuclide contamination of the groundwater began in 2005, and although the investigation is on-going, Entergy and the NRC have concluded that although there appears to be some level of contaminated groundwater that discharges to the Hudson River, these levels do not exceed the effluent or radiological dose criteria established by the NRC. Entergy plans to continue to investigate groundwater contamination mitigation methods to determine their feasibility, as deemed appropriate by the NRC." (4.23.5) Thus, the current condition of this contamination should not be an impediment to license renewal. (IPEC-TTT-45)

Comment: [T]he specific on-site underground leaks which to date have not been identified or remediated, and are factual proof that zero-emissions are not being maintained. (IPEC-Q17-10b)

Comment: There are numerous issues that will have unavoidable adverse impacts on public water supply, primary among them the lack of an off site repository for Indian Point‘s radiological and mixed waste streams that are currently leaking into the groundwater. (IPEC-Q17-54)

Comment: Any unmonitored release, no matter its size, violates the regulations. FUSE therefore concludes that the applicant must first address the present non-compliant issues and the environmental issues associated with each before a meaningful SEIS can be made for a new superceding license. (IPEC-Q17-67)

Comment: Various known and unknown leaks throughout the IP1 LLC, IP2 LLC and IP3 LLC site(s) are leaking radiological contaminants into the ground water and the Hudson River, including but not limited to strontium 90, tritium and cesium 137, yet the leaks remain unidentified, stopped or remediated. (IPEC-Q17-94)

Comment: The past and present leaks at Indian Point 2 provide indicia of continued and future leaks. (IPEC-Q17-131)

Comment: In 2006 Don Mayer, Director of Special Projects for Entergy said that "The underground area of the Indian Point site has contaminated water that is 50 to 60 feet deep, . . . and there is also another area, or underground plume, that is about 30 feet wide by 350 feet long." (IPEC-Q17-132)

Comment: Entergy initiated actions to pump out the Unit 1 Containment Spray Sump through a filter/demineralizer system, designed to remove Strontium 90, and to investigate the source and means of the Strontium 90 groundwater contamination. (IPEC-Q17-137)

Comment: When Entergy began removing the underground leaks by pumping the radioactive contamination out of the ground, it caused more radioactive material to be released. Therefore, the NRC ordered Entergy to discontinue removal of the radioactive effluent from ground, and to monitor it while the issue was further investigated. (IPEC-Q17-138)

Comment: The NRC has ordered that the contaminated materials remain under the plant in the bedrock, until some date uncertain when Applicant figures out a method to find, stop and remediate the Radiation Leaks. Until that time radioactivity will continue to leach into the groundwater and the Hudson River. (IPEC-Q17-139)

Comment: The significance of the Groundwater Contamination has not yet been determined, in fact, new studies and maps of the groundwater contamination are due to be delivered by Entergy later this fall.

Only after all reports, including, but not limited to, Entergy‘s reports due in the fall of 2007, and the NYDEC independent studies based on captured aquatic life and other tests regarding Essential Fish Habitat or Significant Coastal Fish and Wildlife Habitat, specifically of the Haverstraw Bay, regarding the groundwater contamination are complete and fully reviewed by the residents surrounding Indian Point and the elected officials, can a determination be made as to the level of significance of the Groundwater Contamination. (IPEC-Q17-152)

Comment: Entergy‘s misrepresentation stating that Indian Point Groundwater Contamination is NOT NECESSARILY SIGNIFICANT or SMALL is based on conjecture, rather than facts. Therefore, the significance of the Groundwater Contamination cannot be determined until all the relevant studies are complete and submitted. (IPEC-Q17-154)

Comment: Various and assorted leaks of unknown origin and undiscovered specific locations are indicative of deteriorating stability and tensile strength of plant infrastructure and systems. Many of the underground pipes and all the spent fuel pools on the Indian Point site are leaking radiological contaminants into the ground under the Indian Point site, and thus contaminating various potable water supplies in violation of both State and Federal laws. (IPEC-Q17-156)

Comment: The current status of the leaks is that the NRC and Entergy have been investigating them since 2005 and still have not found the source(s). Recently it was decided not to remove the radioactive effluent from the ground. This decision was reached when siphoning began and caused more radioactive materials to be released. Doing nothing is not an answer. In fact it just proves the lack of knowledge and ability of both Entergy and the NRC to properly manage radioactive pollution. (IPEC-Q17-158)

Comment: These leaks unchecked and un-repaired will further increase the contaminant levels in potable water sources and the Hudson River. (IPEC-Q17-159)

Comment: The risk of wall collapse in one of the spent fuel pools is greatly increased, as winter temperature shifts coupled with the leaks creates a much higher risk of damage caused from ground heave. (IPEC-Q17-160)

Comment: The radiological and chemical contaminants associated with these known, yet non-specifically identified leaks hold the potential to increase the rates of corrosion in the underground pipes and other structures at the Indian Point site. (IPEC-Q17-161)

Comment: If the NRC allows this high level radioactive effluent to remain unchecked in the ground during the 20 year new superseding license they are granting permission to Entergy to release unmonitored radioactive waste into the groundwater and the Hudson River, through off-site migration, gravity, tidal pull and capillary action. (IPEC-Q17-164)

Comment: Until all the leaks are identified, located, repaired and fully remediated, significant Environmental Costs and risks continue to increase. Therefore, a comprehensive study of all aspects of the leaks at Indian Point 1,2, and 3 must be included in the EIS. (IPEC-Q17-165)

Comment: Specifically, any unmonitored releases are in violation of NRC regulations § 20.1301 Dose limits for individual members of the public . . . § 20.1302 Compliance with dose limits for individual members of the public. (IPEC-Q17-167)

Comment: Large releases of radioactive particulates and or contaminants into the air or water must be considered new circumstances. In the past, and present, there have been more than one incident at Indian Point in which such releases have occurred, including but not limited to the current leaks and the steam generator spill in 2000 of hundreds of gallons of radioactive waste. (IPEC-Q17-168)

Comment: The current ground water contamination at Indian Point must be fully evaluated and remediated to protect the public against radiation, prior to the issuance of a new license for 20 years. (IPEC-Q17-242)

Comment: Indian Point is the only reactor site that is leaking radioactive strontium 90 into the ground, groundwater and Hudson River. (IPEC-Q17-256)

Comment: Significant spent fuel pool leaks at IP1, IP2 and IP3, are leaking strontium 90, cesium 137 and tritium. All the spent fuel pools at Indian show clear evidence of serious aged related degradation. Yet, since 2005 Entergy has been unable to locate, identify, stop and remediate said leaks. (IPEC-Q17-265)

Comment: A recently discovered leak at IP2 that was incorrectly categorized as a conduit leak was in fact a leak in the fuel transfer tube. (IPEC-Q17-266)

Comment: There are known Tritium, Strontium 90 and Cesium 137 plumes under the entire reactor site that are rapidly migrating towards the Hudson River. Said leaks represent a minimum of 250,000 gallons of radiological contaminants that are polluting the potable water

resources of New York State, in violation of New York State Law. Such leaks have been, and continue to be, unmonitored in violation of the NRC own regulations. (IPEC-Q17-268)

Comment: Indian Point is the only plant in the nation profusely leaking strontium 90, therefore the impact on the environment and human health is site specific. (IPEC-Q17-311)

Comment: Mitigation measures which find, stop, and remediate any and all leaks of strontium, cesium and tritium from Indian Point into the ground, air, groundwater and river must be taken, and those site specific mitigation measures must be included in the EIS. (IPEC-Q17-312)

Comment: Radiological Contaminants have already been found in the fish down river of Indian Point. Such findings have already had some impact on surface-water use such as parents leery of allowing their children to swim in the river and subsistence fisherman afraid of what might be in the fish. (IPEC-Q17-313)

Comment: With the known leak issues at Indian Point, and subsequent contamination of the soils and ground waters there, any refurbishment at the site could increase these surface water impacts. A rain storm, for instance, coming down upon contaminated, freshly disturbed soil could further contaminate the river through soil erosion and/or run off during heavy spring rains. (IPEC-Q17-314)

Comment: It is extremely unnerving that my family and I live within 8 miles of the Indian Point Nuclear facility and know that they've done nothing about the radioactive waste leaking into the Hudson River. This is unacceptable. (IPEC-Z4-1)

Response: *The comments, in general, are related to public concerns regarding identifying and stopping the leaks associated with IP1 and IP2, which are ongoing activities associated with the current operating licenses. The comments, as they pertain to identifying and correcting conditions of the leaks, are not within the scope of the environmental review for license renewal. However, the environmental impacts of identified leaks to the environment during the period of extended operation are within the scope of the environmental review and will be addressed in Chapters 2 and 4 of the SEIS.*

Comment: To strengthen this contention, it is pointed out that reactor coolant chemistry is considered a key issue of concern in Flow Accelerated Corrosion (FAC). If water chemistry inside of the pipes of the reactor is a concern, then it follows that over 250,000 gallons of radioactively contaminated water under the site should be a corrosion concern as relates to the outside of the pipes. (IPEC-Q17-163)

Comment: Would the inaccessibility of large amounts of the conduit system to visual inspection not represent potential environmental impact, especially in light of radioactive steam being released last winter from piping that was supposedly in the "non-nuclear" circulation system? (IPEC-O5-7)

Comment: This is significantly worrisome, as these unreachable pipes and systems cannot be tested with any certainty as it is. (IPEC-Q17-162)

Comment: I formally request that before proceeding with the relicensing process, the NRC define a set of standards and the specific measurements that will be used for the following issues:

-State how many linear feet of piping transport radioactive and non-radioactive water that is inaccessible to visual inspection
-State by what methods other than test wells will be used to evaluate the level of rust or corrosion of those pipes and what percentage of the pipes will be tested to validate the finding
-State the method by which pipe welds that are inaccessible to visual inspection will be evaluated for long term viability and what percentage of total welds will be tested to validate the finding
-State what calculations have been made as to the number of spent fuel assemblies that will have to be stored in casks on the above ground concrete platform over the next 20 years of operation, how much space that will require
-State what calculations have been made to estimate the number of new leaks that will occur over the additional twenty years of operation, given that the agency can not determine how many leaks are currently releasing radioactive materials into the groundwater.
-State what computer modeling has been conducted to estimate the impact of global warming on Hudson River water temperature, given that heat waves across Europe have precluded the use of some river water for cooling and some plants had to be taken offline until temperatures returned to safe levels.
-State what measures or calculations have been made to say that the Emergency Evacuation Plan will be successful. State which of James Lee Witt's contentions of plan insufficiency are incorrect or have been remedied. (IPEC-J5-2)

Response: *The environmental impacts of known leaks at Indian Point will be addressed in Chapter 4 of the SEIS. However, aspects of the comments that address current operating safety issues are not within the scope of the environmental review; they are addressed as part of the NRC's ongoing oversight process. Additionally, aspects of the comments that relate to corrosion and aging management will be evaluated, as applicable, in the license renewal safety review.*

5. Comments Regarding Aquatic Ecology and Related Issues

Comment: Entergy's analysis of Cumulative Impacts on Aquatic Resources is also incomplete. As with the entrainment, impingement and thermal discharge analyses, section 4.43.1 (pp. 4-80 to 4-83) lacks any discussion or consideration of NYSEC's FEIS, which has ample discussion on cumulative impacts of the various "once-through" cooling facilities on the Hudson River. (IPEC-A-31)

Comment: Further, the cumulative effects of ALL discharges from IP2 LLC and IP3 LLC must be weighed, and their Environmental Impacts and Costs considered in the EIS Scoping process. It is impossible to know the Environmental Impacts and Costs associated with Indian Point Discharges without looking at the whole, as well as its singular year effluents totals. (IPEC-Q17-69)

Response: *As part of the environmental review process, the NRC evaluates the potential for cumulative impacts of operations (as defined in 40 CFR 1508.7) during the renewal term. In Chapter 4 of the SEIS, the impacts of the proposed action will be analyzed in conjunction with other past, present, and reasonably foreseeable future actions at Indian Point and the activities of other industrial facilities and/or Federal agencies in the area.*

Comment: The analysis of available alternatives for reducing or avoiding adverse environmental effects on aquatic resources is grossly incomplete. (IPEC-A, IPEC-F5-112c, IPEC-K17-112c)

Comment: Significantly, the NYSDEC's FEIS provides not just recommendations and conclusions regarding entrainment impacts and alternatives to minimize such impacts, but quantifies entrainment impacts that have been ignored by Entergy. According to the NYSDEC's FEIS, the station's cumulative entrainment impact is, as follows:

Plant Species	Indian Point
American Shad	13,380,000
Bay Anchovy	326,666,667
River Herring	466,666,667
Striped Bass	158,000,000
White Perch	243,333,333
Total	1,207,713,334

(IPEC-A-24, IPEC-F5-124, IPEC-K17-124)

Comment: NYSDEC's FEIS concludes that the billions of fish that are killed by the stations each year represent a significant mortality and are yet another stress on the River's fish community. The FEIS also notes, contrary to Entergy's assertions, that although the primary cause of these population changes cannot conclusively be attributed entirely to the operation of these stations, the mortality that they cause must be taken into account when assessing these

population declines. The NYSDEC also states, “What is clear from the data and analyses presented in the DEIS is that entrainment and impingement, primarily the former, are eliminating a significant portion of the above-listed species in their egg and larval forms, as well as many more species which spawn or spend part of their life stages in the lower Hudson River.” (IPEC-A-25, IPEC-F5-125, IPEC-K17-125)

Comment: In addition, NYSDEC’s Fact Sheet, among other important findings, provides the following conclusion regarding entrainment and impingement at Indian Point that has been totally ignored by Entergy and must be reviewed to completely assess environmental impacts: Each year Indian Point Units 2 and 3 (collectively “Indian Point”) cause the mortality of more than a billion fish from entrainment of various life stages of fishes through the plant and impingement of fishes on intake screens. . . . Losses at Indian Point are distributed primarily among 7 species of fish, including bay anchovy, striped bass, white perch, blueback herring, Atlantic tomcod, alewife, and American shad. Of these, Atlantic tomcod, American shad, and white perch numbers are known to be declining in the Hudson River . . . .

Thus, current losses of various life stages of fishes are substantial. (IPEC-A-27, IPEC-F5-127, IPEC-K17-127)

Comment: The historic and persistent use of once-through cooling for the initial 40-year license at Indian Point has wreaked havoc on the fish in the Hudson River. For the reasons provided below, another 20 years of once-through cooling at Indian Point would result in continued significant impingement and entrainment, and thus significant adverse impacts and continued environmental injury to the Hudson River. (IPEC-N17-30)

Comment: For the species that breed in the Hudson River estuary and whose young are vulnerable to entrainment, the estimated impacts from power plant mortality rate are sufficient to cause a substantial reduction in adult numbers. (IPEC-N17-34)

Comment: Indian Point accounts for more than half of the entrainment from the three plants -- an estimated annual entrainment of 1.2 billion fish eggs and larvae. (IPEC-N17-36)

Comment: There's no question that the plants kill fish eggs. No one's arguing that point. Over 90 percent of fish eggs, however, die anyway in the environment, as part of the natural environment, even if the plants weren't there, and it becomes food for other fish. That's biology. And so yes, there are impacts but they are insignificant in terms of the adult fish population. (IPEC-P-4)

Comment: AAEA concurs with Entergy's conclusion on impingement and entrainment that withdrawal of water from the Hudson River for the purposes of once-through cooling at the site does not have any demonstrable negative effect on representative Hudson River fish populations, nor does it warrant further mitigation measures. (Section 4.3.6) (IPEC-TTT-41)

Comment: Since 1986 Indian Point was required to build a fish return pipeline by the DEC, and since that time received multiple construction permits pending issuance of a new easement.

However the fish return pipeline was not constructed and therefore a final easement has not been issued. (IPEC-Q17-76)

Comment: Therefore, Indian Point is in violation of New York State law, which affects all the residents of New York State who own the Hudson River, the aquatic life in the river and the environment of the Hudson Valley. The significance of the effect of this failure to build the fish return pipeline is MODERATE as its environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resources. However, granting of a license renewal for 20 more years of operation could see the cumulative effects of this non-action and elevate this issue to high. (IPEC-Q17-77)

Comment: The requirement of the FISH RETURN PIPELINE is site specific, and is not part of the GEIS. Warranted mitigation measures would be for the NRC to require that the Fish Return Pipeline be constructed prior to approval the LRA. A comprehensive analysis as to why Entergy has not built the required FISH RETURN PIPELINE must be included in the EIS. (IPEC-Q17-78)

Comment: Entergy in the ER states that the environmental impact of entrainment of fish and shellfish [10 CFR 51.53(c)(3)(ii)(B)] is SMALL. Historic and current studies have shown no negative trend in overall aquatic river species populations related to plant operations. Current mitigation measures implemented through the HRSA and fourth amended Consent Order, and the ongoing SPDES permitting process will ensure impacts remain SMALL. Further consideration of mitigation measures is not warranted.
. . .
Mitigation alternatives cannot be considered unless adverse effects are specifically identified, regardless of how SMALL THE ADVERSE IMPACT. (IPEC-Q17-79)

Comment: As a resident in the area and a concerned citizen, I request the Nuclear Regulatory Commission address the following environmental and public health issues in the Draft Environmental Impact Statement for the Indian Point nuclear power plant:

[T]he impacts of Indian Point's cooling system on the Hudson River fish populations (IPEC-G8-1)

Response: *The comments relate to operation of Indian Point's cooling system, specifically the effects of impingement and entrainment. The impacts and any mitigation measures associated with the plant's cooling system will be evaluated in Chapters 4 and 8 of the SEIS.*

Comment: With respect to aquatic ecology, it is patently clear that Entergy's Environmental Report (ER) fails to meet the requirements set forth in 10 CFR 51.45 and 10 CFR 51.53(c). There are three main flaws in the ER in this area: 1) Current specific information prepared by the New York State Department of Environmental Conservation (NYSDEC) has not been evaluated regarding aquatic ecology, in particular entrainment, impingement and thermal discharge impacts. (IPEC-A-2, IPEC-112a, IPEC-K17-112a)

Comment: As discussed further below, Entergy's "Entrainment Analysis," the "Impingement Analysis" and the "Heat Shock Analysis" fail to evaluate and to include significant adverse information contained in NYSDEC documents, which is necessary under 10 CFR 51.45(c), (e) and 10 CFR 51.53(c). (IPEC-A-8, IPEC-F5-116, IPEC-K17-116)

Comment: In addition, the ER's discussion on the status of compliance with New York water quality standards, required under 10 CFR 51.45 (d), is completely at odds with the information contained in current specific information by the NYSDEC. Thus, the ER contains insufficient data and does not aid the Commission in its development of an independent analysis with regards to aquatic ecology. (IPEC-A-9, IPEC-F5-117, IPEC-K17-117)

Comment: on the status of aquatic and riparian ecological communities of the Hudson River . . . the ER, in the section on "Fish Communities" (Section 2.2.5), states that "[t]he NYSDEC's FEIS noted a decline in bay anchovy abundance and suggested it was linked to power generation plant water intakes on the Hudson River [NYSDEC 2003]." But Entergy omits to say that the NYSDEC's FEIS also considers that "[s]everal species of fish in the Hudson River estuary, such as American shad, white perch, Atlantic tomcod and rainbow smelt, have shown trends of declining abundance." (IPEC-F5-119)

Comment: [T]he ER, in the section on "Fish Communities", (Section 2.2.5), states that "[t]he NYSDEC's FEIS noted a decline in bay anchovy abundance and suggested it was linked to power generation plant water intakes on the Hudson River [NYSDEC 2003]." But Entergy omits to say that the NYSDEC's FEIS also considers that "[s]everal species of fish in the Hudson River estuary, such as American shad, white perch, Atlantic tomcod and rainbow smelt, have shown trends of declining abundance." (IPEC-A-15)

Comment: In fact, Entergy's reference to NYSDEC's FEIS statement on the decline in bay anchovy is the only reference to NYSDEC's FEIS in the 5-page section of Fish Communities (pp. 2-13 to 2-17). In contrast, the 1999 DEIS, which is an earlier document prepared by the prior owners of the stations - not by the NYSDEC - is referenced at least 11 times in the same section. (IPEC-A-16)

Comment: Moreover, NYSDEC's FEIS actually criticizes the 1999 DEIS' information regarding white perch. The complete quote from the FEIS on this point is, as follows:

However, juvenile and age-1 abundance indices suggest that white perch numbers in the Hudson River are declining. This contrasts with the DEIS conclusion that the population appears resilient enough to sustain its population in the future under similar levels of power plant mortality. (IPEC-A-17)

Comment: Entergy's "Entrainment Analysis," "Impingement Analysis" and "Heat Shock Analysis" (Sections 4.2.5.2 & 4.2.6 (at 4-12 and 4-13); 4.3.5.2 & 4.3.6 (at 4-17 to 4-19); 4.4.5.2 & 4.4.6, respectively) also fail to evaluate the conclusions and recommendations provided in NYSDEC's FEIS. Similarly, Entergy deliberately neglects to consider the conclusion provided in

the NYSDEC's Fact Sheet regarding the renewal of Indian Point's SPDES permit (hereinafter NYSDEC's Fact Sheet).

Although both documents (NYSDEC's FEIS and NYSDEC Fact Sheet) have been included in the "References" section and considered in other sections of the ER, Entergy has purposely avoided an evaluation of these key NYSDEC documents in the sections that purport to develop the entrainment, impingement and thermal analyses. Furthermore, Entergy's Entrainment Analysis, Impingement Analysis, and Heat Shock Analysis fail to include significant adverse information contained in the conclusions and recommendations provided in NYSDEC's FEIS and NYSDEC's Fact Sheet, and to quantify the adverse factors, which is necessary under 10 CFR 51.45 (e), (c). (IPEC-A-18, IPEC-F5-120, IPEC-K17-120)

Comment: Since 1975, NYSDEC has delegated authority from the Federal government to administer the SPDES program under the Clean Water Act (CWA). Accordingly, the NYSDEC evaluates and regulates the impact of the applicant's cooling system under the CWA. In addition, New York has established criteria governing thermal discharges. NYSDEC's FEIS and NYSDEC's Fact Sheet contain the most current information by the NYSDEC regarding the applicant's environmental impacts due to entrainment, impingement, and thermal discharges. Thus, these documents must be considered in the ER pursuant to the NRC regulations at 10 CFR 51.45 (a), (c) and 10 CFR 51.53 (c). (IPEC-A-19, IPEC-F5-121, IPEC-K17-121)

Comment: The NRC staff has consistently reviewed current specific documentation prepared by the states' environmental agencies in connection with entrainment, impingement and heat shock. For instance, in NUREG-1437, Supplement 28 (January 2007), regarding the renewal license of the Oyster Creek facility in New Jersey (OCNGS), NRC staff expressly noted that to evaluate the impact of entrainment losses it had reviewed NJDEP's "conclusion and recommendations provided in the NJDEP fact sheet (NJDEP 2005) regarding the renewal of the OCNGS NJPDES permit." Moreover, NRC staff relied on NJDEP's assessment to quantify entrainment and impingement at OCNGS. (IPEC-A-20)

Comment: In sum, Entergy's failure to discuss the findings and conclusion in NYSDEC's FEIS and NYSDEC's Fact Sheet amounts to at fatal flaw, since these documents are the latest document analyzing and quantifying the adverse environmental impacts of the station's cooling system and the potential alternatives to minimize such impact. (IPEC-A-21)

Comment: Pursuant to 10 CFR 51.53(c), Entergy is required to analyze the environmental impact of the proposed action as a result of the entrainment and impingement of fish and shellfish in early life stages from its cooling system. Entergy's "Entrainment Analysis," in sections 4.2.5.2 and 4.2.6 (at 4-12 and 4-13), and the "Impingement Analysis," in section 4.3.5.2 and 4.3.6 (at 4-17 to 4-19), however, are fatally incomplete due to the applicant's failure to evaluate vitally important NYSDEC documents. (IPEC-A-22, IPEC-F5-122, IPEC-K17-122)

Comment: To begin, Entergy's "Entrainment Analysis" and the "Impingement Analysis" are incomplete because it has considered entrainment and impingement impacts relying solely on the 1999 DEIS and other two reports prepared by Entergy's consultants, while entirely ignoring

NYSDEC's FEIS. There is no mention or consideration of the FEIS in Entergy's analyses of entrainment and impingement.

Indeed, the "Entrainment Analysis" and the "Impingement Analysis" lack any discussion or consideration of two basic documents prepared by the NYSDEC: NYSDEC's Fact Sheet and NYSDEC's FEIS. Astutely, Entergy has included both documents in the pertinent "References" section (section 4.26) and also mentions these document in the "Background" discussions (and other sections of the EF). But Entergy has failed to consider these key NYSDEC documents in the required analyses pursuant to 10 CFR 51.45 and 10 CFR 51.53(c). (IPEC-A-23)

Comment: Furthermore, the NYSDEC has determined not to rely on the fish population models presented in the 1999 DEIS to make conclusions for the FEIS or for the SPDES permits to be issued for the stations. Instead, NYSDEC has concluded that "the impacts associated with power plants are more comparable to habitat degradation; the entire natural community is impacted." NYSDEC's analysis is summarized, as follows:

> These "once-through cooling" power plants do not selectively harvest individual species. Rather, impingement and entrainment and warming of the water impact the entire community of organisms that inhabit the water column. For example, these impacts diminish a portion of the forage base for each species that consumes plankton (drifting organisms in the water column) or nekton (mobile organisms swimming through the water column) so there is less food available for the survivors. In an intact ecosystem, these organisms serve as compact packets of nutrients and energy, with each trophic (food chain) level serving to capture a diffuse resource and make it more concentrated. Ichthyoplankton (fish eggs, larvae and very small fish which drift in the water column) and small fish feed on a base of zooplankton (drifting animal life) and phytoplankton (drifting plant life). The loss of these small organisms in the natural community may be a factor that leads to harmful algal blooms. The small fish themselves serve as forage for the young of larger species, which serve as forage for larger individuals, and so on up the food chain, more correctly understood as a "trophic pyramid".

Once-through cooling mortality "short-circuits" the trophic pyramid and compromises the health of the natural community. For example, while an individual bay anchovy might ordinarily serve as food for a juvenile striped bass or even for a common tern, entrainment and passage through a power plant's cooling system would render it useful only as food to lower trophic level organisms. It could no longer provide its other ecosystem functions of consuming phytoplankton, digesting and concentrating it into its tissues, and ranging over a wide area, distributing other nutrients as manure. This is just a single example from a very complex natural system, where the same basic impact is multiplied millions of times over more than one hundred fish species. (IPEC-A-26)

Comment: Pursuant to 10 CFR 51.53(c), Entergy is also required to analyze the environmental impact of heat shock from its once-through cooling system. Entergy's Analysis of Environmental Impact in connection with heat shock, however, is incomplete and must not be relied on by NRC

in preparing the SEIS. As with the entrainment and impingement analyses, the "Thermal Discharge Analysis," in sections 4.4.5.2 & 4.4.6, lacks any discussion or consideration of NYSDEC's FEIS or NYSDEC's Fact Sheet. (IPEC-A-28, IPEC-F5-128, IPEC-K17-128)

Comment: In addition, Entergy's "Entrainment Analysis," the "Impingement Analysis," and the "Heat Shock Analysis" do not evaluate and do not include significant adverse information contained in NYSDEC documents, as required under 10 C.F.R. § 51.45(c), (e) and 10 C.F.R. § 51.53(c). Rather than focus on older environmental impact reports, the LRA and the ER should discuss the most recent environmental studies conducted by the NYSDEC regarding entrainment and impingement. (IPEC-D-38)

Comment: The NRC must conduct a rigorous, objective analysis of the impacts of Indian Point's once-through cooling system on Aquatic Ecology, and should not rely on Entergy's incomplete and inaccurate Environmental Report (ER) as the basis for the SEIS. (IPEC-F5-111, IPEC-K17-111)

Comment: In general, NRC regulations require that the ER "contain sufficient data to aid the Commission in its development of an independent analysis." Specifically, “the analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered.", Moreover, the ER "should not be confined to information supporting the proposed action but should also include adverse information." (IPEC-F5-113b, IPEC-K17-113b)

Comment: Entergy considered entrainment and impingement impacts relying solely on the 1999 DEIS and two other reports prepared by Entergy’s consultants, while entirely ignoring NYSDEC’s FEIS for its “Entrainment Analysis” and “Impingement Analysis.” There is no mention or consideration of the FEIS in Entergy’s analyses of entrainment and impingement. The “Entrainment Analysis” and the “Impingement Analysis” lack any discussion or consideration of two basic documents prepared by the NYSDEC: NYSDEC’s Fact Sheet and NYSDEC’s FEIS. Astutely, Entergy has included both documents in the pertinent “References” section (section 4.26) and also mentions these document in the “Background” discussions (and other sections of the EF). But Entergy has failed to consider these key NYSDEC documents in the required analyses pursuant to 10 CFR 51.45 and 10 CFR 51.53(c). (IPEC-F5-123, IPEC-K17-123)

Comment: Furthermore, the NYSDEC has determined not to rely on the fish population models presented in the 1999 DEIS to make conclusions for the FEIS or for the SPDES permits to be issued for the stations. Instead, NYSDEC has concluded that "the impacts associated with power plants are more comparable to habitat degradation; the entire natural community is impacted." (IPEC-F5-126, IPEC-K17-126)

Comment: Entergy has based its conclusions regarding the impact of license renewal on Atlantic sturgeon on the 1999 DEIS prepared by ConEd. Again, this reliance seems to be misplaced, as there was available to the company the more recent 2003 FEIS prepared by New York State. (IPEC-F5-147, IPEC-K17-147)

Comment: Entergy's conclusions regarding the effects of the once-through cooling on Atlantic sturgeon are based, as mentioned above, on the 1999 DEIS. The concerns that Riverkeeper has expressed with regards to reliance on this document apply to its use here. NMFS also expressed concerns with the 1999 DEIS in its 2007 correspondence with Entergy. As noted in the discussion of shortnose sturgeon above, NMFS emphasized that it had no current data regarding impingement or entrainment of sturgeon, nor on the effectiveness of Entergy's impingement/entrainment reduction system in place at Indian Point. (IPEC-F5-150, IPEC-K17-150)

Comment: I'm Philip Musegaas. I represent Riverkeeper. We just have some very brief comments today. Then we'll be filing detailed written comments by the October 12th deadline.

Indian Point's cooling system sucks in 2.5 billion gallons of Hudson River water a day, discharges an enormous thermal plume that damages the Hudson River ecosystem, and the intake of cooling water kills a billion fish a year. This is established in New York State studies, in Riverkeeper's own studies. It's an established fact. This plant has a negative impact on Hudson River fisheries. One of the only fish species that's doing well in the river is striped bass and that's because all the other species are being destabilized. So I just wanted to clarify that point in response to an earlier comment. (IPEC-K-1)

Comment: on the status of aquatic and riparian ecological communities of the Hudson River.

For instance, the ER, in the section on "Fish Communities" (Section 2.2.5), states that "[t]he NYSDEC's FEIS noted a decline in bay anchovy abundance and suggested it was linked to power generation plant water intakes on the Hudson River [NYSDEC 2003]." But Entergy omits to say that the NYSDEC's FEIS also considers that "[s]everal species of fish in the Hudson River estuary, such as American shad, white perch, Atlantic tomcod and rainbow smelt, have shown trends of declining abundance." (IPEC-K17-119)

Comment: As the NRC is aware, the New York State Department of Environmental Conservation ("NYSDEC") has been engaged in an ongoing Clean Water Act State Pollutant Discharge Elimination System ("SPDES") permit renewal process for Indian Point and other Hudson River power plants. Part of this effort lead to an agreement known as the Hudson River Settlement Agreement ("HRSA"'). The HRSA required a thorough investigation of the ecology of the River for purposes of future technical decision making on the SPDES permit application for Indian Point Units 2 and 3 and other Hudson River power plants. The process that followed the HRSA resulted in two Draft EIS's prepared by the Hudson River power plant generators and a Final EIS prepared by DEC. The Final EIS prepared by the NYSDEC in 2003 is the final environmental review document required by State law. The NYSDEC's Final EIS contradicts the industry-prepared second Draft EIS in important ways. This means that as to those points, as a matter of law, the Final EIS supersedes the Draft EIS. Thus, any reliance on the Draft EIS by the applicant in this environmental review is misplaced as a matter of fact and as a matter of law. (IPEC-N17-31)

Comment: The issue of heat shock from the operation of Indian Point must be addressed in the Supplemental EIS. The NYSDEC strongly suggests that NRC staff review the information contained within the Response to Comments section of the HRSA Final EIS, in particular, the section titled, "Fish Population - 5: Thermal Analyses needs to be updated to reflect recent, more extreme conditions," where the NYSDEC stated its position on the thermal discharge issue. (IPEC-N17-45)

Comment: The HRSA Final EIS concludes that "thermal, discharges were inadequately addressed in the DEIS." The Draft EIS indicated that the three facilities examined did not have an impact because the "surface water orientation of the plume allows a zone of passage in the lower portions of the water column, the preferred habitat of the indigenous species." This claim was made without any supporting documentation. The NYSDEC's position, as stated in the Final EIS, is that the available data demonstrates otherwise. (IPEC-N17-46)

Response: *The comments are related to aquatic ecology, specifically impingement, entrainment, and heat shock analysis. The NRC's evaluation of aquatic impacts from continued operation of IP2 and IP3 will be presented in Chapter 4 of the SEIS. The NRC staff is aware of NYSDEC's final environmental impact assessment prepared for the Hudson River Power Plants SPDES permits.*

Comment: In order to reduce the levels of impingement and entrainment of Hudson River fish, the Department of Environmental Conservation's draft SPDES permit could substantially limit the ability of Indian Point 2 and 3 to generate electricity, and may even lead to the closure of the facilities. And that's our big concern. I will talk about that a little bit later. (IPEC-JJ-4)

Comment: In order to reduce the levels of impingement and entrainment of Hudson River fish, the Department of Environmental Conservation's ("DEC") Draft SPDES Permit could substantially limit the ability of Indian Point 2 and 3 to generate electricity, and may even lead to the closure of the facilities. (IPEC-QQQ-8)

Comment: For this reason, AAEA objects to any provision of the Draft SPDES Permit for Indian Point 2 and 3 that imposes any significant limit on the facilities' ability to generate clean-burning electricity, including Special Condition 28. (IPEC-QQQ-33)

Comment: State Permits and Licenses from State agencies, specifically DEC SPDES permits, are required to discharge thermal pollution into the state owned discharge channel, and required fish return pipe lines. Easements from New York State are required for the issuance of a new superceding license for a 20 year period. These required permits must be included in the EIS scoping, as they directly relate to the Environmental Costs of thermal pollution and to potable water quality as required by State law. (IPEC-Q17-68)

Response: *The comments relate to the NYSDEC's Draft SPDES Permit for IP2 and IP3, specifically Special Condition 28 of the draft permit that requires the construction of cooling towers. NYSDEC is responsible for the review and issuance of New York State's water permits under the Clean Water Act. While the NRC's license renewal environmental review considers*

the status of such permits, the NRC does not have regulatory authority in matters concerning the Clean Water Act. However, since the potential for retrofitting the existing once-through cooling system to cooling towers exists, Chapter 8 of the SEIS will address the alternative of retrofitting one or more of Indian Point's existing once-through cooling systems to a closed-cycle or other potentially-viable cooling system.

Comment: Entergy launched its own internal investigation in response to these findings which specifically suggests that further studies of Hudson River fish are warranted. In a January 2007 internal Entergy memorandum discussing preliminary dose assessments from Sr-90 in Hudson River fish and invertebrates, the author concludes that following a conservative analysis of fish consumption based on the 24.5 pCi/kg of Sr-90 in the white perch sample from Roseton, the maximum individual annual dose would equal 44% of the annual allowable bone dose to an Adult male. The memorandum concludes by suggesting that "While we should not discount the value originally determined by AREVA, this evaluation indicates that we must perform additional investigation in an attempt to validate and understand the 25 pCi/L recently identified at our control location in Roseton." Despite this recommendation, no mention of the dose assessment or need for further studies is included in the ER. (IPEC-A-51, IPEC-F5-72, IPEC-K17-72)

Comment: Riverkeeper is highly concerned about the lack of analysis here, particularly because of the known dangers of exposure to radioactive substances such as strontium-90 and tritium. Strontium-90 imitates calcium by concentrating in fish bones and shells of clams and blue crab. Clams are a major part of the diet of sturgeon found in the Hudson River. Riverkeeper is therefore concerned that Hudson sturgeon are being exposed to elevated levels of this dangerous substance. Without reference to additional studies done to scrutinize the effects of such contamination on listed species and humans, Entergy's ER is woefully incomplete. (IPEC-F5-145, IPEC-K17-145)

Comment: I'd like to talk about fish for a sec. We were told by a member of Riverkeeper that the plant at Indian Point is killing a billion fish a year. I don't think there is a billion fish in that river.

That is a ridiculous thing to say. Meanwhile, their own leader -- Bobby Kennedy -- said recently, "Today, the Hudson River is the richest body of water in the North Atlantic Region, producing more pounds of fish per acre than any other waterway in the Atlantic Ocean north of the equator."

That plant has been there for 35 years while the Hudson River has systematically recovered from a time when 20-mile stretches of it were dead to where Bobby Kennedy is saying it's the most productive river north of the equator in the Atlantic Ocean. I don't understand how those points jive at all. (IPEC-HH-6)

Comment: Riverkeeper claims the deaths of 'billions of Hudson River fish' as a result of Indian Point discharges and cites excessive high levels of strontium 90 in fish flesh. (IPEC-M17-26)

Comment: Aquatic Ecology Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-29)

Comment: The data show changes in fish species abundance with low species diversity because most of the River's fish production is concentrated in a few species, demonstrating that the "Hudson River estuary is far from equilibrium." (IPEC-N17-32)

Comment: Long-term trends show declining abundance of common and once abundant species including tomcod, Atlantic sturgeon, bluefish, weakfish, rainbow smelt, white perch, and white catfish. (IPEC-N17-33)

Comment: Entergy's reliance on a statement in the second Draft EIS -- that the "fish community in the system (Hudson River) remains healthy and robust"-- is misplaced. The Draft EIS further stated that any observed changes in the population are attributable to causes other than the operation of the power plants. These statements, however, are belied by the HRSA data and are contradicted by the Final EIS, which is the final review of environmental impacts from Indian Point operations. (IPEC-N17-39)

Comment: Finally, the NYSDEC noted in the HRSA Final EIS that "Declines in the abundances of several species and changes in species composition raises concerns and questions regarding the health of the River's fish community." Data show that several fish species, such as American shad, white perch, and Atlantic tomcod are declining in abundance and one species, rainbow smelt, has been lost from the Hudson River. John R. Waldman, et al., Biodiversity and Zoogeography of the Fishes of the Hudson River Watershed and Estuary, American Fisheries Society Symposium, 51:129-150 (2006). In addition, while the number of different fish has increased over time, diversity of fish, which includes the number and relative abundance of fish, has declined over time. (IPEC-N17-41)

Comment: The lower Hudson River is a 152-mile tidal estuary and Indian Point is located 43 miles from the mouth. (IPEC-TTT-28)

Comment: Though Entergy, painting with a broad brush, may claim there is no negative trend in OVERALL Aquatic and Plant river species that is not the question in the ER. Rather, the question is what the negative trend is for EACH SPECIFIC SPECIES. It is therefore imperative that each plant, animal and aquatic species be A) identified, B) inventoried, and C) the potential negative effects be measured in species specific studies. If a particular species is being negatively impacted, the impact and mitigation alternative must be specifically addressed. (IPEC-Q17-80)

Comment: This is speculative on the part of the Licensee. Further, NRC needs to take specific notice of the use of the phrase "OVERALL AQUATIC RIVER SPECIES". The real question avoided in this presentation, is what effects to SPECIFIC RIVER SPECIES. Licensee must not be allowed to mitigate significant environmental impacts and costs to very SPECIFIC SPECIES by painting with a broad brush through the use of terms like OVERALL liberally used in their Environmental Report. (IPEC-Q17-81)

Comment: We refer the NRC to Entergy's own words in 6.2.2 of Appendix E of their application:

6.2.2 Entergy Response

As discussed in Supplement 1 to Regulatory Guide 4.2, "Preparation of Supplemental Environmental Reports for Applications to Renew Nuclear Power Plant Operating Licenses," when adverse environmental effects are identified, 10 CFR 51.45(c) requires consideration of alternatives available to reduce or avoid these adverse effects. Furthermore, Supplement 1 states, "Mitigation alternatives are to be considered no matter how small the adverse impact; (emphasis added) however, the extent of the consideration should be proportional to the significance of the impact."

Based on the licensees own words as found in its own EIS ER, they admit that when adverse effects are identified, 10 CFR 51.45 (c) requires consideration of alternatives available to reduce or avoid these adverse effects. No such alternatives are listed and evaluated. The licensee goes on further to state, "Furthermore, Supplement 1 states, 'Mitigation alternatives are to be considered NO MATTER HOW SMALL THE ADVERSE IMPACT'".

It is pointed out here, that this STANDARD must be applied to each and every ENVIRONMENTAL issue that has an associated cost. (IPEC-Q17-82)

Comment: And also I heard that, you know, when we heard about the billion fish that are killed every year at Indian Point, I can't speak to that number one billion, but I can remind everyone that we heard that that includes fish eggs. So that brings a question. Does that mean fishermen kill trillions of fish a year on the Hudson? Just something to keep in mind. Be careful of those statistics. They are very dangerous. (IPEC-V-3)

Comment: The environmental aspects of the plant have been mismanaged, as evidenced by the impact on the fish populations of the Hudson River. (IPEC-X4-5)

Comment: NMFS relayed its own concerns regarding Atlantic sturgeon when providing Entergy technical assistance on the presence of listed species. Because young Atlantic sturgeon have been found close to Indian Point, NMFS emphasized the possibility for these yolk sac larvae and post-yolk sac larvae to become entrained in the once-through cooling system currently in place at the plant. (IPEC-F5-148, IPEC-K17-148)

Comment: In addressing the issue of the water quality, I do think it's interesting that there's a plethora of data on the Hudson River, so I don't think there's an issue as far as data concerning the quality of the water in the river.

I do think it's interesting, hearing from the state, that the quality of that river--I mean, the fish stocks are at all-time highs, except in certain key species, a couple species. It's interesting, if

you're against the plant the species are down because of the plant, but if they're up, it's not because of the plant. I don't think you can have it both ways. (IPEC-G-5)

Comment: The NRC must conduct an accurate scientific assessment of these impacts on Hudson River fish populations that relies on the most current scientific studies, which show conclusively, that many critical fish species in the Hudson are harmed and negatively impacted by Indian Point's operation.

The NRC cannot rely on Entergy's renewal application to prepare the draft environmental impact statement. Entergy, in fact, is relying on outdated industry-funded studies that say there is no significant impact on the Hudson River from their operations. This is flatly untrue. (IPEC-K-2)

Comment: One other thing I did want to mention is on the Hudson River. There have been earlier talks about the Hudson River and the impact on the Hudson River. As a result of a mandate by the New York State DEC, and agreements that were made almost 30 years ago, the utilities at Indian Point funded an environmental study of the Hudson River to the tune of approximately $2 million per year for the last 30 years, and that money has been spent, not at the direction of the utilities but at the direction of the New York State DEC and a group of environmental organizations overseeing the expenditure of those funds.

A New York State DEC representative in a meeting in Washington, D.C., approximately five years ago, said that we probably have the best set of data on fish population studies in the world as a result of this research that's been done on the Hudson River. Research of that extent, and of that massive a nature, can sometimes result in some differences of opinion as to the conclusions as to what it all means. But we have been studying the Hudson River for 30 years. We have been doing that study under the direction of people who don't have a vested interest as a utility or as a company trying to run at a profit. This has been directed by the environmental protection organization in New York State and environmental organizations.

One of the conclusions, as I just said, was that it's probably the best set of data on any estuary in the world. I personally believe from my work, over the many years that I worked at Indian Point, that it demonstrates that there has been no significant environmental impact on the population of adult fish. (IPEC-P-3)

Response: *The comments are related to aquatic ecology. Aquatic ecology issues will be discussed in Chapters 2 and 4 of the SEIS, while the impacts to aquatic ecology from continued operation of IP2 and IP3 will be evaluated in Chapter 4 of the SEIS..*

Comment: The ER must assess Category 2 issues related to aquatic ecology, including entrainment, impingement and thermal discharge. See 10 CFR 51.53(c). (IPEC-A-4)

Comment: We were concerned then with thermal pollution. We still are concerned about the fish kills in the Hudson. (IPEC-CC-4)

Comment: In their comments within scoping, Department staff will focus on the potential natural resource and aquatic impacts from the facility during an additional license term of 20 years. The Department's primary concern is the potential impacts of the once-through cooling system at the facility.

The two units combined currently withdraw approximately 2.5 billion gallons of water per day from the Hudson River. This results in the impingement of fish on the intake screens and the entrainment of small fish, fish larvae, and fish eggs within the cooling system of the plant.

In addition, the once-through cooling system also results in a discharge of heated water, because the water is used to absorb waste heat from the operation of the generation equipment. The discharge of heated wastewater for both units is through a single discharge canal. (IPEC-DD-3)

Comment: In their scoping comments, department staff will be focusing on the potential natural resource and aquatic impacts from the facility during an additional license term of 20 years.

The department's primary concern is the potential impacts of the once-through cooling system at the facility. The two units combined currently withdraw approximately 2.5 billion gallons of water per day from the Hudson River.

This results in the impingement of fish on the intake screens and the entrapment of small fish, fish larvae, and fish eggs within the cooling system of the plant.

In addition, the once-through cooling system also results in a discharge of heated water, because the water is used to absorb waste heat from the operation of the generation equipment. The discharge of the heated waste water for both units is through a single discharge canal. (IPEC-E-3)

Comment: As a result of its cooling process, Indian Point consumes billions of gallons of water a day and undermines the survival of several critical species of fish and wildlife. Clearly, this is a direct environmental impact of the plant's continued operation and warrants consideration in the DEIS. (IPEC-EE-10, IPEC-RRR-11)

Comment: The ER must assess Category 2 issues related to aquatic ecology, including entrainment, impingement and thermal discharge. (IPEC-F5-113a, IPEC-K17-113a)

Comment: Entergy uses . . . Unit 1's water intake system (which diverts water from the Hudson River). (IPEC-N17-17)

Comment: The tomcod, a key species to study with regard to power plant impacts, has seen a long-term decline in population, and entrainment losses are likely a factor in their decline. (IPEC-N17-35)

Comment: The New York State Water Quality 2004 report states that tens to hundreds of million of eggs, larvae, and juvenile fishes are killed per year by the large volume, once-through. users on the Hudson River. The report indicates that based on the data collected, the September 1 young of year (YOY) fish populations have been reduced as much as 25-79% for spottail shiner (1977), 27- 63% for striped bass (1986), 52-60% for American Shad (1992), 44-53% for Atlantic tomcod (1985), 39-45% for alewife and blueback herring combined (1992), 30-44% for white perch (1983), and 33% for bay anchovy (1990). (The higher number assumes no through-plant survival; the lower number incorporates power company estimates of through-plant survival.) (IPEC-N17-37)

Comment: [T]he impacts of Indian Point's once-through cooling system on the Hudson River fish populations - including entrainment, impingement, and thermal pollution - using the most current scientific studies. (IPEC-A6-2, IPEC-A7-2, IPEC-A8-2, IPEC-A9-2, IPEC-A10-2, IPEC-A11-2, IPEC-A12-2, IPEC-A13-2, IPEC-A14-2, IPEC-A15-2, IPEC-A16-2, IPEC-B6-2, IPEC-B7-2, IPEC-B8-2, IPEC-B9-2, IPEC-B10-2, IPEC-B11-2, IPEC-B12-2, IPEC-B13-2, IPEC-B14-2, IPEC-B15-2, IPEC-B16-2¸IPEC-C6-2, IPEC-C7-2, IPEC-C8-2, IPEC-C9-2, IPEC-C10-2, IPEC-C11-2, IPEC-C12-2, IPEC-C13-2, IPEC-C14-2, IPEC-C15-2, IPEC-C16-2, IPEC-D6-2, IPEC-D7-2, IPEC-D8-2, IPEC-D9-2, IPEC-D10-2, IPEC-D11-2, IPEC-D12-2, IPEC-D13-2, IPEC-D14-2, IPEC-D15-2, IPEC-D16-2, IPEC-E6-2, IPEC-E7-2, IPEC-E8-2, IPEC-E9-2, IPEC-E10-2, IPEC-E11-2, IPEC-D12-2, IPEC-E12-2, IPEC-E13-2, IPEC-E14-2, IPEC-E15-2, IPEC-E16-2, IPEC-F6-2, IPEC-F7-2, IPEC-F8-2, IPEC-F9-2, IPEC-F10-2, IPEC-F11-2, IPEC-F12-2, IPEC-F13-2, IPEC-F14-2, IPEC-F15-2, IPEC-F16-2, IPEC-G6-2, IPEC-G7-2, IPEC-G9-2, IPEC-G10-2, IPEC-G11-2, IPEC-G12-2, IPEC-G13-2, IPEC-G14-2, IPEC-G15-2, IPEC-G16-2, IPEC-H6-3, IPEC-H7-2, IPEC-H8-2, IPEC-H9-2, IPEC-H10-2, IPEC-H11-2, IPEC-H12-2, IPEC-H13-2, IPEC-H14-2, IPEC-H15-2, IPEC-H16-2, IPEC-I6-2, IPEC-I7-2, IPEC-I9-2, IPEC-I10-2, IPEC-I11-2, IPEC-I12-2, IPEC-I13-2, IPEC-I14-2, IPEC-I15-2, IPEC-I16-2, IPEC-J6-2, IPEC-J7-2, IPEC-J8-2, IPEC-J9-2, IPEC-J10-2, IPEC-J11-2, IPEC-J12-2, IPEC-J13-2, IPEC-J14-2, IPEC-J15-2, IPEC-J16-2, IPEC-K6-2, IPEC-K7-2, IPEC-K8-2, IPEC-K9-2, IPEC-K10-2, IPEC-K11-2, IPEC-K12-2, IPEC-K13-2, IPEC-K14-2, IPEC-K15-2, IPEC-K16-2, IPEC-L6-2, IPEC-L7-2, IPEC-L8-2, IPEC-L9-2, IPEC-L10-2, IPEC-L11-2, IPEC-L12-2, IPEC-L13-2, IPEC-L14-2, IPEC-L15-2, IPEC-L16-2, IPEC-M6-2, IPEC-M7-2, IPEC-M8-2, IPEC-M9-2, IPEC-M10-2, IPEC-M11-2, IPEC-M12-2, IPEC-M13-2¸ IPEC-M14-2, IPEC-M15-2, IPEC-M16-2, IPEC-N6-2, IPEC-N7-2, IPEC-N8-2, IPEC-N9-2, IPEC-N10-2, IPEC-N11-2, IPEC-N12-2, IPEC-N13-2, IPEC-N14-2, IPEC-N15-2, IPEC-N16-2, IPEC-O6-2, IPEC-O7-2, IPEC-O8-2, IPEC-O9-2, IPEC-O10-2, IPEC-O11-2, IPEC-O12-2, IPEC-O13-2, IPEC-O14-2, IPEC-O15-2, IPEC-O16-2, IPEC-P6-2, IPEC-P7-2, IPEC-P8-2, IPEC-P9-2, IPEC-P10-2, IPEC-P11-2, IPEC-P12-2, IPEC-P13-2, IPEC-P14-2, IPEC-P15-2, IPEC-P16-2, IPEC-Q6-2, IPEC-Q7-2, IPEC-Q8-2, IPEC-Q9-2, IPEC-Q10-2, IPEC-Q11-2, IPEC-Q12-2, IPEC-Q13-2, IPEC-Q14-2, IPEC-Q15-2, IPEC-Q16-2, IPEC-R5-2, IPEC-R6-2, IPEC-R7-2, IPEC-R8-2, IPEC-R9-2, IPEC-R10-2, IPEC-R11-2, IPEC-R12-2, IPEC-R13-2, IPEC-R14-2, IPEC-R15-2, IPEC-R16-2, IPEC-S5-2¸IPEC-S6-2, IPEC-S7-2, IPEC-S8-2, IPEC-S9-2, IPEC-S10-4, IPEC-S11-5, IPEC-S12-2, IPEC-S13-2, IPEC-S14-2, IPEC-S15-2, IPEC-S16-2, IPEC-T5-2, IPEC-T6-2, IPEC-T7-2, IPEC-T8-2, IPEC-T9-2, IPEC-T10-2, IPEC-T11-2, IPEC-T12-2, IPEC-T13-4, IPEC-T14-2, IPEC-T15-2, IPEC-T16-2, IPEC-U5-2, IPEC-U6-2, IPEC-U7-2, IPEC-U8-2, IPEC-U10-2, IPEC-U11-2, IPEC-U12-2, IPEC-U13-2, IPEC-U14-2, IPEC-U15-2, IPEC-V5-2, IPEC-V6-2, IPEC-V7-2, IPEC-V8-2, IPEC-V9-2, IPEC-V10-2, IPEC-

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Response: *The comments are related to aquatic ecology, specifically the impingement and entrainment of aquatic species and the impacts of heat shock due to Indian Point's once through cooling system. Impingement, entrainment, and heat shock issues related to continued operation of IP2 and IP3 will be evaluated in Chapter 4 of the SEIS.*

Comment: NMFS also raised concerns about the effect of “heated effluent, chlorine, and other pollutants or anti-fouling agents” on sturgeon. It appears that the ER completely fails to address the effects of these potentially detrimental pollutants on either species of sturgeon. (IPEC-F5-151, IPEC-K17-151)

Response: *The discharge of chlorine and other biocides and the accumulation of contaminants by biota (such as from heavy metals in condenser cooling water discharges) have been determined to be Category 1 issues for license renewal for all nuclear plants. The effects of heat shock on fish is a Category 2 issue and will be evaluated and discussed in Chapter 4 of the SEIS.*

Comment: The Hudson River estuary has Essential Fish Habitat (EFH) designations for the following species: Atlantic sea herring, Atlantic Habitat butterfish, Black Sea Bass, Bluefish, Red hake, Summer flounder, Winter flounder, and Windowpane flounder. As Entergy's ER notes, Section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act, as amended by the National Marine Fisheries Service Sustainable Fisheries Act of 1996, provides that Federal agencies must consult with the Secretary of Commerce on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect essential fish habitat. "Therefore, the NRC staff will also initiate an essential fish habitat consultation with the NMFS." However, under 10 CFR 51.53(c) (3) (ii) (E), Entergy is required to include an analysis on "Important Plant and Animal Habitats." Thus, in addition to the NRC-NMFS consultation, the NRC must prepare an EFH analysis-species by species-and include it in the SEIS. (IPEC-A-26, IPEC-F5-133, IPEC-K17-133)

Response: *The comment is noted. The NRC staff will prepare an Essential Fish Habitat (EFH) assessment.*

Comment: The license renewal of the Indian Point nuclear facility is a federal action which “may affect a listed species or critical habitat.” Since Entergy admits to the facility’s taking of federally listed shortnose sturgeon without an incidental take permit in its ER, and will continue to take these fish if its license is renewed and continues to operate with its once-through cooling

system, such renewal is a federal action which may affect a listed species. (IPEC-F5-139, IPEC-K17-139)

Comment: Riverkeeper's concerns regarding Indian Point's effects on shortnose sturgeon are echoed in a letter from Mary Colligan, Assistant Regional Administrator for Protected Resources for NMFS Northeast Region, to James Thomas at Enercon Services, a company assisting Entergy in its preparation of its ER. In the letter, Colligan states that NMFS is aware that shortnose sturgeon have been impinged at Indian Point in the past, but that NMFS has no data regarding possible impingement that is more recent than 1998. The letter also notes that such impingement is a "take" under the ESA, and as such, Entergy has been operating in violation of ESA because it does not have an incidental take permit. (IPEC-F5-141, IPEC-K17-141)

Comment: In addition, Colligan stresses that although Entergy contends that is current systems reduce impingement by 77% and entrainment by 33%, NMFS has no current information on how this system may affect impingement or entrainment of sturgeon. Riverkeeper, like NMFS, is concerned about the lack of recent data regarding the death of shortnose sturgeon due to Indian Point's once-through cooling system. (IPEC-F5-142, IPEC-K17-142)

Comment: Entergy's conclusions regarding the effects of the once-through cooling on Atlantic sturgeon are based, as mentioned above, on the 1999 DEIS. The concerns that Riverkeeper has expressed with regards to reliance on this document apply to its use here. NMFS also expressed concerns with the 1999 DEIS in its 2007 correspondence with Entergy. As noted in the discussion of shortnose sturgeon above, NMFS emphasized that it had no current data regarding impingement or entrainment of sturgeon, nor on the effectiveness of Entergy's impingement/entrainment reduction system in place at Indian Point. (IPEC-K17-150)

Response: *The comments are related to aquatic ecology, specifically the impingement and entrainment of aquatic species and the impacts of heat shock due to Indian Point's once through cooling system. Impingement, entrainment, and heat shock issues will be evaluated in Chapter 4 of the SEIS. In addition, impacts to threatened and endangered species (T&E), such as the shortnose sturgeon, will also be addressed in the T&E section of Chapter 4. As part of the environmental review, the NRC will also conduct consultation with the National Marine Fisheries Service pursuant to Section 7 of the Endangered Species Act regarding protection of shortnose sturgeon.*

Comment: The ER must also include a discussion of the status of compliance with water quality standards, in particular "thermal and other water pollution limitations or requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection." See 10 CFR 51.45 (d). (IPEC-A-6, IPEC-F5-114)

Comment: Some of NYSDEC's findings, recommendations and conclusion in the FEIS regarding thermal impacts that have been entirely dismissed by Entergy are:

Indian Point: As of the 1987-1992 SPDES permit term, thermal discharges from Indian Point did not meet applicable thermal criteria. . . . These provisions alone [in the SPDES permit based on the Hudson River Settlement Agreement and those in subsequent Consent Orders], however, are not sufficient for Indian Point to meet thermal criteria. Thermal modeling indicates that the thermal discharge from Indian Point causes water temperatures to rise more than allowed, which is four degrees (F.) over the temperature that existed before the addition of heat, or a maximum of 83°F, whichever is less, in the estuary cross sections specified in 6 NYCRR §704.2(b)(5). A mixing zone was not specified in the previous SPDES permit for the Indian Point facility.

Thermal discharges were inadequately addressed in the DEIS. The DEIS asserts, with no supporting evidence, that . . . "[t]he surface water orientation of the plume allows a zone of passage in the lower portions of the water column, the preferred habitat of the indigenous species." Other data and analyses cast doubt on this assertion.

Given the extent of warming shown . . . in the HydroQual graphs, combined with the recent dramatic declines in tomcod and rainbow smelt as discussed previously, the Department believes it prudent to seek additional thermal discharge data for each facility, including a mixing zone analysis, and anticipates requiring triaxial thermal studies as conditions to each of the SPDES renewals. Depending on the results of those analyses, additional controls may be required to minimize thermal discharges. (IPEC-A-29, IPEC-F5-129, IPEC-K17-129)

Comment: The Department is concerned with the potential thermal impacts from the discharge on the aquatic resources of the river. (IPEC-DD-4, IPEC-E-4)

Comment: Indian Point's use of a "once-through" cooling system continues to place a tremendous strain on the Hudson River ecosystem, and is inconsistent with provisions of the Federal Water Pollution Control Act (Clean Water Act) that require the "location, design, construction and capacity of cooling water intake structures reflect the best technology available to minimize adverse environmental impact." Indian Point's average daily water withdrawals exceed two billion gallons. These significant water withdrawals and the returning of "superheated" water to the Hudson River undeniably impact fish populations, killing a very large number of fish eggs, larvae, and adult fish. (IPEC-E5-8, IPEC-I17-8)

Comment: Indian Point's operations also place a great strain on the Hudson through the introduction of thermal pollution that has an undeniably negative impact on the river's ecosystem. (IPEC-EE-10, IPEC-RRR-10)

Comment: The ER must also include a discussion of the status of compliance with water quality standards, in particular "thermal and other water pollution limitations or requirements which have been imposed by Federal, State, regional, and local agencies having responsibility for environmental protection." (IPEC-K17-114)

Comment: Heat Shock/Thermal Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-44)

Comment: New York State has a water quality standard for thermal discharges; which provides, that "all thermal discharges to the waters of the State shall assure the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife and on the body of water." New York has also adopted criteria to ensure that the water quality standards are met.

The available data -- generated from the applicant and the other Hudson River power plant generators as part of the HRSA -- regarding the thermal discharge at Indian Point demonstrates that state water quality criteria are not being met. Specifically, 6 NYCRR Part 704 (Criteria Governing Thermal Discharges) requires that a minimum of one-third of the surface as measured from water edge to water edge at any stage of the tide, shall not be raised to more than 4 degrees Fahrenheit over the temperature that existed before the addition of heat of artificial origin. The generators own data indicates that these criteria are not met under flood and ebb tidal conditions. (IPEC-N17-49)

Comment: Thus, the NRC's Supplemental EIS should provide a thorough analysis of the impacts of license renewal on the Hudson River in the context of the State's water quality standard and criteria for thermal discharges - to minimize impacts so as to support a "balanced and indigenous" fish population. These are the requirements of the Clean Water Act. A thorough analysis of thermal impacts would also provide information needed to assess effects on coastal resources and Significant Habitats as described under the New York Coastal Management Plan ("Coastal Program") . . . . (IPEC-N17-50)

Comment: Additionally, regardless of which cooling system is employed at Indian Point, the thermal discharge effects on the environment, on plant and aquatic life, and on Global Warming must be evaluated. (IPEC-Q17-72)

Comment: The population that is affected by this omission is the People of the State of New York, as they are the true owners and users of the Hudson River, which is affected by the thermal pollution in violation of the Clean Water Act. (IPEC-Q17-73)

Response: *The comments are related to operation of the plant's cooling system, specifically, the effects of the thermal discharge on aquatic and other resources. A discussion of the potential impacts associated with the plant's thermal discharge will be presented in Chapter 4 of the SEIS.*

Comment: The ER states that Indian Point, "is complying with this permit, including limits and conditions established by the NYSDEC for thermal discharges . . . [a]nd the associated agreement to continue implementation of the fourth Consent Decree ensures that thermal impacts will satisfy the requirements of CWA 316(a) and will thus remain SMALL during the license renewal term. Therefore, no further mitigation measures are warranted." (Section 4.4.6) AAEA has no information to challenge this conclusion. (IPEC-TTT-42)

Comment: Entergy also fails to present a complete analysis of compliance, and falsely submits in the ER on page 9-2 that "Compliance with the SPDES Permits over previous years has been excellent. For example, there has never even been an exceedance relative to thermal discharge limits as identified in the Station‘s SPDES permit"

Entergy‘s misrepresentation and omission regarding it status of compliance with required permits is not a Category 1 issue, but rather a Category 2 issue with regard to Indian Point‘s operation which is not in compliance with Environmental Protection Agency, Clean Water Act, and NYS DEC requirements to use the "best technology available", to prevent thermal pollution. (IPEC0Q17-75)

Response: *The comments relate to NYSDEC's water permits for IP2 and IP3. NYSDEC is responsible for the review and issuance of New York State's water permits under the Clean Water Act. While the NRC's license renewal environmental review considers the compliance status of such permits, the NRC does not have regulatory authority in matters concerning the Clean Water Act. The comments do not provide new information specific to the environmental review and will not be evaluated further.*

Comment: NYSDEC's Fact Sheet also provides critical facts and analysis regarding the stations' thermal impacts that have been deliberately ignored by Entergy, such as:

Under Section 316(a) of the Clean Water Act (CWA), a permittee may submit a demonstration that its thermal discharge does not threaten the survival of indigenous aquatic populations even if it does not meet state water quality criteria. Such a study was prepared in 1978 by the prior owners of the Indian Point units, but it was superseded by provisions of the 1981 - 1991 Hudson River Settlement Agreement and subsequent Consent Orders effective 1992 - 1998. Based on that older "316(a) demonstration", the former operators of the Indian Point units asserted that the facility complied with the NYS thermal standard (6 NYCRR Part 704). Based on modeling submitted with the 1999 DEIS by the prior owners of Indian Point (along with owners of two other Hudson River generating stations), the thermal criteria outlined in 6 NYCRR Part 704.2 are not being consistently maintained under the present operation of the facility. Appendix VI Chapter 6 of the 1999 DEIS, "Near-field Temperature Modeling", concludes that newer analyses of the discharge from Indian Point . . . "indicate that it is highly likely that the exceedance of the top width criterion, and possible the cross-sectional area criterion, would occur under slack conditions. Top-width exceedances occur under all flood scenarios . . . ." In more general terms, this means that temperatures measured at the water surface along a line running from the outfall across the river to the far shore, and measured at varying depths along the cross section below that line from outfall to far shore, likely exceed the thermal criteria in the Department's regulations during periods with lowest river flow velocities, that is, during the transition between tidal cycles. Furthermore, temperatures at the water surface along that same line from outfall to far shore appear to exceed the thermal criteria at all flow levels classified as "flood", that is, during high tides.

The permit therefore requires the permittee to conduct additional thermal studies to verify actual in-stream conditions of the thermal component of the discharge. The in-stream tri-axial study

mandated by Special Condition 7 will require actual measurement of river and outfall temperatures at multiple points on the surface and at depth, along the surface and in cross-section running from the outfall and across the river to the far shore, as well as temperature measurements on the surface and at various depths at specified points running parallel to the course of the river. Using this additional data plus existing sources, the Department will be able to determine if the Indian Point facility complies with the thermal standard and whether to grant Indian Point a variance from NYS thermal criteria. (IPEC-A-30, IPEC-F5-130, IPEC-K17-130)

Response: *The comments relate to NYSDEC's Draft SPDES Permit for IP2 and IP3, specifically Special Condition 7 of the draft permit that will require actual measurement of river and outfall temperatures at multiple points on the surface and at depth, in cross-section running from the outfall across the river to the far shore, as well as temperature measurements on the surface and at various depths at specified points running parallel to the course of the river. The NYSDEC is responsible for the review and issuance of New York State's water permits under the Clean Water Act. While the NRC's license renewal environmental review considers the status of such permits, the NRC does not have regulatory authority in matters concerning the Clean Water Act. However, pertinent and available thermal data related to the environmental impacts of Indian Point's discharges will be addressed in Chapters 2 and 4 of the SEIS.*

Comments Regarding Critical/Important Habitat

Comment: Important plant and animal habitats—except for endangered and threatened species—have not been evaluated. (IPEC-A-3, IPEC-F5-112b, IPEC-K17-112b)

Comment: Further, the ER lacks consideration of "Important Plant and Animal Habitats", which are not considered "threatened" or endangered" under Federal law, and that is necessary under 10 CFR 51.53(c)(3)(ii)(E). Entergy's ER simply states that "[t]he Hudson Highlands just north of the Indian Point site (RM 44 through RM 56) is classified as a Significant Coastal Fish and Wildlife Habitat," citing to the 1999 DEIS (Section IV.B.2.2.a), and mentions Haverstraw Bay as a "nursery area". But there is no mention of Haverstraw Bay as a Significant Coastal Fish and Wildlife Habitat just south of the stations. (IPEC-A-34)

Comment: Important plant and animal habitats that have not been evaluated are described in Sections 1.5.1 and 1.5.2 below. (IPEC-A-35)

Comment: Haverstraw Bay, just south of the Indian Point site, is a designated Significant Coastal Fish and Wildlife Habitat by the State of New York. According to the Designation document:

Haverstraw Bay is a major nursery and feeding area for certain marine Species, most notably bay anchovy, Atlantic menhaden, and blue claw Crab. Depending on location of the salt front, a majority of the spawning and wintering populations of Atlantic sturgeon in the Hudson may reside in Haverstraw Bay. Shortnose sturgeon (E) usually winter in this area as well.
. . . .

Haverstraw Bay is a critical habitat for most estuarine-dependent fisheries originating from the Hudson River. This area contributes directly to the production of in-river and ocean populations of food, game, and forage fish species. Consequently, commercial and recreational fisheries throughout the North Atlantic depend on, or benefit from, these biological inputs from the Hudson River estuary. (IPEC-A-37, IPEC-F5-134, IPEC-K17-134)

Comment: The Haverstraw Bay Designation document also states:

A habitat impairment test must be met for any activity that is subject to consistency review under federal and State laws, or under applicable local laws contained in an approved local waterfront revitalization program. If the proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area. The specific habitat impairment test that must be met is as follows. In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions would: destroy the habitat; or, significantly impair the viability of a habitat. (IPEC-A-38, IPEC-F5-135, IPEC-K17-135)

Comment: Since the proposed action is subject to consistency review, then the Haverstraw Bay habitat protection policy applies and must be assessed in the ER. (IPEC-A-39)

Comment: Since the proposed action is subject to consistency review, then the Haverstraw Bay habitat protection policy applies and must be assessed in the SEIS. (IPEC-F5-136, IPEC-K17-136)

Comment: Although applicants for relicensing of nuclear power plants are supposed to analyze the effects on “important plant and animal habitats,” Entergy’s ER fails to mention possible impacts on an incredibly significant natural habitat in the near vicinity of Indian Point. (IPEC-F5-137)

Comment: Haverstraw Bay, designated as a Significant Coastal Fish and Wildlife Habitat by the State of New York, is located only a mile south of Indian Point. It is a major feeding and nursery area for many species, including the Atlantic sturgeon. The State of New York has deemed it an “irreplaceable” habitat, as it is “the most extensive area of shallow estuarine habitat in the lower Hudson River (and in New York State).” Indian Point’s massive intake and discharge of cooling water certainly impacts this exceptional habitat. Indeed, the cumulative impact that all Hudson River power plants with once-through cooling could have on Haverstraw Bay is potentially substantial. (IPEC-F5-138, IPEC-K17-138))

Comment: NRC must conduct a rigorous analysis of Important Plant and Animal Habitats.

Although applicants for relicensing of nuclear power plants are supposed to analyze the effects on "important plant and animal habitats," Entergy's ER fails to mention possible impacts on an incredibly significant natural habitat in the near vicinity of Indian Point. (IPEC-K17-137)

Response: *The comments are related to aquatic and/or terrestrial ecology, specifically critical and important habitat. Critical and important habitat will be evaluated as part of the environmental review and as part of the cumulative impact analysis. The evaluation results will be discussed in Chapter 4 of the SEIS.*

6. Comments Regarding Threatened and Endangered Species

Comment: While the ER considered impacts on "threatened" or "endangered" species, it falls short of evaluating the impact on "threatened" or "endangered" species and other species from the ongoing groundwater contamination from the stations. (IPEC-A-32)

Comment: Moreover, 10CFR 53(c)(3)(ii)(E) mandates that “all license renewal applicants shall access the impact of refurbishment and other license renewal related construction activities on important plant and animal habitats. Additionally, the applicants shall assess the impact of the proposed action on threatened or endangered species in accordance with the Endangered Species Act.” (IPEC-B-5)

Comment: Riverkeeper recognizes that Section 7 consultation is based on astute principles designed to further the basic purpose of the Endangered Species Act (ESA), which is to conserve endangered and threatened species and the ecosystems on which they depend. Of particular relevance here are section 7 “philosophies” which encourage reliance on biology first, emphasize the ecosystem approach to species conservation, and stress the importance of the “best available scientific and commercial data.” These are commendable standards of practice, and NRC should adhere to them during the relicensing process. (IPEC-F5-140, IPEC-K17-140)

Comment: The Atlantic sturgeon is currently a candidate species under the ESA, and is thus being considered for listing as threatened or endangered. As such, it does not currently receive any substantive federal protections. However, if the decision is made to list the Atlantic sturgeon the NRC may have to reinitiate Section 7 consultation with NMFS to assess the effects of relicensing on this species. The chances of reinitiation are particular strong because the listing decision will likely be released well before a final decision is made regarding the relicensing of Indian Point. (IPEC-F5-146, IPEC-K17-146)

Comment: NMFS’s concerns are furthered by the findings of the Atlantic Sturgeon Status Review Report, prepared for NMFS by the Atlantic Sturgeon Status Review Team. That report states that, in the Hudson River, the “abundance of young juvenile Atlantic sturgeon has been declining.” (IPEC-F5-149)

Comment: NMFS's concerns are furthered by the findings of the Atlantic Sturgeon Status Review Report, prepared for NMFS by the Atlantic Sturgeon Status Review Team. That report states that, in the Hudson River, the "abundance of young juvenile Atlantic sturgeon has been declining." (IPEC-K17-149)

Comment: Endangered Species Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-61)

Comment: Another Category 2 issue that the NRC must consider in Indian Point's license renewal application is the impact of an additional 20 years of operation on threatened or endangered species. Under the Federal Endangered Species Act ("ESA"), it is unlawful to "take" a threatened or endangered species. The ESA broadly defines "take "as "harass, harm,

pursue, hunt, shoot, wound, kill, trap, capture or collect." However, a party does not violate the ESA if he or she has an "incidental take" permit, also granted pursuant to the ESA. Here, the applicant is taking threatened or endangered species by operation of the intake structures at Indian Point. Specifically, Hudson River shortnose sturgeon, a species protected as "endangered" under the ESA, are impinged on the intake screens at Indian Point.

Impingement of fish on screens at power plants harasses, harms, wounds, kills, traps, captures, and collects fish and thus qualifies as an activity that can "take" an endangered species. Entergy has no incidental take permit. Thus, Entergy is in violation of the ESA. (IPEC-N17-62)

Comment: On November 20, 2000, the National Marine Fisheries Service ("NMFS") issued a Biological Opinion Report for the review of the Incidental Take permit (copy enclosed) sought not by the operator of Indian Point, but by the operators of two other Hudson River power plants, Roseton and Danskammer. This Opinion is nonetheless relevant. Specifically, the Biological Opinion- referenced the shortnose sturgeon recovery plan (National Marine Fisheries Service Final Recovery Plan for the Shortnose Sturgeon, December 1998) that identifies habitat degradation and mortality as principal threats to the species survival. Identified impingement of shortnose sturgeon on the screens covering cooling water intake structures as a prime reason for mortality (Page 16).

-reached the above conclusion even though it noted that entrainment sampling was not conducted for each year for each Hudson River power plant. In fact, as indicated in Table I of the Opinion, there has not been any entrainment sampling at Indian Point Units 2 & 3 since 1987.

-stated that while levels of entrainment and impingement for shortnose sturgeon at the power plants on the Hudson River "are relatively small, the fact remains that these (and other plants) have previously impinged shortnose sturgeon and may have impacted the Hudson River population." (IPEC-N17-63)

Comment: The Biological Opinion concluded that the issuance of the Incidental Take permit to the two upstream power plants, Roseton and Danskammer, would not have a significant impact on the shortnose sturgeon population in the Hudson River. However, the Biological Opinion also included a discussion of the mitigation measures employed at these two facilities, which of course, it could not have included for the Indian Point mitigation measures. Further, the Incidental Take permits issued to the other two plants include an adaptive management clause that allows the NMFS to require additional mitigation if the impact to the shortnose sturgeon population in the Hudson River from the facilities is greater than anticipated. This currently is not an option at Indian Point Units 2 and 3 because Entergy does not have an incidental take permit for the shortnose sturgeon. Thus, as a matter of law, any impingement violates the Endangered Species Act. (IPEC-N17-64)

Comment: AAEA concurs with Entergy's conclusion regarding endangered species: "The continued operation of the site will not adversely impact any federally listed species which may exist on or pass through the site." (IPEC-TTT-43)

Response: *The potential impacts of the continued operation of IP2 and IP3 and any refurbishment activities on threatened and endangered species is a Category 2 issue and will be addressed in Chapters 3 and 4 of the SEIS.*

7. Comments Regarding Socioeconomic Impacts

Comment: Indian Point generates 2,000 megawatts of critical electricity, over $356 million in payroll and local purchases - in addition to the over $50 million paid in local taxes. Overall, Indian Point produces over $700 million in economic activity throughout the five counties surrounding the site, as well as over a $1 billion in economic activity to New York State. (IPEC-A4-3)

Comment: I also strongly believe this area would never be the same if this site were to close. Many people depend upon Indian Point for jobs, taxes for schools, cheap electricity for their homes and businesses, and it's good for the environment, too. (IPEC-A17-3)

Comment: With regards to the environment, I don't think that it's just the air and the water that you have to be concerned with. If you take a look at part of the environment -- I think it's if you walk down the street, and take a look at the businesses that are supported by Indian Point, there is a delicatessen on the corner of Bleakley Avenue and 9A that has been there since the first time I came up here in 1972.

I'm willing to bet that if you close Indian Point you will close that delicatessen and several of the other businesses that are around the area -- machine shops, bars, restaurants, diners that get the majority of their funding from the businesses that work with Entergy. (IPEC-AAA-2)

Comment: The Business Council of Westchester is the county's largest business organization, representing nearly 1,400 members, ranging in size from multinational corporations and mid-size businesses to professional firms, not-for-profit organizations and small business owners in every sector of the county's diverse economy. The Business Council advocates for Westchester's business community at the local, state and federal levels and works to enhance economic opportunity in Westchester by addressing a broad range of public affairs and area development, economic and business development issues that effect the growth of business in the county.

With 34,000 businesses in Westchester County - employing over 408,700 workers with a total annual payroll of more than $19 billion – we feel the premature closure of the Indian Point Energy Center will cause irreparable damage to the regional economy due to the large amount of electricity, jobs and taxes the site provides. (IPEC-B4-1, IPEC-KKK-1, IPEC-H4-1)

Comment: Indian Point provides jobs, taxes for schools, affordable electricity for area homes and businesses, all in an environment-friendly way. (IPEC-F17-3)

Comment: Thousands of men and women depend upon Indian Point for their livelihood. Whether we are full-time employees, part-time contractors or business owners who provide goods and services to the site, each and every person economically connected to this site knows once the gates close, we will lose a substantial number of jobs, homes and businesses - all of whom support the regional economy and tax base. (IPEC-G17-3)

Comment: From Indian Point's generation of 2,000 megawatts of much-needed electricity to its distribution of $356 million in payroll and local purchases to the over $50 million paid in local taxes (including sales tax, payroll taxes, property taxes and state/local income taxes), the site is a major economic engine that drives business to Westchester County and keeps businesses from running to other counties across the country. (IPEC-H4-2, IPEC-KKK-2)

Comment: Thousands of men and women depend upon Indian Point for their livelihood. Whether full-time employees, part-time contractors or business owners who provide goods and services to the site, each and every person economically connected to this site knows once the gates close, the area-will lose a substantial number of jobs, homes and businesses - all of whom support the regional economy and tax base. (IPEC-H17-3)

Comment: Indian Point generates 2,000 megawatts of critical electricity, over $356 million in payroll and local purchases - in addition to the over $50 million paid in local taxes. Overall, Indian Point produces over $700 million in economic activity throughout the five counties surrounding the site, as well as over a $1 billion in economic activity to New York State. (IPEC-JJJ-3)

Comment: The cost of doing business in New York State is substantially higher than in most other states because employers here must pay higher taxes for electricity and other costs, according to a new "Just The Facts" data compilation by The Public Policy Institute. (IPEC-K4-5)

Comment: Entergy has also paid more than $212 million in taxes which bolsters the state, county and local tax bases which is then used to provide services for the residents of New York State and New York City. We must ask ourselves, can we really afford to lose such an example of model corporate citizenship if Indian Point were to close? (IPEC-L4-3)

Comment: Indian Point retirement, if reinforced by the development of other local energy resources and non-nuclear power facilities, will create new employment far in excess of any decommissioning unemployment. In addition, the use of current enormous tax subsidies for Indian Point will ensure continued increases of employment in innovative related projects. (IPEC-M17-20)

Comment: Every time another glitch occurs at Indian Point (with alarming regularity) property values particularly to the east around Yorktown are impacted. Maybe it's time homeowners started to demand some of Indian Point's subsidies for ongoing home-value compensations! (IPEC-M17-21)

Comment: As a resident of Verplanck (next door community to Indian Point), and an employee of Entergy, I can tell you that Indian Point is a great neighbor. Benefits to my community:

Clean, quiet facility
Jobs for local citizens
Reduced taxes
Local generation of electricity so Con Ed bill is less than it would be otherwise

Minimal traffic impact
Facility looks nice from the river and from across the river (please spare us cooling towers!)
(IPEC-N4-1)

Comment: [T]he development of a financial plan that will mitigate the negative real estate tax implications on the local communities, school district, and county government. (IPEC-N5-19)

Comment: The development of a plan to positively consider the current employees, such consideration will include job placement, retraining of affected workers, and other employment strategies. (IPEC-N5-20)

Comment: [T]he development of a financial plan that will mitigate the negative real estate tax implications on the local communities, school district, and county government. (IPEC-N5-40)

Comment: The development of a plan to positively consider the current employees, such consideration will include job placement, retraining of affected workers, and other employment strategies. (IPEC-N5-41)

Comment: WHEREAS, Entergy states its commitment to safely producing electric energy for this region with significant accompanying economic benefits of jobs created and taxes paid. (IPEC-N5-45)

Comment: Socio-economic Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-57)

Comment: Because the license renewal application must be consistent with the New York Coastal Management Program ("Coastal Program") authorized under the federal Coastal Zone Management Act, the Supplemental EIS must address the underlying policies relevant to Indian Point. The Coastal Program, administered by the New York State Department of State (NYSDOS), incorporates a comprehensive set of objectives reflected in forty-four coastal policies, many of which cross-cut socio-economic issues. Thus, not only must the NRC's review of the license renewal application be consistent with the federal and state Coastal Program requirements and analyses, but the policies inherent in those analyses also form the basis of a coastal socio-econornic analysis, which is a Category 2 issue required to be examined by the NRC's regulations for nuclear power plant license renewals. (IPEC-N17-58)

Comment: Some of the coastal policies include waterfront redevelopment, water dependent uses, port and harbor management, growth management, significant habitats, commercial and recreational fisheries, flooding and erosion hazards, public access and recreation, agriculture, historic resources, scenic quality, water quality, air quality, and wetlands. The nearby City of Peekskill and the Town of Stony Point have approved Local Waterfront Revitalization Programs ("Local Waterfront Plans") that tailor the Coastal Program to their unique local conditions.

Based on the above, the Supplemental EIS should include an analysis that assesses the reasonably foreseeable adverse effects of the license renewals and mitigation measures on State coastal resources and uses. (IPEC-N17-59)

Comment: The Supplemental EIS should examine if approving the license renewal request and its environmental impacts would be consistent with the enforceable policies of the Coastal Program and of applicable Local Waterfront Plans. The analysis should consider how the license renewal will have continuing and possibly new effects on resources and uses of the Hudson River and upland coastal areas, including economic and other effects far afield of the facility. (IPEC-N17-60)

Comment: In addition to the importance of Indian Point as an energy provider for the people of the State of New York in this increasingly energy starved area, the facility also is significant for its economic impact. Indian Point is a local economic engine that provides over $365 million a year through its payroll and local purchases, which is further augmented by the local and state taxes paid to New York. (IPEC-NNN-7)

Comment: Jobs and employment -- you take away the jobs at Indian Point, we will be suffering here. You know, they pay one of the highest dollar per hour in the area. And I can look around the room here today and see how many people will be affected, how many children will be affected. You talk about educating your children and sending them to college, and making a better life for them. (IPEC-PP-5)

Comment: So we should realize how fortunate we are to have Indian Point, because it serves our needs, not only our electrical needs but our employment needs, taxes. Can you imagine how much taxes would be in the area if we weren't being subsidized by Indian Point? (IPEC-PP-7)

Comment: Good afternoon. I'm Marilyn Elie. I am a co-founder of Westchester Citizens Awareness Network and a member of the Indian Point Safe Energy Coalition. I live about two, maybe two and a half miles from the plant, and this is an issue I have been following for the last 11 years. I too would like to thank the people who work at Indian Point. They have a tough job, and by their standards, they do it well. They're very concerned, we have lots of differences of opinion, but it's a good job with a good salary and a good pension, and if and when, from my perspective, when that plant closes down, all those things need to be addressed. (IPEC-Q-1)

Comment: This increased presence of low level waste at the Indian Point site coupled with the additional high level waste at the site could exacerbate the adverse impact on the adjacent land values and underscores the substantial benefit that would accrue to the adjacent land owners - at least out to 2 miles where approximately $4 billion worth of property is located - if renewal were denied and those properties recovered as much as $500 million in value. (IPEC-R17-5)

Comment: I originally come from Long Island, and a few people have -- one of my neighbors was talking about the Shoreham plant. I lived in Culmac, which was pretty far from it, but all of Long Island was averse -- very adversely impacted by the mistakes and the mishandling,

weighing in by the fearmongers, of what could happen in the worst-case scenarios. And when I went to college in 1987, Long Island was a vibrant place with rising home prices, a beautiful place to raise a family. And what happened in that four years, when I came home it was just a different world. The State of New York and the Governor at the time decided the best way to deal with this would be to close the plant -- it was open for a day -- and would raise everybody's rates seven percent a year for 10 years. Now, any mathematician will tell you that's about doubling your rates.

As soon as that deal was inked, the largest employer on Long Island, which was in Nassau County -- Grumman, Grumman made fighter planes and a lot of our fleet in the military -- they looked at the State and the Governor and said, "Sorry, we're out of here." So that didn't do too well for the environment. And when I came home looking for a job from college, all my father's friends were out of work. And Long Island -- unemployment was high nationally and real estate values were dropping nationally. It was twice as bad on Long Island. There was just no opportunity. You had to hit the road. People were putting illegal basements -- illegal apartments in their basements to pay their taxes. I mean, it was just not the thing to do. I moved up here and a lot of my friends would come up and visit me, and I would say, "Yes, you know" -- they'd say, "What are your property taxes?" and I'd say, "Well, they're this." They'd say, "Oh, my God, we pay twice that." And I said, "Well, I have a nuclear power plant about two miles from my house, and I'm not going to close it." (IPEC-SS-2)

Comment: You see, it's more than just money. It's more than just affordability. It's safety. I am a volunteer firefighter with the Cortland Engine Company. I moved up here, and I noticed a lot of people in this community who are good, hardworking, blue collar people, much like the area I grew up in. And they can afford to live here, and, you know, in Westchester County affordable housing is -- it's kind of like jumbo shrimp. It doesn't -- you know, it's one of those words that really doesn't mean anything. But in our area, because of reasonable property taxes, working class families can afford to live here and raise a family and thrive here. (IPEC-SS-3)

Comment: An assessment of the historic impact of the plant on property values, tax collection, home sales and economic activity and development that shows lost opportunities and costs as well as benefits. This analysis shall include assessments of residents, home buyers, realtors, business investors, renting behavior, people evaluating where to live in the region, effects on tourism, and all areas of economic impact at outward spheres of impact, including existing risk zones, and beyond. The level of analysis will include an understanding of the type of land use and residential decisions that are made and what choices are foregone due to the plant. (IPEC-SSS-28)

Comment: An analysis of local economic life due to the existing and re-permitted facilities and contrasting re-permitting to closure. (IPEC-SSS-31)

Comment: Locally, it is also a concern for the economic situation in the community. If the plant were to move, it would definitely cause a lot of financial hardship. I don't think anybody could afford to live in this area. (IPEC-TT-2)

Comment: Entergy wrongfully assumes that a stable work force at the plant with numbers neither going up nor going down is the only potential effect on housing in the period of continued operation of IP2 and IP3. (IPEC-Q17-51)

Comment: IP1 LLC, IP2 LLC and IP3 LLC are all aging industrial facilities with known radiological leaks and contaminant flows. Its current operation has suppressed, and will continue to suppress, the property values of those communities closest to the plant, specifically Buchanan and Peekskill. It is expected that this suppression of real estate prices will worsen during the period of license renewal as the media coverage of an increasing number of incidents caused by aging and poor management increase. (IPEC-Q17-52)

Comment: Industry best standards and experience have shown that the additional inspection requirements in the period of license renewal is likely to add up to 60 people to the staff of each licensed reactor facility. Further, continued transport of materials into and out of Indian Point, as well as potential refurbishment issues, will create local transportation impacts. Additionally, any significant incident at Indian Point will create transportation impacts. Entergy‘s own words are that all negative impacts, no matter how small, must be evaluated and mitigation alternatives reviewed. Entergy, however, attempts to remain mute on these issues by claiming they simply do not exist. (IPEC-Q17-56)

Comment: Indian Point employs thousands of highly skilled, highly trained workers and contractors, including many Millwright Union members. The loss of those jobs and the 2,000 megawatts of electricity produced by the site, would create undue hardship on the workers and the families they support through their labor. (IPEC-V4-2)

Comment: Furthermore, the economic viability of a well-run Indian Point and its positive effect on the surrounding communities are not deemed to be fully understood by certain groups possessing a stake in IPEC's future. (IPEC-W16-4)

Comment: I'm Laurent Lawrence. I'm Executive Director of the New York Affordable Reliable Electricity Alliance. I'm reading on behalf of our member, the Westchester Business Council, and I'll just go ahead and read this.

The Westchester Business -- the Business Council of Westchester is the county's largest business organization, representing nearly 1,400 members ranging in size from multi-national corporations and mid-sized business to professional firms, not-for-profit organizations, and small business owners in every sector of the county's diverse economy. The Business Council of Westchester advocates for Westchester's business community at a local, state, and federal level, and works to enhance economic opportunity in Westchester by addressing a broad range of public affairs and area development, economic, and business development issues that affect the growth and -- the growth of business in the community. With 34,000 businesses in Westchester County, employing over 400,000 -- I'm sorry, 408,700 workers with a total annual payroll of more than $19 billion, we feel the permanent closure of the Indian Point Energy

Center will cause irreparable damage to the regional economy due to the large amount of electricity, jobs, and tax -- that the site provides. (IPEC-WW-1)

Comment: From Indian Point's generation of 2,000 megawatts of much-needed electricity to its distribution of 356 million in payroll and local purchases to the over 50,000 -- $50 million paid in local taxes, including sales tax, payroll tax, property tax, and state and local income tax, the site is a major economic engine that drives business to Westchester County and keeps business from running to other counties across the country. (IPEC-WW-2)

Comment: I also strongly believe this area would never be the same if this site were to close. Many people depend upon Indian Point for jobs, taxes for schools, cheap electricity for their homes and businesses, and it's good for the environment, too. (IPEC-Y16-3)

Comment: I also strongly believe this area would never be the same if this site were to close. Many people depend upon Indian Point for jobs, taxes for schools, cheap electricity for their homes and businesses, and it's good for the environment, too. (IPEC-Z16-3)

Comment: Indian Point generates 2,000 megawatts of critical electricity, over $356 million in payroll and local purchases, in addition to over $50 million paid in local taxes. Overall, Indian Point produces over $700 million in economic activity through the five counties surrounding the site, as well as over a billion dollars in economic activity in New York State. (IPEC-ZZ-3)

Response: *The comments are related to the socioeconomic impacts associated with the continued operation or closure of Indian Point. Socioeconomic impacts such as housing, transportation, taxes, employment, and land use are Category 2 issues. These issues will be addressed in Chapters 2, 4, and 8 (for no action) of the SEIS*.

Comment: They must include our tax that is being transferred to the ratepayers for the decommissioning fund. It must also include the insurance, the Price-Anderson Act, and the lack of insurance, and to look at the true costs if, in the event an accident or a radiological event occurred, what those true costs would be for the Hudson Valley. Right now, those costs don't exist, and nobody is talking about it, and right now, the counties surrounding Indian Point are footing the bill to support this private, profit-making center. (IPEC-S-4)

Response: *10 CFR 51.95(c)(2) specifically states that the economic costs and economic benefits of renewing an operating license are outside of the scope of license renewal. The comments provide no new information will not be evaluated further.*

Comment: The member companies of the Energy Association of New York State (EA) are the owners and operators of much of the state's electric and natural gas infrastructure, comprised of many hundreds of thousands of individual shareholders including a great many New Yorkers and retirees, employing over 28,000 New Yorkers, serving over 7 million New York customers and their families and businesses, annually paying over $2.5 billion in state and local taxes and contributing tens of millions of dollars annually to community and charitable purposes.

The Energy Association firmly believes that the Indian Point nuclear facility is an essential asset to the State of New York and its millions of residents. (IPEC-D4-1, IPEC-J4-1, IPEC-MMM-1)

Response: *The comment is noted. The comment is supportive of license renewal at Indian Point, and is general in nature. The comments provide no new information and will not be evaluated further.*

Comment: My name is Patrick Canino. I'm a member of NYPIRG, and a student at SUNY New Palz. I'm within 30 miles of Indian Point.

In the NRC's review of Indian Point, they must include the safety and security issues facing us today. They must use data from 2007, not the data or analysis taken from 30 years ago. The population, density, and political climate of 30 years ago has changed dramatically, and the Review Board must address these changes before considering the relicense of this plant with such an abysmal safety record.

I hope the Review Board takes all of these things into consideration and makes the proper choice. (IPEC-BBB-1)

Comment: Indian Point is on the east bank of the Hudson River, 24 miles north of the New York City line and 35 miles from mid-Manhattan. This puts Indian Point in the most densely populated area in the United States (approximately 20 million people, about 6% of the nation's population, live or work within 50 miles of Indian Point) and near the City's reservoirs. (IPEC-D-3)

Comment: You would never site a new plant at this location in this day and age. Even if there is 1/100 of a 1% chance of a disaster it is too much for this location!! It is a common sense decision. Nuclear plants should be located away from major population centers. (IPEC-F11-6)

Comment: Clearwater was here originally. We originally opposed the siting of this plant due to its location in what was then a relatively dense population, but the increase in population over the years has been -- that has exceeded our projections. (IPEC-GG-3)

Comment: The continued explosive population growth in the region (calculated using the same percentage of growth that has occurred over the past 20), which will exponentially increase the potential damage calculation for virtually every area of concern. (IPEC-I5-10)

Comment: Indian Point is located in one of the most densely populated areas of the country, an area which includes not only New York City and much of southern New York and northern New Jersey, but also much of the State of Connecticut, within its potential exposure zone. (IPEC-M5-22)

Comment: Whereas, Indian Point 2 and 3 were initially licensed based on Nuclear Regulatory Commission (NRC) regulations promulgated over 30 years ago, and if plant owners were to apply for a license to operate a nuclear power plant at the Indian Point site today, it would not

likely be granted by the NRC under its current standards and regulations, specifically prohibiting the siting of nuclear power plants based on population density considerations. (IPEC-N5-24)

Comment: In addition, the review should analyze the population density around the reactor and the facility, which is unique in this nation. That's the population, not the plants. (IPEC-O-4)

Comment: Federal regulations adopted by the Nuclear Regulatory Commission nearly 30 years ago make no provision for the re-licensing of such a facility in a highly residential area. In my opinion, these regulations must be updated in order to take population figures and the safety of residents of such areas into account, not only for new nuclear power plants, but for existing plants as well. (IPEC-Q4-5)

Comment: On that basis alone, they need to look at all the siting requirements, which include the population density. (IPEC-S-10)

Comments: Based on census studies from 1970, 1990, 2000 and updates in 2002 and 2006, the projected average annual rate of pollution increase has been 1.23%. Using the same rate of increase, the projected population in the counties surrounding Indian Point will be 2, 250,619 or a 63% increase. Census Study 1970-2006), or at a more modest rate of 50%, 1,958,575. (IPEC-Q17-191)

Comment: At the time the plant was built the area was primarily farmland, and the plant owners could have mitigated the rapidly increasing population by purchasing vast acreage to maintain the required low population density. Today only unrealistic mitigation measures exists as the surrounding region is densely populated with homes, apartments and businesses. (IPEC-Q17-194)

Comment: The high dense and numerous population surrounding Indian Point is plant specific and is not a Category issue. Therefore a full comprehensive study of population and population increases in the surrounding counties, Westchester, Rockland, Orange and Putnam is a Category 2 issue that must be included in the EIS. (IPEC-Q17-195)

Comment: [T]he entire population, of 20 million residents, 8% of the United State population, living within the 10 mile emergency evacuation zone, 17.5 mile peak injury zone, and the 50 miles ingestion zone are all affected by the NRC‘s inability to maintain an enforceable standard of REASONABLE ASSURANCE OF ADEQUATE PROTECTION OF PUBLIC HEALTH AND SAFETY. (IPEC-Q17-248)

Comment: The population mass within a 50 mile radius of Indian Point far exceeds 20 million citizens, 8% of the U.S. population, and is located in the most densely populated area surrounding a nuclear facility in the nation. (IPEC-Q17-253, IPEC-Q17-285)

Comment: West Point Military Academy, the training ground for America‘s future leaders, and a vital American brain trust, which includes a U.S. mint, it located less than 8 miles away. (IPEC-Q17-255)

Comment: In addition, Indian Point is unique because . . . it is located 25 miles from NYC. The population mass within a 50 mile radius of Indian Point far exceeds 20 Million citizens, 8% of the U.S. Population, and is located in the most densely populated area surrounding a nuclear facility in the nation. (IPEC-Q17-283)

Comment: What reasonable alternatives are appropriate for the area? I was told, quite a bit ago, that the area that Indian Point actually services has nothing to do with Cold Spring, although we hold the burden of the risk within the ten mile radius. So I think that should be broken out. Why should we be held responsible and hold that risk on our shoulders for energy that we're not even getting? (IPEC-Z-2)

Comment: So when we ask about what are reasonable alternatives appropriate for the area, are we talking about the area of Cold Spring? Or are we talking about the area of the Greater New York Metropolitan Region? (IPEC-Z-3)

Response: *The NRC staff will discuss regional socioeconomic factors, including population and demographics, in Chapter 2 of the SEIS. Socioeconomic issues that are considered to be Category 2 issues will be addressed as appropriate in Chapters 3 and 4 of the SEIS.*

Comment: Further, Entergy fails to spell out what the effects would be on housing should a significant fire, radiological accident and/or terrorist event occur at the Indian Point facility during the period of license renewal. (IPEC-Q17-53)

Comment: Continued operation of Indian Point raises the risk of radioactivity exposure in two ways. First, the reactor cores would maintain high levels of radioactivity in the core and add waste to the approximately 18,000 tons already at the site, worsening the consequences of a large-scale release after a mechanical failure or an act of sabotage. Many thousands would be stricken with thorough acute radiation poisoning or cancer.
(IPEC-Q17-172)

Response: *The comment is related to the impacts of postulated accidents, including design basis and severe accidents. The environmental impacts of design basis accidents are addressed in Chapter 5 of the GEIS, which contains a detailed discussion of the possible environmental effects of postulated accidents, including socioeconomic impacts. The environmental impacts of design basis accidents are designated as a Category 1 issue. However, severe accident mitigating alternatives (SAMAs) will be discussed in Chapter 5 and Appendix G of the SEIS.*

To the extent that the comment addresses terrorist events, the Commission, in its Memorandum and Order concerning the renewal of the operating license for the Oyster Creek Nuclear Generating Station ("Amergen Energy Company, LLC (License Renewal for Oyster Creek Nuclear Generating Station)," CLI-07-8, 65 NRC 124 (February 26, 2007), ADAMS Accession No. ML070570511), reaffirmed its long-standing position that NEPA does not require inquiry into the consequences of a hypothetical terrorist attack.

Comment: In addition, as owner and operator of Indian Point, the Entergy Corporation remains a critical, major employer and corporate philanthropist - donating millions of dollars to a myriad of worthy causes, hospitals, educational institutions, regional associations and municipalities. Without their continuing service to the community and vital investments in non profit programs and projects, we will see a dramatic- decrease in the number of non-government groups and associations serving a wide variety of constituencies - hungry, homeless, elderly, children in need, sick, infirmed, etc. (IPEC-KKK-4, IPEC-B4-4, IPEC-H4-4, IPEC-WW-4)

Response: *The comment is noted. The comment supports Entergy and/or their philanthropic activities. However, the comments are out of scope of the environmental review process and will not be evaluated further.*

Comment: The document must also address health consequences, incorporating psycho-social as well as physical health consequences. Because there is a long history of Indian Point, historic and current impacts can be assessed to serve as a guide to future impacts. There is also a substantial literature related to the psycho-social impact issues of plant siting and plant events and accidents. For example, Three Mile Island, while its impacts are thought to be relatively minor in terms of radioactive release, were not minor in terms of stress and psycho-social impact (let the study review the very extensive literature) and of course, that TMI involved the near status of a major accident. Likewise, Chernobyl and other types of human-caused disasters have a known and documented legacy that should be discussed in light of the historical and proposed future operations of Indian Point. (IPEC-SSS-26)

Comment: Accordingly, the study must assess:
1. The contributions of the plant to stress experienced by those living and working in the surrounding and potentially impacted communities
2. Perceived threats and their correspondence to the typology of reactor events
3. An assessment of the everyday impacts of the plant's operation
4. An analysis of the psycho-social consequences associated with bounding of risk (the creation of demarcations on a map of risk zones, as currently practices) and the corresponding reality of such lines on a map.
5. Psycho-social consequences associated with such events as chronic and acute leaks, accidents, breaches of security, terrorist acts, warning system failures, evacuation system failures, loss of political support, loss of public support, etc. This analysis shall include for all events, including everyday operation, impacts to perceived safety. (IPEC-SSS-27)

Comment: An analysis of perceived and confirmed health consequences of living and working in the potential impact zones of the plant
. . . .
An analysis of perceived impacts to psychological well being, overall quality of life and people's sense of control over their lives for the various impact zones around the plant due to the existing and re-permitted facilities
. . . .

An analysis of perceived impacts to people's feelings about the safety, desirability and integrity of the local environment due to the existing and re-permitted facilities and impacts for their connection to place

. . . .

An analysis if the perceived impacts to people's feelings about the safety and desirability of their homes and any changes to behavior toward homes, the quality of home life and home ownership or rentership and the use of homes due to the existing and re-permitted facilities

. . . .

An analysis of community life as affected due to the existing and re-permitted facilities. (IPEC-SSS-30)

Comment: An analysis of how effects to patterns of behavior and lifestyle due to the existing and repermitted facilities.

. . . .

An analysis of changes to the experience of childhood in the surrounding and impacted communities due to the existing and re-permitted facilities.

. . . .

An analysis of changes to the quality of family relationships and experiences due to the existing and re-permitted facilities.

. . . .

An analysis of community cohesion and conflict as affected by the existing and repermitted facilities.

. . . .

An analysis of how the impact region would be different at different future intervals comparing re-permitting to closure and decommissioning.

. . . .

An analysis of the psycho-social consequences (behaviors, cognitive and emotional) and victimization conditions associated with all scenarios and types of plant events for the existing and re-permitted facilities. (IPEC-SSS-32)

Response: *The comments are noted. Socioeconomics impacts from continued operation of IP2 and IP3 such as housing, transportation, and offsite land use are Category 2 issues and will be addressed in Chapters 4 of the SEIS. However, a number of the comments, as they relate specifically to psycho-social impacts, are beyond the scope of the environmental review process and will not be evaluated further in the context of the environmental review.*

Comment: Secondly, in the original license agreement, 80 acres of the 235 acre Indian Point site were to be changed into a beautiful woodland park complete with walking paths that would be used and enjoyed by the surrounding community. Again, that commitment was not and has not been kept. (IPEC-H-4)

Comment: Secondly, 80 acres of the 235 acre Indian Point site were to be changed into a beautiful woodland park complete with walking paths that would be used and enjoyed by the surrounding community. Again, that commitment was not kept. (IPEC-PPP-2)

Comment: These commitments are now over 30 years old. We do not have our 80 acre public park on the site. The status of the land donation is indeterminate, as well as the public boat marina built in Buchanan. The center envisioned and originally promised has not been delivered as well, and the landscaping of the site is woefully inadequate to mitigate the harsh industrial look of the Indian Point site. (IPEC-Q17-362)

Comment: Turning 80 of the 235 acres of the Indian Point sight is not a small issue of little importance, not a medium issue, but a MAJOR issue. A full one third of the Indian Point was promised to the community, to be used for the public good in the form of a PUBLIC woodland park complete with walking paths, and thirty years later that License Commitment is unfulfilled. (IPEC-Q17-365)

Response: *Socioeconomic impacts of continued operation and potential refurbishment, such as housing, transportation, and offsite land use, are plant-specific Category 2 issues and will be addressed in Chapters 3 and 4 of the SEIS. However, comments concerning economic agreements by certain parties are beyond the scope of the license renewal environmental review and will not be evaluated further.*

Comment: I wrote all that so that maybe you will understand my position as an Environmentalist and to reinforce the concept that anti-nuclear and environmentalist are not synonymous. I am very concerned with the environment here in the Hudson Valley. In recent years I am seeing a lot of land clearing and stripping. Just look at the historical Fishkill Ridge area, or at least what's left of it. Entire mountains ground into dust. I fear that if Indian Point is closed the same thing will happen here. The land area required to support economic production in the local community will far exceed the land area currently occupied by the plant. (IPEC-M4-2)

Response: *Land use issues related to the no-action alternative and other energy alternatives will be evaluated and presented in Chapter 8 of the SEIS.*

Comment: A recent August 12th New York Times article highlight a recent Census report indicates a disturbing trend of African-Americans moving out of the New York area. This great exodus of working and middle class African-Americans is due in part to the growing housing costs -- costs coupled with increased energy costs, making home ownership unattainable. (IPEC-DDD-4, IPEC-XXX-5)

Comment: In 1993, the Council of Environmental Quality guidance, Pollution Prevention and the National Environmental Policy Act, encouraged federal agencies to include the concepts of pollution prevention in EISs during the scoping alternatives analysis, mitigation measure development, and decision-making processes. (IPEC-E17-10)

Comment: And, finally, I have a comment. Several groups have made comments about the environmental justice implications of nuclear power. Not only is it not a clean source of power, but from its original manufacture, from the mining, from the processing, from the enrichment of the uranium, to the waste disposal, those -- all of those practices have environmental impacts,

and invariably those impacts are on communities of color and Native American communities. (IPEC-GG-9)

Comment: But that [Yucca Mountain] environmental justice issue really works -- definitely works both ways. And I think it's really important that that point be made. (IPEC-GG-11)

Comment: I have lived in Harlem and Hamilton Heights over 25 years working as an educator and nurse, so my time speaking about health-related matters with people in the area has been substantial. My interest in Indian Point nuclear plant mushroomed after the September 11, 2001 attacks-before then I barely knew of its existence, quite frankly, which is my point. In speaking with people here about Indian Point, many have neither knowledge nor can make an association to it, and, they are astonished and concerned upon hearing the facts. People in our communities in Harlem, and beyond, are unaware about Indian Point-how dangerous it is, how much of a threat it is to our health and safety, and how close it is. The 30 miles between us and Indian Point puts it in our backyard, quite literally, given the potency and portability of a nuclear plume; and, the less than 5 miles it is from one of New York City's drinking sources puts it smack dab in our kitchen. (IPEC-H5-1)

Comment: Not only do catastrophes happen, but they hurt, kill, and damage the property of people of color, people who have little money, and people who are isolated, such as elderly, disabled, and nursing home residents far worse than they do any others. These are the people who are going to pay the highest price if a disaster is not prevented from occurring at Indian Point, and of such there are millions who live within its reach. (IPEC-H5-3)

Comment: In conclusion, I respectfully request that you take into consideration the special health and environmental condition hardships that would be faced by the residents of Harlem and other minority communities in the event of a large radiation release event at Indian Point. The fate of the minority community in New Orleans should be your polestar. (IPEC-H5-6)

Comment: Environmental justice, especially the environmental and health impacts on poor communities and communities of color in the event of a large radiation release incident (e.g., the continued impact on those communities in New Orleans, long after Katrina) as well as the environmental impacts of 20 additional years of uranium mining and nuclear fuel processing and disposition upon Native American populations, people of color, and poor communities. (IPEC-I5-8)

Comment: We submitted written -- a written statement for the record. We went through the entire environmental report and addressed each item. I won't try to do that now, but I will go over some of the items of interest to the members of our organization.

The Director of our New York office testified at the afternoon hearing and pointed out some of the environmental justice considerations that I'm going to also add to. And we will supplement our record, probably later we'll submit an electronic copy.

One thing in the environmental report that we're a little concerned about is the Section 4.22.2, and that's on environmental justice. It's a little confusing, and NRC should maybe revisit that. It states that 10 CFR Part 51 -- that Entergy isn't responsible for conducting an environmental justice analysis, yet the NRC comes back around and says that in its environmental justice review it will rely upon Entergy's environmental report to base its environmental justice review on that. That's something that NRC should look at and do something about. (IPEC-JJ-2)

Comment: Also, I'd like to revisit the state, the Department of Environmental Conservation, and the water permit. The New York State Department of Environmental Conservation, environmental justice policy, states that it is the general policy of the DEC to promote environmental justice and incorporate measures for achieving environmental justice into its programs, policies, regulations, legislative proposals, and activities. This policy is specifically intended to ensure that DEC's environmental permit process promotes environmental justice. (IPEC-JJ-3)

Comment: In the Bronx, which is 35.6 percent African-American and 88 percent minority, there are two power plants. In Brooklyn, which is 36.4 percent African-American and 64.2 percent minority, there are seven power plants. In Queens, which is 20 percent African-American and 63.2 percent minority, there are six power plants. So you get the idea --and I could go on for the rest of the night about the disproportionate impact in minority and African-American communities. (IPEC-JJ-7)

Comment: African- American residents will be affected because this adjustment will increase the cost of living while income remains the same. (IPEC-K4-3)

Comment: This financial impact will also produce broad repercussions for African- American businesses as well. The increased cost of electricity could have a devastating effect for minority businesses that already feel the pinch of limited access to capital. (IPEC-K4-4)

Comment: Jobs -- you know, I would be -- and I wish the NRC would look at the diversity at Indian Point. Are African-Americans getting their fair share of jobs in Indian Point? (IPEC-PP-6)

Comment: The New York State Department of Environmental Conservation's (DEC) Environmental Justice policy states that it is the general policy of DEC to promote environmental justice and incorporate measures for achieving environmental justice into its programs, policies, regulations, legislative proposals and activities. This policy is specifically intended to ensure that DEC's environmental permit process promotes environmental justice. (Environmental Justice Policy, Policy Statement CP-29, March 19, 2003). (IPEC-QQQ-7)

Comment: The Draft SPDES Permit, therefore, effectively places the interests of Hudson River fish eggs and larva over the health of New York's low-income and minority communities. (IPEC-QQQ-11)

Comment: In a report by the Natural Resources Council of America entitled: "Environmental Stewardship for the 21st Century: Opportunities and Actions for Improving Cultural Diversity in Conservation Organizations and Programs," it was found that African Americans comprise only 4% of the boards of directors and only 6% of employees at 61 surveyed conservation organizations. From this, it is clear that the African American perspective has heretofore been lacking from the environmental movement.

The need for greater involvement from the African American community in the DEC permitting process has been recognized by the DEC itself. In September 1999, then DEC Commissioner John P. Cahill announced the creation of DEC's Office of Environmental Justice. This Office, which implements the DEC's Environmental Justice Program, seeks to "ensure that local communities are given an opportunity to express their concerns and that those concerns are considered when making decisions which potentially impact the environment and public health." On March 19, 2003, the DEC issued Policy Statement CP-29: Environmental Justice and Permitting. In issuing this policy, the DEC stated that the policy was meant to "promote the fair involvement of all people in the DEC environmental permit process," and further stated that:

It is the general policy of DEC to promote environmental justice and incorporate measures for achieving environmental justice into its programs, policies, regulations, legislative proposals and activities. This policy is specifically intended to ensure that DEC's environmental permit process promotes environmental justice. (IPEC-QQQ-14)

Comment: Allowing AAEA to participate in the Indian Point 2 and 3 permitting process will achieve the DEC's goal of ensuring that the concerns of local communities, particularly low-income and minority communities be considered when making decisions that impact the environment and public health of these communities. (IPEC-QQQ-15)

Comment: In total, there are 24 power plants in the New York metropolitan area, only a handful of which are in areas where minorities do not comprise the majority of the population. One of these is the Indian Point power generating facility. (IPEC-QQQ-21)

Comment: AAEA has an interest relating to the statutes administered by DEC, namely, AAEA seeks to ensure that those statutes are interpreted consistent with the DEC's policy goal of promoting environmental justice. AAEA also has an interest in ensuring that, when DEC is required by statute or regulation to weigh adverse environmental impacts, it factor environmental justice into the calculation. In addition, AAEA believes that the reference to adverse environmental impacts in the regulation at issue, 6 NYCRR § 704.5, the best technology assessment, implicates the environmental considerations that AAEA has raised herein. . . . AAEA's Petition made clear that it was seeking full party status. (IPEC-QQQ-38)

Comment: In order to qualify for party status, AAEA identified substantive and significant issues for adjudication, and presented an offer of proof specifying the witnesses and testimony it expects to present, and the grounds upon which the assertion is made with respect to the issue. Under 6 NYCRR § 624.4(c)(2), an issue is substantive "if there is sufficient doubt about the applicant's ability to meet statutory or regulatory criteria applicable to the project, such that a

reasonable person would require further inquiry." An issue is significant "if it has the potential to result in the denial of a permit, a major modification to the proposed project or the imposition of significant permit conditions in addition to those proposed in the draft permit." 6 NYCRR § 624.4(c)(3). (IPEC-QQQ-40)

Comment: I do feel that many of the representatives of neighborhoods of color tonight, and different organizations, have been sold in addition a false set of goods. (IPEC-RR-3)

Comment: I know that Entergy does pour a lot of money into the communities, and I would like you to examine your feelings on how you will feel when Entergy wants to come in and set up maybe a nuclear storage site in your community and see how you feel about having that. I think what we're experiencing is kind of reverse racism here. So I don't think that you should buy this -- the bill of goods you're being sold. (IPEC-RR-4)

Comment: An assessment of Environmental Justice impacts associated with demographic influences or economic consequences of the plant. (IPEC-SSS-29)

Comment: Environmental justice is defined by AAEA as the fair treatment of all people regardless of race or income with respect to environmental issues. AAEA was among the participants at the U.S. Environmental Protection Agency in 1991 when environmental justice polices were first being considered by the agency. AAEA is currently promoting environmental justice locally, regionally and nationally. (IPEC-TTT-13)

Comment: This section of the ER could be a little confusing to the casual observer. In one section it states, "The need for and the content of an analysis of environmental justice will be addressed in plant specific reviews." (4.22.2). The next section states, "Other than the above referenced finding, there is no requirement concerning environmental justice in 10 CFR Part 51." (4.22.3). The Background section then goes on to state, "The environmental justice review involves identifying off-site environmental impacts, their geographic locations, minority and low income populations that may be affected, the significance of such effects, and whether they are disproportionately high and adverse compared to the population at large within the geographic area, and if so, what mitigative measures are available, and which will be implemented. The NRC staff will perform the environmental justice review to determine whether there will be disproportionately high human heath and environmental effects on minority and low-income populations and report the review in its SEIS." The section then comes full circle to state, "The staff's review will be based on information provided in the ER and developed during the staff's site-specific scoping process." (4.22.4). (IPEC-TTT-17)

Comment: The NRC identified and analyzed 92 environmental issues in its Generic Environmental Impact Statement (GELS) that it considers being associated with nuclear power plant license renewal and has designated the issues as Category 1, Category 2, or NA (not applicable). Entergy lists 43 Category 1 issues that are applicable to the site. The NRC identified 21 issues as Category 2. Entergy lists 11 Category 2 issues that are applicable to the site. Regarding Not Applicable License Renewal Issues, NRC determined that its categorization and impact finding definitions did not apply to electromagnetic fields (chronic effect) and

environmental justice. However, the ER goes on to state that, "for environmental justice, NRC does not require information from applicants, but noted that it would be addressed in individual license renewal reviews (10 CFR Part 51, Appendix B, Table B-I, Footnote 6). Entergy has included environmental justice demographic information in Section 2.6.2. (IPEC-TTT-40)

Comment: This amounts to an environmental justice issue of MEDIUM TO HIGH concern, since the Stakeholders and Ratepayers are at a distinct disadvantage in advocating for public health and safety, when Entergy has the ability to throw it's unprecedented financial weight behind a powerful legal staff and a major public propaganda campaign. (IPEC-Q17-302)

Comment: Due to the fact that the environmental issues of violations of Fair Trade and of financially prejudice advocacy have not been considered in the GEIS, nor has mitigation of these issues been considered, the issues of Environmental Justice as it relates to Fair Trade must be fully considered as a Category 2 issue in the EIS. (IPEC-Q17-305)

Comment: Sustenance Fishermen are affected by Entergy's failure to properly prevent releases of unmonitored radioactive waste into the environment, the air, the water and the ground. (IPEC-Q17-306)

Comment: The affected populations are those residents, specifically the non- English speaking residents and the residents of Haverstraw, Stony Point and Peekskill, living within 10 miles of Indian Point. They are unjustly endangered. . . . The Emergency Evacuation Booklet is in English. It is true that if you can read the booklet in English you could find out how to get a Spanish version. (IPEC-Q17-307)

Comment: A large number of non-English speaking residents are sustenance fishermen and fish the Hudson River without being informed that they are catching fish which are laced with strontium. There is no educational campaign or warning signs placed along the river at the customary fishing sites to inform such fisherman not to eat the fish. These fishermen are unaware of the radioactive strontium in the bones of the fish. This is an issue of environmental justice because underrepresented members of the community and their families are being placed in danger from the ingestion of strontium 90. This is especially dangerous for young children, as strontium acts like calcium in bone formation. (IPEC-Q17-308)

Comment: Therefore, based upon the facts as provided, and the determination that the scope item [environmental justice] is significant (not "small") but meets criteria for "medium" or "large" environmental affect, coupled with serious contamination issue both chemical and radiological at the Indian Point site, this the Environmental Justice issue of sustenance fisherman, should be included in the site specific EIS review as a category 2 issue. (IPEC-Q17-317)

Comment: The Category 1 analysis in the GEIS is insufficient because 1) the sustenance fisherman in the area surrounding Indian Point are uniquely affected by the site specific leaks at Indian Point and 2) the geological attributes of the site and the Hudson River are unduly effected. (IPEC-Q17-318)

Comment: These factors negatively contribute to the quality of life for many African Americans in the New York. (IPEC-XXX-6)

Response: *The comments are noted. Environmental justice is a plant-specific issue and will be addressed in Chapter 4 of the SEIS.*

Comment: Unfortunately, these power plants are, for the most part, pollution-emitting fossil fuel plants located in New York's low income and minority communities. As production of these fossil fuel plants increases, the air quality in and around these plants will further deteriorate, causing a spike in the incidences of respiratory and cardiovascular diseases in the communities where these plants are based. The draft SPDES permit, therefore, effectively places the interests of Hudson River fish eggs and larvae over the health of New York's low income and minority communities. (IPEC-JJ-6)

Comment: Currently, minority communities are facing serious risks due to fossil fuels. As an example, Harlem has one of the highest asthma rates in the nation, according to a 2004 study. (IPEC-K4-8)

Comment: My comments will address specific environmental justice issues and will expand upon the water permit issue included in Entergy's Environment Report (ER).

Environmental justice is defined by AAEA-NY as the fair treatment of all people regardless of race or income with respect to environmental issues. AAEA-NY is deeply concerned with any policy or measure that impacts the air quality of the communities where it is based, or that affects the health of its members. Although AAEA-NY is concerned about air quality in all areas, we are particularly concerned with promoting clean air in African American communities because, in many instances, those communities suffer a disproportionate amount of total pollution. (IPEC-QQQ-5)

Comment: Unfortunately, these nearby plants are, for the most part, pollution-emitting fossil fuel plants located in New York's low-income and minority communities. As production at these fossil-fuel plants increases, the air quality in and around these plants will further deteriorate, causing a spike in the incidences of respiratory and cardiovascular diseases in the communities where these plants are based. (IPEC-QQQ-10)

Comment: The ER addresses the National Pollution Discharge Elimination System (NPDES) status of Indian Point. This issue is of vital importance because an unacceptable permit could cause Entergy to close the facility, which would exacerbate environmental injustice in the region. We are submitting this information in the hope that NRC will utilize it for the EIS and will also see the important environmental justice implications of this facility.

AAEA sought and received full party status in order to bring its unique perspective to the Indian Point 2 and 3 permitting process, and to raise the issue of environmental justice in this proceeding. (IPEC-QQQ-13)

Comment: New York is no exception to this national crisis. In New York City, it is estimated that there are 2,290 deaths, 1,580 hospitalizations, 546 asthma-related emergency room visits, 1,490 cases of chronic bronchitis, and 46,200 asthma attacks yearly attributable to power plant pollution. The New York City area has also been ranked as one of the top five U.S. metropolitan areas for particulate air pollution. And again, these adverse effects disproportionately affect minority communities. In one study, nonwhites in New York City were found to be hospitalized twice as many times as whites on days when ozone levels were high. Another study found that, of the 23 counties in New York State that fail to meet Federal air pollution standards, 37.7% of them are populated by people of color. (IPEC-QQQ-19)

Comment: That African Americans and other minorities are disproportionately affected by air pollution in New York is not surprising when considering the fact that the majority of air-polluting power plants in the New York metropolitan area are located in African American and other minority communities. (IPEC-QQQ-20)

Comment: Based on figures from the 2000 U.S. Census, only 12.3% of New York State is identified as being African American, and only 29.4% of the total population is classified as a minority. However, in communities that are predominantly minority, such as Queens, the Bronx, and Brooklyn, there are a disproportionate number of fossil fuel power plants emitting criteria air pollutants. For example, there are approximately 1,563,400 people of color, 217,247 children living in poverty, and 40,248 children who suffer from pediatric asthma within 30 miles of the Lovett facility, a coal-fired power plant bordering the New York City metropolitan area. In the Bronx, which is 35.6% African American and 88% minority, there are two power plants, Harlem River Yards and Hell's Gate. In Brooklyn, which is 36.4% African American and 64.2% minority, there are seven power plants, the 23rd and 3rd Plant, Brooklyn Navy Yard, Gowanus, Hudson Ave., Narrows, the North First St. Plant, and Warbasse Cogen. In Queens, which is 20% African American and 63.2% minority, there are six power plants, Astoria, Poletti, Far Rockaway, JFK Cogeneration, Ravenswood, and the Vernon Blvd. Plant. Queens is also ranked among the worst 10% of U.S. Counties in terms of its exposure to criteria air pollutants, and is one of two city boroughs that violate federal standards. In the Air Quality in Queens County Report, it is stated that:

The concentration of generating capacity in Northwest Queens is exceptionally high for such a densely populated area. In addition, this community includes a high percentage of low-income people and persons of color. These demographics suggest that "environmental justice" concepts and policies should be taken into account when considering options for addressing air quality in Queens and in considering the siting of further sources of air pollution. The steam generating units in Queens are responsible for a large percent of the NOx, SO2, and CO 2 emitted in Queens. (IPEC-QQQ-21)

Comment: And as the level of air pollution increases, so do the incidences of death and respiratory and cardiovascular ailments. For instance, in the National Morbidity and Mortality Air Pollution Study ("NMMAPS"), a team of investigators from Johns Hopkins University and the Harvard School of Public Health found, among other things, strong evidence linking daily increases in particle pollution to increases in death in the largest U.S. cities. Links have also

been found between fine particle levels and increased hospital admissions for asthma, cardiovascular disease, pneumonia, and chronic obstructive pulmonary disease. Stated bluntly in the Air Quality in Queens County Report, "Epidemiological studies tell us that on days when air pollution levels are high, more people get sick or die. (IPEC-QQQ-26)

Comment: Based on the above data and studies, it is clear that if Indian Point 2 and 3 were to be brought offline, forced to close, or if their production were limited, the void in electricity production would be filled by power plants located in minority communities, with a corresponding increase in the rates of asthma and other respiratory diseases, cardiovascular diseases, and even infant mortality in these communities. (IPEC-QQQ-27)

Comment: And since most of these plants are in African American and minority communities, the bulk of the adverse health effects - including asthma and other respiratory diseases, cardiovascular disorders, and even infant mortality - will be borne by these communities. (IPEC-QQQ-32)

Comment: The NRC is required to consider environmental justice in the preparation of an environmental impact statement. Unfortunately, the State of New York did not consider environmental justice in the current permit. Moreover, DEC is imposing a structure that could lead Entergy to close the facility. In the Draft SPDES Permit, the DEC concludes that cooling towers are the "Best Technology Available" ("BTA") to maximize fish protection at Indian Point. However, in making a BTA determination, DEC was required not only to attempt to maximize fish protection, but also to minimize or avoid "other impacts . . . to the 'maximum extent practicable' to satisfy SEQR as well as CWA § 316(b)." See Final Environmental Impact Statement ("FEIS"). See also 6 NYCRR § 704.5 ("The location, design, construction and capacity of cooling water intake structures, in connection with point source thermal discharges, shall reflect the best technology available for minimizing adverse environmental impact') (emphasis added); ("closed-cycle systems do not come without impacts, and those potential impacts must also be weighed for each site"); ("there are certain expenses associated with installing closed-cycle cooling"). Despite these acknowledgments, the DEC issued the Draft SPDES Permit without addressing the environmental justice impacts, which its decision would entail, particularly the significant adverse impacts that will result from a shift in power production from Indian Point 2 and 3 to existing fossil-fuel facilities. The DEC's failure to consider these "other impacts" violates the SEQRA, 6 NYCRR § 704.5, and rendered the FEIS and the Draft SPDES Permit null and void. (IPEC-QQQ-34)

Comment: Whether the DEC fully considered - as required - all adverse environmental impacts in formulating the Draft SPDES Permit for Indian Point 2 and 3, including air impacts on minority communities? (IPEC-QQQ-41)

Comment: Whether the DEC would have issued a different permit had it adequately considered the negative impacts on air quality in low income and minority communities that will result from any substantial reduction in generation at Indian Point 2 and 3? (IPEC-QQQ-42)

Comment: Whether the failure to consider all adverse environmental impacts in formulating the Draft SPDES Permit for Indian Point 2 and 3, including air impacts in minority communities, renders the Permit unsupportable? (IPEC-QQQ-43)

Comment: Let me get to the question that you wanted to talk about today. In the discussion of global climate change, and the quality of air that we breathe, some environmentalists have come forward to highlight the importance of nuclear power as a free source of electricity. I know that in black and brown communities across the country, our senior and young people are choking to death on the fumes of pollution and suffer from high rates of asthma and respiratory illness. (IPEC-T-2)

Comment: According to the study of the Black Leadership Form, An Air of Injustice, African American and Power Plant Pollution, the air in our communities violate air quality standards. 71 percent of African Americans live in counties that violate federal air pollution standards, and our death rate from asthma is twice that of other Americans. 38.7 deaths per million population. The study further states global warming could enhance ozone formation, which could, in turn, increase health problems such as asthma attacks. For that reason, social justice organizations such as the NAACP have a special interest in working to combat climate change and reduce air pollution. (IPEC-T-3)

Comment: The license renewal of Indian Point is vitally needed because if units two and three are not producing emission free electricity then the air pollution will increase throughout the region, which will exacerbate conditions in minority communities already overburdened by pollution sites. (IPEC-TTT-14)

Comment: Indian Point provides reliable emission free energy without contributing pollutants that exacerbate asthma. Closure of Indian Point would also result in compliance issues for the State with respect to the federal Clean Air Act State Implementation Plan ("SIP") and to meeting the requirements of the Regional Greenhouse Gas Initiative (RGGI). (IPEC-TTT-15)

Comment: AAEA is deeply concerned with any policy or measure that impacts the air quality of the communities where it is based, or that affects the health of its members. Comments being submitted by our New York Office address the specific environmental justice issues that are negatively affecting minority communities. Those comments will specifically list how the operation of Indian Point continually mitigates those negative effects. (IPEC-TTT-16)

Comment: Sadly, these serious health effects disproportionately fall on the shoulders of low-income and minority communities, including African American communities. For instance, the percentage of African Americans and Hispanics living in areas that do not meet national standards for air quality is considerably higher than that of whites. Correspondingly, respiratory ailments affect African Americans at rates significantly higher than whites. Asthma attacks, for example, send African Americans to the emergency room at three times the rate of whites (174.3 visits per 10,000 people for African Americans versus 59.4 visits per 10,000 people for whites), and African Americans are hospitalized for asthma at more than three times the rate of whites (35.6 admissions per 10,000 people for African Americans versus 10.6 admissions for

every 10,000 people for whites). Similarly, the death rate from asthma for African Americans is almost three times that of whites (38.7 deaths per million versus 14.2 deaths per million). (IPEC-TTT-22, IPEC-QQQ-18)

Comment: The license renewal would promote environmental justice and mitigate global warming. (IPEC-TTT-51)

Comment: And yes, I may have to tell you what's in my wallet as one of the speakers before me asked, and let me just say, there's not enough in my wallet. There's very little. There's enough gas to get back to Brooklyn and that's about it. So let's put that out on the table. I'm asking for the renewal of this license because I am concerned about those communities of color that are downstream, who, if this plant is closed, will see a firing up of power plants that will adversely impact their health and, yes, again, I will stay away from statistics. (IPEC-W-5)

Comment: You see, because in Brooklyn, and any community that you will want to name, there are always hard decisions to be made. One of those hard decisions that has to be made in the coming year has been presented, most eloquently, by others who have stood in front of you. What I am asking is that you consider in this process, the impact of the closure on communities in Brooklyn, in Queens, in Jersey, and all the counties of New York.

And yes, my brother gave me a good opening. Be wary of statistics. One of the statistics I would like you to know is that with this phone, I reach out to a thousand members of our organization, and with this phone, I must call my mother in one year from now, 80 years old, and if this plant is not renewed, I must tell my mother why it was not renewed and why she will have difficulty breathing. If you are against this licensing, then here, please use my phone. Thank you for your time, your attention, and your patience. (IPEC-W-7)

Response: *The comments are noted. The comments, in general, express concerns that fossil fuel alternatives to Indian point present an air quality concern, specifically to minority and low-income individuals. Environmental justice issues associated with the continued operation of Indian Point for an additional 20 years will be evaluated and presented in Chapter 4 of the SEIS. Potential environmental justice issues associated with the no action alternative (plant closure) and viable energy alternatives will also be addressed in Chapter 8 of the SEIS*.

Comment: Moreover, the Coastal Zone Management Program -- which postdated the original licenses granted to the Indian Point nuclear plant operators -- provides for the protection of unique visual resources in the coastal region through the designation of Scenic Areas of Statewide Significance (SASS), and protection, restoration, or enhancement of the overall scenic quality of the coastal area outside of designated SASS's. Indian Point is outside of, but adjacent to, the southern part of the Hudson Highlands SASS -- a highly scenic and valued region of the Hudson River Valley, rich in natural beauty and-cultural and historic features. (IPEC-N17-67)

Comment: In addition to the Jones Point subunit, the plant can be viewed from the Bear Mountain State Park subunit (HH-11) and from Anthony's Nose subunit (HH-16) on the eastern

side of the Hudson. These subunits form the southern gateway to the Hudson Highlands SASS. (IPEC-N17-70)

Comment: Moreover, the analysis in the Supplemental EIS could, for example, include a visual analysis consistent with New York State protocol for addressing these impacts under the State Environmental Quality Review Act ("SEQRA"): Assessing and Mitigating Visual Impacts, DEP-00-2 ("DEC Visual Policy"). This visual impact analysis should also include a discussion on the impact to visual resources described under the NYSDOS designated SASS locations. The impacts analysis must also comply, with the U.S. Army Corps of Engineers "Instruction Report EL-88-1: Visual Resources Assessment Procedure for U.S. Army Corps of Engineers," March 1988. (IPEC-N17-74)

Comment: The Jones Point subunit narrative briefly discusses the Indian Point plant: "Extensive industrial development to the south and east of the subunit, including the Indian Point nuclear plant across the Hudson River, is a discordant feature and detracts significantly from the high scenic quality surrounding the subunit." The narrative continues: "Views from the subunit are contained by the bends in the Hudson River and are directed across the river to the City of Peekskill and the villages of Buchanan and Verplanck. The incongruent structures of industrial development on the eastern shorelands of the Hudson River dominate the views from the subunit, providing negative focal points." (IPEC-N17-69)

Comment: Aesthetic Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-72)

Comment: Several commitments were made to the citizens of the host community in the final EIS issued for IP2 LLC, and IP3 LLC, which were intended to mitigate the aesthetic impacts of the Indian Point site. These commitments that have not been kept include, but are not limited to:
80 acres of the 235 acre Indian Point site were to be changed into a beautiful woodland park complete with walking paths that would be used and enjoyed by the surrounding community.

Extensive landscaping of the entire 235 acre site to make it less stark and industrial.

There was to be a public access information and events center built, again with extensive landscaping for citizen use and enjoyment. (IPEC-Q17-361)

Comment: These unfilled License Commitments though OLD, are new information that could only be learned with a complete review of the Final SER and Final EIS for the original licensing of IP2 LLC and IP3 LLC. The NRC has categorized Aesthetics issues as Category 1, it is assumed, because they place little if any importance on landscaping and beautification of their License Sites. This assumption is born out in the classification of small given to Aesthetics issues in the GEIS. (IPEC-Q17-363)

Response: *The comments are noted. Aesthetic impacts were evaluated in the GEIS and determined to be a Category 1 issue. These comments provide no new and significant information and will not be evaluated further.*

Comment: Historic Resources Impacts Must Be Analyzed in the Supplemental EIS. (IPEC-N17-65)

Comment: Impacts on historic resources is a Category 2 issue under the NRC's NEPA regulations and must be considered in its NEPA review of the Indian Point license renewal. As demonstrated below, several scenic resources are located in proximity to the plant and they should be described in the Supplemental EIS. (IPEC-N17-66)

Comment: In order for Delaware Nation personnel, to be thoroughly informed about this project and to provide comments we would like to request status as a: consulting party. With this status, we are confident that you would be able to forward a copy of all formal documents sent to all consulting parties prior to the August 24, 2007 letter we received. It is important to the, Delaware Nation that all cultural sites are properly maintained and the environmental impacts be reviewed before further action is taken. (IPEC-Q5-2, IPEC-G4 -2)

Response: *The comments are related to the potential impacts to cultural and historical resources. The impacts of continued operation and potential refurbishment activities for IP2 and IP3 on cultural and historical resources will be assessed in Chapters 3 and 4 of the SEIS.*

8. Comments Regarding Human Health

Comment: That is, any radiological contamination in this region could result in major health crises and the financial ramifications would dwarf the impact of the 9/11 attack on the World Trade Center. I would remind you that the NAS has stated unequivocally that there is no safe level of exposure to ionizing radiation, and Regional Director Sam Collins has publicly stated his agreement with that assessment. (IPEC-O5-2)

Comment: Although the National Academy of Sciences has now determined that THERE IS NO SAFE LEVEL OF EXPOSURE TO RADIOACTIVITY, the NRC has not taken a single step to revise downward the "safe" level of exposure, either for workers or for the general public - at least not that I'm aware of. In consideration of another 20 years of ANY of the nuclear plants around the country, I believe those everyday emissions levels need to be revised. (IPEC-S11-3)

Comment: The National Academy of Sciences BEIR VII report concludes that women are significantly more vulnerable to radiation than are men and that the cancer mortality risks for solid tumors are almost 50% greater for women (though for leukemia, the risk estimates are higher for men). (IPEC-Q17-179)

Comment: The BEIR VII panel was also in accord with the European Commission on Radiation Risk, in determining that the risk differential for children – especially babies and very young children – is even more dramatic. For instance, the cancer risk for male infants up to age one is 3 - 4 times that for males in the age range of 20 - 50 exposed to the same amount of radiation. Female babies and children are even more vulnerable than males. Moreover, infants are vulnerable to the transference of isotopes like strontium-90 which can be fed to a newborn during breastfeeding. (IPEC-Q17-180)

Response: *In spring 2006, the National Research Council of the National Academies published, "Health Risks from Exposure to Low Levels of Ionizing Radiation, BEIR VII Phase 2." The major conclusion of the report is that current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose response relationship between exposure to ionizing radiation and the development of cancer in humans. This conclusion is consistent with the system of radiological protection that the NRC uses to develop its regulations.*

The NRC staff evaluated the BEIR VII report and discussed its findings in a report to the Commission (SECY.05-0202; Accession Number ML052640532). The NRC staff concluded the BEIR VII report does not support the need for fundamental revision to International Commission on Radiological Protection recommendations. Therefore, the NRC's regulations continue to be adequately protective of public health and safety and the environment. None of the findings in the BEIR VII report warrant changes to the NRC regulations. The BEIR VII report does not say there is no safe level of exposure to radiation; it does not address "safe versus not safe". It does continue to support the conclusion that there is some amount of cancer risk associated with any amount of radiation exposure and that risk increases with exposure and exposure rate. It also concludes that risk of cancer induction at the dose levels in NRC's and EPA's radiation standards is very small. Similar conclusions have been made in all of the associated BEIR

reports since 1972 (BEIR I, III, and V). The NRC staff, in the GEIS, evaluated radiation exposures to the public associated with license renewal and concluded that the impacts are small at all plants; this is a Category 1 issue. The comments do not provide any new information and will not be evaluated further.

Comment: The potential health and environmental consequences of 20 additional years of additional releases of radiation and other chemical toxins released by Indian Point into the environment (especially toxic metals like cadmium) upon populations most susceptible to radiation and toxic chemicals, such as women, adolescents, children, babies, breast-fed infants and the embryo/fetus. (IPEC-15-6)

Comment: My name is Maureen Ritter. I'm a resident of Rockland County, a mother of two children, and a founding member of Friends United for Sustainable Energy. . . . I come here tonight as a former member of the Electrical Workers Union in Rockland County and a current member of the Teachers Union. And my reason for being here tonight, there are many things that are being sited among -- which are several things that fall out of the scope of the environmental siting.

I have two children who I feel, along with the other children of the Hudson Valley, are very vulnerable to the fallout that occurs from Indian Point. I know that there is radiation released as a normal functioning of the plant, and that these releases used to be posted, which is now difficult information to get. (IPEC-RR-1)

Comment: The potential health and environmental consequences of 20 additional years of additional releases of radiation and other chemical toxins released by Indian Point into the environment (especially toxic metals like cadmium) upon populations most susceptible to radiation and toxic chemicals, such as women, adolescents, children, babies, breast-fed infants and the embryo/fetus would be significant. (IPEC-Q17-175)

Comment: It is also well established that radiation is most potent to the rapidly dividing cells of babies in utero (Gamma rays can pass through the fetus. Alpha and beta particles can be transmitted via the placenta.). Radiation interferes to a high degree with cell proliferation and such rates exist throughout prenatal development. The central nervous system may be at especially high risk. Central nervous system development starts during the first weeks of embryonic development and continues through the early postnatal period. This system is accordingly quite vulnerable for a very long period. The constellation of effects from injury to the developing central nervous system includes: mental retardation, autism spectrum disorders, learning disabilities, and ADD. (IPEC-Q17-181)

Comment: Notwithstanding their special vulnerability, women, children, babies and the embryo/fetus are not given corresponding consideration in the regulatory framework which governs nuclear power plant emissions. The current outmoded standards do not incorporate the medical knowledge that has been attained during the past 20 years and continues to be based on "Reference Man" which is defined as a young adult Caucasian male. (The term actually derives from the standards created to protect the young, white, male scientists working

in nuclear labs during the early post-Manhattan Project era.) The regulatory paradigm is also narrowly oriented to genetic effects and cancer, thereby ignoring the wide panoply of other extensively reported conditions that can result from exposure to ionizing radiation. (IPEC-Q17-184)

Comment: This dramatic increase in population and population density has LARGE and significant adverse impact on public health and safety. Public health and safety cannot be grandfathered in, especially in light of such substantial changes in population. (IPEC-Q17-192)

Comment: The licensee must consider . . . .

3. Combined effects of onsite and offsite dose during normal and accident conditions. (IPEC-Q17-116c)

Response: *Human health issues were evaluated in the GEIS and were determined to be Category 1 issues. The GEIS evaluated radiation exposures to the public for nuclear power plants, including Indian Point, and concluded that the impact was small. The comments do not provide substantive evidence to contradict the GEIS findings that the maximum dose to any member of the public living or working near Indian Point is well below the radiation standards set by EPA and NRC. These comments provide no new and significant information regarding human health issues and therefore will not be evaluated further.*

Comment: Now, we've heard a lot tonight about -- we heard Mr. McDonald say that Indian Point is emission-free. We've heard a number of people speaking in support of Indian Point talk about how the fossil fuel plants produce so much greater environmental impact. And in certain ways fossil fuel plants do produce more environmental impact. But what we didn't hear any of them -- these people talk about is the environmental impact of the radiation released from the plant. (IPEC-NN-7)

Comment: And I'm just going to read an excerpt of a statement that Joe Mangano and myself put together, and I'm going to be submitting this part of the statement in writing, and it's fairly brief. . . . Reactors routinely release radioactivity. Persons living near Indian Point would be exposed to more of these radioactive chemicals were Indian Point to be relicensed. Historically, Indian Point has a checkered record of contaminating the local environment.

Do people realize this? It released the fifth-most airborne radioactivity of 72 U.S. nuclear power plants. Radioactivity levels in the Hudson River are over 10 times greater in this area than they are in Albany. Levels of strontium-90 in local baby teeth are the highest in any area near seven U.S. nuclear power plants, and this amount of strontium-90, which is supposed to just have come from the bomb testing, has risen 38 percent -- 38 percent since the late 1980s after the bomb testing had long stopped. (IPEC-NN-8)

Comment: This record of contamination raises health concerns, which are heightened when considering that since 2000, in the four counties closest to Indian Point, childhood cancer incidence is 22 percent above the U.S. rate. Thyroid cancer incidence is 70 percent above the

U.S. rate. And cancer incidence in the six towns within five miles of Indian Point is 20 percent greater than the rest of Rockland and Westchester Counties.

If closing Indian Point results in decreases in cancer mortality in a way parallel to the closure of the Rancho Seco plant in California, 5,000 fewer cancer deaths would occur in the next 20 years in Westchester, Rockland, Orange, and Putnam Counties. While many factors contribute to cancer risk, evidence suggests that more detailed study on Indian Point is warranted, and that the public be informed of any health risks. The prudent policy would be not to grant license extension until the public better understands the extent of the threat that Indian Point presents to local public health. Thank you. (IPEC-NN-9)

Comment: PLEASE, PLEASE, PLEASE . . . my 27-year-old daughter underwent surgery on July 27 and is currently undergoing chemo treatments for a germ cell tumor (only .5% occurrence in women); and my good friend living in Tompkins Cove (directly across the river from Indian Point) has just been diagnosed with ovarian cancer. What is going on here? Both women, healthy and health conscious, eating organic, regular doctor checkups, etc. -- what is going on? . . . Some 8,000 local people participated in the recent walk to support cancer care, research, and cure at FDR Park. This was a LOCAL effort, so the high turnout was particularly disturbing. (IPEC-S6-6)

Comment: I was also struck by comments from people who work at Indian Point about how safe the plant is. I have concluded that the plant is much safer for those who work INSIDE it than for those of us OUTSIDE it who are subjected to air-borne and water-borne releases of radioactivity on a continual basis. (IPEC-S11-2)

Comment: Reactors routinely release radioactivity and persons living near Indian Point would be exposed to more of these radioactive chemicals. Historically, Indian Point has a checkered record of contaminating the local environment.
- It released the 5th most airborne radioactivity of 103 U.S. nuclear plants.
- Radioactivity levels in the Hudson River are over 10 times greater than in Albany.
- Levels of Strontium-90 in local baby teeth are the highest of any area near seven U.S. nuclear plants, and rose 38% since the late 1980s. (IPEC-Q17-176)

Comment: This record of contamination raises health concerns, which are heightened when considering that since 2000, in the four counties closest to Indian Point,
- Childhood cancer incidence is 22% above the U.S. rate
- Thyroid cancer incidence is 70% above the U.S. rate
- Cancer incidence in the six towns within five miles of Indian Point is 20% greater than the rest of Rockland and Westchester Counties.

Closure of Indian Point will result in decreases in cancer mortality, as it did near the closed Rancho Seco plant in California. In the event the NRC does not approve Entergy‘s LRA and the plants close in 2013 and 2015, respectively, 5000 fewer cancer deaths would occur in the next 20 years in Westchester, Rockland, Orange, and Putnam Counties. While many factors

contribute to cancer risk, evidence suggests that more detailed study on Indian Point is warranted, and that the public be informed of any health risks. (IPEC-Q17-177)

Comment: Tissues that are particularly susceptible if exposed during normal periods of rapid growth (i.e., prenatal, early childhood and puberty) are the brain, thyroid, bone and breast. (IPEC-Q17-182)

Comment: Notably, a Radiation and Public Health Project study published in the February 2003 issue of the Archives of Environmental Health examined rates of cancer of children living near operating U.S. nuclear reactors. The study found that cancer incidence for children under age 10 living within 30 miles of each of the 14 nuclear plants in the eastern U.S. exceeded the national average. Incidence was particularly elevated for leukemia. Of the 14 power plant regions studied, the childhood cancer rates in Rockland and Westchester Counties near the Indian Point plant was 4th highest (17.4% above the U.S. average). While such findings are not determinative, they are highly suggestive of the possibility that Indian Point is posing a consequential risk to its surrounding population. (IPEC-Q17-183)

Comment: Compliance with standards does not mean that the health of the public is not compromised, as radioactive exposure is cumulative, and therefore must be evaluated over the period of 60 years, rather than 40 years as a Category 2 issue in the EIS. (IPEC-Q17-185)

Comment: Additionally, comprehensive health studies and associated Environmental Costs and Impacts must be included as Category 2 issues in the EIS as part of the relicensing application for Indian Point 2 and Indian Point 3. (IPEC-Q17-186)

Comment: The current magnitude of the impact on the affected population is at least MODERATE, and is evidenced by the increase in thyroid cancer in those communities closest to the plant. (IPEC-Q17-309)

Comment: However as the plant continues to leak strontium, tritium and cesium into the Hudson River, the magnitude of the impact during the 20 year new superseding license will become at least LARGE if not GARGANTUAN, and the radiological adverse health will expand exponentially. (IPEC-Q17-310)

Comment: It [Indian Point] released the 5th most airborne radioactivity of 72 U.S. nuclear plants.
- Radioactivity levels in the Hudson River are over 10 times greater than in Albany.
- Levels of Strontium-90 in local baby teeth are the highest of any area near seven U.S. nuclear plants, and rose 38% since the late 1980s.
[Reference tables available in ML072830613] (IPEC-UUU-4)

Comment: This record of contamination raises health concerns, which are heightened when considering that since 2000, in the four counties closest to Indian Point,
- Childhood cancer incidence is 22% above the U.S. rate
- Thyroid cancer incidence is 70% above the U.S. rate

- Cancer incidence in the six towns within five miles of Indian Point is 20% greater than the rest of Rockland and Westchester Counties.

If closing Indian Point results in decreases in cancer mortality as it did near the closed Rancho Seco plant in California, 5000 fewer cancer deaths would occur in the next 20 years in Westchester, Rockland, Orange, and Putnam Counties. While many factors contribute to cancer risk, evidence suggests that more detailed study on Indian Point is warranted, and that the public be informed of any health risks. The prudent policy would be to not to grant license extension until the public better understands the extent of the threat that Indian Point presents to local public health. [Reference tables available in ML072830613] (IPEC-UUU-5)

Comment: Estimated Deaths/Cases of Acute Radiation Poisoning and Cancer Deaths Near Indian Point, Following a Core Meltdown

Type of Effect	Indian Point 2	Indian Point 3
Deaths, Acute Radiation Poisoning	46,000	50,000
Cases, Acute Radiation Poisoning	141,000	167,000
Cancer Deaths	13,000	14,000

As many as 44,000 near term deaths from acute radiation syndrome within 50 miles and 518,000 long term deaths from cancer within 60 miles could occur, depending on weather conditions. (IPEC-UUU-6, IPEC-Q17-178)

Comment: I do believe there has to be eventual cancer studies that are done in the areas, put that to rest, and, no, environmental groups do not have the endless money that the industry and the government has. (IPEC-RR-7)

Comment: And finally --we need a comprehensive study on the health effects of Indian Point. Currently today, since 2000, the thyroid cancer rates in the areas surrounding Indian Point is 70 percent higher than the rest of the United States. (IPEC-S-17)

Comment: A lot of people didn't want to accept what he had to say, but I can tell you this. I'm not a scientist, but when I went to college I went for a biochemistry degree. And a lot of things that are done in that plant on a scale of one to -- you can't compare a nuclear bomb to a nuclear plant. There's just no basis of comparison. It's like comparing an apple to a pineapple. Yes, they're both fruit, but you wouldn't want to pick them both up and take a bite out of them.

What goes on in that plant is so low level, and the people that are around it, it's so low level that if they go get an X-ray, they can't go to work for two days because they'll set off all the sensors. Now, what does that tell you? That there is more radiation in a tobacco plant than there is in any of the equipment that's at Indian Point, and people smoke all the time. (IPEC-SS-6)

Comment: And when you look at the whole picture, Indian Point is -- you know, people have worked there their entire adult lives. They haven't gotten sick, and they haven't died from working there. That speaks a lot more volumes than what could be. Thirty-five years is a pretty

long test period for a health situation. And if people can work there, union men, carpenters, steamfitters, everybody, and they can spend their entire life there, their entire working career, and not get sick, then what are we talking about? You know, in the First Responders Corps when we gauge health and safety by sickness and death. Sickness and death at all the nuclear power plants combined is zero, and that's the real number. Thank you very much, and thank you for listening. (IPEC-SS-8)

Comment: The quantities of gaseous effluents released from the site are controlled by the administrative limits defined in the Offsite Dose Calculation Manual (ODCM). Entergy has operated the plant within ODCM parameters and we are satisfied that releases have never caused environmental harm. (IPEC-TTT-38)

Comment: The ER states that there are no adverse health affects and the impact of Indian Point on public health in "SMALL". FUSE asserts that the impacts and environmental costs are "LARGE" . . . . (IPEC-Q17-170)

Comment: and the health effects are not generic Category 1 issues, but rather must be investigated and evaluated on a plant-specific basis. (IPEC-Q17-171)

Comment: On June 12, 2006, Richard S, Barkley, of the NRC wrote that the NRC‘s definition of REASONABLE ASSURANCE OF ADEQUATE PROTECTION OF PUBLIC HEALTH AND SAFETY was stated in the Director‘s Decision, in the matter of Docket No. 50-346 FIRSTENERGY NUCLEAR OPERATING COMPANY, and NRC case law, to be, — as a general matter, defined by the Commission‘s health and safety regulations themselves. . . . There is reasonable assurance of adequate protection of public health and safety when the applicant or licensee demonstrates compliance with the Commission‘s regulations. The regulations were established using defense-in-depth principles and conservation practice. (IPEC-Q17-246)

Comment: The magnitude of the impact on the effected population is LARGE, as the impact of the NRC not enforcing its own required standard regulations has a significant adverse affect on the population. (IPEC-Q17-249)

Comment: The issues surrounding Indian Point are unique, and the GEIS does not adequately address the site specific and unique issues of Indian Point to give REASONABLE ASSURANCE OF ADEQUATE PROTECTION OF PUBLIC HEALTH AND SAFETY. (IPEC-Q17-252)

Comment: Mitigation measures with regard to REASONALE ASSURANCE OF PUBLIC HEALTH AND SAFETY would be warranted for impacts that would have the same significance level for all plants. However, due to the unique facts and issues at Indian Point, such mitigation must be site specific. Therefore, the criteria of Category 1 cannot be met and additional plant specific review is required of the environmental impacts as a Category 2 issue, due to the unenforceable nature of the definition of REASONABLE ASSURANCE OF ADEQUATE PROTECTION TO PUBLIC HEALTH AND SAFETY at Indian Point, which is the underlying organizing purpose of the NRC. (IPEC-Q17-277)

Comment: Entergy Nuclear, which has proposed to extend the operating licenses of the Indian Point two reactors for 20 additional years beyond their 2013 and 2015 expiration dates, has not acknowledged any public health risks of license extension. (IPEC-UUU-1)

Comment: Second, because reactors routinely release radioactivity, persons living near Indian Point would be exposed to more of these radioactive chemicals. Historically, Indian Point has a checkered record of contaminating the local environment. (IPEC-UUU-3)

Comment: As a resident of Westchester County, I am concerned about the potential for serious harm to the residents of my community and all of New York City as a result of the relicensing of Indian Point nuclear power plant without appropriate investigation into a number of important issues. (IPEC-X4-1)

Comment: and I got up here to speak about safety. I was told by the woman out in the hall that that would be of interest to people, but now, when I'm looking at this and hearing what everybody else has spoken about, it appears the NRC isn't really interested in that aspect. So I'd like to speak about it anyway, and I hope that my comments won't be superfluous.

Just going over the list for a second, what about your community should the NRC focus on in EIS? I'm imagining EIS as environmental impact statement. EIS. So environment. To me, in one of the most densely-populated environments in the United States, to not consider the safety of the people, along with the fish, I think is a severe oversight. When it says, What local environmental aspects should the NRC examine? public sentiment should be one, public health should be another, public stress factor should be another. (IPEC-Z-1)

Response: *The GEIS evaluated human health issues and determined them to be a Category 1 issue. The amount of radioactive material released from nuclear power facilities is well measured, well monitored, and known to be small. The GEIS evaluated radiation exposures to the public for nuclear power plants, including Indian Point, and concluded that the impact was small. The maximum dose to any member of the public living or working near Indian Point is well below the radiation standards set by EPA and NRC. These comments provide no new and significant information regarding human health issues and therefore will not be evaluated further.*

9. Comments Regarding Air Quality and Global Warming

Comment: While Indian Point is located in this region, its two nuclear units have never contributed carbon emission (and produced 2000 megawatts Emissions of electricity) to this problem given the benefits of nuclear technology in combating global warming. Even Greenpeace co-founder and nuclear power advocate Dr. Patrick Moore has noted as much in many speeches he has given throughout this area. (IPEC-B17-2)

Comment: As New York's energy demand continues to grow, so does the importance of facilities such as Indian Point. In providing this source of energy, Indian Point does not contribute to air emissions. Continued reliance on nonemitting generating sources such as nuclear power is an essential component of a responsible strategy to avoid and reduce emissions that lead to climate change. Indeed, energy modeling that forms the basis of the regional greenhouse gas initiatives, one of the main projects that I work on at the Independent Power Producers of New York, the modeling for this program assumes that existing, nonemitting facilities such as Indian Point continue to operate. Clearly, nuclear energy from Indian Point is essential to holding current emission levels constant and keeping emissions low in the future. (IPEC-BB-3)

Comment: Specifically, the continued operation of this facility avoids emissions that would result otherwise, and you've heard the numbers and statistics, so I won't repeat them or get into them. But essentially, it is the whole scope of emissions, including carbon dioxide, sulfur dioxide, nitrogen oxide, carbon monoxide, and volatile organic carbons. (IPEC-BB-4)

Comment: It is critically important to recognize that Indian Point supplies its 2000 megawatts electricity without producing the air emissions inherent to varying degrees in fossil fuel burning generating facilities. This air quality benefit cannot be overlooked in any discourse surrounding the future of the facility. (IPEC-D4-8)

Comment: The applicants fail to meet applicable statutory and regulatory mandates by . . . failing to delineate the license renewals' negative affects on climate change. (IPEC-F5-103, IPEC-K17-103)

Comment: You cannot look at Indian Point or nuclear power in a vacuum. You have to compare what would happen if Indian Point was not in operation. What would happen would be an increase in burning fossil fuels. This should be taken into account not only by the NRC but by the DEC. I was sad that the speaker did not take that into account, nor did Congressman Hall. (IPEC-FF-3)

Comment: Because of Indian Point, there is a reduction in the amount of fossil fuels which would be burned. That is important. Why? Because of global warming, because of the greenhouse effect, because of the impact of burning fossil fuels on fish and wildlife, because of the effect on human health in terms of asthma, emphysema, and, yes, even cancer. (IPEC-FF-4)

Comment: Westchester County and the New York City metropolitan area suffer some of the worst air pollution in the country if you look at the EPA studies that are issued periodically. In fact, there are two coal-burning plants that are directly across the river from Westchester County, one of them almost directly across the river from Indian Point. Those two coal-burning plants have been in constant violation of EPA emission standards for years, and there seems to be no end in sight. (IPEC-FF-6)

Comment: It's clean: Nuclear power emits zero greenhouse gases. Increased reliance on non-polluting nuclear energy represents our best Emissions chance of meeting the region's clear air goals. (IPEC-H17-5)

Comment: The prognosticated effects and conditions of global warming. (IPEC-I5-2)

Comment: Its costs are much higher than anything else. Its fossil fuel print is equal, if not greater . . . . (IPEC-II-1)

Comment: It is critically important to recognize that Indian Point supplies its 2000 megawatts electricity without producing the air emissions inherent to varying degrees in fossil fuel burning generating facilities. This air quality benefit cannot be overlooked in any discourse surrounding the future of the facility. (IPEC-J4-8)

Comment: Of special concern for me as an area resident is the issue of air quality. Several times over the past several years, the Environmental Emissions Protection Agency and American Lung Association have reported on the lower Hudson Valley region's considerably polluted air. My family and neighbors are worried about this alarming trend, and quite uncomfortable with the idea of taking the area's largest source of carbon-free electricity off the grid. (IPEC-J17-4)

Comment: While Indian Point is located in this region, its two nuclear units have never contributed carbon emissions (through-the production of over 2,000 megawatts of much-needed electricity) to this problem given the benefits of nuclear technology in combating global warming.

Even Greenpeace co-founder and nuclear power advocate Dr. Patrick Moore has noted as much in many speeches he has given throughout this area. (IPEC-J17-5)

Comment: New York State is facing a SIP call, the state implementation plan, of the Clean Air Act. Most of the non-attainment areas will violate those. I get frustrated, because I have been working in the environmental community for 28 years, and the non-attainment areas, they continue to be non-attainment areas. We have to do something about that.

Well, by its very nature, Indian Point does something about that. So let's go more into the benefits. Indian Point will benefit the regional greenhouse gas initiative. Of course, NRC is required to conduct an environmental justice analysis due to the Presidential Executive Order 12898 passed back January 11, 1994. (IPEC-JJ-9)

Comment: There is also numerous environmental, health, and welfare benefits of a non-greenhouse gas-emitting source like nuclear energy. (IPEC-K4-7)

Comment: The other issue that we're concerned about is environmental. When you look at the residual effect from respiratory ailments based upon sulfur dioxide and carbon dioxide, that goes into the air from other forms of energy creation, and when you look at the residual effect from the World Trade Center, six years later, I think we have to be concerned about what's going into the environment. (IPEC-L-3)

Comment: This is vital to the health and wellness of our community given the alarming rates of asthma and other respiratory illnesses amongst minorities in New York. It is estimated that the Indian Point Energy Center keeps more than 41,000 tons of nitrogen oxides, 116,300 tons of sulfur dioxide, and 31.8 million tons of carbon dioxide out of the air each year. (IPEC-L4-5)

Comment: In addition, the closure of the facility will exasperate the already poor air quality in the New York City and lower Hudson Valley region. (IPEC-L4-9)

Comment: I'd like to thank the NRC for allowing us to participate in this hearing. My name is Jerry Kremmer. I'm the Chairman of the Advisory Board of the New York Affordable Reliable Electricity Alliance. We have 123 members, including the Business Council of Westchester County, the Westchester County Association, the New York City Partnership, the Building Congress of New York, 21 union organizations, and a variety of community groups. We were formed some four years ago, because we felt it was necessary for there to be another voice on the issue of energy sources here in this region. I'm a 23-year veteran of the New York State Legislature and have been involved with power issues probably since the early 1970s.

According to the NRC, this hearing is designed to give members of the public the chance to suggest environmental issues that the NRC should consider. There are many factors that NRC must consider in making its decision. We believe that air quality has to be one of the key factors in making your decision, which I noted on your chart. (IPEC-LL-1)

Comment: Because Indian Point is located in New York, which has the dubious distinction of having the poorest air quality in the nation, the NRC has an even more daunting challenge. To understand the gravity of our air quality situation, one has to look no further than the EPA scorecard on air quality in this region. The following areas in New York State are in violation of federal ozone standards as well as federal standards for particulate matter: the five burroughs of New York City, Long Island, three counties of the Lower Hudson Valley, including Westchester, Putnam, and Rockland. Dutchess and Orange are also in violation of federal ozone standards.

Additionally, the Lung Association's 2007 report shows that New York's air quality continues to worsen with the New York area continuing to be the most dangerous place to breathe the air for thousands and thousands of asthma sufferers, along with many others who have respiratory illnesses.

Indian Point generates 2,000 megawatts of electricity, enough to power approximately two million homes. Most important is that it generates this power without spewing harmful toxins or greenhouse emissions into our atmosphere. Two thousand megawatts is a lot of power, equal to four or five natural gas or coal burning plants. So minus Indian Point, we would need four or five fossil fuel burning plants to replace the electricity that Indian Point produces. (IPEC-LL-2)

Comment: The things that make nuclear the best form of base load power is the fact that it doesn't emit harmful pollutants, pollutants like NOX, like SOX. We hear a lot about it. People don't realize the fact that nuclear is not one of the criminal elements involved in producing it. (IPEC-LL-6)

Comment: In closing, I request that the NRC give significant weight to the fact that without Indian Point producing 2,000 megawatts of emission-free electricity, the atmosphere in the New York City region will further degrade as fossil fuel burning plants are built to replace the enormous levels of power that Indian Point produces. The replacement power would generate 14 million tons of CO2 each year. (IPEC-LL-9)

Comment: It's a sad fact that should Indian Point's energy need to be replaced, the replacement power will be paid for not just in dollars but in the health of our most vulnerable citizens -- children, senior citizens, the people we care so much about. Thank you for taking this into account. (IPEC-LL-10)

Comment: Right now, 50 percent of our electricity comes from coal, which results in billions of tons of greenhouse gas emissions annually.

Imagine if we changed the 50 percent of our electricity currently generated by coal to a mix of nuclear and renewable energy sources.

The environmental benefits would be enormous. It's unfortunate that so many people don't recognize the important role that nuclear facilities like Indian Point already play, and must continue to play, in our energy supply. (IPEC-LLL-2)

Comment: Replacing Indian Point with coal or natural gas would significantly increase airborne pollutants and toxins that are truly harmful today, especially for children and the elderly. (IPEC-LLL-5)

Comment: Replacing Indian Point with coal is estimated to add the following toxins to the air we breathe:

Emissions
* 6,284 tons of sulfur oxides per year
* 1,476 tons of nitrogen oxides per year
* 1,476 tons of carbon monoxide per year
* 210 tons of total suspended particulates, and
* 48 tons of other particulate matter per year

(IPEC-LLL-6)

Comment: Nor does Entergy present an accurate or legally sufficient picture of Indian Point's contribution to global warming. (IPEC-M-3)

Comment: Let us now address the crisis of climate change and not face the questions of our children--I'm almost done--who will ask in the future, you knew the risks and you knew the solutions to climate change. Why did you not address them when you had the chance? Why did you put us in this untenable situation? Thank you. (IPEC-M-9)

Comment: It is critically important to recognize that Indian Point supplies its 2000 megawatts electricity without producing the air emissions inherent to varying degrees in fossil fuel burning generating facilities. This air quality benefit cannot be overlooked in any discourse surrounding the future of the facility. (IPEC-MMM-8)

Comment: It's clean. This is of particular importance to me since my wife and I have recently increased our family size by adding a daughter who is now one year old. I want Caitlin to have the same opportunities as I had growing up and not be affected by the changes in quality of life due to global warming. (IPEC-N-4)

Comment: A case in point. Indian Point emits almost zero greenhouse gases. Increased reliance on nonpolluting nuclear energy represents our best chance of meeting the region's clean air and maintaining our standard of living while improving the environment. The same cannot be said with the world's coal fire plants which emit nearly 2 billion tons of CO2 annually. (IPEC-N-5)

Comment: Nuclear power in New York avoids 42,000 tons of nitrous oxide, which is equivalent to 2.2 million passenger cars, which would otherwise be polluting the air due to the output from natural gas or a coal facility. (IPEC-N-9)

Comment: In providing this vital and necessary source of energy, Indian Point does not contribute to the local air emissions. Continued reliance on non-emitting generating sources, such as nuclear power, is an essential component of a responsible strategy to avoid and reduce emissions that lead to climate change. Indeed, energy modeling that forms the basis for the Regional Greenhouse Gas Initiative assumes that existing non-emitting nuclear facilities, such as Indian Point, will continue to operate. Clearly, nuclear energy from Indian Point is essential to holding current emission levels constant and keeping emissions low in the future. Specifically, the continued operation of Indian Point avoids increased emissions that would result otherwise, such as almost 14 million tons of carbon dioxide, over 75 thousand tons of sulfur dioxide, more than 23 thousand tons of nitrogen oxides, in excess of a thousand tons of carbon monoxide, and 145 tons of volatile organic carbon. (IPEC-NNN)

Comment: It's Clean: This is of particular importance to me since my wife and I have recently increased our family size by one; our daughter Katelyn was born almost a year ago. I want

Katelyn to have the same opportunities I had growing up and not be affected by changes in quality of life due to global warming. (IPEC-OOO-4)

Comment: Nuclear power in New York avoids 42,000 tons of nitrous oxide [NOx] (equivalent to 2.2 million passenger cars), which would otherwise be polluting the air due to the output from a natural gas or coal facility. (IPEC-OOO-9)

Comment: So I would want to make sure that the NRC takes into consideration the possible atmospheric impact of shutting the plants down and what would be used in order to replace that plant. Thank you. (IPEC-P-5)

Comment: Now, I'm looking at two issues here. One is the health issues, because, again, I'm a diabetic victim, I'm also a cancer victim; I'm also an asthma victim. So I have a lot here. I have a real concern myself. But replacing Indian Point with coal or natural gas will significantly increase airborne pollutants and toxins that are truly harmful, especially for our children, especially for our older people, especially for folks like myself. (IPEC-PP-3)

Comment: So let me say that one more time. How much greenhouse gas is released during the entire fuel cycle for Indian Point? One year from now, when this meeting comes back, or when these experts come back and present their draft report, I will be here in the audience, and I will be looking for the question and I'll be looking for the answer. I hope people here will too, because we keep hearing things. It does, it doesn't, it's a little bit, it's not very much. So this is a chance to definitively answer that question, and I really hope that the panel of experts will think about it, present good science, and come to a conclusion that we can all look at and make adequate decisions in that regard. Thank you. (IPEC-Q-5)

Comment: AAEA-NY has members in the New York area. Members of AAEA live and work - and breathe the air in a Clean Air Act Nonattainment Area. Of particular import to AAEA-NY is the promotion of clean air in African American communities. Because nuclear power is emission-free and has a demonstrated safety record, whereas fossil fuel power contributes to numerous health issues, AAEA-NY seeks to promote the safe use of nuclear power. (IPEC-QQQ-3)

Comment: The license renewal of Indian Point is vitally needed because if units two and three are not producing emission free electricity then the air pollution will increase throughout the region. Closure of Indian Point would result in compliance issues for the State with respect to the federal Clean Air Act State Implementation Plan ("SIP"). Additionally, Indian Point provides reliable energy without contributing pollutants that exacerbate asthma. (IPEC-QQQ-6)

Comment: Not surprisingly, air pollution has been characterized as one of the largest threats to public health. (IPEC-QQQ-17)

Comment: The TRC Report further found that, if Indian Point is brought offline, the air quality in New York would decrease dramatically. For instance, if the gap created by Indian Point's closure were to be filled by the power plants located in New York City, almost all of which are in

predominantly minority communities, C02 plant emissions would increase by 101% (or 12,494,172 tons), SO2 plant emissions would increase by 106% (or 8,020 tons), and NO plant emissions would increase by 105% (or 16,107 tons). Even if replacement electricity were spread out more broadly, to include all of the Hudson Valley and New York City plants, CO 2 plant emissions would still increase by 57% (to 13,686,648 tons), SO2 plant emissions would increase by 62% (to 35,961 tons), and NO, emissions would increase by 57% (to 20,258 tons). (IPEC-QQQ-25)

Comment: And, unlike New York's fossil-fuel burning facilities, Indian Point 2 and 3 do not pollute the air. (IPEC-QQQ-29, IPEC-TTT-24)

Comment: In that framework, as Congressman Greg Meeks of New York, Senator Crystal . . . and others have pointed out; nuclear power must be a part of the clean air and global warming solutions. We, at New York State Conference, recognize that Indian Point nuclear power plant avoids millions of tons of pollution every year; it provides electricity for our schools, mass transit, hospitals and government institutions. (IPEC-T-4)

Comment: Nuclear power produces no smog forming emissions. (IPEC-TTT-6)

Comment: Nuclear power produces no greenhouse gases. (IPEC-TTT-7)

Comment: Not surprisingly, air pollution has been characterized as one of the largest threats to public health. (IPEC-TTT-21)

Comment: Two of the most serious issues around the plant are . . . it is located in a Clean Air Act nonattainment area. (IPEC-TTT-29)

Comment: Regarding air issues, Indian Point is probably the most positive industrial structure in the region that provides valuable electricity service while adding no EPA criteria pollutants. (IPEC-TTT-31)

Comment: The license would enhance New York's ability to meet its clean air requirements and global warming agreement. (IPEC-TTT-52)

Comment: The region of this country has already been recognized by the EPA as having some of the worst air quality in the nation. It is, in fact -- it is a fact that many suffer from it -- poor air quality, and working -- our working relationship with the institution, we treat many individuals in emergency situations as a result of that poor air quality. (IPEC-UU-2)

Comment: I can attest to the fact that asthma and other respiratory illnesses are very real and a very real result of fossil fuel sources. Without Indian Point, many other fossil fuel sources in the region would increase, as would the problems that I've outlined in these areas. (IPEC-UU-3)

Comment: As a person who suffers from asthma, a special concern for me is the issue of air quality. Several times over the past several years, the Emissions Environmental Protection Agency and American Lung Association have reported on the lower Hudson Valley region's considerably polluted air. I am worried about this alarming trend, and quite uncomfortable with the idea of taking the area's largest source of carbon-free electricity off the grid. (IPEC-V16-3)

Comment: While Indian Point is located in this region, its two nuclear units have never contributed carbon emissions (through the production of Emissions over 2,000 megawatts of much needed electricity) to this problem given the benefits of nuclear technology in combating global warming.

Even Greenpeace co-founder and nuclear power advocate Dr. Patrick Moore has noted as much in many speeches he has given throughout this area. (IPEC-V16-4)

Comment: More nuclear reactors cannot halt climate change. We would need 300 reactors in the United States to make any impact, and reactors take a long time to build -- seven to 10 years. Fossil fueled vehicles, not electricity, are the biggest problem for global warming. Taking away the nuclear -- adding more nuclear power is not going to reduce the fossil fuel vehicle pollution that's adding to the asthma and other things that are creating health problems in communities. Nobody here wants filthy coal plants. Nobody. That's silly to even talk about filthy coal plants that nobody wants. (IPEC-VV-5)

Comment: Of special interest to me as an area resident is the issue of air quality. Several times over the past few years, the Environmental Emissions Protection Agency (EPA) and the American Lung Association have reported on the lower Hudson River Valley region's considerably polluted air. The population of this region has expanded with an accompanying increase in air pollution. My family and neighbors are worried about this alarming trend, and are uncomfortable with the idea of removing the area's largest source of essentially carbon-free electricity off the grid. (IPEC-W16-5)

Comment: Since Indian Point has been located in this region, its two nuclear units have never contributed carbon emissions through the generation Emissions of over 2,000 megawatts of much needed electricity. Nuclear technology is acknowledged to be currently a key contributor to combating global warming, and is seen as playing an even greater role in the future in this regard. Even Greenpeace co-founder and nuclear power advocate Dr. Patrick Moore has noted as much in many speeches he has given throughout this area. (IPEC-W16-6)

Comment: Of special concern for me as an area resident is the issue of air quality. Several times over the past several years, the Environmental Emissions Protection Agency and American Lung Association have reported on the lower Hudson Valley region's considerably polluted air. My family and neighbors are worried about this alarming trend, and quite uncomfortable with the idea of taking the area's largest source of carbon-free electricity off the grid. (IPEC-X16-4)

Comment: While Indian Point is located in this region, its two nuclear units have never contributed carbon emissions (through the production of over 2,000 megawatts of much-needed electricity) to this problem given the benefits of nuclear technology in combating global warming.

Even Greenpeace co-founder and nuclear power advocate Dr. Patrick Moore has noted as much in many speeches he has given throughout this area. (IPEC-X16-5)

Comment: There is a common misconception that nuclear power could help mitigate greenhouse gas emission. This is false, as the many fossil Emissions fuel inputs into the nuclear fuel cycle viewed as a whole, provide as much greenhouse gas to our atmosphere as the fission process itself mitigates. Under the best of circumstances, a nuclear power plant will reach a break even after 20 years of operation vis a vis greenhouse gas. (IPEC-Y4-4)

Response: *The comments are related to air quality issues. Air quality issues for continued operation were evaluated in the GEIS and determined to be Category 1 issues. Since Indian Point is located in a non-attainment area, the NRC staff will evaluate air quality issues associated with potential refurbishment activities in Chapter 3 of the SEIS. Although these comments do not provide any new and significant information on air quality associated with the operation of IP2 and IP3 during an extended period of operation, the carbon footprint of nuclear power compared to other alternatives will be addressed in Chapters 6 and 8 of the SEIS.*

10. Comments Regarding Cumulative Impacts

Comment: Cumulative impacts for all scoped areas of consideration must be fully explored. (IPEC-SSS-37)

Comment: failing to address the cumulative environmental effects of spent fuel storage and proposed transportation; and (IPEC-F5-106, IPEC-K17-106)

Comment: failing to address the cumulative impacts which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such action. (IPEC-F5-107, IPEC-K17-107)

Comment: Does this infer "out of sight out of mind" is an acceptable position for a nuclear facility operator? The residents in the Hudson Valley have just been advised of the FAA's decision to increase air traffic in the region. Rockland County residents were not advised until just a few weeks before the closing period. Were the FAA -- okay. Where there were few to no aircraft flying over Rockland County, we can now expect up to 600 flights per day, increasing the noise level. On average, every two to three minutes, the noise of aircraft flying overhead will be heard. Entergy's environmental review reports no foreseeable related federal projects were identified. (IPEC-YY-7)

Comment: Secondary and further impacts must be explored beyond primary impacts, as well as the relationship between different levels of impact. (IPEC-SSS-36)

Comment: Identify any Environmental Impact Cost assessments and other environmental impact statements being prepared that are related to the supplement to the GEIS, including those necessary for other licenses and/or permits required to operate the Indian Point Plants in a lawful manner . . . . (IPEC-Q17-12)

Comment: The NRC is obligated by law to complete a thorough and accurate SEIS and to take a "hard look" at the cumulative adverse impacts of this project before approving an extension of the operating license. (IPEC-L17-48, IPEC-M5-48)

Comment: A comprehensive evaluation of cumulative, indirect, and secondary impacts. The cumulative impacts analysis should consider the environmental impacts of the project as a whole, and, if any, as one of a number of the other proposed and/or approved actions in the area that would have the potential to impact the same resources. (IPEC-E17-9)

Comment: Under NEPA, a reviewing agency is required to consider the impact on the environment resulting from the total effects of the contemplated action and other past, present, and "reasonably foreseeable" future actions. See 40 C.F.R. 1508.7 (1990). (IPEC-L17-35, IPEC-M5-35)

Comment: examination of cumulative changes to the facility including plant modifications, operational procedural changes, and fuel cycle management, and compliance to maintenance

rules including 10 CFR 50.65 were examined for conformance with aggregation of environmental impact, and compliance with federal regulations. In particular, changes to the facility under 10 CFR 50.59 apparently did not aggregate environmental impact analysis and provide necessary comprehensive EIS review as required under section 102(C) of NEPA, which warrants detailed site specific assessment environmental impact analysis and additional scope. (IPEC-Q17-7)

Response: *As part of the environmental review process, the NRC staff evaluates the potential for cumulative impacts (as defined in 40 CFR 1508.7) during the renewal term. In Chapter 4 of the SEIS, the impacts of the proposed action will be analyzed in conjunction with other past, present, and reasonably foreseeable future actions at Indian Point and the activities of other industrial facilities and/or Federal agencies in the area.*

Comment: The Nuclear Regulatory Commission must now prepare a complete EIS of Indian Point Unit I's ongoing and future operations because Unit I was never subjected to NEPA when the AEC authorized its construction or operation. (IPEC-N17-14)

Comment: In 1956, the AEC issued Con Ed a construction permit to build Unit 1. At that time, the AEC had not promulgated substantive siting or Seismic regulations, and the facility was not subjected to an environmental impact review since NEPA would not be enacted for over a decade. In 1962, the AEC issued Con Ed a provisional 18- month Facility Operating License for Unit 1. Although Entergy's license renewal application ostensibly does not include Unit 1, the fact remains that Entergy will continue to use various Unit 1 systems should the NRC grant the license renewal application. (IPEC-N17-15)

Comment: its [Unit 1] unlined and leaking spent fuel pool. (IPEC-N17-18)

Comment: its [Unit 1] low level radioactive" waste system. (IPEC-N17-19)

Comment: Indeed, Indian Point may be the only facility in the country where a SAFSTOR unit remains physically conjoined and provides integral daily support to an operating unit. Since neither the AEC nor the NRC has examined the environmental impacts of Unit I's operation pursuant to NEPA, the NRC must now conduct an analysis of Unit I's continued operation that meets all legal requirements. (IPEC-N17-20)

Comment: The GAO has determined that spent fuel one, which isn't decommissioned but just is in safe store, has been sitting there and leaking, doesn't have adequate decommissioning funds at this point. (IPEC-S-16)

Comment: Additionally, Energy‘s violation of the terms of the SAFESTOR for Indian Point 1, must be comprehensively evaluated in the EIS, as it is a Category 2 issue, due to the new information regarding the leaks of strontium 90 and cesium 137 from Indian Point 1 which have LARGE significant impacts to the environment and costs of decommissioning. (IPEC-Q17-135)

Response: *The comments are noted. The environmental impacts of identified leaks at Indian Point will be addressed in Chapter 4 of the SEIS, including cumulative impacts from IP1.*

However, aspects of the comments that specifically address current operating safety issues associated with IP1 are not within the scope of the environmental review, as they are addressed as part of the NRC's ongoing oversight process.

11. Comments Regarding Monitoring Programs

Comment: In response to concerns raised over the adequacy of Entergy's offsite sampling program under Indian Point's Radiological Environmental Monitoring Plan (REMP), the New York State Department of Environmental Conservation (DEC) publicly committed to an expanded radiological sampling plan in conjunction with New York's Department of Health. At a March 2, 2007 Roundtable Meeting on the Indian Point leaks, a representative of New York DEC's Bureau of Radiation Protection stated that Entergy's current sampling program under the REMP was not adequate to determine whether the groundwater leaks were affecting the Hudson River environment. (IPEC-A-53, IPEC-F5-74, IPEC-K17-74)

Comment: Further, radiological monitoring in the Hudson river should be expanded to additional forms of aquatic life . . . . (IPEC-E5-6, IPEC-I17-6)

Comment: We need to depend on our government and the NRC to conduct these studies. More sampling has to take place of the bones of the wildlife surrounding the plant. (IPEC-RR-8)

Comment: All the below outlines issues appear to be in non-compliance, which is a new circumstance, and therefore should be considered in the EIS as Category 2 issues with MODERATE to LARGE significance.

Criterion 60--Control of releases of radioactive materials to the environment . . . .
Criterion 64--Monitoring radioactivity releases . . . .
§ 50.36a Technical specifications on effluents from nuclear power reactors . . . .
§ 20.1301 Dose limits for individual members of the public . . . .
§ 20.1302 Compliance with dose limits for individual members of the public . . . .
Appendix B to Part 20--Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage . . . . (IPEC-Q17-65)

Comment: To comply with NRC‘s regulations on doses to the public, one must monitor all releases of radioactive material to the air and water. (IPEC-Q17-66)

Comment: The ER does not contain any analysis regarding the potential contamination of Hudson River fish and shellfish with strontium-90 as a result of the unmonitored leak from the Indian Point 1 spent fuel pool. On January 16, 2007 the Westchester County Journal News reported that fish samples taken by Entergy in Fall of 2006 showed slightly elevated levels of strontium-90 in their flesh, raising concerns that this radionuclide could potentially bioaccumulate in the Hudson River ecosystem. Out of twelve individual fish and shellfish collected for analysis, four showed detectable levels of strontium-90. The bones of the fish were not sampled for strontium-90, despite the fact that this type of radionuclide mimics calcium and concentrates in bones and teeth. (IPEC-A-50)

Comment: In addition, Entergy's ER does not contain any analysis regarding the potential contamination of Hudson River fish and shellfish with strontium-90 as a result of the

unmonitored leak from the Indian Point 1 spent fuel pool. On January 16, 2007 the Westchester County Journal News reported that fish samples taken by Entergy in fall of 2006 showed slightly elevated levels of strontium-90 in their flesh, raising concerns that this radionuclide could potentially bioaccumulate in the Hudson River ecosystem. Out of twelve individual fish and shellfish collected for analysis, four showed detectable levels of strontium-90. The bones of the fish were not sampled for strontium-90, despite the fact that this type of radionuclide mimics calcium and concentrates in bones and teeth. (IPEC-F5-71, IPEC-K17-71)

Comment: In sum, the ER is incomplete because it fails to address the potential environmental impacts of the Indian Point 1 strontium-90 leak on Hudson River fish and shellfish. The ER states that "the radionuclide release is not anticipated to change environmental considerations, such as water usage, land usage, terrestrial or aquatic ecological conditions, or air quality . . . as a result of license renewal activities." (IPEC-A-54)

Comment: The NRC must assess the potential impacts of the Indian Point 1 strontium-90 leak on Hudson River fish and shellfish in the SEIS. The ER states that "[T]he radionuclide release is not anticipated to change environmental considerations, such as water storage, land usage, terrestrial or aquatic ecological conditions, or air quality . . . as a result of license renewal activities." This conclusion is based on an incomplete ER that fails to include the most recent results of Entergy' fish sampling under the REMP, any mention of the NYDEC expanded fish sampling plans or any analysis of potential dosage pathways to man form ingesting contaminated Hudson River fish. The NRC cannot reasonably rely on Entergy's findings in its preparation of the SEIS. (IPEC-F5-75, IPEC-K17-75)

Comment: Entergy states that the Indian Point 1 and 2 pools are leaking in section 5.1 of the ER, and also concede that "some contaminated groundwater has likely migrated to the Hudson River." However, the ER at no point considers the effects of this toxic contamination on the River's federally listed species. In fact, it does not consider its effects on any part of the natural environment of the Hudson River, nor on human populations which rely on the river for drinking water and recreation. (IPEC-F5-144, IPEC-K17-144)

Comment: Lastly, three-eyed fish have been seen swimming near the Indian Plant Nuclear facility. A friend of ours actually caught a three-eyed catfish from the Hudson River there, indicating that the steady leak of radioactive material is affecting the fish in this river by the plant. (IPEC-L11-8)

Comment: The EIS must include fully independent, plant-specific, comprehensive studies of groundwater, including but not limited to, testing for radio nuclides including strontium 90, as well as strontium 89, which has a shorter half life, tritium, cesium 137, and trace levels of plutonium and PCB's. Such testing must include samples from wells, riverbeds, silts, all discharge points and river water, at high and low tides. In addition testing of wildlife, including but not limited to, captured fish, oyster beds, turtles, frogs, nesting birds and egg shells must be fully monitored for a complete growth cycle from spring to fall. (IPEC-Q17-83)

Comment: that radiological monitoring in the Hudson should be expanded to more forms of aquatic life. (IPEC-RRR-8)

Comment: This conclusion is based on an incomplete ER that fails to include the most recent results of Entergy' fish sampling under the REMP, any mention of the NYSDEC expanded fish sampling plans, or any analysis of potential dosage pathways to man from ingesting contaminated Hudson River fish. (IPEC-A-55)

Response: *The comments call for a general expansion of the radiological environmental monitoring program (REMP) at Indian Point to assess potential impacts on biota. (Comments indicating lack of data in the ER refer to sampling performed as part of the REMP program.)*

The REMP is designed to provide data on measurable levels of radiation and radioactive materials in the environment around the plant. The results of the REMP are intended to supplement the results of the radiological effluent monitoring program by verifying that the measurable concentrations of radioactive material and levels of radiation are not higher than expected on the basis of the effluent measurements and modeling of the environmental exposure pathways. The two programs work together as a check against each other. The REMP provides measurements of radiation and of radioactive materials in those exposure pathways and for those radionuclides which lead to the highest potential radiation exposure to members of the public. However, it does not have specific requirements for the sampling and analysis of all environmental media or biota in the area. The NRC staff reviews Indian Point's REMP as part of NRC's ongoing inspection program.

For Indian Point, the REMP's waterborne pathway consists of Hudson River water, fish and invertebrates, aquatic vegetation, bottom sediment, and shoreline soil. For fish samples, the NRC requires that commercially or recreationally important species in the vicinity of the discharge point be sampled and analyzed. Other species, while present in the area, do not represent a significant pathway for human exposure. The edible (meaty) portion of the fish is analyzed because this is what is typically consumed by humans and thus could present a radiological impact. Human health impacts will be addressed in Chapters 2 and 4 of the SEIS.

In addition to the REMP, Entergy has performed onsite groundwater studies and the New York State Department of Health and New York State Department of Environmental Conservation perform radiological monitoring near the Indian Point Site. The NRC staff will discuss the various monitoring programs in Chapter 2 of the SEIS.

12. Comments Regarding Postulated Accidents

Comment: NRC's Supplemental EIS Must Examine the Radionuclide Air Dispersion Model and Relevant Meteorological Data As Part of the NEPA and SAMA Analysis. (IPEC-N17-100)

Comment: Pursuant to NEPA, the NRC must examine up-to-date and facility-specific information regarding meteorological plume behavior. Entergy's model for atmospheric dispersion of a point release of radionuclides does not take into account variable meteorological conditions such as wind speed and direction changes, Hudson Valley topography, and coastal breezes. Such omissions are of critical concern, and this data must be fully analyzed. The scope of a NEPA review should include whether the plume model is sufficiently accurate for use in computing the health and safety consequences of an accident, as an environmental issue. (IPEC-N17-101)

Comment: THE NEPA AND SAMA REVIEW SHOULD INCLUDE AN ACCURATE ASSESSMENT OF THE CLEAN UP AND DECONTAMINATION COSTS ASSOCIATED WITH A RADIOLOGICAL RELEASE FROM INDIAN POINT (IPEC-R17-8)

Comment: As an alternative, the NRC should use the analytical framework contained in the 1996 Sandia National Laboratories report concerning site restoration costs. See D. Chanin and W. Murfin, "Site Restoration: Estimation of Attributable Costs from Plutonium-Dispersal Accidents," SAND96- 0957, Unlimited Release, UC-502, (May 1996). The Site Restoration study analyzed the expected financial costs, for cleaning up and decontaminating a mixed-use urban land and Midwest farm and range land. The decontamination costs identified in the report could be extrapolated to apply to the four counties in the 10-mile Emergency Planning Zone as well other cities and towns in the New York City-Connecticut-New Jersey metropolitan area that are within 50-mile Emergency Planning Zone. (IPEC-R17-10)

Comment: The Sandia study, which was commissioned by the U.S. Department of Energy, estimated the activities likely to be involved in the decontamination of an accident involving the dispersal of plutonium. Although SAND96-0957 studied a scenario in which plutonium from a nuclear weapon is dispersed as a result of an accident resulting from a fire or non-nuclear detonation of the weapon's explosive trigger device, the study's methodology and conclusions to estimate decontamination costs are directly useful to the license renewal application. (IPEC-R17-11)

Comment: The Sandia study recognized that it is extremely difficult to clean up and decontaminate small radioactive particles (i.e., particles ranging in size from a fraction of a micron to a few microns). Such small-sized particles adhere more readily to objects and become more easily lodged in small cracks, crevices, masonry, fabric, or grass and other vegetation. (IPEC-R17-12)

Comment: The study examined the costs for extended remediation for mixed-use urban land (defined as having the national average population density of 1,344 persons/ km2), Midwest farmland, arid western rangeland, and forested area, and concluded that accident costs would

be highest for urban areas. Id., Executive Summary, at x, xiii. Earlier estimates (such as those incorporated within the MACCS codes) of decontamination are incorrect because they examined fallout from the nuclear explosion of nuclear weapons that produce large particles and high mass loadings (i.e., particles ranging in size from tens to hundreds of microns). (IPEC-R17-13)

Comment: In the words of SAND96-0957, "Data on recovery from nuclear explosions that have been publicly available since the 1960's appear to have been misinterpreted, which has led to long-standing underestimates of the potential economic costs of severe reactor accidents." (IPEC-R17-14)

Comment: For an extended decontamination and remediation operation in a mixed-use urban area with an average national population density, the Sandia study predicted a clean up cost of $ 311,000,000/km2 with on-site waste disposal and $ 402,000,000/km2 with off-site disposal. SAND96-0957, at p. 6-4. For a so-called expedited clean up of a heavily-contaminated urban area, i.e.,-one,-that it finished within one year, the cost was predicted to be' $ 398,000,000/km2; using off-site disposal and $ 309,000,000/km2 using on-site waste disposal. (IPEC-R17-15)

Comment: The costs could be much higher. For a tourism, educational; transportation, and financial center such as the New York metropolitan area, the economic losses stemming from the stigma effects of the dispersion of radioactive material would likely be staggering. The Sandia study further recognized that:

In comparing the numbers of cancer health effects that could result from a plutonium-dispersal accident to those that could result from a severe accident at a commercial nuclear power plant, it is readily apparent that the health consequences and costs of a severe reactor accident could greatly exceed the consequences of even a "worst-case" plutonium-dispersal accident because the quantities of radioactive material in nuclear weapons are a small fraction of the quantities present in an operating nuclear power plant.

These costs must be taken into account. (IPEC-R17-16)

Comment: In addition, many areas in the Indian Point EPZ have higher population densities and property values than those examined in the Sandia report. Accordingly, as part of its analysis, the NRC should revise the Sandia results for the densely populated and developed New York City area, incorporate the region's property values, and ensure that the resulting financial costs are expressed in present value (in 2008/2009/2010 dollars) and future value (until 2035, the likely term of any renewed operating license). (IPEC-R17-17)

Comment: Two recent studies provide additional information concerning the appropriate cost inputs for evacuation, temporary housing, decontamination, replacement, and disposal activities. Beyea, Lyman, von Hippel, Damages from a Major Release of "37Cs into the Atmosphere of the United States, Science and Global Security, Vol. 12, p. 125-136 (2004) (discussing Indian Point and four other sites); Lyman, Chernobyl on the Hudson? The Health

and Economic Impacts of a Terrorist Attack at the Indian Point Nuclear Power Plant, Union of Concerned Scientists (September 2004). (IPEC-R17-18)

Comment: These two studies and the economic model found in SAND96-0957 are currently available to NRC. The results from this readily-available model, as updated and revised for the New York- Connecticut-New Jersey metropolitan area, should be included in the environmental review and incorporated into any SEIS for the consideration of federal decision makers. (IPEC-R17-19)

Comment: With regard to what the scope of the site specific supplement to the GEIS should be, FUSE does not present a position as to the adequacy or lack there of, IP2 LLC or IP3 LLC's Aging Management Plans, or the ability of specific parts or systems to perform as intended. Instead, FUSE points out that industry guidance and lessons learned show that these items can fail, and when they do, there is a potential for off site Environmental Costs to occur which must be included in the Environmental Scoping process and in the final draft of the Site Specific Supplemental ER. (IPEC-Q17-20)

Comment: The atmospheric conditions at a site should provide sufficient dispersion of radioactive materials released during a postulated accident to reduce the radiation exposures of individuals at the exclusion area and low population zone boundaries to the values in 10 CFR 50.34, including 10 CFR Part 50, and Regulatory Guide 1.23 "Onsite Meteorological Programs", Regulatory Guide1.145 Atmospheric Dispersion Models for Potential Accident Consequence Assessments at Nuclear Power Plants", Regulatory Guide 1.4, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Loss of Coolant Accident for Pressurized Water Reactors, Regulatory Guide 1.25, "Assumptions Used for Evaluating the Potential Radiological Consequences of a Fuel Handling Accident in the Fuel Handling and Storage Facility for Boiling and Pressurized Water Reactors." (IPEC-Q17-385)

Comment: Since the analysis of the economic cost of a severe accident is driven, in part, by the expected number of people exposed to a given amount of radiation, this failure to analyze the full extent of population growth and evacuation inefficiency results in the ER substantially underestimating the costs of such an accident and thus in a failure to consider, without valid justification, important mitigation measures that should be given serious consideration. (IPEC-D-15)

Response: *The comments are noted. Chapter 5 of the SEIS will discuss Environmental Impacts of Postulated Accidents and Severe Accident Mitigation Alternatives.*

13. Comments Regarding Alternatives

Comment: The ER, in its section on "Physical and Chemical Environment" (section 2.2.1), only mentions the existence of "once-through" cooling plants on the Hudson River - not a single closed-cycle cooling plant is mentioned - and includes the Bethlehem facility among the various once-though cooling facilities on the Hudson River. However, since 1999, Bethlehem has been repowered and converted into a closed-cycle cooling facility, and other facilities - including Athens and Bowline 3 on the Hudson River and others on the East River in New York City - have been permitted to operate with closed-cycle cooling systems. Indeed, as stated in NYSDEC's FEIS. (IPEC-A-11)

Comment: For the Athens project, a new plant employing combined-cycle technology, potential impacts on aquatic resources were found to be a very compelling concern, and a dry cooling system was determined to be BTA [Best Technology Available]. At Bethlehem, a repowering incorporating combined-cycle technology, third parties voiced strong concerns over potential visibility of the taller structures required for a full dry cooling system as opposed to wet of hybrid cooling tower systems, but significant numbers of species and life stages susceptible to both entrainment and impingement were present at the site. Thus, for that project, a plan was developed and approved to construct hybrid cooling towers, install a wedgewire structure over the intake, and seasonally deploy an MLES™ [Marine Life Exclusion System] to further screen the intake during peak periods of potential entrainment. The MLES™ installation at Bethlehem will be flat panels generally paralleling the shoreline. (IPEC-A-12)

Comment: Bowline 3, a new combined-cycle plant, will use a combination of technologies similar to that at Bethlehem. In addition, Bowline 3's sponsors propose to use discharge water from Bowline 1 and 2, when available, instead of Hudson River water for its cooling water source. This management strategy could further reduce the amount of fresh river water required for the new generating plant. (IPEC-A-13)

Comment: At the Reliant/Astoria facility, a repowering project on the Queens side of the East River, combined-cycle generation with hybrid towers plus intake protection will be provided; the towers will use a reverse osmosis treatment system to minimize salt drift impacts. The SCS/Astoria and NYPA/Astoria projects, both new plants employing combined-cycle generation, will use dry cooling. (IPEC-A-14)

Comment: Although Entergy submits that "substantial feasibility concerns exist" regarding closed-cycle cooling at this site, the ER offers no other alternatives to substantially reduce impacts to a level equivalent to that which can be achieved by closed-cycle cooling at this site. Indeed, the level of protectiveness for aquatic ecology has already been established by the State of New York, which is a level equivalent to that which can be achieved by closed-cycle cooling at this site. (IPEC-A-40)

Comment: I am bothered by 2 people in particular who call themselves environmental stewards. The fellow from river keeper and the employee from the NY state DEC. Both of them think COOLING TOWERS are the only way to protect the surrounding environment.

It is my belief that going to cooling towers at this point in time would be an environmental disaster. The thermo pollution would only be dispersed to the atmosphere. (IPEC-B5-1)

Comment: There is now an ecosystem set up in the surrounding thermo plumb near the plant . . . been there 30ish years . . . and pretty consistently (95% of the online time) for the last 7-8 years. The fish that enjoy that environment are happy and thrive there. I'm sure some fish have moved away (as the Eagles will), but to re-stress the surrounding Hudson; now with the installation of cooling towers . . . then again in 25 years or so when the plant might be to old to run; will surely effect the fish population. To me that isn't being a good environmental steward. (IPEC-B5-3)

Comment: Discharge effluent into the River must meet state of the industry and cooling towers must be installed to meet federal EPA standards. (IPEC-C-47)

Comment: THE ENVIRONMENTAL REPORT DOES NOT ADEQUATELY ADDRESS THE IMPACT OF THE FACILITIES "ONCE-THROUGH" COOLING SYSTEM.

Cooling water systems fall into three groups. "Once-through" systems take water in from outside sources such as the Hudson River, use it to absorb heat, and return the water to its source at a higher temperature. "Closed-cycle" systems re-circulate water after it passes through the heat source to a reservoir or tower where the water is cooled and add water to the system only to replace that which is lost through evaporation. Closed-cycle systems withdraw far less water than once-through systems. "Dry cooling" systems use air drafts to transfer heat, and, as their name implies, they use little or no water. See generally Riverkeeper, Inc. v. United States EPA, 358 F.3d 174, 182 n. 5 (2d Cir. 2004); Citizens for the Hudson Valley v. N.Y. State Bd. on Elec. Generation Siting & Envt., 281 A.D.2d 89, 99 (3d Dep't 2001) (upholding a New York State Public Service Law Article X permit authorizing the construction of the Athens, New York, power plant utilizing a dry cooling system). (IPEC-D-35)

Comment: For approximately thirty years, Indian Point Units 1, 2, and 3 have diverted large amounts of water from the Hudson River in order to manage and control the facilities' operations. The chief effects of once-through cooling water intake structures are impingement, which occurs when aquatic organisms are squashed against a facility's intake screens, and entrainment, which occurs when they are extruded through or around the screens and sucked into the facility's cooling water intake structure. Once-through cooling water intake systems, such as those at Indian Point, can injure or kill billions of aquatic organisms each year. Riverkeeper, Inc. v. EPA, 475 F.3d 83, 89 (2d Cir. 2007). The alternative technologies, such as closed-cycle cooling or a dry cooling system, would substantially reduce fish mortality. (IPEC-D-36)

Comment: Entergy apparently wishes to continue to use the existing once-through cooling systems and has opposed replacing them with closed-cycle or dry-cooling systems. NRC's regulations require a complete analysis on available alternatives for reducing or avoiding adverse environmental effects and such analysis must "include a discussion of whether the

alternatives will comply with such applicable environmental quality standards and requirements." See 10 C.F.R. § 51.45(b), (c), (d). (IPEC-D-37)

Comment: Given the Second Circuit's recognition of the environmental damage caused by once-through cooling water intake systems, Riverkeeper, Inc. v. EPA, 475 F.3d at 89, the LRA's Environmental Report should contain a detailed discussion and analysis of the effects of the continued use of once-through cooling for another 20 to 28 years. Additionally, it should identify the existence of alternative cooling water systems, acknowledge the use of such alternative systems at other nuclear power plants throughout the country and around the world, and evaluate the use of such systems at Indian Point. (IPEC-D-39)

Comment: As the facility impacts aquatic life by impingement and entrainment of fish and shellfish in cooling water, EPA recommends that several cooling alternatives be explored within the draft SEIS. (IPEC-E17-8)

Comment: Although Entergy submits that “substantial feasibility concerns exist” regarding closed cycle cooling at this site, the ER offers no other alternatives to substantially reduce impacts to a level equivalent to that which can be achieved by closed-cycle cooling at this site. Indeed, the level of protectiveness for aquatic ecology has already been established by the State of New York, which is a level equivalent to that which can be achieved by closed-cycle cooling at this site. (IPEC-F5-131, IPEC-K17-131)

Comment: My name's Sherwood Martinelli, vice president of FUSE USA and founder of the Green Nuclear Butterfly. I'll try to be brief but it's not my strong suit.

Back when Indian Point was originally licensed to operate, certain problems, or as the NRC calls them, commitments were made as a part of the license agreement.

One of those was the IP2 and IP3 reactors would go to a closed cooling system. Some 30 plus years later, even after a decisive court defeat, the current licensees are trying to skip out on that commitment. (IPEC-H-3)

Comment: Designated as an estuary of national significance, the Hudson River is a critical habitat for many of the east coast's migratory fish species and deserves the protections afforded by the use of modem and efficient power plant cooling technology. The issue of the facility's cooling technology should be fully considered in the DEIS, and Entergy should be required to consider the implementation of a closed cycle cooling system, which would dramatically reduce the entrainment and impingement impacts to fish and other aquatic organisms, and significantly lessen negative impacts upon the River's biota from thermal pollution. (IPEC-I17-9, IPEC-E5-9)

Comment: Water Pollution: Discharge effluent into the River must meet state of the industry and cooling towers must be installed to meet federal EPA standards. (IPEC-L5-6)

Comment: Based on the above analysis, the impacts of the operation of once-through cooling at Indian Point for an additional 20 years will continue to have a significant impact on the aquatic

resources of the Hudson River. The NRC should require Entergy to employ additional mitigation measures to minimize impacts on the resource. In particular, the NRC should conclude, as the NYSDEC already has, that closed-cycle cooling would be the most appropriate option considering the level of impacts. (IPEC-N17-38)

Comment: Other reports demonstrate further adverse impacts to the Hudson River fishery. Of particular note is the American Shad Assessment Report that was released in August 2007 by the Atlantic States Marine Fisheries Commission. Volume II of the report contains the assessment of the American Shad population in the Hudson River and notes that the adult population of American Shad in the Hudson River has seen a decline over the last twenty years. While the report notes that commercial fishing is the main reason for the mortality to adult shad, it also concludes that "total losses have declined over the past few years as one fossil fuel plant was retrofitted with closed cycle cooling," further supporting the NYSDEC's position that closed cycle cooling is warranted at Indian Point. Thus, the Supplemental EIS should review the impacts from the once-through cooling operation at both units. (IPEC-N17-40)

Comment: The NRC must fully study and analyze this issue as part of the Supplemental EIS undertaking to determine if that renewal license is to be granted. The NRC must not allow the NEPA process in 2007 to avoid a full analysis and study of the environmental benefits of closed cycle cooling at Indian Point. (IPEC-N17-43)

Comment: Back when Indian Point was originally licensed to operate, certain problems, or as the NRC calls them, commitments were made as a part of the licensing agreement. One of those, was that the IP2 and IP3 reactors would go to a Closed Cooling system. Some 30 plus years later, even after a decisive court defeat, the current licensees are trying to skip out on that commitment. (IPEC-PPP-1)

Comment: The ER examines four alternative technologies for heat dissipation: 1) evaporative ponds, spray ponds or cooling canals, 2) dry cooling towers, 3) natural draft cooling towers, and 4) mechanical draft wet cooling towers. A closed cycle cooling retrofit has never been performed on a nuclear power plant before and the consequences of trying are wildly unpredictable. The consideration of these technologies is comprehensive in the ER. We oppose all of these technologies and fear that if any of them are imposed, it is our belief the company will choose to close. (IPEC-TTT-47)

Comment: The EIS Supplement states:

Water use conflicts (plants with cooling ponds or cooling towers using make-up water from a small river with low flow) [10 CFR 51.53(c)(3) (ii)(A)]

> IP2 and IP3 are equipped with once-through cooling systems that utilize make-up water from an estuary on the Hudson River. IP2 and IP3 do not have or use cooling ponds or cooling towers. Consideration of mitigation is not required.

The way Entergy presents Surface Water Quality, Hydrology and Use (for all plants) would seem upon its face to be true, and to close this environmental issue. Here‘s the problem the licensee is misrepresenting the issue by omission, and deliberately obfuscating the facts of this issue. In the original Environmental Impact Study for IP2 LLC and IP3 LLC, both plants made a COMMITMENT to go to a closed cooling system. There are current and significant (unresolved) issues as relates to this very issue. Until a final decision is made on Indian Point‘s original commitments to go to a closed cooling system, Entergy‘s comments here are, at best, misleading. (IPEC-Q17-70)

Comment: As a part of the EIS Supplement, all environmental Impacts and Costs associated with a Closed versus a Once-through cooling system should be completely investigated and resolved to the satisfaction of all parties. (IPEC-Q17-71)

Comment: The thermal pollution significantly and adversely affects the larvae and fish populations of the Hudson River. Entergy not using the "best available" technology with regard to closed cycle cooling is an issue of LARGE significance. Indian Point takes in a billion gallons of Hudson River water a day and super heats it 15 to 25 degrees before discharging it back into the Hudson, dramatically affecting the flora and fauna of the river. (IPEC-Q17-74)

Response: *The comments, in general, relate to the potential retrofitting of Indian Point's once-through cooling water system with cooling towers. Chapters 2 and 4 of the SEIS will describe the current once-through cooling water system and its impacts on aquatic ecology, respectively. Chapter 8 of the SEIS will include an evaluation of the environmental impacts of retrofitting a closed-cycle cooling system to Indian Point's existing once-through cooling water system.*

Comment: Entergy fails to disclose that NYSDEC would require Indian Point to install and operate a closed-cycle cooling system or to provide "an alternative technology(s) that can minimize adverse environmental impact to a level equivalent to that which can be achieved by closed-cycle cooling at this site." Therefore, Entergy's analysis lacks a complete evaluation on available alternatives for reducing or avoiding adverse environmental effects and fails to "include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements." See 10 CFR 51.45 (b), (c), (d). (IPEC-A-41)

Comment: The ER fails to present a complete analysis of compliance. Contrary to the findings and conclusions in NYSDEC's FEIS and NYSDEC's Fact Sheet discussed above in 1.3, Entergy submits that: Compliance with the SPDES Permits over previous years has been excellent. For example, there has never even been an exceedance relative to thermal discharge limits as identified in the Station's SPDES permit.

As noted above, in sections 1.3 and 1.5, NYSDEC has determined to modify Entergy's SPDES permit to require closed-cycle cooling at this site or other alternatives to substantially reduce impacts to a level equivalent to that which can be achieved by closed-cycle cooling at this site, and that there may be exceedances relative to thermal discharge limits as identified in the Station's SPDES permit. Thus, the ER has failed to completely discuss the status of

compliance with water quality standards, in particular thermal and other water pollution limitations or requirements which have been imposed by New York State. (IPEC-A-42)

Comment: On May 14, 2003, the court issued an order that set a schedule requiring, among other things that NYSDEC complete the FEIS for the stations by July 1, 2003, and issue a draft SPDES permit for the stations by November 14, 2003. The court's order also granted a motion by Riverkeeper, Inc. to intervene. By February 4, 2006, the NYSDEC Administrative Law Judge had issued a Ruling on Issues on Adjudication, which has been appealed by all parties. A decision of the NYSDEC Commissioner is imminent. Thus, it is reasonable that Entergy will be required to install and operate a closed-cycle cooling system under the renewed SPDES permit, or to provide an alternative technology(s) that can minimize adverse environmental impacts to a level equivalent to that which can be achieved by closed-cycle cooling at this site, in order to comply with the CWA and NYS water quality standards. (IPEC-A-44)

Comment: The Department also has jurisdiction over the wastewater discharge from the facility through the State Pollutant Discharge Elimination System, or SPDES, Program. Through the SPDES Program, the Department ensures that all discharge wastewater meets state water quality standards. In addition, the SPDES Program also allows the Department to regulate the withdrawal of water for cooling purposes.

The Department issued a draft SPDES permit in November 2003 and commenced the administrative process to modify the permit. The draft permit is currently the subject of an adjudicatory hearing, and the Department is awaiting a Commissioner's ruling on the appeals of the issues that should be adjudicated. The draft permit currently requires Entergy to install cooling towers or equivalent technology if the facility is relicensed by the NRC. (IPEC-DD-8)

Comment: The department also has jurisdiction over the wastewater discharge from the facility through the state pollutant discharge elimination system or SPDES program. Through the SPDES program, the department ensures that all discharges of wastewater meet state water quality standards.

In addition, the SPDES program also allows the department to regulate the withdrawal of water for cooling purposes. The department issued a draft SPDES permit in November 2003 and commenced the administrative process to modify the permit. The draft permit is currently the subject of an adjudicatory hearing and the department is awaiting a commissioner's ruling on the appeals of the issues that should be adjudicated. The draft permit currently requires Entergy to install cooling towers, or equivalent technology, if the facility is relicensed by the NRC. (IPEC-E-7)

Comment: Entergy fails to disclose that NYSDEC would require Indian Point to install and operate a closed-cycle cooling system or to provide “an alternative technology(s) that can minimize adverse environmental impact to a level equivalent to that which can be achieved by closed-cycle cooling at this site” Therefore, Entergy’s analysis lacks a complete evaluation on available alternatives for reducing or avoiding adverse environmental effects and fails to

“include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements.” (IPEC-F5-132)

Comment: Entergy fails to disclose that NYSDEC would require Indian Point to install and operate a closed-cycle cooling system or to provide "an alternative technology(s) that can minimize adverse environmental impact to a level equivalent to that which can be achieved by closed-cycle cooling at this site" Therefore, Entergy's analysis lacks a complete evaluation on available alternatives for reducing or avoiding adverse environmental effects and fails to "include a discussion of whether the alternatives will comply with such applicable environmental quality standards and requirements.'" (IPEC-K17-132)

Comment: Thirty-five years ago, as a result of its NEPA review of the operating license for Indian Point Unit 2, the AEC required closed cycle cooling to protect various aquatic species in the Hudson River. Consolidated Edison Co. of New York. The initial determination regarding closed cycle cooling made by federal agencies ultimately led to the HRSA, additional study, and the NYSDEC draft SPDES permit issued in 2003. The 30 years that have passed have resulted in the same conclusion - the dramatic intake and use of Hudson River water has significant adverse environmental impacts and must be mitigated. New York has concluded in its draft permit that closed cycle cooling shall be required if the license renewal request is granted. (IPEC-N17-42)

Comment: Indian Point currently has an administratively extended SPDES permit. NRC regulation 10 CFR Part 51 requires the applicant to present a current Clean Water Act § 316(b) determination or, if necessary, a § 316(a) variance in accordance 40 CFR Part 125. This permit, while technically "current," however, does not address the actual significant environmental impacts from once through cooling and is in the process of being revised. The NYSDEC issued a draft SPDES permit in 2003 and required closed cycle cooling. Thus, to base a conclusion with regard to the significance of the thermal impact from Indian Point on the existing SPDES permit, while possibly consistent with the technical requirements of the NRC's regulations in 10 CFR Part 51, is contrary to the spirit of Part 51 and the legal requirements of NEPA. (IPEC-N17-47)

Comment: The following section specifically addresses the [environmental justice] implications of the water permit because the ER, at Section 4.1, Water Use Conflicts, goes into great detail about the issue. Regarding this issue the ER states, "the vast majority of existing nuclear stations, including those stations undergoing license renewal, currently are or in the future will be undergoing comprehensive 316(b) review as EPA develops final 316(b) regulations for existing facilities in response to the recent remand of that rule." EPA suspended the Cooling Water Intake Structure Regulations for existing large power plants on July 2, 2007. This suspension is in response to the 2nd Circuit Court of Appeals decision in Riverkeeper, Inc., v. EPA. In the meantime, all permits for Phase II facilities should include conditions under section 316(b) of the Clean Water Act developed on a Best Professional Judgment basis. See 40 C.F.R. § 401.14. (IPEC-QQQ-12)

Comment: Several conditions of the DEC's Draft SPDES Permit for Indian Point 2 and 3 significantly limit Indian Point's ability to generate electricity for the State of New York. For example, Special Condition 28 of the Draft Permit requires the construction of cooling towers.

NYSDEC issued a draft SPDES permit for IP1, IP2, and IP3 in 2003 that, among other conditions, requires the design and, if appropriate, the installation of closed-cycle cooling systems for IP2 and IP3 if the site seeks and receives from NRC license renewals for IP2 and IP3. (IPEC-QQQ-30)

Comment: AAEA understands that, under conservative estimates, it would take approximately 10 months of Indian Point being offline for a closed-cycle cooling system to be installed. AAEA further understands that the costs of installing cooling towers are sufficiently prohibitive so that Indian Point's owners may elect to shut down the plants rather than invest in the retrofit. Either way, the results will be devastating in terms of the pollution-related health effects when New York's non-clean burning plants scramble to replace the power lost by Indian Point 2 and 3. (IPEC-QQQ-31)

Comment: AAEA's issues for adjudication are substantive, given that they call into question the legality of the DEC's FEIS and Draft SPDES Permit for Indian Point 2 and 3, raise important public health and environmental justice concerns, and challenge the Draft Permit's compliance with the SEQRA and 6 NYCRR § 704.5 requirement that in issuing a permit, DEC consider all adverse environmental impacts. AAEA's issues for adjudication are also significant because they ultimately call for a major modification to the DEC's SPDES Permit for Indian Point 2 and 3, namely, eliminating those provisions of the Permit which would result in significant reductions in generation at Indian Point 2 and 3, including Special Condition 28 (the cooling tower requirement). (IPEC-QQQ-44)

Comment: AAEA-NY wants the DEC to eliminate the cooling tower provision in a water permit for Indian Point. Such a permit would eliminate the issue of possible closure of the plant and provide a more clear-cut status for NRC in considering the license renewal. Resolution of this situation will also provide a simpler situation for describing the position environmental justice impacts provided by Indian Point in the EIS. (IPEC-QQQ-45)

Response: *The comments relate to the NYSDEC's water permits for IP2 and IP3, specifically, Special Condition 28 of the Draft SPDES Permit that requires the construction of cooling towers. NYSDEC is responsible for the review and issuance of New York State's water permits under the Clean Water Act. While the NRC's license renewal environmental review considers the status of such permits, the NRC does not have regulatory authority in matters concerning the Clean Water Act. However, since the potential for retrofitting the existing once-through cooling system to cooling towers exists, Chapter 8 of the SEIS will address the alternative of retrofitting one or more of Indian Point's existing once-through cooling systems to a closed-cycle or other potentially-viable cooling system.*

Comment: The proposed license renewal of Indian Point and any potential mitigation measures, including the use of cooling towers (discussed in the next section), should be

considered in the context of the NYCMP for the preservation of these visually important areas. (IPEC-N17-71)

Comment: The State recommends that the Supplemental EIS include a visual impact analysis to determine the significance of the impacts from cooling towers. Cooling towers do not present an all or nothing proposition, sacrificing aesthetics for promoting a healthier fishery. Both interests can be accommodated, as reflected in various cooling tower designs. (IPEC-N17-73)

Response: *The comments relate to the potential retrofitting of Indian Point's once-through cooling water system to cooling towers. Chapter 8 of the SEIS will address the alternative of retrofitting Indian Point's existing once-through cooling water system with a closed-cycle cooling system or other potentially-viable alternatives, including an evaluation of potential aesthetics (visual) impacts.*

Comment: THE ENVIRONMENTAL REPORT IMPROPERLY LIMITS THE "NO ACTION" ALTERNATIVE TO CONSIDERATION OF EITHER BOTH INDIAN POINT 2 AND 3 OR NEITHER OF THEM.

The License Renewal Application's crabbed analysis of alternatives ignores the possibility that one license renewal might be approved and the other rejected. Such an analysis might impact on the feasibility of alternative technologies, such as wind, solar, biomass, or energy conservation, in terms of their capabilities to meet the need created by turning off only one of the plants. The ER also fails to consider which unit might be better shut down and which might be better left to run an additional twenty years. The mere fact that the two plants are now owned by the same company -- a situation that has existed only for the last few years -- is not a justification for failing to separately evaluate each unit, mitigation measures for each unit, and alternatives to each unit.

The LRA and ER are incomplete in this respect and should not be docketed or processed until this inadequacy is corrected. (IPEC-D-28)

Comment: The NRC must fully consider and analyze renewable energy sources together with conservation as an alternative to license renewal of Indian Point 2 and Indian Point 3 separately. (IPEC-F5-78)

Comment: An accurate assessment of reasonable power alternatives to Indian Point 2 and 3 must be considered both separately and collectively. The license renewal of IP2 is a proposed action, as is the license renewal of IP3. Not only does each proposed action need to be dealt with separately, alternatives must also be considered separately. (IPEC-F5-80, IPEC-K17-80)

Comment: Throughout the Environmental Report, the applicant has presented the picture of one single applicant applying for one license renewal, when in fact two separate licenses renewals are sought, one license for Indian Point 2 and one for Indian Point 3. The current operating licenses relate to two nuclear power plants that expire at different times – IP2's license expires on September 28, 2013 and IP3's license expires on December 12, 2015. The

applicant for each plant is a separate corporate entity – Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC.

The applicants' arguments proffered in their Environmental Report state 2,158 MWe as the baseline of power that would need to be replaced in a no-action alternative (nonrenewal). This is incorrect. The NRC must consider each application separately and on its own merits. The NRC has the statutory obligation to fully consider a "no-action" alternative and replacement alternatives separately for the re-licensing of IP2 and IP3 whose ratings are 1078MWe and 1080MWe respectfully. (IPEC-F5-81, IPEC-K17-81)

Comment: Entergy's application misstates the power rating for each separate license and therefore does not comply with NEPA. NRC's environmental regulations in Part 51 expressly require a review of each proposed action - that being the license renewal of IP2 and the license renewal of IP3 separately. The regulations state that each applicant for a renewal of a nuclear plant shall submit an environmental report containing the environmental impacts of alternatives. Entergy's combined environmental report does not allow the NRC, nor the public to consider the environmental consequences of the "no-action" alternative for each plant or the environmental consequences of the various alternatives for the replacement of generating capacity loss that would be available to a utility or other responsible energy planner for each separate entity. (IPEC-F5-82, IPEC-K17-82)

Comment: The applicants dismissively rule out alternative and more environmentally friendly energy sources such as wind, solar and hydroelectric power (or a combination of alternatives). In the environmental report the applicants state that "wind, solar and hydroelectric power are not capable of replacing the 2,158 MWe of power." The total 2,158 MWe of power generated from the combined plants is not the operative standard to be utilized in reviewing individual plant licenses and therefore does not fulfill the applicant's responsibility under NEPA.

Moreover it does not properly inform the public of the relevant standard upon which public comment should be based. (IPEC-F5-83, IPEC-K17-83)

Comment: The NRC must fully consider and evaluate, as an alternative to license renewal, the replacement of either Indian Point 2 or Indian Point 3's power generation by a portfolio of power sources inclusive of renewable sources in coordination with conservation. (IPEC-F5-93)

Comment: The NRC must fully consider and analyze renewable energy sources together with conservation as an alternative to license renewal of Indian Point 2 and Indian Point 3 separately. (IPEC-K17-78)

Comment: The NRC must fully consider and evaluate, as an alternative to license renewal, the replacement of either Indian Point 2 or Indian Point 3's power generation by a portfolio of power sources inclusive of renewable sources in coordination with conservation. (IPEC-K17-93)

Comment: Entergy, in its application for license renewal, presents a picture of one license, not two separate licenses sought to be renewed. This is far more than a simple semantic distinction

but one fraught with legal consequence. For example, in its environmental report, Indian Point states that green sustainable energy sources cannot replace the combined 2158 megawatts of power generated by Indian Point 2 and Indian Point 3 combined, and the green energy sources need not be considered, addressed, or analyzed. While I will not address today the accuracy of Entergy's assertion, it is clear, beyond purview that the combined 2158 megawatts standard is, as a matter of law, simply wrong.

Each application for each plant must be addressed separately and the law mandates that the only correct standard of comparison is Indian Point 2's 1078 megawatts, and Indian Point 3's 1080 megawatts. (IPEC-M-5)

Comment: The Alternatives of Not Renewing the License for Either Unit 2 or Unit 3 Must Be Analyzed in the Supplemental EIS. (IPEC-N17-102)

Comment: The license renewal application's analysis of alternatives ignores the possibility that one license renewal might be approved and the other rejected. Such an analysis might impact on the feasibility of alternative technologies, such as wind, solar, biomass, or energy conservation, in terms of their capabilities to meet the need created by not granting the license renewal request. The ER failed to consider which unit might be better shut down and which might be better left to run an additional twenty years. The alternatives analysis must consider these varying possibilities to satisfy NEPA. (IPEC-N17-103)

Response: *The comments are noted. Chapter 8 of the SEIS will address alternatives to the continued operation of IP2 and IP3, including the no-action alternative (not renewing the licenses) as well as the operation of one unit along with a combination of other energy sources.*

Comment: Numerous studies have demonstrated, particularly since the price of electricity has risen dramatically in the last few years, that saving a Conservation MW hour of electricity is far less expensive than generating one. Entergy merely notes that such programs, to date, are driven by what the utilities want to do and that, for Entergy, it will not pursue an aggressive energy conservation program in any state, like New York, where electricity generators are deregulated. Regardless of Entergy's corporate intentions, it is obligated under NRC regulations to provide a full and fair assessment of any viable alternative to the proposed action. In particular, such an assessment should be based on the recognition that any alternative to Indian Point reactors does not need to be available until 6 or 8 years from now when the initial operating licenses expire. Thus, there is substantial lead time for such energy conservation strategies and alternative power sources to come on line. (IPEC-D-25)

Comment: In addition, a full and fair assessment also should take into account that such strategies and sources will be in use during Indian Point's proposed 20 additional years of operation beyond 2013 and 2015. Entergy has failed to provide such an analysis and relies, at best, on the current status of energy conservation (and other benign alternatives like wind turbines, solar power, biomass, etc.) rather than on the potential for full deployment of these alternatives if, within the next two years, it were determined that Indian Point Unit 2 and/or Unit 3 would cease operation when their current licenses expired in 2013 and 2015. Entergy needs

to evaluate in the ER the impact of such an incentive on the development and deployment of non-nuclear, carbon-neutral, energy alternatives. Thus, the ER does not comply with 10 C.F.R. § 54.13.

The LRA and ER are incomplete in this respect and should not be docketed or processed until this inadequacy is corrected. (IPEC-D-27)

Comment: The NRC must fully consider the impacts from instituting additional conservation resources. (IPEC-F5-85)

Comment: The NRC's environmental review regulations require that NRC consider all reasonable alternatives to the proposed license renewal Conservation action of both IP2 and IP3 and the cumulative impacts of each. NRC's regulations state that applicants must include in their environmental report "the potential impacts of instituting additional conservation resources to reduce the total demand for power." (IPEC-F5-86)

Comment: Not one of the conservation methods available in the regulations is addressed in either IP2 or IP3's Renewal Application Environmental Conservation Report. Rather, the applicants dismissively conclude that they have no responsibility to explore conservation options "the conservation option by itself is not considered a reasonable replacement for the IP2 and IP3 Operating License Renewal alternatives," (the applicants again posit replacement of both IP2 and IP3's energy output as if only one license was sought to be renewed – a wholly deficient standard as previously delineated) and "conservation is neither single nor discrete, nor is it a source of generation." (IPEC-F5-87, IPEC-K17-87)

Comment: The applicants' cavalier dismissal of conservation runs in contravention of NEPA as well as the NRC's own regulations. The Conservation regulations mandate the analysis of alternatives and mitigation methods to reduce the environmental consequences of relicensing and require meaningful consideration of all reasonable mitigation and conservation methods. (IPEC-F5-88)

Comment: The NRC must fully and explicitly assess all potential conservation methods separately for each license renewal in the SEIS. (IPEC-F5-92)

Comment: The NRC must fully consider the impacts from instituting additional conservation resources. (IPEC-K17-85)

Comment: The NRC's environmental review regulations require that NRC consider all reasonable alternatives to the proposed license renewal Conservation action of both IP2 and IP3 and the cumulative impacts of each. NRC's regulations state that applicants must include in their environmental report "the potential impacts of instituting additional conservation resources to reduce the total demand for power." (IPEC-K17-86)

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alternatives and mitigation methods to reduce the environmental consequences of relicensing and require meaningful consideration of all reasonable mitigation and conservation methods. (IPEC-K17-88)

Comment: The NRC must fully and explicitly assess all potential conservation methods separately for each license renewal in the SEIS. (IPEC-K17-92)

Comment: As the NRC has recognized, a wide variety of energy efficiency and conservation technologies could be considered as alternatives to Conservation generating electricity at Indian Point. These technologies include hardware, such as more efficient motors in consumer appliances, commercial establishments, or manufacturing processes; more energy-efficient light bulbs; and improved heating, ventilation, and air conditioning systems. Also, structures could be weatherized with better insulation, weather stripping, and storm windows. (IPEC-L17-46)

Comment: As the NRC has recognized, a wide variety of energy efficiency and conservation technologies could be considered as alternatives to Conservation generating electricity at Indian Point. These technologies include hardware, such as more efficient motors in consumer appliances, commercial establishments, or manufacturing processes; more energy-efficient light bulbs; and improved heating, ventilation, and air conditioning systems. Also, structures could be weatherized with better insulation, weather stripping, and storm windows. (IPEC-M5-46)

Comment: Numerous studies have demonstrated, particularly since the price of electricity has risen dramatically in the last few years, that saving a Conservation MW hour of electricity, is far less expensive than generating one. (IPEC-N17-110)

Comment: NEPA requires a full assessment of any viable alternative to the proposed action. In particular, such an assessment should be based on Conservation the recognition that any alternative to Indian Point generated electricity does not need to be available for at least 6 or 8 years, when the initial operating licenses expire. Thus, there is substantial lead time for such energy conservation strategies and alternative power sources to come on line. (IPEC-N17-111)

Comment: In addition, a full and fair assessment of such alternatives also should take into account that such strategies and sources will be in use Conservation during Indian Point's proposed 20 additional years of operation beyond 2013 and 2015. Entergy has failed to provide such an analysis and relies, at best, on the current status of energy conservation (and other benign alternatives like wind turbines, solar power, biomass, geothermal, etc.) rather than on the potential for full deployment of these alternatives if, within the next two years, it were determined that Indian Point Unit 2 and/or Unit 3 would cease operation when their current licenses expired in 2013 and 2015. As part of its NEPA review, the NRC's EIS should evaluate the impact of such an incentive on the development and deployment of non-nuclear, carbon-neutral, energy alternatives. (IPEC-N17-113)

Comment: Why is conservation played down by the industry, the government and the media? We can, right now, stop wasting energy and minimize Conservation loss through the

transmission systems. If we are a country at war, why are we not being asked by the Federal government to at least conserve. (IPEC-R11-6)

Comment: Patriotism was mentioned tonight. The real patriotic thing for Americans to do is to use our good American brains to figure out a way to Conservation change our wasteful energy habits, to stop wasting what we have. We waste about 40 percent of our energy, if not more. (IPEC-VV-3)

Comment: And of course, conservation of energy is key. If we all really had to - everyone would do their part. It's sure better to turn out lights and Conservation use "Energy Star" products . . . than slowly die of cancer or be blown to bits one day. (IPEC-Z4-6)

Comment: Additionally in the regulations, the NRC states that each of the following is a separate and distinct issue: (1) the potential environmental impacts from electrical generating sources other than nuclear license renewal; and (2) the potential impacts from instituting additional conservation resources to reduce the total demand for power. The simple discrete language used by the applicants relates to generating electricity, not to conservation. (IPEC-F5-91, IPEC-K17-91)

Comment: Entergy has grounded its refusal to even consider a reasonable replacement generation scenario to include a portfolio of sources including renewable sources on NUREG-143 7 Vol. 1 Section 8.1. However section 8.1 is neither a regulation nor a statue, but merely guidance. It states, in part, that the "NRC has determined that a reasonable set of alternatives should be limited to analysis of single, discrete electrical generating sources." Section 8.1 does not comply with NEPA's mandate to assess all reasonable "alternatives to the proposed action," nor does it comply with Appendix A to Part 51, Section 5, which mandates presentation of "the environmental impacts of the proposal and the alternatives in comparative form," and goes on to require that "all reasonable alternatives will be identified and considered." 10 CFR 51.71 (d) requires that the NRC will consider and weigh "the environmental impacts of alternatives to the proposed action;" and "will, to the fullest extent practical, quantify the various factors" . . . . Additionally, 51.71(d) states that "due consideration will be given to compliance quality standards and requirements that are imposed by . . . State . . . agencies." Section 8.1, in contravention of Section 51.71 (d), essentially moots New York State's September 24, 2004 adoption of a Renewable Portfolio Standard with a goal of increasing the proportion of renewable energy used by consumers to at least 25% by 2013. (IPEC-F5-99, IPEC-K17-99)

Comment: The above-referenced studies demonstrate the necessity and feasibility of developing and implementing energy portfolios that include renewable energy sources, conservation and energy efficiency measures. The NRC's continued reliance on an outdated GEIS that ignores the significant progress made on energy issues is unreasonable, because it ignores the NEPA mandate to fully consider "new and significant" information in the SEIS. (IPEC-F5-100, IPEC-K17-100)

Comment: NEPA mandates that the full and complete environmental consequences of a proposed action (license renewals) be compared to all reasonable alternatives. As delineated in

Sections 1502.14(a) through (f), the obligation includes rigorously exploring and objectively evaluating all reasonable alternatives, devoting substantial treatment to each and including alternatives not within the jurisdiction of the lead agency. The NRC's regulations, inclusive of Section 51.45 mandate the same. (IPEC-F5-102, IPEC-K17-102)

Response: *The comments are related to the environmental impacts of alternatives to license renewal at Indian Point, specifically conservation. The environmental impacts associated with various alternatives to renewal of the operating licenses for Indian Point will be evaluated as appropriate in Chapter 8 of the SEIS.*

Comment: If the amount of money that has been devoted to keeping these plants going, well, the rest of the atomic energy business going for the last 30 years, had been in any way devoted towards alternatives, I think we'd be very much further along with the possibility of really viable alternatives. But that wasn't done, any more than the evacuation plan was ever changed, the waste problem was solved, thermal pollution was solved, or the embrittlement of the pipes was really addressed up to now. (IPEC-CC-7)

Comment: Furthermore, New York State is pursuing various actions to implement additional energy efficiency standards and encourage alternative energy sources within the next few years. (IPEC-D-26)

Comment: Furthermore, the CEQ regulations require a full and fair discussion of reasonable alternatives to minimize environmental impacts (conservation) and devotion of substantial treatment to each alternative. (IPEC-F5-89)

Comment: Contrary to Entergy's presentation in its Environmental Report, NUREG-1437 Volume 1, Section 8.1 does not mandate that energy conservation be addressed if and only if it could replace the MWe of IP2 or IP3. In fact it is quite the contrary. The applicants posit that in the aforementioned regulation when the NRC discusses looking to power generation, "alternatives should be limited to single, discrete electrical sources." Such limitation does not encompass conservation as NUREG-1437 makes abundantly clear. The single, discrete limitation, as specified in the regulation is applicable, by its express terms to power generation, not power conservation. (IPEC-F5-90)

Comment: Furthermore, the CEQ regulations require a full and fair discussion of reasonable alternatives to minimize environmental impacts (conservation) and devotion of substantial treatment to each alternative. (IPEC-K17-89)

Comment: [T]he alternatives to Indian Point's nuclear power, using a combination of renewable energy (wind, solar, geothermal), conservation, and clean natural gas, as offered by the 2006 National Academy of Sciences report. (IPEC-A6-5, IPEC-A7-5, IPEC-A8-5, IPEC-A9-5, IPEC-A10-5, IPEC-A11-5, IPEC-A12-5, IPEC-A13-5, IPEC-A14-5, IPEC-A15-5, IPEC-A16-5, IPEC-B6-5, IPEC-B7-5, IPEC-B8-5, IPEC-B9-5, IPEC-B10-5, IPEC-B11-5, IPEC-B12-5, IPEC-B13-5, IPEC-B14-5, IPEC-B15-5, IPEC-B16-5, IPEC-C6-5, IPEC-C7-5, IPEC-C8-5, IPEC-C9-5, IPEC-C10-5, IPEC-C11-5, IPEC-C12-5, IPEC-C13-5, IPEC-C14-5, IPEC-C15-5, IPEC-C16-5,

IPEC-D4-5, IPEC-D6-5, IPEC-D7-5, IPEC-D8-5, IPEC-D9-5, IPEC-D10-5, IPEC-D11-5, IPEC-D12-5, IPEC-D13-5, IPEC-D14-5, IPEC-D15-5, IPEC-D16-5, IPEC-E6-5, IPEC-E7-5, IPEC-E8-5, IPEC-E9-5, IPEC-E10-5, IPEC-E11-5, IPEC-E12-5, IPEC-E13-5, IPEC-E14-5, IPEC-E15-5, IPEC-E16-5, IPEC-E17-7, IPEC-F6-5, IPEC-F7-5, IPEC-F8-5, IPEC-F9-5, IPEC-F10-5, IPEC-F11-5, IPEC-F12-5, IPEC-F13-5, IPEC-F14-5, IPEC-F15-5, IPEC-F16-5, IPEC-G6-5, IPEC-G7-5, IPEC-G9-5, IPEC-G10-5, IPEC-G11-5, IPEC-G12-5, IPEC-G13-5, IPEC-G14-5, IPEC-G15-5, IPEC-G16-5, IPEC-H6-5, IPEC-H8-5, IPEC-H9-5, IPEC-H10-5, IPEC-H11-5, IPEC-H12-5, IPEC-H13-5, IPEC-H14-5, IPEC-H15-5, IPEC-H16-5, IPEC-I6-5, IPEC-I7-5, IPEC-I8-5, IPEC-I9-5, IPEC-I10-5, IPEC-I11-5, IPEC-I12-5, IPEC-I14-5, IPEC-I15-5, IPEC-I16-5, IPEC-J6-5, IPEC-J7-5, IPEC-J8-5, IPEC-J9-5, IPEC-J10-5, IPEC-J11-5, IPEC-J12-5, IPEC-J13-5, IPEC-J14-5, IPEC-J15-5, IPEC-J16-5, IPEC-K6-5, IPEC-K7-5, IPEC-K8-5, IPEC-K9-5, IPEC-K10-5, IPEC-K11-5, IPEC-K12-5, IPEC-K13-5, IPEC-K14-5, IPEC-K15-5, IPEC-K16-5, IPEC-L6-5, IPEC-L7-5, IPEC-L8-5, IPEC-L9-5, IPEC-L10-5, IPEC-L11-5, IPEC-L12-5, IPEC-L13-5, IPEC-L14-5, IPEC-L15-5, IPEC-L16-5, IPEC-L17-5, IPEC-M6-5, IPEC-M7-5, IPEC-M8-5, IPEC-M9-5, IPEC-M10-5, IPEC-M11-5, IPEC-M12-5, IPEC-M13-5, IPEC-M14-5, IPEC-M15-5, IPEC-M16-5, IPEC-M17-5, IPEC-N6-5, IPEC-N7-5, IPEC-N8-5, IPEC-N9-5, IPEC-N10-5, IPEC-N11-5, IPEC-N12-5, IPEC-N13-5, IPEC-N14-5, IPEC-N15-5, IPEC-N16-5, IPEC-O4-5, IPEC-O6-5, IPEC-O7-5, IPEC-O8-5, IPEC-O9-5, IPEC-O10-5, IPEC-O11-5, IPEC-O12-5, IPEC-O13-5, IPEC-O14-5, IPEC-O15-5, IPEC-O16-5, IPEC-P6-5, IPEC-P7-5, IPEC-P8-5, IPEC-P9-5, IPEC-P10-5, IPEC-P11-5, IPEC-P12-5, IPEC-P13-5, IPEC-P14-5, IPEC-P15-5, IPEC-P16-5, IPEC-Q6-5, IPEC-Q7-5, IPEC-Q8-5, IPEC-Q9-5, IPEC-Q10-5, IPEC-Q11-5, IPEC-Q12-5, IPEC-Q13-5, IPEC-Q14-5, IPEC-Q15-5, IPEC-Q16-5, IPEC-R5-5, IPEC-R6-5, IPEC-R7-5, IPEC-R8-5, IPEC-R9-5, IPEC-R10-5, IPEC-R11-5, IPEC-R12-5, IPEC-R13-5, IPEC-R14-5, IPEC-R15-5, IPEC-R16-5, IPEC-S5-5, IPEC-S6-5, IPEC-S7-5, IPEC-S8-5, IPEC-S9-5, IPEC-S11-8, IPEC-S12-5, IPEC-S13-5, IPEC-S14-5, IPEC-S15-5, IPEC-S16-5, IPEC-T5-5, IPEC-T6-5, IPEC-T8-5, IPEC-T7-5, IPEC-T9-5, IPEC-T10-5, IPEC-T11-5, IPEC-T12-5, IPEC-T13-7, IPEC-T14-5, IPEC-T15-5, IPEC-T16-5, IPEC-U5-5, IPEC-U6-5, IPEC-U7-5, IPEC-U8-5, IPEC-U9-5, IPEC-U10-5, IPEC-U11-5, IPEC-U12-5, IPEC-U13-5, IPEC-U14-5, IPEC-U15-5, IPEC-V5-5, IPEC-V6-5, IPEC-V7-5, IPEC-V8-5, IPEC-V9-5, IPEC-V10-5, IPEC-V11-5, IPEC-V12-5, IPEC-V13-5, IPEC-V14-5, IPEC-V15-5, IPEC-W5-5, IPEC-W6-5, IPEC-W7-5, IPEC-W8-5, IPEC-W9-5, IPEC-W10-5, IPEC-W11-5, IPEC-W12-5, IPEC-D15-5, IPEC-W14-5, IPEC-W15-5, IPEC-X5-5, IPEC-X6-5, IPEC-X7-5, IPEC-X8-5, IPEC-X9-5, IPEC-W13-5, IPEC-X10-5, IPEC-X11-5, IPEC-X12-5, IPEC-X13-5, IPEC-X14-5, IPEC-X15-5, IPEC-Y5-5, IPEC-Y6-5, IPEC-Y7-5, IPEC-Y8-7, IPEC-Y9-5, IPEC-Y10-5, IPEC-Y11-5, IPEC-Y12-5, IPEC-Y13-5, IPEC-Y14-5, IPEC-Y15-5, IPEC-Z4-5, IPEC-Z5-5, IPEC-Z6-5, IPEC-Z7-5, IPEC-Z8-5, IPEC-Z9-5, IPEC-Z10-5, IPEC-Z11-5, IPEC-Z12-5, IPEC-Z13-5, IPEC-Z14-5, IPEC-Z15-7)

Comment: The Environmental Report also Fails to Address What Alternatives Exist to the Requested License Renewals . . . . (IPEC-B-13)

Comment: I would also like to add that I am not concerned with the price of Entergy stocks . . . or Wayne Leonard's disturbingly huge salary. I do believe the company could absorb the legal fees and building costs involved with cooling towers. But, I believe all that money could be better spent in new and improved energy sources (R&D public education, etc) . . . making American a better place. (IPEC-B5-4)

Comment: the alternatives to Indian Point's nuclear power, using a combination of renewable energy (wind, solar, geothermal), conservation, and clean natural gas, as offered by the 2006 National Academy of Sciences report. (IPEC-C7-5)

Comment: It was exactly the same conversation about the possibility of alternatives. There weren't supposed to be any. (IPEC-CC-6)

Comment: THE ENVIRONMENTAL REPORT FAILS TO CONDUCT A COMPREHENSIVE EVALUATION OF THE ALTERNATIVES TO APPROVAL OF THE REQUESTED LICENSE EXTENSION BECAUSE IT DOES NOT CONTAIN A SYSTEMATIC OR SCIENTIFICALLY COMPETENT DISCUSSION OF THE POTENTIAL FOR ENERGY CONSERVATION DURING THE 20 TO 28 YEARS OF OPERATION AUTHORIZED BY SUCH PERMIT. (IPEC-D-24)

Comment: Any suggestion that such an enormous and vital component of the state's energy infrastructure (Indian Point supplies 20-40% of the electricity to the New York City metropolitan area, depending on the time of year and other factors) could be replaced with, for example, renewable options such as wind, hydropower and solar, fails to account for the comparatively low capacity factors, high costs, intermittent nature, and distinct environmental impacts of those other options. (IPEC-D4-4)

Comment: Even if they could be sized, sited and built to generate 2000MW (in real terms, an extremely unlikely prospect), such alternatives could not provide the overall system capacity and reliability now provided by Indian Point. (IPEC-D4-5, IPEC-MMM-5)

Comment: Replacing Indian Point with non-baseload renewable facilities is simply not a realistic or viable option. (IPEC-D4-6)

Comment: Any evaluation of the alternatives to the proposed project, including reasonable alternatives not within the jurisdiction of the lead agency. (IPEC-E17-7)

Comment: The NRC must fully consider the use of alternative energy sources in its analysis of alternatives for Indian Point in order to comply with NEPA. (IPEC-F5-77)

Comment: NEPA, CEQ regulations, NRC regulations and Appendix A to Part 51 mandate that the full and complete environmental impacts of the proposed action, license renewal of IP2 and/or license renewal of IP3, be compared to the projected impacts of all reasonable alternatives. As delineated in CEQ regulations, the obligations include rigorously exploring and objectively evaluating all reasonable alternatives, devoting substantial treatment to each alternative, and including alternatives not within the jurisdiction of the lead agency. (IPEC-F5-79)

Comment: The NRC must fully consider and assess the use of sustainable energy sources in conjunction with conservation and to include energy efficiency measures as an alternative. The NRC must assess the use of a combination of renewable energy sources rather than relying on

discrete sources. It is unreasonable and in violation of NEPA for the NRC to assert that the power rating of IP2 or IP3, separately or in combination, to be replaced solely by one discrete renewable energy source. (IPEC-F5-84)

Comment: NEPA, CEQ and the NRC all mandate a vigorous exploration and an objective evaluation of all reasonable alternatives to license renewals in its regulations. The regulations also require an assessment of alternative energy sources including sustainable energy sources and energy conservation as a means of replacement for IP2 and/or IP3's current power generation.

In the environmental report, the applicants state that power generated by wind, solar, hydropower, geothermal, biomass and other technologies, conservation or a combination of alternatives "were not considered as reasonable replacement base load power generation." Therefore, the applicants did not consider or address a replacement portfolio of power sources inclusive of sustainable sources in coordination with conservation. (IPEC-F5-94)

Comment: The applicants' conclusions simply fly in the face of recent independent technical and scientific studies regarding energy replacement of Indian Point. The most comprehensive study directly on issue is the National Academy of Sciences (NAS) June 2006 report, "Alternatives to the Indian Point Energy Center for Meeting New York's Electrical Power Needs." The report ultimately concludes that even when considering the combined energy production of IP2 and IP2, the approximately 2000 MWe is replaceable, and "the committee has identified no technical obstacles that it believes present insurmountable barriers to the replacement of Indian Point's capacity, energy and ancillary services." On point, the committee found that "if a decision were definitively made to close all or some part of Indian Point by a date certain, the committee anticipates that a technically feasible replacement strategy for Indian Point would be achievable" and no major disruption would result if both IP2 and IP3 were retired at the conclusion of their current licenses in 2013 and 2015, respectively. (IPEC-F5-95)

Comment: Furthermore, contrary to Entergy's findings, the NAS study states that an achievable replacement strategy would focus on conservation, energy efficiency, improvement of transmission infrastructure and replacement generating capacity including wind, photovoltaic, hydroelectric and other technologies such as natural gas-fired combined cycle plants. (IPEC-F5-96)

Comment: The study states that "a replacement strategy for Indian Point would most likely consist of a portfolio of the approaches discussed in this report, including investment in energy efficiency, transmission and new generation" and that regarding wind generation alone: "technically there is sufficient wind resource in New York stat to replace the Indian Point units." (IPEC-F5-97)

Comment: Additionally, the Nuclear Research Institute and the Institute for Energy and Environmental Research recently published a summary of its book to be published in October of 2007; "Carbon Free and Nuclear Free – A Roadmap for U.S. Energy Policy." The overarching finding of the study is that a reliable U.S. electricity sector is achievable without nuclear power

through a combination of conservation and alternative sustainable energy sources and thus would reduce environmental risks posed by nuclear proliferation, terrorism, severe accidents nuclear waste and uranium mining and transportation. The report finds that wind or solar capacity individually equals between 2.5 and 3 times the entire electricity production in the U.S. and that each of 6 states have wind energy potential greater than the electricity produced by all 103 nuclear power plants. (IPEC-F5-98)

Comment: The NRC, in order to comply with NEPA, must present an accurate comparison of all direct environmental and cumulative impacts of extended operation to utilization of other energy sources including renewable with and without conservation, in the draft SEISs for IP2 and IP3. (IPEC-F5-110)

Comment: In addition, the so-called alternative methods of making electricity may be very viable, but they also have adverse environmental impacts.

For example, the California branch of the Natural Resources Defense Council filed suit to stop the construction of a wind farm. Robert Kennedy, Jr. of the Riverkeeper opposed the wind farm in Massachusetts.

Solar power -- there is another alternative energy source that has problems because of the chemicals used in the photoelectric cells.

So no matter what way electricity is made you have to look at the environmental impact. (IPEC-FF-7)

Comment: There are no viable alternatives to the 2,000 megawatts of power generated by Indian Point that provides electricity to power our homes, our railroads, our airport, and our business. (IPEC-FFF-2)

Comment: I also think that in looking at the environmental impact, you've got to look at the totality of the input, including all the key alternatives, which I think the NRC already mentioned, including the impact of not running the plant. (IPEC-G-3)

Comment: Alternative energy has been mentioned over and over today. Alternative energy is the alternative. By 2013 and 2015, and during the 20 years thereafter, substantial increases in infrastructure for alternative energy, for renewable energy and energy efficiency, will be put into place in the Hudson Valley, and that must be reliably estimated. (IPEC-GG-8)

Comment: New York has an agenda to use more non-renewable, non-nuclear energy in the coming years. Shutting down Indian Point opens an opportunity in the market to tap into the ingenuity of minorities, particularly, to create safer, cleaner, and less costly ways of providing energy. (IPEC-H5-5)

Comment: the alternatives to Indian Point's nuclear power, using a combination of renewable energy (wind, solar, geothermal), conservation, and clean natural gas, as offered by the 2006 National Academy of Sciences report. (IPEC-H6-6)

Comment: What are the alternatives to nuclear? Well, I'll tell you one thing: they're not wind and solar.

Wind energy has a very useful application in that when the wind is blowing you can turn off some of the gas peaking plants if you're at peak power requirements. Solar is simply too expensive and will -- unless it comes down by 10 times in price, will remain a very minor niche player. But those aren't the reasons that they can't replace Indian Point. It's because they are intermittent and unreliable sources of energy by nature. The sun does not shine at night. The wind does not blow all the time, and, therefore, they cannot provide base load electricity to the grid like nuclear, hydro, and fossil fuels can.

The only alternative would be gas-fired plants producing 10 million tons more CO2, and it absolutely blows my mind when I hear someone from Riverkeeper, an environmental group, say the words "clean natural gas." How is 10 million tons of additional CO2 clean? And how are additional tons of sulfur dioxide, nitrous oxides, and particulate matters clean? It's absolutely logically inconsistent to on one hand say shut down Indian Point, and on the other hand say we're all worried about air pollution and climate change. (IPEC-HH-8)

Comment: All reasonable energy alternatives, especially the renewable clean forms of energy that are widely viewed as the energy technologies of the "future" as well as efficiency technologies and demand-side options. (IPEC-I5-7)

Comment: Any suggestion that such an enormous and vital component of the state's energy infrastructure (Indian Point supplies 20-40% of the electricity to the New York City metropolitan area, depending on the time of year and other factors) could be replaced with, for example, renewable options such as wind, hydropower and solar, fails to account for the comparatively low capacity factors, high costs, intermittent nature, and distinct environmental impacts of those other options. (IPEC-J4-4)

Comment: Replacing Indian Point with non-baseload renewable facilities is simply not a realistic or viable option. (IPEC-J4-6)

Comment: The NRC only looks at coal and natural gas plants as reasonable alternatives under NEPA to replacing Indian Point's energy output in their environmental impact studies.

Why does the NRC refuse to consider a combination of renewable energy such as wind, solar, geothermal, combined with conservation and clean natural gas to replace Indian Point as a National Academy of Sciences study suggests and lays out a road map for? (IPEC-K-4)

Comment: If Indian Point is not relicensed, the power will have to come from sources other than nuclear and these have already been determined to be inadequate substitutions. (IPEC-K4-9)

Comment: The NRC must fully consider the use of alternative energy sources in its analysis of alternatives for Indian Point in order to comply with NEPA. (IPEC-K17-77)

Comment: NEPA, CEQ regulations, NRC regulations and Appendix A to Part 51 mandate that the full and complete environmental impacts of the proposed action, license renewal of IP2and/or license renewal of IP3, be compared to the projected impacts, of all reasonable alternatives. As delineated in CEQ regulations, the obligations include rigorously exploring and objectively evaluating all reasonable alternatives, devoting substantial treatment to each alternative, and including alternatives not within the jurisdiction of the lead agency. (IPEC-K17-79)

Comment: The NRC must fully consider and assess the use of sustainable energy sources in conjunction with conservation and to include energy efficiency measures as an alternative. The NRC must assess the use of a combination of renewable energy sources rather than relying on discrete sources. It is unreasonable and in violation of NEPA for the NRC to assert that the power rating of IP2 or IP3, separately or in combination, to be replaced solely by one discrete renewable energy source. (IPEC-K17-84)

Comment: NEPA, CEQ and the NRC all mandate a vigorous exploration and an objective evaluation of all reasonable alternatives to license renewals in its regulations. The regulations also require an assessment of alternative energy sources including sustainable energy sources and energy conservation as a means of replacement for IP2 and/or IP3's current power generation.

In the environmental report, the applicants state that power generated by wind, solar, hydropower, geothermal, biomass and other technologies, conservation or a combination of alternatives "were not considered as reasonable replacement base load power generation." Therefore, the applicants did not consider or address a replacement portfolio of power sources inclusive of sustainable sources in coordination with conservation. (IPEC-K17-94)

Comment: The applicants' conclusions simply fly in the face of recent independent technical and scientific studies regarding energy replacement of Indian Point. The most comprehensive study directly on issue is the National Academy of Sciences (NAS) June 2006 report, "Alternatives to the Indian Point Energy Center for Meeting New York's Electrical Power Needs." The report ultimately concludes that even when considering the combined energy production of IP2 and IP3, the approximately 2000 MWe is replaceable, and "the committee has identified no 'technical obstacles that it believes present insurmountable barriers to the replacement of Indian Point's capacity, energy and ancillary services." On point, the committee found that "if a decision were definitively made to close all or some part of Indian Point by a date certain, the committee anticipates that a technically feasible replacement strategy for Indian Point would be

achievable" and no major disruption would-result if both IP2 and IP3 were retired at the conclusion of their current licenses in 2013 and 2015, respectively. (IPEC-K17-95)

Comment: Furthermore, contrary to Entergy's findings, the NAS study states that an achievable replacement strategy would focus on conservation, energy efficiency, improvement of transmission infrastructure and replacement generating capacity including wind, photovoltaic, hydroelectric and other technologies such as natural gas-fired combined cycle plants. (IPEC-K17-96)

Comment: The study states that "a replacement strategy for Indian Point would most likely consist of a portfolio of the approaches discussed in this report, including investment in energy efficiency, transmission and new generation" and that regarding wind generation alone: "technically there is sufficient wind resource in New York state to replace the Indian Point units." (IPEC-K17-97)

Comment: Additionally, the Nuclear Research Institute and the Institute for Energy and Environmental Research recently published a summary of its book to be published in October of 2007; "Carbon Free and Nuclear Free - A Roadmap for U.S. Energy Policy." The overarching finding of the study is that a reliable U.S. electricity sector is achievable without nuclear power through a combination of conservation and alternative sustainable energy sources and thus would reduce environmental risks posed by nuclear proliferation, terrorism, severe accidents nuclear waste and uranium mining and transportation. The report finds that wind or solar capacity individually equals between 2.5 and 3 times the entire electricity production in the U.S. and that each of 6 states have wind energy potential greater than the electricity produced by all 103 nuclear power plants. (IPEC-K17-98)

Comment: The NRC, in order to comply with NEPA, must present an accurate, comparison of all direct environmental and cumulative impacts of extended operation to utilization of other energy sources including renewable with and without conservation, in the draft SEISs for IP2 and IP3. (IPEC-K17-110)

Comment: A central responsibility of any SEIS is an evaluation of the public need for the project and a careful review of any reasonably foreseeable alternatives that could meet that need with fewer adverse impacts. As the United States Court of Appeals for the Second Circuit said over thirty years ago, the requirement that the agency describe the anticipated environmental effects of proposed action is subject to a rule of reason. The agency need not foresee the unforeseeable, but by the same token neither can it avoid drafting an impact statement simply because describing the environmental effects of and alternatives to particular agency action involves some degree of forecasting. . . . It must be remembered that the basic thrust of an agency's responsibilities under NEPA is to predict the environmental effects of proposed action before the action is taken and those effects are fully known.

Scientists Institute for Public Information, Inc. v. Atomic Energy Commission, 481 F.2d 1079, 1092 (2d Cir. 1973). (IPEC-L17-42)

Comment: What is required is a review of projects that are reasonably foreseeable. Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry.' . . . But implicit in this rule of reason is the overriding statutory duty of compliance with impact statement procedures to 'the fullest extent possible.'

Scientists Institute For Public Information, Inc. v. Atomic Energy Commission, 481 F.2d 1079, 1092 (2d Cir. 1973). See also, Natural Resources Defense Council, Inc. v. Morton, 458 F.2d 827, 837 (D.C. Cir. 1972) ("[T]he requirement in NEPA of discussion as to reasonable alternatives does not require 'crystal ball' inquiry. Mere administrative difficulty does not interpose such flexibility into the requirements of NEPA as to undercut the duty of compliance 'to the fullest extent possible.'") (IPEC-L17-43)

Comment: Therefore, NRC's SEIS must include a reasoned discussion of alternatives to this application. Those alternatives include, without limitation, whether or not the energy produced by each (or both) of the two operating reactors could be obtained through alternative means - such as energy efficiency, energy conservation, or other forms of energy generation, including renewable energy sources. (IPEC-L17-45)

Comment: In recent years, various renewable energy technologies have been deployed on an ever increasing scale. For example, in recent years energy generation has increased from wind, biomass, and photovoltaic technologies. (IPEC-L17-47)

Comment: However, there are several issues that I think are more important as you go into this air quality. There are those who put forth the notion that we can replace Indian Point with power generated from wind turbines or solar panels. These renewable former energies are great, they're terrific, we should have them in our portfolio.

They have just tried to build one in the ocean off of Jones Beach, and the Long Island Power Authority has abandoned that wind project because of cost factors. So people talk about wind; you just can't do it. (IPEC-LL-4)

Comment: Even if the wind was blowing all the time, like it does in certain parts of the west, or the sun was out 24 hours a day, you can't get enough power to replace 2,000 megawatts. Using calculations of the amount of electricity produced from the average wind turbine in New York, it would require 1,300 wind turbines to replace Indian Point. Ironically, the same environmentalists that we mentioned earlier who runs the group that is opposed to Indian Point fought to kill the wind farm off of Martha's Vineyard. You can't have it both ways. And that project only proposed to site one-tenth of the number of turbines. Good luck on getting their support for that type of project. (IPEC-LL-7)

Comment: I don't think there's an elected official in this room who appeared recently in June when I did, or who appeared tonight or is going to appear at the next hearing, who is willing to

raise their hand and say, "I will willingly accept one of those five coal plants in my community, because it's the patriotic thing to do. It just ain't going to happen." (IPEC-LL-8)

Comment: Good afternoon. My name is Glenn Rickles. I am here today on behalf of Riverkeeper. I also reside in Croton on Hudson, which is approximately five to six miles away from the Indian Point plant.

We put forward today four environmental issues with a common theme. The total lack of consideration of Indian Point's license renewal on climate change and global warming. Pursuant to the National Environmental Policy Act, seminal law on point, as well as the NRC's own regulations, the NRC is mandated to fully consider and meaningfully evaluate more environmentally friendly and sustainable alternatives to the relicensure of Indian Point. (IPEC-M-1)

Comment: Entergy, in its environmental report in support of relicensure, unfortunately presents a wholly inaccurate and legally insufficient picture of the positive environmental effects of alternative sustainable replacement energy sources such as wind, hydroelectric, biomass, geothermal or energy conservation. (IPEC-M-2)

Comment: Cases in point. Entergy says in its environmental report, for those of you who have read it, it's section 7.5, that alternative and sustainable energy sources, and I quote, "were not--were not considered as reasonable replacement for Indian Point."

As will be delineated in a later-written submission, such a cavalier dismissal by Entergy is both contrary to law and simply flies in the face of generally-accepted science. In its 2006 report on replacement of Indian Point's power generation, the National Academy of Sciences states that Indian Point's power can be replaced by a variety of energy sources, including sustainable green sources and energy conservation. (IPEC-M-4)

Comment: Entergy based on NUREG 1437, it is a NRC regulation, it's section 8.1, states that energy conservation need not be considered, need not be considered, or analyzed, regardless of its positive environmental contribution as it is not a single discrete source of energy.

Entergy's reliance in their environmental report on NUREG is again simply wrong as a matter of law and runs contrary to the National Environmental Policy Act and NRC's own regulations. (IPEC-M-6)

Comment: A central responsibility of any SEIS is an evaluation of the public need for the project and a careful review of any reasonably foreseeable alternatives that could meet that need with fewer adverse impacts. As the United States Court of Appeals for the Second Circuit said over thirty years ago, the requirement that the agency describe the anticipated environmental effects of proposed action is subject to a rule of reason. The agency need not foresee the unforeseeable, but by the same token neither can it avoid drafting an impact statement simply because describing the environmental effects of and alternatives to particular agency action involves some degree of forecasting. . . . It must be remembered that the basic

thrust of an agency's responsibilities under NEPA is to predict the environmental effects of proposed action before the action is taken and those effects are fully known.

Scientists Institute for Public Information, Inc. v. Atomic Energy Commission, 481 F.2d 1079, 1092 (2d Cir. 1973). (IPEC-M5-42)

Comment: What is required is a review of projects that are reasonably foreseeable. Reasonable forecasting and speculation is thus implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry.' . . . But implicit in this rule of reason is the overriding statutory duty of compliance with impact statement procedures to 'the fullest extent possible.'

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Comment: Therefore, NRC's SEIS must include a reasoned discussion of alternatives to this application. Those alternatives include, without limitation, whether or not the energy produced by each (or both) of the two operating reactors could be obtained through alternative means – such as energy efficiency, energy conservation, or other forms of energy generation, including renewable energy sources. (IPEC-M5-45)

Comment: In recent years, various renewable energy technologies have been deployed on an ever increasing scale. For example, in recent years energy generation has increased from wind, biomass, and photovoltaic technologies. (IPEC-M5-47)

Comment: Ironically Entergy is ahead of its own game! The company has already filed a 'scoping' proposal with the NY Public Service Commission to construct an alternative natural gas power plant at Indian Point using the existing Algonguin natural gas pipeline. (IPEC-M17-12)

Comment: Nuclear power is not competitive today-it will still be more expensive and offset much fewer greenhouse gas emissions than a portfolio of renewable and energy-efficiency options. (IPEC-M17-32)

Comment: According to Jerry Kremer, Chairman of NYAREA-"it would require more than 1300 wind turbines to replace Indian Point." So-let's start building them! It's been done elsewhere in other locations around the world. One of the biggest turbine 'farms' in the USA is near Palm Springs, California. So-let's go! (IPEC-M17-33)

Comment: It is possible that safer, more cost-efficient, less vulnerable and 'greener' non-carbon dioxide-generating types of nuclear power generation (including, one day, the elusive fission process!) may eventually be developed. France and Japan are way ahead in this area. Unfortunately-Indian Point is not. (IPEC-M17-35)

Comment: Any suggestion that such an enormous and vital component of the state's energy infrastructure (Indian Point supplies 20-40% of the electricity to the New York City metropolitan area, depending on the time of year and other factors) could be replaced with, for example, renewable options such as wind, hydropower and solar, fails to account for the comparatively low capacity factors, high costs, intermittent nature, and distinct environmental impacts of those other options. (IPEC-MMM-4)

Comment: Replacing Indian Point with non-baseload renewable facilities is simply not a realistic or viable option. (IPEC-MMM-6)

Comment: The development of an alternative, uninterrupted, and affordable energy source to replace the power currently produced by Indian Point. (IPEC-N5-39, IPECN5-18)

Comment: WHEREAS, there is a natural gas line that presently feeds into the facilities and that Entergy is planning to build a separate finishing plant that would use natural gas, and understanding there are large resources of natural gas in North America, now, therefore, be it RESOLVED that the Westchester County Board of Legislators call on Entergy, the New York Public Service Commission and all other relevant parties to immediately begin a detailed feasibility study on converting Indian Points II and III from nuclear energy to natural gas or other non-nuclear fuel. (IPEC-N5-47)

Comment: Natural gas line . . . RESOLVED that while the potential cost of conversion is expensive, it is an expense that in the interest of safety and sanity must be made given the potential danger to life and property. (IPEC-N5-48)

Comment: ALTERNATIVES TO INDIAN POINT MUST BE ANALYZED IN THE SUPPLEMENTAL EIS. (IPEC-N17-109)

Comment: Environmental alternatives including, but not limited to, energy efficiency, photovoltaics, wind, biomass, and the usual list of suspects. Alternatives to each unit, not to both units together. Emergency planning and evacuation, security, and the spent fuel pools. Thank you all for the opportunity to make our comments here today and we'll see how she goes from here. (IPEC-O-5)

Comment: Improvement of transmission infrastructure lessens the need for a downstate nuclear plant. Uranium based nuclear fuel is not a renewable or sustainable energy source, and long term strategies should include a variety of renewable resources such as solar, wind, geothermal, hydroelectric, distributed generation, etc., as well as efficiency and conservation programs. (IPEC-O5-14)

Comment: We -- you know, serving on local boards here in the community, we had a natural gas line that wanted to come through this pretty area -- very close to here. We had groups against it. Our homes run either on oil or gas or electric. There is no other substitution at this point.

You have people that say, "Put hydrogen fuel cells" -- well, there's a problem with that at this point, and it may be a problem in the near future as well. (IPEC-OO-7)

Comment: So nuclear is not coal-free, and I'd also like to make it very clear, on this record, in this transcript, that no one in the coalition is calling for more coal plants. There are alternatives. That will be part of an intervener petition, and hopefully it will be part of what the NRC looks at as part of a countrywide, statewide, local initiative for clean energy. (IPEC-Q-3)

Comment: But the NRC seems to, in my very unlegal mind and very simple mind, seems to change the rules to fit the relicensing of this plant and others. Very frankly, this plant is my prime concern as opposed to others across the nation, but I do feel it's time to look beyond nuclear. (IPEC-RR-2)

Comment: the alternatives to Indian Point's nuclear power, using a combination of renewable energy (wind, solar, geothermal), conservation, and clean natural gas, as offered by the 2006 National Academy of Sciences report. (IPEC-S10-7, IPEC-S11-8, IPEC-T13-7, IPEC-U9-4, IPEC-Y8-7, IPEC-Z15-7)

Comment: Alternatives must be thoroughly reviewed for their feasibility and impacts. In particular, a thorough and honest review of the use of conservation, renewable energy and other emerging innovations must be included that explores the use of these approaches to replace the contributions made by Indian Point. It will not be sufficient to use coal fired or other fossil fuel technologies as a straw dog to justify nuclear power. (IPEC-SSS-34)

Comment: We need to keep ourselves safe. Nobody here wants to have to move. We couldn't move in an emergency. Let's find some economic way to put this plant in a less populated area. (IPEC-TT-4)

Comment: The alternatives to the proposed action: no action, decommissioning or utilizing alternative energy sources, will either have very negative environmental impacts or are not feasible. (IPEC-TTT-26)

Comment: AAEA supports the proposed action, opposes the no-action alternative, and believes that alternative energy technologies are not feasible for replacing the electricity output at the facility. The ER gives thorough coverage to these alternatives. (IPEC-TTT-46)

Comment: AAEA believes these fossil fuel plants are not feasible at the Indian Point location. AAEA believes natural gas should be used to produce base-load electricity as little as possible. The site is not large enough to accommodate a coal plant. (IPEC-TTT-48)

Comment: Not enough is being done to investigate alternative energies and to implement plans immediately to make us less dependent upon Indian Point. (IPEC-X4-7)

Comment: Contrary to Entergy's presentation in its Environmental Report, NUREG- 1437 Volume 1, Section 8.1 does not mandate that energy conservation be addressed if and only if it could replace the MWe of IP2 or IP3. In fact it is quite the contrary. The applicants posit that in the aforementioned regulation when the NRC discusses looking to power generation, "alternatives should be limited to single, discrete electrical sources." Such limitation does not encompass conservation as NUREG-1437 makes abundantly clear. The single, discrete limitation, as specified in the regulation is applicable, by its express terms to power generation, not power conservation. (IPEC-K17-90)

Comment: The elimination of the plant and the urgent need for alternative power resources could stimulate huge 'innovation and rapid response' funds that would revolutionize the whole generating sector in the region and the USA (and world) as a whole. The Indian Point site could be a positive focal point and catalyst for new and innovative energy sources. (IPEC-M17-7)

Comment: Furthermore, New York State is pursuing various actions to implement additional energy efficiency standards and encourage alternative energy sources within the next few years. For example, in April 2007, Governor Spitzer announced a "15 by 15" Clean Energy Plan to reduce energy consumption in 2015 by 15 percent. This reduction is to be achieved by energy efficiency alone. The energy efficiency that would be achieved under this Plan would more than replace the capacity and energy provided by Indian Point. (IPEC-N17-112)

Comment: Moreover, the closure of Indian Point would be expected to encourage the creation of additional generating capacity. As explained in the 2005 Indian Point Options study by Levitan & Associates, it is reasonable to expect that the retirement of Indian Point would encourage developers to complete various projects that have been approved but have not yet been. built:

Project developers are keenly tuned to market dynamics in New York. They would realize that retiring IP would cause market energy and capacity values to increase across the downstate region. These price signals would be important, given IP's size and location, to encourage the development of new generation and/or transmission projects that would replace the lost capacity. These new generation projects could include decentralized and renewable resource options. If the retirement of IP were announced in advance, developers would be able to calculate the economic feasibility of their projects and pursue those that make financial sense in time to maintain the state's reliability requirement. (IPEC-N17-114)

Comment: Where is the push to develop alternative technology. Let's use the brain power of our citizens, let's use the collective desire of the people to participate in conservation, at least. Let's talk about the good jobs that would be generated from renewable energy projects. (IPEC-R11-7)

Comment: That means we should be betting on conservation, energy efficiency, and solar and wind power, none of which rely on water. (IPEC-Q17-221)

Comment: Additionally, the extent that there are dramatically unequal subsidies and total life-cycle costs between Nuclear Energy production and energy efficiency and renewable energy sources, such as geothermal, photovoltaic and wind, must be comprehensively considered. True sustainable and renewable safe, forms of energy that are widely viewed as the energy technologies of the "future," as well as efficiency technologies and demand side options, must be considered in the EIS, including the replacement energy study by NAS commissioned by Nita Lowey. (IPEC-Q17-304)

Comment: To stop pouring billions of government dollars into dangerous forms of energy, and to use our resources to develop real, safe, clean energy that doesn't require evacuation plans. That's real, safe, clean energy. And to work out the kinks of the alternate forms of power and put the resources there and get some really good results. The resources have not gone there. The resources have gone into nuclear. (IPEC-VV-4)

Response: *The comments are related to the environmental impacts of alternatives to license renewal at Indian Point. The GEIS provides a discussion of a number of applicable alternatives to nuclear power plants. In addition, Chapter 8 of the SEIS will evaluate the environmental impacts associated with various reasonable alternatives, including combinations of renewable energy sources, conservation, and natural gas, as compared to the license renewal of Indian Point.*

Comment: The NRC must compare Indian Point's cumulative detrimental contribution to climate change and environmental degradation to safe and clean renewable energy sources. (IPEC-F5-101)

Comment: I want to talk about the environmental issues. Climate change is the biggest environmental issue today. Many people have come up and made the assertion that nuclear energy is producing a lot of greenhouse gas and CO2 emissions. This is purposely misleading the public. There are many independent, full life cycle analyses of greenhouse gas emissions from all the different electricity sources. (IPEC-HH-3)

Comment: Nuclear plants produce on average five grams of CO2 per kilowatt hour. Solar panels produce 35 grams of CO2 per kilowatt hour, largely because of the need to extract silicon, which is a very energy-intensive process. Gas plants produce 500 grams of CO2 per kilowatt hour, 100 times as much as nuclear energy. And coal-fired powerplants produce 1,000 grams of CO2 per kilowatt hour, 200 times as much as nuclear energy.

These are facts -- this is from the Office of Science and Technology from the Parliament of the United Kingdom. You can also Google the University of Madison, Wisconsin, that has done an independent study of full life cycle CO2 for all power generation sources. (IPEC-HH-4)

Comment: Nuclear and hydroelectric are the two lowest CO2 emitters of all our technologies. That is partly why New York State is the fifth lowest per capital CO2 emitter in the country, because 45 percent of its electricity comes from either nuclear or hydroelectric. Vermont and Idaho are the lowest, because even more of their electricity is coming from either hydroelectric, as in the case of Vermont -- Idaho, I mean, and a combination of hydro and nuclear in the case of Vermont. (IPEC-HH-5)

Comment: The NRC must compare Indian Point's cumulative detrimental contribution to climate change and environmental degradation to safe and clean renewable energy sources. (IPEC-K17-101)

Comment: The law mandates that the detrimental environmental effects of license renewal on climate change and global warming be fully considered and fully analyzed. Entergy, in its environmental report, at section 8.4.3.2.1, states that no carbon dioxide is emitted by the production of nuclear energy. Nonsense. Nonsense. Completely wrong. The statement is simply inaccurate. There is no disagreement among scientists, none at all, that large amounts of carbon dioxide is produced in the nuclear power life cycle, be it from uranium mining, milling of uranium, refining and enrichment of uranium, refurbishment of the plants, transportation of uranium, etcetera, etcetera, etcetera. These well-known facts are simply ignored by Entergy in its environmental report. Nowhere does Entergy address, as mandated by law, that nuclear's production of CO2 is at a far higher level than would be produced by green, sustainable energy sources. (IPEC-M-7)

Comment: In sum, what we see is a denial at every step of Entergy's contribution to climate change and a refusal to consider and analyze conservation and replacement energy supplied by a portfolio of sources inclusive of green sustainable energy. As will be fully delineated in a written submittal, such is wrong as a matter of law and is wrong as a matter of public policy. (IPEC-M-8)

Comment: Case in point: Indian Point emits almost zero greenhouse gases. Increased reliance on non-polluting nuclear energy represents our best chance of meeting the region's clean air goals and maintaining our standard of living while improving the environment. The same cannot be said with the world's coal-fired plants, which emit nearly 2 billion tons of CO 2 annually. (IPEC-OOO-5)

Comment: My name is John Kelly. I live less than four miles from Indian Point with my family. I've lived there for over 30 years. I am the retired director of licensing for Indian Point, so I guess I pay my bills with my pension check and my Social Security check. I'd like to bring up one point which has been touched on by a few of the earlier speakers, which I think is vitally important, and I found it interesting that for some reason the New York DEC did not mention this as one of the issues they're considering relative to the environmental impact of Indian Point in the renewal process. While I was still employed by Entergy, before I retired in 2003, we hired an engineering firm in Lyndhurst, New Jersey, to do a study of what would be the impact on air pollution of the shutdown of the Indian Point plants.

In doing that analysis, they looked at, quite frankly, only those plants that were currently available. If you shut the plant down, obviously, you're going to replace the power with currently available sources. And they did an analysis which came up with some interesting numbers. If you shut Indian Point down, you would have to replace the power with fossil-fired plants in the immediate vicinity in New York City and in the Hudson Valley. That would result in another 14 million tons of carbon dioxide per year put into the atmosphere in this area. Another 63,000 tons of sulfur oxides per year. Another 22,000 tons of nitrous oxides. Another 2000 tons of particulate matter, PM10, that's particulates with sizes up to ten microns. About 1300 tons of carbon monoxide, and approximately 200 tons of volatile organic carbons. [ML072830629]

All of these pollutants would be emitted into an area where we're already in noncompliance relative to ozone. So we already have a pollution problem in the atmosphere which would be substantially aggravated simply by the shutdown of Indian Point. (IPEC-P-1)

Comment: An earlier speaker noted that there is some carbon dioxide released as a result of the uranium fuel cycle. That's true. An analysis was done recently by a European Union organization and they looked at the entire fuel cycle from mining and milling and enrichment through reprocessing, which they're doing in Europe, and they concluded that the amount of carbon dioxide released as a result of the entire uranium fuel cycle is less than 5 percent of that produced by coal or oil or natural gas per megawatt produced. So yes, there is a very small amount of carbon dioxide in greenhouse gases produced by nuclear power but it's extraordinarily small in concern, relative to that which comes from fossil power. (IPEC-P-2)

Comment: And, of course, we always -- we know about global warming and what is happening with the greenhouse effect. The Arctic Ocean now -- the Arctic is depleting. We're having more floods in the coastal area, because of global warming, and that's because of more pollutants from coal. We have this plant over here in Haverscroll that's just spitting out pollutants, and Texans to come back across the river to this area. You know, I wish some of these groups would go over there and tell them to shut down their coal plant or at least get it into regulation or get into requirements to help us all out. (IPEC-PP-9)

Comment: However, that's not why I'm here today for this environmental scoping session. There's been a lot of talk about the carbon footprint of the nuclear reactors at Indian Point, and you don't see the release there but it happens, and because we are a country, because this is one planet, because we are looking at global warming, it's very important that we look at the entire fuel cycle. Now maybe this will turn out to be the battle of the studies, because the studies from Europe that I've been reading, particularly the one from Denmark, says that the carbon emissions from nuclear power plants is about equal to or slightly greater than gas. Much better than coal, but still very significant. There is a coalfire generator, many, many megawatts, in Paducah, Kentucky, that churns out greenhouse gases and that electricity from that plant is used in the processing of uranium, of the fuel rods. (IPEC-Q-2)

Comment: Nuclear energy is not clean nor is it cheap. It's heavily subsidized by the taxpayer. That needs to be understood, if we're going to have a reasonable dialogue in this community about whether the plants stay open or not. Here's my question, and I'm going to say it in

several ways, because I really need to see, we all really need to see an answer to this. The NRC has already conceded, said, stated, that there is a carbon footprint for nuclear power plants. They have a generic environmental study. Well, now we're doing the specific study. What is the carbon footprint for this particular pair of reactors in this particular part of the country?

And what happens from the coal emission, the emissions from the coal-fired plant in Kentucky? My understanding is that we end up with it in New York as acid rain. How does that cycle play into the economics of our forests and our lakes with the high acid and the lack of fish, in our dying forests? All of that's an economic impact and all of that needs to be looked at in an environmental cycle. (IPEC-Q-4)

Comment: We ask specifically for--we would like a specific carbon footprint of each one of these plants, individually. (IPEC-S-2)

Comment: Even new fossil fueled baseload facilities would take years to site and build in the region (if indeed that is feasible at all) and would inevitably have a "carbon footprint" that doesn't now exist at Indian Point. (IPEC-D4-7, IPEC-J4-7)

Comment: Even new fossil-fueled baseload facilities would take years to site and build in the region (if indeed that is feasible at all) and would inevitably have a "carbon footprint" that doesn't now exist at Indian Point. (IPEC-MMM-7)

Comment: In 1999, coal-fired power plants in the United States emitted into the environment 11.3 million tons of sulfur dioxide ("SO 2 "), a criteria air pollutant that is correlated to asthma and impaired lung functions, 6.5 million tons of nitrogen oxides ("NOx") which, when combined with other pollutants and sunlight, forms ozone, another lung irritant linked to asthma, and 1.9 billion tons of carbon dioxide ("C0 2"), yet another contributor to increased ozone levels and global climate change. This equates to approximately 60% of all SO2 emissions, 25% of all NOx emissions, and 32% of all CO 2 emissions nationwide.

These and other airborne pollutants emitted by fossil-fuel power stations may have a direct and significant effect on human health. In a study by Abt Associates, one of the largest for-profit government and business research consulting firms in the world, it was found that over 30,000 deaths each year are attributable to air pollution from U.S. power plants. Another study found that air pollution from power plants was a contributing factor to higher infant mortality rates and higher incidences of Sudden Infant Death Syndrome ("SIDS").

Research has further shown that pollutants from fossil-fuel power plants form tiny particles (called fine particulate matter) that are linked to diseases of both the respiratory and cardiovascular systems. (IPEC-QQQ-16, IPEC-TTT-20)

Response: *The comments are related to air emissions. Air quality issues were evaluated in the GEIS and determined to be Category 1 issues. Although these comments do not provide any new and significant information on air quality pertaining to the relicensing of IP2 and IP3,*

air quality and the carbon footprint of nuclear power, compared to other alternatives, will be addressed in Chapter 6 of the SEIS, while the staff will address emission levels from proposed alternatives in Chapter 8. Related comments that address air emissions but do not address alternatives can be found in Section 9 of this document.

14. Comments Regarding Uranium Fuel Cycle and Waste Management

Comment: failing to delineate the voluminous production of carbon dioxide within the nuclear power life cycle. (IPEC-F5-104, IPEC-K17-104)

Comment: The applicants, at Section 8.4.3.2.1 of their Environmental Report have stated that to "produce and deliver" nuclear energy, no carbon dioxide is emitted. This statement is completely inaccurate. The applicants have also stated that the "environmental impacts of the continued operation of IP2 and IP3 . . . are significantly smaller than impacts associated with the best case among reasonable alternatives."' Again, this statement is simply inaccurate. (IPEC-F5-108, IPEC-K17-108)

Comment: Carbon dioxide is a prime contributor to climate change. The United States Supreme Court held in Massachusetts et al v. Environmental Protection Agency, that the U.S. government's objective analysis of the relevant science establishes that carbon dioxide precipitated global warming, threatens a precipitous rise in sea levels, severe and irreversible changes to the natural ecosystem, a significant reduction in winter snow pack, increased spread of disease and increased ferocity of weather events. There is no disagreement that carbon dioxide is produced in the nuclear power life cycle, whether it be in the mining and milling of uranium, the refining and enrichment of uranium into fuel, the transportation of uranium, the refurbishment and replacement of major plant structures, (inclusive of Entergy's 2011 and 2012 planned replacement of both reactor vessel heads), and the transportation and disposal of spent fuel. (IPEC-F5-109, IPEC-K17-109)

Response: *The comments are related to air emissions. Air quality issues were evaluated in the GEIS and determined to be Category 1 issues. Although these comments do not provide any new and significant information on air quality pertaining to the relicensing of IP2 and IP3, air quality and the carbon footprint of nuclear power, compared to other alternatives, will be addressed in Chapter 6 of the SEIS, while the staff will address emission levels from proposed alternatives in Chapter 8.*

Comment: Transportation accident involving radiological materials coming into or leaving the Indian Point facility is a key accident pathway. (This scenario should also include radiological materials leaving Indian Point in any unplanned fashion, which has already occurred at the plant facility.) (IPEC-Q17-354)

Comment: Unregulated transportation of radioactive materials is a key accident pathway that would result in the potential for significant off site release of radiological contaminants into the air, water and ground, resulting in significant Environmental costs and impact. (IPEC-Q17-355)

Comment: Transportation must be investigated, as transportation accidents would result in significant Environmental impact, maybe LARGE. Therefore, a comprehensive study of the transportation as a Category 2 issue must be included in the EIS. (IPEC-Q17-356)

Response: *The comments are noted. However, transportation, as it relates to impacts from the uranium fuel cycle and waste management, has been evaluated in the GEIS and determined to be a Category 1 issue. The comments do not provide any new and significant information and will not be evaluated further.*

Comment: Foremost among the critical risks are. . . the grave risks resulting from an additional 20 years accumulation of spent nuclear fuel . . . If the NRC cannot ensure safe solutions to all of these problems, then it cannot relicense this facility. (IPEC-L17-50, IPEC-M5-50)

Comment: Facts supporting this [inclusion as a Category 2 issue] include: (1) long term permanent storage remains unresolved, (2) multiple spent fuel pool leakage issue requiring design load changes to the pad and cask storage changes, (3) closing of Barnwell storage facility, (4) fissures in the pad that were unanticipated, (5) potential mixing of fuels from different units including Unit 1, (6) NRC and industry own research into leaving waste sitting where it now resides for periods in excess of 100 years, and finally (7)the extent of contaminated soil requiring remediation, as well as new seismology studies are each relevant to the EIS for the renewal license itself and probable consequences (IPEC-Q17-101)

Response: *Onsite spent fuel storage is considered a Category 1 issue, which was evaluated in the GEIS. The safety and environmental effects of spent fuel storage onsite have been evaluated by the NRC and, as set forth in the Waste Confidence Rule (10 CFR 51.23), the NRC generically determined that such storage could be accomplished without significant environmental impacts. In the Waste Confidence Rule (10 CFR 51.23), the Commission determined that spent fuel can be safely stored onsite for at least 30 years beyond the plant's life, including license renewal. These comments provide no new information regarding onsite spent fuel storage and will not be evaluated further with respect to that specific issue. However, as indicated in responses in Section 4 of this report, the environmental impacts of identified spent fuel pool leaks to the environment during the period of extended operation are within the scope of the environmental review and will be addressed in Chapters 2 and 4 of the SEIS.*

15. Comments Regarding Refurbishment

Comment: The applicants have not only failed to provide the mandated reports in the specificity required but provided absolutely no environmental reports at all on their plans to change or modify the facility or refurbish same. The applicants, at section 3.3 of their Environmental Report Refurbishment Activities, simply and dismissively state that “there are no such refurbishment activities planned at this” time and thus provide no Environmental Report on refurbishment.

Omitted is the fact Entergy has already ordered Replacement Reactor Vessel Heads for Indian Point #2 and Indian Point #3, with delivery dates scheduled for October 2011 and October 2012 respectively, as evidence by the attached page of the Doosan Heavy Industries Construction Co., Ltd presentation at the Burns & Roe 17th Annual Seminar, Powering the Future, March 21, 2007. Attached hereto as exhibit "A". (IPEC-B-6)

Comment: This undisclosed, major refurbishment issue indicates Entergy's willful omission of a vital fact in their relicensing application, as it was never mentioned in Entergy's re-licensing application. A complete comprehensive design basis inspection of the integrity of the containment dome liner and the rust in the dome liner, was delayed 5 years. This inspection is almost due, yet it is not addressed in the application. (IPEC-B-7)

Comment: Reactor vessels, of course, are far from tangential components. They contain the nuclear fuels in the plants, and, over time, are irradiated which can lead to embrittlement, deterioration, loss of material, and less able to withstand flaws which may be present. The 2002 incident at the Davis Besse Nuclear Plants only highlight the integral nature of the vessel and the vessel heads. Nevertheless, neither action is listed, described, or reported on the environmental impact of vessel head replacement nor are any other refurbishments. (IPEC-B-9)

Comment: IP2 and IP3 apparently, take the position that the above and other changes or modifications are not within the purview of the law. The change/modification/replacement of the vessel heads and presumably other proposed, yet undisclosed actions, are within the scope of 10 CFR 53 and 10 CFR 54.21. As stated by the Nuclear Regulatory Commission ”For the purposes of the Environmental Impact Review, refurbishment describes an activity or change in a facility that is needed to support operations during the renewal term.” The replacement of the reactor vessel heads are needed to support operations during the renewal term and environmental report delineating with specificity all potential impacts remediations and alternatives must be set forth, inclusive of, but not limited to, worker radiation exposure, construction traffic and noise, construction runoff, radiation releases, impacts on plant and animal habitats, and the impact of the proposed actions on threatened or endangered species in accordance with the Endangered Species Act. (IPEC-B-10)

Comment: The undersigned respectfully request that both IP2 and IP3 be required, in their respective Environmental Reports, to fully delineate any and all refurbishments, key component modifications, and changes as well as a complete and thorough impact, mitigation, alternative

analysis on each, prior to the NRC accepting the application for license renewal to be deemed complete and accurate. (IPEC-B-11)

Comment: Such inspection is particularly important from a load bearing perspective, since the licensee has discussed the possibility of a designed/engineered plan which would replace the failing domes with new model domes that have far different design and weight criteria from the domes approved under in the original DB. This refurbishment cannot comply with DB and must not proceed until all dome inspection/repair issues have been fully identified, and corrected and a full complete EIS for said significant action is implemented and carried out. (IPEC-C-25)

Comment: The first issue to address is the lie contained in Entergy's LRA, Appendix E, when they state in their supplemental EIS, that the need to review the environmental costs associated with refurbishment is unnecessary because there are no anticipated refurbishment issues in the 20 year period of license renewal. Perhaps then, Entergy would like to discuss with the NRC their deliberate omission of the fact they have already ordered and are planning replacement of the reactor vessel heads for both IP2 and IP3. (IPEC-H-11)

Comment: Such inspection is particularly important from a load bearing perspective, since the licensee has discussed the possibility of a designed/engineered plan which would replace the failing domes with new model domes that have far different design and weight criteria from the domes approved under in the original DB. This refurbishment cannot comply with DB and must not proceed until all dome inspection/repair issues have been fully identified and corrected and a full complete EIS for said significant action is implemented and carried out. (IPEC-L5-31)

Comment: Close examination as provided in Section VI reveals that in each SEIS, Entergy‘s assertions of no environmental impact turns on their claim that there are no refurbishment issues anticipated for, or during the period of license extension. The argument collapses on a fact analysis alone. Refurbishment issues are predicted, and in fact required for many active components, and the consequences of rationalizing not performing them are immediately obvious. One only has to look at Entergy‘s Vermont Yankee cooling tower collapse after a lengthy environmental intervention by the stakeholders to include the cooling towers within scope where the ALSB ultimately ruled against the petitioner. (IPEC-U16-9)

Comment: Closer examination reveals more disturbing activities that appear to deliberately circumvent disclosure of refurbishment of equipment during the relevant license renewal period, by upgrading or refurbishing the equipment prior to the renewal period. (IPEC-U16-10)

Comment: This apparently deceptive approach to refurbishment directly controverts regulations targeted specifically to include as in scope, all refurbishment done in anticipation of license renewal. Examples are provided in section VI including the refurbishment plans for both Indian Point Plant reactor vessel heads scheduled for 2011 and 2012, and the refurbishment of equipment during power up rate initiatives. In addition, one only needs to examine substantial historical design basis events such as the Unit 2 Steam Generator Tube rupture that show no signs of simply disappearing over the extended operation. (IPEC-U16-11)

Comment: The first issue to address is the lie contained in Entergy's LRA, Appendix E when they state in their Supplemental EIS that the need to review the Environmental Costs associated with Refurbishment is unnecessary because there are no anticipated refurbishment issues in the 20 year period of license renewal. Perhaps then, Entergy would like to discuss with the NRC their deliberate omission of the fact they have already ordered, and are planning replacement of the reactor vessel heads for both IP2 and IP3. (IPEC-PPP-9)

Comment: Entergy alleges there are no refurbishment issues to be considered in the EIS Scoping process. However, there is a far greater than 50 percent chance that IP2 and IP3 are facing the necessity of replacing feedwater heaters. Lack of industry expertise, fewer vendors and manufacturers coupled with material changes, and you have a potentially serious issue that could negatively impinge on the licensee's ability to maintain safe operation of the reactors. (IPEC-PPP-21)

Comment: Under issue of refurbishment, licensee's LRA Appendix E is silent on the issue of shell and heat exchanger replacement. (IPEC-PPP-23)

Comment: In each SEIS, Entergy‘s arguments turn on there being no refurbishment issues. The argument collapses on a fact analysis alone. Refurbishment issues are predicted, and in fact required, for many active components and the consequences of rationalizing not performing them are immediately obvious. (IPEC-Q17-29)

Comment: For example, at Entergy Vermont Yankee, there was an environmental intervention by the Stakeholders to include the cooling towers as within scope because the cooling towers needed refurbishment. The ALSB ruled against the Stakeholders, and did not include the cooling towers within the EIS. Recently the cooling towers in question collapsed. (IPEC-Q17-30)

Comment: Closer examination reveals more disturbing activities that appear to deliberately circumvent refurbishment of equipment during the renewal period, by upgrading or refurbishing the equipment prior to the renewal period. (IPEC-Q17-31)

Comment: Entergy‘s assertion in the Indian Point EIS that no refurbishment issues exist, or are expected during the period of license renewal is a misrepresentation. Examples of refurbishment plans are provided below including the refurbishment plans for both Indian Point Plant reactor vessel heads scheduled for 2011 and 2012 and the refurbishment of equipment during power uprate initiatives. Substantial historical events and problematic issues will not simply disappear over the extended operation. (IPEC-Q17-32)

Comment: It is pointed out here, that Entergy as a Fleet Operator has claimed NO REFURISHMENT ISSUES EXIST for any of their reactor sites. As example, from Entergy‘s Arkansas One Plant (ANO-1) ER:

In addition, an evaluation of structures and components as required by 10 CFR 54.21 did not identify any major plant refurbishment activities or modifications necessary to support the

continued operation of ANO-1 during the license renewal term. Therefore, evaluation of refurbishment issues was not considered. (IPEC-Q17-33)

Comment: A cursory review of other License Renewal Applications and their Environmental Reports shows a very disturbing trend. Despite the self admitted fact that all 104 reactors in the American Fleet are aging and have some known and serious issues that will need to be addressed through refurbishment during the license renewal period, both the NRC and their licensees have been side stepping this significant Category issue by simply claiming there ARE NO REFURBISHMENT ISSUES, and they thus do not need to be discussed in the Supplemental Report. As example, we quote from the Wolf Creek (WCGS) Environmental Report:

WCGS has stated that its evaluation of structures and components, as required by 10 CFR 54.21, did not identify any major plant refurbishment activities or modifications as necessary to support the continued operation of WCGS for the license renewal period. In addition, any replacement of components or additional inspection activities are within the bounds of normal plant operation, and are not expected to affect the environment outside of the bounds of the plant operations evaluated in the U.S. Nuclear Regulatory Commission‘s 1982 Final Environmental Statement Related to Operation of Wolf Creek Generating Station, Unit No. 1. (IPEC-Q17-34)

Comment: Even more disturbing, is the almost identical cut and paste preparation of site specific reports that is taking place. Below is a passage from Vermont Yankee‘s (VYNPS) Environmental Report, and the similarity between it, and the Wolf Creek Passage above is startling.

Entergy has stated that its evaluation of structures and components, as required by 10 CFR 54.21, did not identify any major plant refurbishment activities or modifications as necessary to support the continued operation of VYNPS for the license renewal period. In addition, any replacement of components or additional inspection activities are within the bounds of normal plant operation and are not expected to affect the environment outside of the bounds of the plant operations evaluated in the U.S. Atomic Energy Commission‘s 1972 Final Environmental Statement. (IPEC-Q17-35)

Comment: Again, if we look at the Environmental Report for Pilgrim (PNPS), we again find the same identical cut and paste.

PNPS has stated that its evaluation of structures and components, as required by 10 CFR 54.21, did not identify any major plant refurbishment activities or modifications as necessary to support the continued operation of PNPS for the license renewal period. In addition, any replacement of components or additional inspection activities are within the bounds of normal plant operation, and are not expected to affect the environment outside of the bounds of the plant operations evaluated in the U.S. Atomic Energy Commission‘s 1972 Final Environmental Statement Related to Operation of PNPS. (IPEC-Q17-36)

Comment: This startling cut and paste is INDUSTRY WIDE, as is further witnessed by the same comment lifted from Nine Mile Point's (NMPN) Environmental Report:

NMPNS has stated that its |evaluation of structures and components, as required by 10 CFR 54.21, did not identify any major plant refurbishment activities or modifications as necessary to support the continued operation of NMP, for the license renewal period. In addition, any replacement of components or additional inspection activities are within the bounds of normal plant operation, and are not expected to affect the environment outside of the bounds of the plant operations evaluated in the U.S. Atomic Energy Commission's 1972 Final Environmental Statement Related to Operation of Nine Mile Point Nuclear Station. (IPEC-Q17-37)

Comment: The integrity of the entire EIS Scoping process is further questioned when we look at the Environmental Report for Brunswick (BSEP), and find again almost word for word cut and pasting going on throughout. CP&L has stated that its evaluation of structures and components, as required by 10 CFR 54.21, did not identify any major plant refurbishment activities or modifications as being necessary to support the continued operation of BSEP for the license renewal term. In addition, any replacement of components or additional inspection activities that are within the bounds of normal plant operation are not expected to affect the environment outside the bounds of the plant operations evaluated in the Final Environmental Statement Related to Operation of Brunswick Nuclear Steam Electric Plant Units 1 and 2, issued by the U.S. Atomic Energy Commission in 1974. (IPEC-Q17-38)

Comment: It's breathtaking to realize that the biggest Category 2 issue in the license renewal Environmental Scoping process, refurbishment, is side stepped by the industry by claim after claim that there are no Refurbishment issues anticipated for 104 aging, embrittled reactors with known Boric Acid Corrosion Issues as relates to reactor vessel heads and spray nozzles. (IPEC-Q17-39)

Comment: This claim by the industry is even more disturbing in light of the NRC's attempts to LOWER SAFETY MARGINS for Reactor Vessel Heads and Fire Safety. No PWR's can meet those standards during the period of extended operation. Couple that with the fact that Entergy has already placed orders for replacement reactor vessel heads for both IP2 LLC and IP3 LLC, negating their claim that no refurbishment is anticipated, is a planned misrepresentation, and an attempted deception of both the NRC and the public. (IPEC-Q17-40)

Comment: Entergy alleges in their EIS Statement, marked as Appendix E to the LRA, that there are no refurbishment issues anticipated in the period of license renewal, and therefore no Environmental Costs need be considered. This statement on the part of the licensees (IP2 LLC and IP3 LLC) is the equivalent of the owner of a Chevy Vega or Ford Pinto claiming their vehicles were going to require no significant repairs in the next 20 years, even though it is being driven 60 miles a day. (IPEC-Q17-41)

Comment: FUSE USA has uncovered the fact that Entergy has made commitments to purchase and install new reactor vessel heads at both IP2 and IP3. According to experts in the specific area of reactor vessel head replacement and repair, the installation of a reactor vessel

head is highly complex, and comes with a host of potentially significant issues, including the possibility of cutting a hole in the containment if said head will not fit otherwise. (IPEC-Q17-42)

Comment: To skew and limit the scope of the EIS Supplemental ER, Entergy has deliberately omitted any and all refurbishment issues planned in anticipation of, or during, the period of license renewal. It is pointed out that numerous Generic Letters issued by the NRC anticipate numerous refurbishment issues during the period of license renewal for a nuclear reactor. (IPEC-Q17-43)

Comment: Each of these refurbishment issues, and specifically the reactor vessel head replacement, will have potentially SIGNIFICANT impacts on environment that must be investigated in the GEIS Supplemental ER process. (IPEC-Q17-44)

Comment: In Appendix E of the EIS Statement Entergy falsely states that there are no refurbishment issues in sections A through J: (IPEC-Q17-45)

Comment: Refurbishment issues could disturb known PCB's at the site, which in turn could threaten (as one example) American Bald Eagles. (IPEC-Q17-46)

Comment: Entergy's ER claims that there is no impact on air quality, because —no refurbishment activities have been identified. Consideration of mitigation is not required." (IPEC-Q17-47)

Comment: As has been stated, FUSE USA has uncovered the fact that Entergy has made commitments to purchase and install new reactor vessel heads at both IP2 and IP3. According to experts in the specific area of reactor vessel head replacement and repair, the installation of a reactor vessel head is highly complex, and comes with a host of potentially significant issues, including the possibility of cutting a hole in the containment if said head will not fit otherwise. (IPEC-Q17-48)

Comment: To skew and limit the scope of the EIS Supplemental ER, Entergy has deliberately omitted any and all refurbishment issues planned in anticipation of, or during the period of license renewal. It is pointed out, that numerous Generic Letters issued by the NRC anticipate numerous refurbishment issues during the period of license renewal for a nuclear reactor. (IPEC-Q17-49)

Comment: Each of these refurbishment issues and specific reactor vessel head replacement will have potentially SIGNIFICANT impacts on air quality that must be investigated in the GEIS Supplemental ER process. (IPEC-Q17-50)

Comment: FUSE asserts that changes to the facility under 10 CFR 50.59 did not aggregate environmental impact analysis and Entergy did not provide a necessary comprehensive EIS, as required under section 102(C) of the NEPA.

From 10 CFR 50.59 ... (IPEC-Q17-59)

Comment: These statements are gross misrepresentations due to the fact that Entergy already has committed to the purchase new reactor vessel heads for both IP2 LLC and IP3 LLC, with delivery and installment tentatively scheduled for 2011 and 2012 respectively. Even if installation were to occur before the period of license renewal were to begin, said major refurbishment is being contemplated, or planned in expectation of license renewal. Additionally such refurbishment effects many other systems and components whose failure will have significant Environmental Impacts and Costs. (IPEC-Q17-63)

Comment: Therefore, Refurbishment of the reactor vessel head must be included in the EIS, as site specific Category 2 issues, that have significant Environmental Impacts and Costs on, terrestrial resources, Threatened or Endangered Species, Air Quality during refurbishment, Socioeconomics Housing impacts, Unavoidable Adverse impacts, Education impacts, Local transportation impacts, historic and archaeological properties, and Offsite land use. (IPEC-Q17-64)

Comment: Specifically, with regard to the known radioactive leaks and planned refurbishment of the reactor vessel heads, the EIS must include a comprehensive review of the disposal plan of the old, highly irradiated and contaminated reactor vessel heads. Once again this is new information, which Entergy has failed to include in Environmental Supplement E, and it must be included as a Category 2 issue that must be comprehensively reviewed in the EIS. (IPEC-Q17-119)

Comment: A self serving profit biased in favor of NRC licenses, a corrupted process wherein NEI money and lobbying influence saw public safety take a second seat to licensee convenience and needs. Reliance on false or incorrect assumptions, such as assuming the licensee will use best industry standards in carrying out refurbishment on the site. (IPEC-Q17-315)

Comment: Known infrastructure degradation related issues at Indian Point, along with known, yet unidentified radiological leaks throughout the site and known yet unidentified buried Mixed Wastes make any construction or refurbishment at Indian Point a significant action worthy of careful review and analysis under the constructs of NEPA. (IPEC-Q17-316)

Comment: Entergy alleges there are no refurbishment issues to be considered in the EIS Scoping process. However, there is a far greater than 50 percent chance that IP2 and IP3 are facing the necessity of replacing feedwater heaters. Lack of industry expertise, fewer vendors and manufacturers, coupled with material changes, are serious issues that negatively impinge on the licensee‘s ability to maintain safe operation of the reactors. Therefore, the associated significant Environmental Impacts and Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-336)

Comment: Shell and heat exchanger replacement was not mentioned by Entergy‘s LRA Appendix E, however such shell and heat exchanger replacement will inevitably occur during

the 20 year new superseding license. Therefore, the associated significant Environmental Impacts and Costs of such accident pathways must be included in the EIS. (IPEC-Q17-338)

Response: *The comments are noted. The staff will evaluate any refurbishment issues in Chapter 3 of the SEIS.*

16. Comments Regarding Decommissioning

Comment: Due to the Radiation Leaks, the IP decommissioning funds must be increased to ensure adequate clean up of the IP site. (IPEC-C-12)

Comment: It has been acknowledged by the NRC that numerous systems, structures and components can experience undetected radioactive leaks over a prolonged period of time and that "relatively large volumes of contamination above the decommissioning release limits" can result in "notable increases in remediation time and costs" in the sums of millions of present value dollars. The past and present leaks at IP provide indicia of continued and future leaks. (IPEC-C-13)

Comment: Furthermore, Entergy has stated getting the tritium out of the bedrock will require chiseling out the contamination. Such remediation work (which is required to bring the reactor site into compliance with NRC guidelines and the DB), will require additional protective actions during the remediation work to keep radioactive contaminants from migrating off site, and exposing both humans and the environment to unnecessary additional exposure risks and pathways. (IPEC-C-14)

Comment: Moreover, from 2002 to 2006 the Urban Inflation rate has been 2.9%, yet the adjustment of the decommissioning funds for IP1, 1P2 and IP3 have been 1%, which means the decommissioning funds for Indian Point have a substantial shortfall, as they are not even keeping up with the rate of inflation. (IPEC-C-18)

Comment: That an orderly closure and decommissioning of the Indian Point Nuclear Power Plants begin at the earliest time possible. (IPEC-N5-22)

Comment: In terms of financial considerations, decommissioning is a very labor intensive and long term job. (IPEC-O5-13)

Comment: We also ask that in the environmental impact statement a full, complete, comprehensive study of the decommissioning fund be evaluated. Currently, the decommissioning fund is not keeping up with the cost-of-living increase and it has not been reevaluated for the ongoing leaks. (IPEC-S-14)

Comment: At one of our last meetings here, we were told that the only way that they were going to be able to get the radioactive waste, the strontium and the tritium out of the bedrock was to chisel it out, because they couldn't blast it out and they certainly couldn't dig it out. So we need to know the comprehensive costs and whether there is actually enough money in the decommissioning fund. (IPEC-S-15)

Comment: My name is Karen Kahn. I've been a resident of Westchester my entire life, and have lived in this area since 1973. My concerns are, like everybody else's, to live in a healthy environment.

The nuclear plant is a hot topic. It has spewn or leaked contaminated material into bedrock, which cannot be cleaned up, therefore leaving it a site that's contaminated and half-lives, as we know, forever. (IPEC-TT-1)

Comment: The licensee must consider . . . Financial liability provisions, including impact on indemnity coverage. (IPEC-Q17-116e)

Comment: In addition, the following issues must be considered . . . Financial assurance to provide for commercial storage operation and decommissioning including any necessary repackaging, transportation and disposal of the waste. (IPEC-Q17-117c)

Comment: The GEIS has taken the position that the environmental impact of onsite spent fuel storage at generic reactor sites does not require any further environmental analysis because it is has already been generically determined that such impacts will be SMALL. However, that position can no longer be sustained because, as per well-established law, there is new and significant information suggesting that the basis for the original GEIS conclusion is no longer valid, and specifically related to Indian Point, that conclusion is invalid because of known serious structural issues (known leaks), which greatly change and impact the costs of decommissioning. Such new information regarding additional costs has not been incorporated into the GEIS. (IPEC-Q17-120)

Comment: As an example, neither Entergy‘s ER (Appendix E), nor the GEIS, address, much less provide a reasoned analysis of, the new and significant information (leaks) and its impact on the original GEIS findings with regard to the Decommissioning trust funds. (IPEC-Q17-121)

Comment: That flawed assumption, invalidated by the fact that the plant is already leaking unmonitored radioactive effluent into the bedrock, groundwater and Hudson River, relies upon the misdirected assumption that the decommissioning of Indian Point will be generic decommissioning, however the leaks into the bedrock will dramatically increase decommissioning costs at this site, thereby causing the impacts to be LARGE and therefore Decommissioning must be a Category 2, site specific issue based on new information, in the EIS. (IPEC-Q17-123)

Comment: Entergy‘s decommissioning trust fund balances are inadequate and insufficient to properly decommission the site, as required by 10CFR 54.3 to properly restore the site including, but not limited to, removal of underground radioactive contamination in the bedrock under the plant. (IPEC-Q17-124)

Comment: Per NRC Section PART 50 Sec. 50.75: Reporting and recordkeeping for decommissioning plan, Indian Point‘s decommissioning funds are inadequate to clean up the bedrock site from the ongoing underground leaks. (IPEC-Q17-125)

Comment: The costs for complete decommissioning and cleanup of the site must be adjusted to reflect significant changes in circumstances in the contamination streams, including the large underground radioactive leaks. (IPEC-Q17-126)

Comment: The EIS must include a comprehensive evaluation of actual decommissioning funds required to decontaminate the site in light of ongoing massive underground radioactive effluent and leaks. In addition, such funds must be placed into the decommissioning fund to protect the public health and safety, as well as the environment prior to acceptance of Entergy‘s LRA. (IPEC-Q17-127)

Comment: The Indian Point 2 decommissioning trust fund has not been adjusted to take into consideration the enormous, underground radioactive contamination accidentally discovered in 2005. (IPEC-Q17-128)

Comment: The current decommissioning plan for aging management of the plant is inadequate to clean up the bedrock site and is not addressed in the Applicant's LRA, and must be adjusted to reflect the large underground radioactive leaks, as required by:

Section PART 50 Sec. 50.75 (2) (e)(1)(v); any modifications occurring to a licensee's current method of providing financial assurance since the last submitted report; and any material changes to trust agreements . . . or where conditions have changed such as: (iii) The current situation with regard to disposal of high-level and low-level radioactive waste; (iv) Residual radioactivity criteria; (v) Other site-specific factors which could affect decommissioning planning and cost; (1) Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when significant contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations, or certification is used. (IPEC-Q17-129)

Comment: It has been acknowledged by the NRC that numerous systems, structures and components can experience undetected radioactive leaks over a prolonged period of time and that relatively large volumes of contamination above the decommissioning release limits can result in notable increases in remediation time and costs in the sums of hundreds of millions of present value dollars. (IPEC-Q17-130)

Comment: In the Matter of Power Authority of the State of New York and Entergy Nuclear Fitzpatrick LLC, Entergy Nuclear Indian Point 3 LLC, and Entergy Nuclear Operations, Inc. Docket Nos. 50-333-LT and 50-286-LT regarding the license transfer to Entergy, the Nuclear Regulatory Commission held that decommissioning shortfall did not fall within the scope of this license transfer proceeding, as Entergy Indian Point was not seeking in its application to renew or extend the Indian Point 3 operating license, nor does its pending application assume such a request. (IPEC-Q17-133)

Comment: The Commission further states, that regarding decommissioning Stakeholders have the right to seek intervener status in any application for license renewal or license extension that Entergy Indian Point may file. Therefore, based on the Commission‘s own decision, the issue of

whether there are adequate decommissioning funds is within scope of the licensing renewal proceedings, specifically included in the EIS. (IPEC-Q17-134)

Comment: The method of cost analysis of adequate decommissioning funds must be clearly stated. Entergy's application and Environmental Supplement E does not outline an adequate decommissioning and clean up plan for the large amounts of underground radioactive waste, for which the source has not yet been identified. Therefore the extent of the contamination remains unknown. (IPEC-Q17-136)

Comment: At a recent annual assessment NRC meeting in Croton, NY, NRC officials stated that since they can't dig the radioactive contamination out, and can't blast it out, therefore they will have to chisel out the tritium, cesium and strontium from the bedrock. If such remediation work is required to bring the reactor site into compliance with NRC guidelines and PART 50.7 it will require additional protective actions during the remediation work to keep radioactive contaminants from migrating off site, and exposing both humans, workers and the public, as well as the environment, to unnecessary additional exposure risks and pathways. (IPEC-Q17-140)

Comment: In the NRC's Liquid Radiation Release Lessons Learned Task Force Final Report, it was concluded and recommended that, in some cases, such as Indian Point, the relatively large volumes of contamination above the decommissioning release limits resulted in notable increases in remediation time and costs. The NRC staff estimates the increased cost to be in the tens of millions of dollars, although specific actual cost data is not available to the staff. (IPEC-Q17-141)

Comment: The decommissioning reports for Indian Point 2 from 2002 to 2006 indicate that the Urban Inflation rate has been 2.9% per year, yet the adjustment of the decommissioning funds for IP2 has been only 1% per year. However, the decommissioning reports falsely state the escalation rate is 3.0%. The decommissioning funds for Indian Point have a substantial shortfall, as they are not even keeping up with the rate of inflation, as evidenced in the March 29, 2005 Report BVY-05-033/NL-05-039/JNP-05- 005/Entergy Nuclear Operations Ltr.2.05.023 and the March 29, 2007 Report Entergy Nuclear Operations C-07-00007. (IPEC-Q17-142)

Comment: The lack of protection and additional decommissioning costs associated with forced onsite storage of radioactive waste streams must be addressed in the license renewal process. (IPEC-Q17-145)

Comment: The costs of assuming these burdens cannot be placed on the taxpayers, but should be assumed by the Applicant which profits from the operation. These additional costs must be added to the decommissioning fund. (IPEC-Q17-148)

Comment: Even the Nuclear Energy Institute (NEI) recommends that although NRC regulations do not require the inclusion of used-fuel storage costs in decommissioning funds,

companies should include such costs in their estimates, because no federal repository or interim storage facility is available. (IPEC-Q17-149)

Comment: The adequacy of decommissioning trust funds are not addressed in the GEIS. Due to the site specific nature of the decommissioning funds, the collective off-site radiological impacts and the need to determine site specific mitigation measure, decommissioning is not a Category 1 issue. This must be considered a Category 2 issue which has significantly LARGE impacts to the environment and public health and safety and therefore, must be comprehensively evaluated in the EIS. (IPEC-Q17-150)

Comment: The Decommissioning Trust Funds for IP1, IP2 and IP3, are insufficient to restore the site, especially in light of the multiple leaks first noticed in 2005. (IPEC-Q17-276)

Response: *Environmental impacts from the activities associated with the decommissioning of any reactor before or at the end of an initial or renewed license are evaluated in the GEIS and in NUREG-0586, Generic Environmental Impact Statement for Decommissioning Nuclear Facilities, Supplement 1, Regarding the Decommissioning of Nuclear Power Reactors. Findings from these two documents will be incorporated in the SEIS regarding decommissioning. The environmental impacts of decommissioning associated with license renewal will be addressed in Chapter 7 of the SEIS.*

In addition, 10 CFR 50.75 establishes requirements for reporting the status of a licensee's decommissioning trust fund, which is reviewed as part of the NRC's ongoing regulatory process. Therefore, the status of Indian's Point decommissioning trust fund is a current operating issue and is outside the scope of the environmental review for license renewal.

17. Comments Outside the Scope of License Renewal

Comments Regarding Emergency Response and Preparedness

Comment: Further, an acceptance by the NRC of the NEI's guidance to reduce the evacuation area to a 2 mile wedge/keyhole, constitutes a complete abrogation of the NRC's originating mandate to protect the public health and safety, and is capricious, arbitrary and criminally negligent. (IPEC-C-41)

Comment: Further, a substitution of the fallback option of shielding in place instead of prompt evacuation is non-protective of human health and safety. Sam Collins admitted in the April NRC meeting that, in the case of a fast moving event or terrorist attack on Indian Point, evacuation under the Emergency Plan could not/would not be implemented, and shielding in place would be employed. A CDC study has shown, that shielding in many structures provides limited protection from radioactive contaminants. For instance, a wood framed home with no basement affords a mere 10 percent level of protection. Though various members of the NRC staff have acknowledged that those levels are unacceptable, the NRC is taking no steps to improve shielding capabilities and facilities for all persons likely to be unable to evacuate, thereby failing to uphold the commission's primary mandate of protecting human health and safety. (IPEC-C-42, IPEC-L5-41)

Comment: Migration of Entergy work force out of the area has placed into jeopardy Indian Point's ability to quickly mobilize trained personnel to respond to fast moving events at the facility that could lead to a significant event. Specifically, close to half of the work force now lives in Dutchess County, with another 30 percent living over an hour or further from the plant. In a fast moving, all-hands-on-deck scenario, odds of avoiding a disaster have been greatly diminished because of this reality. More startling, is the overlay of this reality onto the NRC's move to issue a generic letter which would eliminate requirements for various back up systems to shut down the reactors and to replace it with a plan for licensees to manually shut down the reactors. If something happens to staff onsite (in, say, an internally caused explosion or fast moving fire) time would be of the essence, and the 60-90 minutes it would take to mobilize and return staff to the site could be the difference between saving the reactors, and losing not only the reactors, but every community within 50 miles of the plant. (IPEC-C-49)

Comment: As commuting residents of the area (Bedford), we experience the congested traffic patterns on Westchester roads daily -- these are chronic conditions which did not exist when the plant was originally licensed some forty years ago. In the event of an emergency, how could Entergy's safety and evacuation be viably executed? The logistics of traffic volume, outdated narrow roads, and population density on even "normal days" prohibit seriously entertaining even the thought that safety and communication efforts could be coordinated and a reasonable exodus could occur. The resultant traffic jams caused by advertised, mundane events as well as by traffic accidents render their plans ludicrous. One has to ask: does a disaster have to happen before the disinterested thinking of hindsight can prevail? (IPEC-C5-2, IPEC-OO-6)

Comment: We were concerned then about the possibility of evaluation. (IPEC-CC-2)

Comment: Given the very high stakes, it is vital that the NRC consider the effectiveness of the evacuation plans for Indian Point in the context of environmental impacts and human health. Such evaluations have precedent in the review procedures established for critical energy infrastructure by the Federal Energy Regulatory Commission and the Department of Energy. This assessment should take into account changes in population density and traffic patterns that have occurred in the 10-mile emergency planning zone since Indian Point's initial licensing. (IPEC-I17-12, IPEC-E5-12)

Comment: On a Friday in July 2003, FEMA, under the infamous Michael Brown, approved the evacuation plan and that judgment was quickly accepted by the NRC, saying the plan provided reasonable assurance that it would be effective. Ironically, on that very day, all the major roadways in Westchester were jammed through the entire day because of a single accident on the George Washington Bridge during the morning rush hour. I still wonder how the NRC defined reasonable assurance for that ridiculous judgment. When I think of that day, I have a mental image of those traffic jams happening while Indian Point's sirens wailed. That is the sirens that were working that day. (IPEC-J-3)

Comment: It has been 11 years since the GEIS was written. In that time the United States has experienced the worst terrorist attack on American soil in our history, leading to a heightened risk of a terrorist attack on a nuclear power plant. In addition, the earliest likely completion date for the Yucca Mountain waste repository has been delayed by two decades, to 2017. The total volume and density of spent fuel stored in Indian Point's spent fuel pools continues to increase as a result. In the past 11 years the amount of spent fuel being stored in the already packed onsite pools has increased. The population around Indian Point power plant has nearly doubled, resulting in significant traffic congestion that would prevent authorities from evacuating the residents living within the ten-mile Emergency Planning Zone (EPZ) in the event of an accident or terrorist attack. (IPEC-K17-6)

Comment: In 2003 KLD Associates conducted a traffic study for Entergy and determined that evacuation times for the Emergency Planning Zone around Indian Point doubled since 1994. The original estimate was 2.5 hours for people to proceed with evacuation, with a total of 5.5 hours for complete evacuation. KLD estimates increased mobilization time to four hours, while complete evacuation of the region in good weather conditions could take up to 9.5 hours and in snow conditions up to 12 hours. Shadow evacuation would increase this time. (IPEC-K17-20, IPEC-F5-20)

Comment: Emergency planning is an issue, unfortunately, that the NRC refuses to address during the relicensing process, despite significant changes in the population, roadways, and infrastructure, since the plant was originally sited in the agriculture landscape of Buchanan, New York, nearly half a century ago. (IPEC-KK-3, IPEC-VVV-3)

Comment: These are the concerns that I and fellow New Yorkers submitted to NRC Chairman Dale Klein beginning on May 29, 2007, in the form of an electronic action alert issued by

Riverkeeper. We further requested that the NRC include emergency planning in its relicensing proceedings for Indian Point.

On August 7th, J.E. Dyer, Director for the Office of Nuclear Reactor Regulation, wrote a response back to me and hundreds of others explaining why the NRC will not look at emergency planning -- a topic I will return to shortly. (IPEC-KK-5, IPEC-VVV-5)

Comment: OFF-SITE WORKERS Migration of Entergy work force out of the area has placed into jeopardy Indian Point's ability to quickly mobilize trained personnel to respond to fast moving events at the facility that could lead to a significant event. Specifically, close to half of the work force now lives in Dutchess County, with another 30 percent living over an hour or further from the plant. In a fast moving, all hands on deck scenario, odds of avoiding a disaster have been greatly impinged upon because of this reality. More startling, is to overlay this reality onto the NRC's move to issue a generic letter which would eliminate requirements for various back up systems to shut down the reactors and be replaced with a plan that would allow licensees to manually shut down the reactors. If something happens to staff onsite (in say an internally caused explosion or fast moving fire) time would be of the essence, and the 60-90 minutes it would take to mobilize and return staff to the site could be the difference between saving the reactors, and losing not only the reactors, but every community within 50 miles of the plant. (IPEC-L5-36)

Comment: Further, an acceptance by the NRC of the Nuclear Energy Institute's guidance to reduce the evacuation area to a 2 mile wedge/keyhole, constitutes a complete abrogation of the NRC's originating mandate to protect the public health and safety, and is capricious, arbitrary and criminally negligent. (IPEC-L5-40)

Comment: Foremost among the critical risks are . . . the need to ensure a practically workable evacuation plan. If the NRC cannot ensure safe solutions to all of these problems, then it cannot relicense this facility. (IPEC-L17-51, IPEC-M5-51)

Comment: In the past, the NRC has failed to evaluate evacuation protocols as part of the NEPA process for a license extension application. This omission is unacceptable, and would constitute a patent violation of NEPA, if it were allowed in the consideration of Indian Point’s relicensing application. (IPEC-M5-34, IPEC-L17-34)

Comment: It is unacceptable for the NRC to say that emergency planning is the domain of another federal agency (FEMA or DHS) and thereby decline to examine the environmental impacts resulting from the need to evacuate citizens from the EPZ or the impacts of a deficient evacuation plan and process. (IPEC-M5-38, IPEC-L17-38)

Comment: The emergency evacuation plan is a central and critical element of the NRC’s reactor permit and regulatory program. Thus, the NRC’s NEPA review of the potential impacts resulting from operation of two nuclear reactors, three spent fuel pools, and dry cask storage facility for an additional 20 years must include an analysis of the impacts of the emergency

evacuation plan for Indian Point, and whether it is meaningful and effective. (IPEC-M5-39, IPEC-L17)

Comment: WHEREAS, Federal law requires that licensees of nuclear generating facilities develop Radiological Emergency Preparedness (REP) Plans; WHEREAS, County governments where the nuclear generating facilities are located carry the bulk of the responsibility for developing updating and periodically evaluating the REP plan's effectiveness; WHEREAS, New York State currently requires licensees to pay an annual fee of $550,000 per nuclear generating facility, half of which amount is given to counties whose boundaries are within a 10-mile radius of said nuclear generating facility; WHEREAS, While Westchester received $412,500 per year under this arrangement, the actual cost to County taxpayers for radiological emergency preparedness is over ten times that amount -- $4.6 million annually. (IPEC-N5-14)

Comment: WHEREAS, Virtually every county department is called on to maintain and participate in the REP plan for the Indian Point Nuclear Facilities, and the Department of Emergency Services, the Department for Health and the Department of Public Safety in particular, contribute enormous resources to ensure that the REP plan requirements are met;

WHEREAS, County property tax dollars are utilized to supplement the difference between the licensee fee that Westchester received and the total amount that the County subsidizes;

WHEREAS, County government has a principal role to play in the REP planning, however County property taxpayers should not have to subsidize the entire cost of planning. (IPEC-N5-15)

Comment: WHEREAS, Legislation (A.2099/S.241) currently pending before the state legislature would offset the local costs for radiological preparedness by requiring that the fee paid by the licensee of nuclear power plants be increased to reflect the actual costs incurred by local governments associated with radiological preparedness. (IPEC-N5-16)

Comment: WHEREAS, consistent with this charge, this Honorable board, through its committees on Public Safety and Criminal Justice and on Environmental and Health, has, for the past three years, been monitoring the County's Emergency Evacuation Plan that would be put into effect in the event of a radiological incident at the Indian Point Nuclear Power Plant.

WHEREAS, as a result of serious questions raised regarding this Plan the two aforementioned Committees did urge that an independent, non-governmental assessment be made of the ability of the Plan to achieve its goals of protecting public health and ensuring public safety. (IPEC-N5-27)

Comment: RESOLVED, that as a matter of policy, this Honorable Board does hereby direct the County Executive or any other official and/or employee of the County of Westchester not to issue a radiological emergency preparedness activities form or any other official communication that would in any way state or imply that the Emergency Evacuation Plan as is currently exists is

capable of achieving its goals of protecting public health and ensuring public safety in the event of a radiological incident. (IPEC-N5-30)

Comment: RESOLVED, that, should such communication be mandated by a higher authority, this Honorable Board does hereby direct, as a matter of policy, that it shall not be issued without an accompanying disclaimer that the Emergency Evacuation Plain as it currently exists should not be construed as capable of achieving its goals of protecting public health and ensuring public safety. (IPEC-N5-31)

Comment: RESOLVED, That this Honorable Board does hereby call upon the Nuclear Regulatory Commission to immediately shutdown the Indian Point Nuclear Power Plants and provide for the proper safeguarding of all of the fuel rods by removal or safe storage until such time as it can be demonstrated that the Emergency Evacuation Plan can achieve its goals of protecting public health and ensuring public safety. (IPEC-N5-34)

Comment: Accidental Release/Emergency Response and Evacuation Must Be Analyzed in the Supplemental EIS. (IPEC-N17-94)

Comment: A significant release of radiation into the environment from a nuclear power plant - whether through a sudden event like a terrorist attack or through slow leakage because of chronic conditions like structural deterioration - could have disastrous environmental and public health consequences. Because of such risks, and following the 1979 accident at the Three Mile Island nuclear power station, owners of nuclear power plants must demonstrate that nearby residents can be safely and quickly evacuated. (IPEC-N17-95)

Comment: The emergency planning and evacuation failures experienced during Hurricanes Ivan, Katrina, and Rita further demonstrate the real world inadequacies of Indian Point's evacuation plan. NEPA requires that any NRC Supplemental EIS prepared as part of the current license renewal proceeding must also examine these inadequacies. (IPEC-N17-99)

Comment: Evacuation route, issues to be raised with our other officials in Washington specifically, if it's not with NRC, then it will have to be with FEMA. But shutting down the plant is not going to be the answer. There is nothing at this point to replace it. (IPEC-OO-6)

Comment: I know about the orange county emergency plan that comes in the mail each year. Do I think it will work? No. Am I concerned? Yes. My family and I have a plan, that is if someone blows the alarm in time to do anything about it. I believe people will want to cover it up, try to fix it, or just not want to create havoc, so that the alarm will be sounded too late! (I tell my friends if there is a real emergency get out your sunglasses and lawn chair and head for the roof because it's not something we will want to live through, a slow miserable death.) (IPEC-P4-2)

Comment: As Rockland County Executive, I represent a county of nearly 300,000 residents, approximately 120,000 of which live in a ten-square mile Emergency Planning Zone (EPZ) directly across the Hudson River from the Indian Point nuclear power plant in Buchanan, NY.

Along with my counterparts in Westchester, Putnam, and Orange Counties, I am responsible for the safety and security of the people I represent. Although Rockland enjoys an enviable record with respect to its ability to respond to emergency situations, this same level of response cannot be guaranteed, nor can the safety of Rockland residents, in the event of an emergency at Indian Point. It is for this reason, and for numerous others cited below, that I oppose the re-licensing of the facility. (IPEC-Q4-1)

Comment: Our present road infrastructure, which includes major transportation corridors including the New York State Thruway, the Palisades Interstate Parkway, and many state highways, cannot adequately handle a mass evacuation in a short period of time - under three hours. I continue, with County Executive Spano in Westchester, to refuse to authorize evacuation plans sanctioned by the Federal Emergency Management Association (FEMA) that we feel would not guarantee the safety of the residents that live in this County in the event of a release of radiation from the nuclear reactors located in Buchanan, NY, owned and operated by Entergy Northeast. (IPEC-Q4-4)

Comment: Those factors, coupled with the stark reality that we still do not yet have an adequate emergency notification system, beg the obvious question: If a new plant would not meet the criteria for licensing under current -federal regulation, how then can a license be renewed for an existing plant in an area where the population continues to grow and the transportation infrastructure would hamper a mass evacuation? (IPEC-Q4-6)

Comment: Given the stakes, it is necessary and appropriate for the NRC to consider the effectiveness of the evacuation plans for Indian Point in the context of environmental conditions and human health. (IPEC-RRR-14, IPEC-EE-14)

Comment: The warning failures are coupled with the impossibility of evacuating at risk populations even if warning devices functioned properly. Studies need to thoroughly review and test the feasibility of any evacuation scenario that is considered in the decision to reauthorize. Evacuation cannot be considered a protective mitigatory option if it is not going to happen. (IPEC-SSS-15)

Comment: These evacuation issues include but are hardly limited to the facts, to be confirmed in the study, that . . . evacuating populations would have great difficulty moving west across the Hudson River crossings. (IPEC-SSS-16)

Comment: That once across the river, they would find it difficult if not impossible to move out of likely fallout or impact zones due extreme baseline congestion problems on the New York State Thruway, New Jersey roadways, Rt. 17/6/86 and Rt. 84. These roads have unacceptable LOS rates during portions of the week. (IPEC-SSS-17)

Comment: That proposed development, including proposed casinos in Sullivan County, New York, threaten to make congestion problems intractable in the foreseeable future. How does evacuation occur in a zone of perpetual immobility? (IPEC-SSS-18)

Comment: That the availability of evacuation vehicles and drivers for populations is not certain. Katrina was a test case for the issues of unrealized evacuation. (IPEC-SSS-19)

Comment: That evacuation areas for populations are inadequate and not sufficiently isolated from potential impacts. A review must address where evacuated people will gather and be cared for at a level of potential successful implementation, something currently lacking. Furthermore, the length of evacuation and the possibilities for relocation if evacuation is long term or permanent must be fully explored, along with all of the attendant impact issues (loss of jobs, livelihood, property loss and replacement, the readiness of current insurance policies to address liability issues, evacuation and care for injured in short and long term, costs of cleanup, rehabilitation and reconstruction, etc.) (IPEC-SSS-20)

Comment: That evacuating populations on the west side of the river would block or be blocked by those evacuating from the east side of the river. The prospect of people being blocked by congestion from fleeing during a disaster demanding their evacuation promises enormous trauma and no mitigation of risk of exposure. (IPEC-SSS-21)

Comment: That under the best circumstances, some residents of evacuation zones would remain at home, workplace or community even if ordered to leave or would delay departure (looking for their family members, animals, securing homes against vandalism, or doubting the need or efficacy of escape). While this trend would ease road congestion, what are the possibilities for people to ride out nuclear disasters caused by Indian Point at home? (IPEC-SSS-22)

Comment: That the overall inability to safely evacuate populations at risk during an Indian Point event (even if no release eventually occurred) parallels the factual basis for the decision to never start up the Seabrook Nuclear power plant on Long Island even though the plant was newly built and never operated. If New York determined it too dangerous for Seabrook to open, in what ways are conditions at Indian Point different enough to justify a different outcome? (IPEC-SSS-24)

Comment: That development of air traffic at Stewart Airbase in Newburgh and realigned air routes by the FCC associated with Newark Airport Demographics further compound congestion on land and by air in the region of the plant. (IPEC-SSS-25)

Comment: This is written on behalf of the Board of Federated Conservationists of Westchester County (FCWC). FCWC is a 40-year old environmental coalition of hundreds of individual and organizational members representing several thousand Westchester County residents. We are dedicated to protecting Westchester County's natural resources.

We have expressed our concerns about Indian Point a number of times over the years, including at a hearing before your very Commission in the 1980's to object to the inadequacy of the emergency evacuation plan for Indian Point. (IPEC-T4-1)

Comment: No workable or viable evacuation plan exists for this population. As a Poughkeepsie, NY resident attempting to get an additional 100 miles from a cataclysmic event at IP, residents would be stuck on Route 9, trying in a futile attempt, to make it past Hudson NY on a 2 lane roadway clogged with tens of thousands of it's citizens trying to do the very same. Would any members of the regulatory body of the NRC like to buy real estate after a WPA in a post Nuclear Westchester/Putnam/Dutchess/Ulster/Orange/Columbia County! (IPEC-T13-2)

Comment: In fact, Nita Lowey tried, some years ago, to get them to define it, and they would not do so. I took and I asked, some years back, at another hearing, how would define "reasonable assurance" in a worst case scenario, or even a large accident scenario, in terms of dead, in terms of people who will not live more than a year or two after the accident. What kind of numbers are you coming up with? And they refused to answer. The NRC would not answer that question. FEMA would not answer that question. Indeed, there's, to my knowledge, not been any analysis, and I would request, very strongly, that such an analysis must be done if the NRC is going to have any credibility in saying that this plant should continue operation for another 20 years. Thank you. (IPEC-U-6)

Comment: The nearest distance to the boundary of a densely populated center containing more than about 25,000 residents must be at least one and one third times the distance from the reactor to the outer boundary of the LPZ "low population zone". An "exclusion area" is the area surrounding the reactor in which the reactor licensee has the authority to determine all activities, including exclusion or removal of personnel and property, and a "low population zone" (LPZ), which immediately surrounds the exclusion area. (IPEC-Q17-188)

Comment: The purpose of the EIS, as originally spelled out in the NEPA laws, is that the Scoping process should be used to ascertain ALL potential environmental costs of a particular federal action. The Environmental Costs associated with the issuance of a new 20 year superseding license by the NRC with regard to a potential significant radiological event with the current emergency plan, which has been deemed inadequate to provide reasonable assurance of public health and safety by the local and state authorities for the past five years, must be considered in the EIS. The NRC acknowledges this in the following statement:

For operating power reactors, 10 CFR 50.54(s)(2)(ii) requires that "If the NRC finds that the state of emergency preparedness does not provide reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency, the Commission will determine whether the reactor shall be shut down until such deficiencies are remedied or whether other enforcement action is appropriate." (IPEC-Q17-225)

Comment: Adequate Emergency Plan is a requirement and an important part of the issuance of a new nuclear plant operating license.

In § 50.47, "Emergency Plans," of 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," paragraph (a)(1) states that no initial operating license for a nuclear power reactor will be issued unless a finding is made by the NRC that there is reasonable assurance

that adequate protective measures can and will be taken in the event of a radiological emergency. (IPEC-Q17-226)

Comment: A comprehensive evaluation of any and all the environmental costs and impacts that could occur in the event that Indian Point‘s Emergency Plan fails during a radiological release must be included in the EIS. (IPEC-Q17-228)

Comments: The NRC acknowledged that shutdown risk associated with shutdown and refueling (however remote) can occur:

In January 1992, the Nuclear Utilities Management and Resource Council (NUMARC) issued Revision 2 of NUMARC/NESP-007, "Methodology for Development for Emergency Action Levels," which contained guidance on EAL development that accounted for lessons learned from ten years of using the NUREG-0654 guidance. The NRC stated in Revision 3 of regulatory Guide 1.101 (August 1992), that Revision 2 of NUMARC/NESP-007 was considered to be an acceptable alternative to the guidance provided in NUREG-0654 for development of EALs to comply with 10 CFR 50.47 and Appendix E to 10 CFR Part 50. (IPEC-Q17-230)

In addition, the NRC stated in Revision 3 of Regulatory Guide 1.101 that there is a likelihood that the results of ongoing risk studies related to shutdown may necessitate revision of both the NRC EAL guidance (NUREG-0654) and the NUMARC EAL guidance (NUMARC/NESP-007). Appendix E to 10 CFR Part 50 specifies that EALs are to be used as criteria for determining the need for taking emergency response actions (e.g., notification of emergency response organizations). The need for emergency response actions depends on the degree of degradation of plant safety during an event. The shutdown risk studies have demonstrated that events warranting emergency classification and response (although very unlikely) can occur in the shutdown and refueling mode of plant operation. (IPEC-Q17-231)

Comment: "Regulatory Guide 1.101 - Emergency Planning and Preparedness for Nuclear Power Reactors”. Here the NRC admits there are events that can occur that would require implementation of the Emergency Plan. (IPEC-Q17-232)

Comment: Reactor core components are designed and built to function in a fashion meant to avoid core damage and/or meltdown, yet due to the possibility of failure of the reactor core components; it is nonetheless, included within the scope of the EIS.

Therefore, by applying the same standards, the Emergency Plan is designed to adequately protect public health and safety, yet due to the possibility of failure of the Emergency plan it too must be included within the scope of the EIS. (IPEC-Q17-234)

Comment: The characteristics of the site should not preclude development of such plans. 10 CFR Part 100, "Reactor Site Criteria," requires that:

Site characteristics must be such that adequate plans to take protective actions for members of the public in the event of emergency can be developed . . . .

10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities" . . . . (IPEC-Q17-236)

Comment: This is evidenced by the fact that the State and County government surrounding the plant have found the emergency evacuation plans to be wholly inadequate. (IPEC-Q17-250)

Comment: I'm here to address two issues tonight - one that remains of great importance to those living in the shadows of Indian Point - evacuation planning - (IPEC-VVV-1)

Comment: But it seems that the NRC also has fears - fears that if emergency planning were to be included in the relicensing process for Indian Point, the plant may fail the test and need to cease operation at the end of its current license. In his letter to me and hundreds of others, Mr. Dyer noted:

"In adopting its regulations for license renewal, the Commission determined that the existing regulatory framework for emergency preparedness at operating reactors is sufficient and that the staff need not review emergency preparedness again as part of the license renewal process . . . . [T]he NRC generally relies on FEMA's review of emergency plans and preparedness for areas surrounding nuclear power plants." In other words, the NRC refused our request. But then again, the NRC has refused the County of Westchester's formal petition requesting that emergency planning be included. The NRC has refused the New York State Attorney General's request that emergency planning be included. And the NRC has refused the New York - Hudson Valley Congressional delegation's request that emergency planning be included.

But if, in fact, the NRC relies on FEMA's review of emergency plans for regions around the plant, then surely the latest news to come from FEMA is all the NRC needs to shut down Indian Point until an adequate emergency siren system is working. (IPEC-VVV-8, IPEC-KK-8)

Comment: and impossible to evacuate should the unthinkable occur. (IPEC-Y4-3)

Comment: Infeasible evacuation plan. The plan does not accommodate for overcrowded roads, the low probability that bus drivers will drive into contaminated areas to pick up evacuees, the probability that parents with children in the evacuation zone will refuse to politely wait outside the zone, etc. Hazards such as this should not be located in areas of high population such as Westchester NY. (IPEC-Y8-2)

Comment: And then finally, I just want to say--actually, there are two finales. Somebody else tried to do this. But in terms of safety, my husband and I have had a concern ever since a thunderstorm hit Cold Stream and knocked out the lights on Main Street in '90. That would be one of the evacuation routes for this plant. There was chaos. This wasn't a rush hour. It wasn't--there was no threat behind us they were trying to escape from, and there weren't a lot of people around, and yet it was absolutely chaos. And we just imagined, what would this be like, given humanity, who, somebody would drive up on the sidewalk, somebody else would try and overtake them, and, you know, it'd just be--it would be insane. That's one thing. (IPEC-Z-4)

Comment: Being prepared for an emergency is part and parcel of living in the United States in the eras of post-September 11th and Global Climate Change. When we are well-warned by experts' reports about aging and deteriorating man-made structures, as New Orleans officials were about the levees there, and the Public's safety depends on their integrity, it is lethally slipshod not to act on these reports. A disaster at Indian Point, either from an accident or a terrorist attack is inarguably one for which responsible leaders, officials, and citizens have to be prepared. In this case, prevention is the best preparation. (IPEC-H5-4)

Comment: The GAO's testimony continued with an exhaustive discussion of the history of emergency response failures at Indian Point and concluded as follows:

> In reviewing NRC's reports on its on-site inspections and evaluations of the plant's emergency preparedness exercises or drills completed since we issued our 2001 report, we found that the facility's emergency preparedness program has continued to experience problems or weaknesses. For example, NRC reported that, in an emergency exercise conducted last fall, the facility gave out unclear information about the release of radioactive materials, which also happened during the February 2000 event. In addition, NRC reported that several actions to correct previously identified weaknesses had not been completed. For example, NRC noted that the timely and accurate dissemination of information was identified as a weakness in the fall 2002 exercise and had been documented previously in drill critique and condition reports.

(IPEC-L17-13, IPEC-M5-13)

Comment: This very sobering report documents how, beginning in 2001, a previous report by the GAO noted that “NRC had identified a number of emergency preparedness weaknesses at Indian Point 2 that had gone largely uncorrected. For example, in 1998 and again in 1999, NRC identified several communication weaknesses, including delays in activating the pagers used to alert the plant’s staff about an emergency.” (GAO Report, p. 3.) (IPEC-M5-12, IPEC-L17-12)

Comment: The safeties that are at Indian Point are not just looked over by the government. They're not just looked over by the community. But the people who work there live in this community.

One of the operators, one of the licensed operators of that plant, is the Chief of the Verplank Fire Department. They are first do if there's ever an incident on that scene. They have a fire brigade there. We all train together. They talk about inadequate emergency response. Well, I could tell you, we've trained there plenty of times. It's not inadequate.

We've gone over a lot of different details. We've gone through tabletops. We've looked at a lot of different scenarios to protect the public. The reality is the reaction that goes underneath that dome -- and the good doctor was talking about it earlier. (IPEC-SS-5, IPEC-U-5)

Comment: I have been an observer at every single, quote, terrorist drill, since 2001. Okay. Those drills are effectively protocol plans that do not prove anybody would survive anything. They've never done a real drill. They have never done any kind of evacuation scenario, and they have never even been willing to define what they mean by reasonable assurance, other than by simply regurgitating the different citations of their regulations, and saying we consider it reasonable assurance because in our opinion it's reasonable. (IPEC-U-5)

Comment: The impact of potential aviation accident(s) such as those described above, will have a direct impact and will impinge on critical infrastructure at Indian Point, resulting in significant Environmental impacts and costs, and therefore must be included in the EIS. (IPEC-Q17-208)

Comment: To be clear, FUSE is not requesting that the entire adequacy of the evacuation plan be placed within scope of the EIS, however FUSE asserts that any and all resulting Environmental Impacts and Costs of such accident pathway caused by failure of the Emergency Plans must be included in the EIS. (IPEC-Q17-227)

Comment: In the event the Emergency Plan is implemented, there is also the possibility of failure of the plan to perform adequately in the intended activation scenario. The environmental costs of said Emergency Plan's failure, without specifically discussing the adequacy of the plan itself, must be addressed in the EIS. (IPEC-Q17-233)

Comment: If, and when, the necessity comes where the Emergency Plan has to be implemented, we are talking a very serious life and death situation. Therefore, the potential Environmental Costs and Impacts of such failure must be transparently evaluated and considered in the EIS to ensure that adequate protective measures can be taken to protect members of the public in the event of an emergency. (IPEC-Q17-235)

Comment: Is the iodine distribution process adequate to the test of a real disaster? (IPEC-SSS-23)

Response: *The Commission considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceeding on 10 CFR Part 54, which included public notice and comment. As discussed in the Statement of Considerations for rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees and afford protection for each licensee regardless of plant design, construction, or license date. Requirements related to emergency planning are set forth in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to plants with renewed licenses. Through application of its standards and the conduct of required exercises, the Commission reviews emergency preparedness plans throughout the life of any plant, keeping up with changing demographics and other site-related factors. Therefore, the Commission has determined that a special review of emergency planning issues in the context of an environmental review for license renewal is not warranted.*

The comments are noted. Emergency planning is part of the current operating license. The NRC's environmental review is confined to environmental matters relevant to the extended period of operation. The comments are outside the scope of license renewal environmental review under 10 CFR Part 51. Therefore, they will not be evaluated further.

Comment: THE ENVIRONMENTAL REPORT CALCULATES THE OFF-SITE IMPACT OF A RELEASE OF RADIATION IN THE EVENT OF A SEVERE ACCIDENT WITHOUT CONSIDERING THE SUBSTANTIAL INCREASE IN POPULATION IN THE IMMEDIATE VICINITY OF THE PLANT AND THE SUBSTANTIAL REDUCTION IN THE ABILITY OF LOCAL AUTHORITIES OR OTHERS TO ADEQUATELY EVACUATE THIS INCREASED POPULATION IN THE EVENT OF A SEVERE ACCIDENT DURING THE PROPOSED 20 YEARS OF ADDITIONAL OPERATION. (IPEC-D-12)

Comment: Relying on outdated analyses of population density and evacuation effectiveness, the ER understates the radiation impact on the human population in the event of a severe accident during the proposed 20 years of additional operation. It ignores recent analyses that demonstrates that should a severe accident occur at the Indian Point site, there would be no effective way to evacuate the potentially affected population in time to avoid substantial radiation exposure. (IPEC-D-13)

Comment: Clearly the environmental impacts on public health will be far greater if the population within the 10-mile emergency planning zone cannot be evacuated in a timely manner. (IPEC-F5-17, IPEC-K17-17)

Comment: Indian Point is a prime example of a plant sited in an area which has undergone tremendous population growth and development over the last thirty years since Indian Point began operating. This increase in population density must be taken into account during the license renewal process. Roads and bridges would not be able to handle the amount of traffic leaving the 10-mile radius and beyond in the event of an accident or attack (IPEC-F5-18, IPEC-K17-18)

Comment: As far as Indian Point is concerned, there is no low population zone, therefore if Entergy were applying to build a new nuclear power plant as opposed to a relicensing it would likely not be permitted. (IPEC-F5-25, IPEC-K17-25)

Comment: And to ignore the increase in population density, the lack of viability of the emergency evacuation plan is an unacceptable form of denial. (IPEC-GG-5)

Comment: And I've also heard, often from the NRC, that many of them are dealt with on an ongoing basis, but some of them, for example, the issue of the population density and the road networks, and so forth, which by just not even, like up for reconsideration, although I also know that some legislators are requesting that they be put back in the equation, and I, for one, find it extremely frustrating that that's not part--like this is this great opportunity to ask ourselves, is this really, given all of our needs, and all the pluses and minuses and the risks involved, is this really the best thing for us here, to have this plant in this dense population area?

So I feel frustrated that that's not currently part of the conversation going on and hopeful that it will be. (IPEC-I-3)

Comment: Over twenty years ago, one of your own directors found the placement of Indian Point absurd. In 1979, Robert Ryan, the NRC's Director of the Office of State programs, stated, "I think it is insane to have a three-unit reactor on the Hudson River in Westchester County, 40 miles from Times Square, 20 miles from the Bronx . . . [Indian Point is] one of the most inappropriate sites in existence."' This was before an increase in population around Indian Point and before the terrorist attacks of September 11, 2001. (IPEC-K17-21, IPEC-F5-21)

Comment: Were Entergy applying for a license to build a new nuclear power plant where Indian Point is now located, it is unlikely they would be allowed to do so, based on its proximity to such a highly populated area. In fact in the evaluation factors for stationary power reactor site applications before January 1997 the regulations state that residence within the exclusion area shall normally be prohibited. In exclusion areas with residents, the regulations recommend low population zones - the total number and density of which are such that there is a reasonable probability that appropriate protective measures could be taken in their behalf in the event of a serious accident. The regulations state where very large cities are involved, the regulations find that a greater distance may be necessary because of total integrated population dose consideration. (IPEC-K17-22, IPEC-F5-22)

Comment: The regulations for reactors built after 1997 require that every site must have an exclusion area and a low population zone. These regulations define low population zone as "the area immediately surrounding the exclusion area which contains residents, the total number and density of which are such that there is a reasonable probability that appropriate protective measures could be taken in their behalf in the event of a serious accident." (IPEC-K17-23, IPEC-F5-23)

Comment: There are 300,000 people living within the ten-mile EPZ of Indian point and the only means of evacuation are primarily one and two lane roads. The regulations do not specify a permissible population density or total population within this zone because the situation may vary from case to case. The regulations go on to say whether a specific number of people can, for example, be evacuated from a specific area, or instructed to take shelter, on a timely basis will depend on many factors such as location, number and size of highways, scope and extent of advance planning, and actual distribution of residents within the area. (IPEC-K17-24, IPEC-F5-24)

Comment: Location: If this were an application to construct a new nuclear power plant, under current siting standards, it is highly unlikely that it could be sited within 10 miles of 300,000 people, or within 20 miles of the nearly 1 million living within 20 miles, or within 50 miles of the 21 million people living in the greater NY metropolitan area and beyond. Because the plant has already been sited and built, its location is essentially ‘grandfathered’ into the relicensing process; however, NRC will consider population density as a background for other health and safety considerations. (IPEC-L5-35)

Comment: Indian Point is located in one of the most densely populated areas of the country, an area which includes not only New York City and much of southern New York and northern New Jersey, but also much of the State of Connecticut, within its potential exposure zone. (IPEC-L17-22)

Comment: The emergency planning area for Indian Point includes plans covering both a 10-mile radius emergency planning zone ("EPZ") and a separate 50-mile radius ingestion pathway EPZ. The 50-mile radius EPZ includes substantial portions of the State of Connecticut, including its largest city, Bridgeport, and its most populous county, Fairfield. The immediate onsequences of an evacuation order would affect approximately 1/3 of the population of Connecticut. (IPEC-L17-32, IPEC-M5-32)

Comment: As the NRC, the Federal Emergency Management Agency (FEMA), and the Department of Homeland Security (DHS) have all recognized, Indian Point is located in one of the most densely populated regions of the United States. On any given day, approximately, 20 million Americans live, work, or travel within 50 miles of the Indian Point facility. (IPEC-M5-10, IPEC-L17-10)

Comment: The statistics are mind-boggling! The "Radiation Ingestion zone" of 50 miles radius-impact contains over 20 million people. The most vulnerable population is obviously in New York City if usual wind patterns draw the 'plume' southwards. Near term death estimates are 44,000 from immediate radiation poisoning and over 500,000 later cancer deaths (Union of Concerned Scientists). (IPEC-M17-17)

Comment: NRC admits that a new nuclear power plant would never be permitted at the Buchanan site because it far exceeds ‘NRC’s current population density guidelines’! And yet NRC is seriously considering license-renewal for Indian Point! (IPEC-M17-23)

Comment: Whereas, concern has been raised about the potential results of a terror attack on the plants, or the potential results of a failure of equipment or human error in the operations of the plants, in such a densely populated region of the country. (IPEC-N5-37)

Comment: One of every 12 - 13 Americans lives within 50-miles of Indian Point. The financial capital of the United States is 35 miles from Indian Point. A large part of the New York City water supply is within the peak injury zone around Indian Point. (IPEC-O5-16)

Comment: Rockland County is unique in the fact that it is home to many public parks and the Palisades Center mall, which could contribute to temporarily increasing the county's transient population by more than 100,000 people within the EPZ during certain times of the year. The imminent construction of a new Tappan Zee Bridge which will likely, increase Rockland's permanent population has also not been taken into consideration when weighing criteria for re-licensing of the nuclear power plant in Westchester. (IPEC-Q4-3)

Comment: The demographics of Rockland County and the surrounding areas within the EPZ notwithstanding, there are numerous operational issues experienced by Entergy Northeast with regard to the day to day operation of the Indian Point nuclear power plant that cause grave concern about the safety of our residents. Each time an issue arises, Entergy and the NRC assure us that the numerous problems that have occurred at both plants are "under control" and pose no serious threat to the surrounding population. (IPEC-Q4-7)

Comment: Furthermore, the changes in population and traffic patterns within the EPZ of Indian Point, especially to the adequacy of the emergency planning in case of an accident, should also be comprehensively addressed. (IPEC-R-9)

Comment: I attended the September 19 public hearing on the re-licensing of Indian Point. Those opposed to the re-licensing continuously use the dense population of the surrounding area as reason to close Indian Point. I request that the NRC review census information from the time the Indian Point units were built to the most recent. I was born and raised in lower Westchester. In the late 1980's, like so many young couples just starting out, we headed "upstate" to Putnam County to find affordable housing. For the anti's that have moved into the area within the last 10-15 years, they didn't do their homework. They didn't do their homework with respect to the area to which they were moving. And they continue to not do their homework regarding nuclear power, which was evident by some of the incorrect statement of facts that were made at the hearing. (IPEC-R4-1)

Comment: It includes the population--I said population density. Evacuation planning, that we all know is undoable and unworkable and unfixable. So all those initial siting--I think there are eight siting criterias must come into play. (IPEC-S-12)

Comment: What are the changed demographics and population conditions within a worst-case zone around the plant? (IPEC-SSS-9)

Comment: This is a fiction. Unless you define the word "considered" meaning acknowledge a problem, shrug your shoulders, and then proceed to ignore it, the NRC has not considered population, has not considered the risk of terrorism, has not considered the complete operability and ineffectiveness of any emergency plan in an area where you have 300,000 people within 10 miles, on a roadway structure that's about 50 years old, that was built at a time when this was essentially an ex-urban community. (IPEC-U-3)

Comment: Locating reactors away from densely populated centers is part of the NRC's defense-in-depth philosophy and facilitates emergency planning and preparedness, as well as reducing potential doses and property damage in the event of a severe accident. (IPEC-Q17-187)

Comment: In 2006 the immediately surrounding area had substantially more than 25,000 residents, in fact the communities directly adjacent to Indian Point had 84,848 residents: Peekskill 24,601, Buchanan 2,269, Croton-on- Hudson 7,899, Stony Point 14,975 and Haverstraw 35,104. (IPEC-Q17-189)

Comment: Reactor sites should be located away from very densely populated centers. Areas of low population density are generally preferred. The projected Population increase during the new superseding 20 year license period distinguishes Indian Point from any other plant in the nation. The population surrounding Indian Point has exponentially increased since 1970 by 32%. The population in the surrounding Counties are continuing to grow rapidly. In fact, Orange County, is the fastest growing county in New York State. (IPEC-Q17-190)

Comment: Population increases directly affects the ability to evacuate the areas and protect public health and safety and has not been included in the GEIS. This enormous population is specific to the New York Metropolitan area, specifically in the communities surrounding Indian Point. (IPEC-Q17-193)

Comment: The environment and the entire population within 50 miles Indian Point, approximately 20 million residents, 8% of the United States population, will be affected in the event a successful terrorist attack occurs at Indian Point. (IPEC-Q17-280)

Response: *The comments relate to the demographics of the area and population density surrounding Indian Point and their potential impact on emergency preparedness and evacuation. As noted in the previous response, requirements related to emergency planning are prescribed in 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to facilities with renewed licenses. The NRC's environmental review is confined to environmental matters relevant to the period of extended plant operation. The comments are not within the scope of license renewal under 10 CFR Part 51, and will not be evaluated further.*

Comment: Back up power, as required by federal law, for the IP emergency sirens remain unresolved. (IPEC-C-33)

Comment: Further, there have been numerous complaints about the sirens not working and working when they are not supposed to work, and citizens being unable to hear the new lower tonal quality siren system. (IPEC-C-34)

Comment: The residents in the Hudson Valley have just been advised of the FAA's decision to increase air traffic in the region. Rockland County residents were not advised of the proposed plan until until a few weeks before the end of the comment period. In fact, the County has filed a lawsuit on the merits of the environmental review process conducted by the FAA. Where there were few to no aircraft flying over the County we can now expect up to 600 flights per day increasing the noise level. On average every two to three minutes the noise of aircraft flying overhead will be heard.

Entergy's Environmental review reports no foreseeable related Federal projects were identified. As the FAA Redesign Project is a Federal project, we ask what effect the background noise of increased air traffic might have on the efficacy of the emergency alert system. Specifically, was

the system designed to be heard above the increased noise coming from the increased noise levels projected for Rockland County?

["2.13 Related Federal Project Activities
During the preparation of this report, Entergy did not identify any known or reasonably foreseeable federal projects or other activities that could contribute to the cumulative environmental impacts of license renewal at the site." (IPEC-D5-6)

Comment: My one question for the NRC today deals with, as we know, as many, as the parties have mentioned today, numerous events have occurred at Indian Point, several of which have in the last month alone. Specifically as the DEC just mentioned, the leak in the spent fuel pool. These recent missteps and violations are an obvious safety problem for the local residents, and the one question I actually have is how will the operational safety and the operational status of the sirens, together with all these other factors, including the leak of the spent fuel pool, specially the performance indicator change from green to white for the plant operations, factor in the relicensing of Indian Point Facility 2 and Indian Point 3? (IPEC-F-2)

Comment: Sirens: Back up power, as required by federal law, for the IP emergency sirens remain unresolved. (IPEC-L5-32)

Comment: Further, there have been numerous complaints about the sirens not working and working when they are not supposed to work, and citizens being unable to hear the new lower tonal quality siren system. (IPEC-L5-33)

Comment: Now, we also need to look at the impact by the plant being regulated by a federal agency like the Nuclear Regulatory Commission. And Ms. Rainwater raised some really important issues about how the NRC has been doing on certain issues. I want to raise another one. I read an article recently about how the Nuclear Regulatory Commission was going to deal with the fact that the sirens still are not functioning, having missed three deadlines. Well, it isn't actually three deadlines. It's probably closer to 240 deadlines, because every day after the first deadline is when the sirens should have been ready. But the Nuclear Regulatory Commission has the ability to fine hundreds of thousands of dollars -- the owner-operator of the plant hundreds of thousands of dollars each day.

Now, what was -- the quote in the recent AP article about the approach of the NRC for the sirens, Mr. Sheehan was quoted as saying that "We're going to decide about what fines to impose after they get the sirens up and running." And I called him up right away. I actually called him up as soon as I read that and got him on the phone and said, "Neil, this has got to be a mistake, because your job is to impose fines in order to get Entergy to get the sirens working. If you wait until afterwards, what incentive do they have?" And they said, "No, no, we talked about it. We know we could fine -- impose fines every day, from now until the time that the sirens are working." And we all know if that were done the sirens would be up and running right away. But no, the Nuclear Regulatory Commission yet again has decided not to do its job of regulating and, therefore, the siren may be up and running in some unspecified future. (IPEC-NN-4)

Comment: I live within 10 miles of Indian Point, in Cornwall, NY. The siren is less than a quarter mile up the hill.

My concern is if they aren't able to get the new sirens right will the people who run Indian point be able to handle a real emergency? There are rules to be followed but if they aren't even able to get these correct then how are we to have any hope that we are safe? (IPEC-P4-1)

Comment: RESOLVED: that the Board of Trustees of the Village of Hastings-on-Hudson expresses its ongoing concerns about the safety record and warning system at the Indian Point nuclear power plant, and thinks that record should be a significant consideration in the re-licensing of the plant. (IPEC-P5-1)

Comment: let's honestly discuss the ridiculous notion that we need a good siren warning system near the Indian Point plant. Surely those within the first 10 mile radius will have no chance to survive, even if they get out initially. Do these people know how dangerous this facility really is? Should we be talking about early warning systems that can be projected to those living in the 10-50 mile radius zone? (IPEC-R11-9)

Comment: The repeated and endemic failure of sirens and warning systems. There is a contradiction presently between the failure of mandated warning capability and the continued permitting of the plant that cannot be perpetuated in a new permit. The study must address the issue that such mitigations, when unrealized, represent a failure of the level of protection that was deemed requisite for permitting to begin with. Are mitigations only rhetorical or must they be substantive as well? What has the failure of regulation been to date that has allowed rhetorical mitigation to suffice? (IPEC-SSS-14)

Comment: Specifically, was the emergency siren system designed to be heard above the increased noise coming from the increased noise levels projected for Rockland County? The current new installed alarm system cannot be heard inside a house or even in a parked car. (IPEC-Q17-200)

Comment: Despite various extensions granted by the NRC, Entergy has yet to come into compliance with NRC regulations as relates to having a working siren system. FEMA recently failed the system, and a full review of Entergy's own documents shows that the system ordered and installed FAILS to meet the Design Basis Criteria. Further, the old system, as NRC records show, also fails to come close to being in compliance with 10 CFR Rules and Regulations. (IPEC-Q17-262)

Comment: It is pointed out here, that the Emergency Plans tells us, "When you hear the sirens . . . go inside and follow instructions." However FEMA has admitted the Siren level is inadequate and therefore the sirens cannot be heard. (IPEC-Q17-264)

Comment: September 12: FEMA sent a letter to New York State's Emergency Management Office, in which the current emergency sirens at Indian Point are deemed unworkable: "The

placement of the new sirens decreases the audibility of the existing system ... Therefore, the new electronic sirens that were installed and tested by Entergy must be removed from interfering with the sound path of any existing co-located rotating siren in order to restore the existing system to its full functionality." For over two years, the public has waited for a reliable emergency notification system at Indian Point. And if one is to read accurately FEMA's assessment of Entergy's installation proceedings - we've been waiting, while the company has been dilly-dallying. And what penalties has Entergy faced for missing not one but three deadlines: a paltry $130,000.

Perhaps the NRC should begin developing fear in the entity it's mandated to regulate and stop intimidating citizens. (IPEC-VVV-9, IPEC-KK-9)

Comment: Indian Point sirens do work and were quite audible at my home in the Northern part of Westchester. (IPEC-WW-1)

Comment: It's bad enough that this unnecessary and outdated facility remains open. Even more outrageous is the apparent inability of its owners, the $10 billion New Orleans-based Entergy Nuclear Northeast, to meet federal guidelines for the installation of an emergency warning system. (IPEC-Y-2)

Comment: Shortly after this fiasco, the NRC threatened Entergy with fines because Indian Point's warning sirens were not operating properly, despite an order from the Feds to get the system in working order. Thankfully, the NRC refused to grant Entergy an extension. (IPEC-Y-4)

Comment: I formally request that the Nuclear Regulatory Commission address the following environmental and public health issues in the Draft Environmental Impact Statement for the Indian Point nuclear power plant:. . . . I live within the evacuation area and when the alarms are tested, I only hear them if it is a quiet day, I go outside and listen for them, and the wind is blowing in the correct direction. I invite NRC to come to my home during the next test and see. (IPEC-Y8-1)

Comment: As the FAA redesigned project is a federal project, we ask that the effect of the background noise of increased air traffic might have -- what it might have on the efficacy of the emergency alert system. Specifically, was the system designed to be heard over the increased noise coming from the increased noise levels of the projected air traffic in Rockland County? That is a federal project that's approved. (IPEC-YY-7)

Comment: In addition, they are always fixing the warning sirens in our Yorktown community. We have no confidence in these devices either. (IPEC-Z4-3)

Response: *The comments relate to the adequacy of the emergency siren system at Indian Point in the event of a nuclear emergency. The NRC's environmental review is confined to environmental matters relevant to the period of extended plant operation. Operational issues such as the sirens are addressed as part of the ongoing regulatory oversight process, and are*

not within the scope of the license renewal environmental review under 10 CFR Part 51; the comments will not be evaluated further.

Comment: The emergency plan for IP ("Emergency Plan") is inadequate, unworkable and largely unfixable. Few of the flaws detailed in over 500 pages by the only independent expert evaluation of the IP Emergency Plan, the New York State Governor-commissioned study by James Lee Witt Associates ("Witt Report") or the flaws of the Emergency Plan repeatedly raised by regional public officials, public interest groups, school officials, and first responders have been addressed by NRC/FEMA, much less remedied. Simply rubber stamping the Emergency Plan does not constitute compliance with federal regulations mandating the protection of the public. (IPEC-C-40)

Comment: A 2003 report prepared by the consulting firm headed by James Lee Witt, former director of FEMA, the agency to whom NRC delegates primary responsibility for reviewing the adequacy of such plans, concluded that the radiological emergency plan for Indian Point is not adequate to protect the people from an unacceptable dose of radiation in the event of a release. James Lee Witt Associates, Review of Emergency Preparedness of Areas Adjacent to Indian Point and Millstone, viii (2003) ("Witt Report"). The Witt Report observed that it is questionable whether those at risk will have as much warning as NRC assumes, and that the narrow roads and hilly terrain within the 10 mile Emergency Planning Zone would make safe evacuation highly unlikely, if not impossible. Further, the Witt Report determined that the NRC-approved Indian Point plan fails to consider the reality that many essential personnel will take care of their families, rather than focus on their response activities, the possible ramifications of a terrorist-caused event, and the reality and impacts of spontaneous or "shadow" evacuation. A number of the problems identified by the Witt Report were confirmed by the shortcomings experienced during the evacuations in response to Hurricanes Ivan (2004) and Katrina (2005). However, the License Renewal Application does not address this definitive report. (IPEC-D-14)

Comment: According to former FEMA director James Lee Witt, the current radiological response plans are not adequate to protect the public. See Review of Emergency Preparedness of Areas Adjacent to Indian Point and Millstone, p. viii, James Lee Witt Associates, 2003. (IPEC-E5-11, IPEC-I17-11)

Comment: A primary example of this is the Agency's approval of the Indian Point emergency evacuation plan, after James Lee Witt issued a report that the plan was, "inadequate to protect the public from an unacceptable dose of radiation". (IPEC-J-2)

Comment: The radiological emergency plan for Indian Point is badly flawed, unworkable and key components are unfixable, according to an independent analysis of Indian Point's emergency plans commissioned by former New York Governor George Pataki in 2003. The author of the report, former FEMA director James Lee Witt found "the current radiological response system and capabilities are not adequate to . . . protect the people from an unacceptable dose of radiation in the event of a release from Indian Point. . . ." (IPEC-K17-19, IPEC-F5-19)

Comment: Emergency Evacuation: The NRC will NOT consider the effect a major accident at Indian Point would have on people, property or the environment. When the Witt Report was issued in __ it stated that ___. In response the NRC reduce the Emergency Evacuation area from 17.5 miles to 2 miles, while 10 miles is still considered the peak fatality radius and 50 miles remains the peak injury zone. (IPEC-L5-37)

Comment: Emergency Response: The NRC will NOT consider the region's actual emergency response capability or the capacity of the local congested roadways to handle a mass evacuation, or the feasibility of truly protective sheltering for those unable to evacuate in time. (The sole independent expert assessment made of the Indian Point emergency plan - the Witt Report - spent over 500 pages detailing the flaws of the NRC/FEMA plan.) (IPEC-L5-38)

Comment: The emergency plan for IP ("Emergency Plan") is inadequate, unworkable and largely unfixable. Few of the flaws detailed in over 500 pages by the only independent expert evaluation of the IP Emergency Plan, the New York State Governor-commissioned study by James Lee Witt Associates ("Witt Report") or the flaws of the Emergency Plan repeatedly raised by regional public officials, public interest groups, school officials, and first responders have been addressed by NRC/FEMA, much less remedied. Simply rubber stamping the Emergency Plan does not constitute compliance with federal regulations mandating the protection of the public. (IPEC-L5-39)

Comment: In 2003, James Lee Witt, the former director of the Federal Emergency Management Agency (FEMA), issued a report detailing the deficiencies in the emergency evacuation plan for the Indian Point EPZ. Mr. Witt concluded that safe evacuation of the area surrounding Indian Point is highly unlikely, if not impossible. (IPEC-L17-33, IPEC-M5-33)

Comment: According to James Lee Witt (former director of FEMA) nuclear 'evacuation plans' are utter nonsense (as the Katrina chaos clearly showed) and a recent NRC proposal to only evacuate a 'two mile wedge at IP and leave the rest of us 'sheltered in place' is outrageous, immoral and should be totally condemned. (IPEC-M17-4)

Comment: WHEREAS, legislation was introduced in both Houses of the 109th Congress (H.R 4891 and S. 2488) that would have mandated the NRC to order a Maine Yankee-style ISA on the vital systems of Indian Point and require FEMA to justify, with specificity, its approval of the IP evacuation plan despite the findings of the 2003 Witt Report, commissioned by then the New York State Governor George Pataki, which detailed the impossibility of evacuation should an incident occur at the Indian Point site.

WHEREAS, that legislation which would have required:
1) a "vertical slice" review of all operating systems;
2) a "horizontal" review of all plant maintenance;
3) a rigorous re-evaluation of the feasibility of the evacuation plan for Indian Point;
4) a mandate that independent experts conduct the review, and
5) a mandate that the review be monitored by local officials (IPEC-N5-12)

Comment: WHEREAS, under contract with the State of New York such an assessment has been made and the findings released by James Lee Witt Associates, LLC and

WHEREAS, these findings have pointed to deep deficiencies in the Plan, many of which had already been noted by your Honorable Board's aforementioned Committees, and

WHEREAS, these deficiencies have, in turn, called into question the ability of the Plan to achieve the goals of protecting the public health and ensuring public safety, and

WHEREAS, acting on the recommendation of its two aforementioned Committees, this Honorable Board has determined that these deficiencies must, as a matter of the public good, be addressed and remedied with the greatest possible speed. (IPEC-N5-28)

Comment: RESOLVED, that this Honorable Board, as a matter of policy, direct that the County Executive immediately begin to incorporate the germane recommendations of the Witt Report into the Emergency Evacuation Plan and that he report back to this Honorable Board no later than 120 days following the passage of this Resolution on the progress that has been made with respect to this directive. (IPEC-N5-32)

Comment: RESOLVED, that this Honorable Board does hereby call upon the State and Federal Governments to immediately begin to implement those recommendations of the Witt Report relevant to their respective responsibilities in and for the Emergency Evacuation Plan. (IPEC-N5-33)

Comment: New and significant information demonstrates that such prompt and effective evacuation is not possible for the communities surrounding Indian Point. For example, a 2003 report prepared by the consulting firm headed by James Lee Witt -- former director of FEMA, the agency to which the NRC delegates primary responsibility for reviewing the adequacy of such plans -- concluded that safe evacuation of the area surrounding Indian Point is highly unlikely, if not impossible. (IPEC-N17-96)

Comment: The Witt Report found that the NRC approved Indian Point plan fails to consider (1) that many essential personnel will take care of their families rather than focus on their response activities, (2) the possible ramifications of a terrorist-caused event, and (3) the likelihood and effects of spontaneous or "shadow" evacuation. Id. at vi. The Witt Report also observed that it is questionable whether those at risk will have as much warning as the NRC assumes and that the narrow roads and hilly terrain within the ten-mile Emergency Planning Zone ("EPZ") would make safe evacuation highly unlikely, if not impossible. (IPEC-N17-97)

Comment: The Witt Report's conclusions are bolstered by a 2003 traffic study by KLD Associates, which concluded that evacuation times for the EPZ around Indian Point had doubled since 1994 and could take up to 9.25 hours in good weather conditions and 12 hours in snow conditions. ("KLD Traffic Study"). Since January 2003 and continuing to this year, three out of the four county governments with territory in the ten-mile EPZ for Indian Point - Westchester, Orange, and Rockland - have refused to submit annual verification updates for the

Indian Point evacuation plan. See, e.g., January 17, 2003 letter from E. Diana, Orange County Executive, to E. Jacoby, New York State Emergency Management Office (referencing Witt Report conclusions), ML030350231. (IPEC-N17-98)

Comment: The normal risks associated with operating a nuclear power plant increase proportionally when such a facility is located in a densely populated area like Rockland County, and indeed, the entire area in the four-county EPZ. The Witt Report, issued January 2003, determined that despite our County's satisfactory evaluation during drill exercises measuring response to an emergency at Indian Point, such preparedness would not be enough to protect residents who live within the EPZ. The report clearly states: "The current radiological response system and capabilities are not adequate to overcome their combined weight and protect the people from an unacceptable dose of radiation in the event of an uncontrolled release of radiation from Indian Point." (IPEC-Q4-2)

Comment: The 2003 Witt report declared that current radiological response plans are not adequate to protect the public, and the plan has been met with strenuous local government opposition. (IPEC-RRR-13, IPEC-EE-13)

Comment: FUSE asserts that all costs of a failed Emergency Plan do rightfully belong in the EIS Scoping process, with a full complete record of those potential costs as set forth in various scientific studies including, but not limited to, the Witt Report and must be included in the Final Environmental Impact Statement to be issued as a contributing document to the LRA. (IPEC-Q17-229)

Comment: The Counties surrounding Indian Point and retired FEMA director James Lee Witt, who was hired by the State of New York to evaluate the Emergency Planning for Indian Point, have determined that the current evacuation plan is inadequate and unfixable, due to the limited road infrastructure and the enormous population density surrounding Indian Point. (IPEC-Q17-238)

Comment: The State and County governments within the 10 mile Emergency Evacuation Zone have stated it is there own belief that the Evacuation Plan is fundamentally flawed, and the Witt Report supports their conclusions. (IPEC-Q17-263)

Comment: A 2003 report conducted by James Lee Witt - FEMA Director under President Clinton and considered the nation's leading emergency planning expert - on Indian Point's emergency evacuation plans concluded that "the current radiological response system and capabilities are not adequate to overcome their combined weight and protect the people from an unacceptable dose of radiation in the event of a release from Indian Point, especially if the release is faster or larger than the design basis release." Most country officials, emergency responders, and area residents understand that, given high population density and congested road networks that characterize the New York metropolitan area, Indian Point's emergency plans are patently unworkable and unfixable. In fact, three of the four counties, and the NYS Emergency Management Office have refused to submit their Annual Certification Letters for five

years running. And yet, the NRC and FEMA continue to rubberstamp a gravely flawed plan. (IPEC-VVV-4, IPEC-KK-4)

Response: *The comments with respect to the Witt Report are noted. However, offsite emergency planning is not within the scope of the NRC's environmental review. The NRC monitors emergency planning under requirements of the current operating license. These requirements apply to all operating licenses and will continue to apply to facilities with renewed licenses. The NRC's environmental review is confined to environmental matters relevant to the period of extended plant operation. The comments are not within the scope of the license renewal environmental under 10 CFR Part 51, and will not be evaluated further.*

Comments Regarding Security and Terrorism

Comment: In San Luis Obisipo Mothers for Peace vs. NRC (cite?) the 9th Circuit Court of Appeals held that the NRC could not, under NEPA, categorically refuse to consider the consequences of a terrorist attack against a spent fuel storage facility at the Diablo Canyon reactor site in California. The 9th Circuit's holding and dicta are applicable and relevant herein. (IPEC-B-16)

Comment: An analysis of the impacts of intentional destructive acts (e.g., terrorism). The requirement to consider such acts is based on the Ninth District Court's decision in San Luis Obispo Mothers for Peace v. Nuclear Regulatory Commission (June 2006). (IPEC-E17-5)

Comment: However, as the 9th District court case showed, there is a difference of opinion into what is or is not within scope, what is or is not to be considered in the NRC environmental impact statement. The tragic events of 9/11, the ruthless attack of our twin towers, remind each of us that there is a very real chance of a terrorist attack on Indian Point. The 9th Circuit Court agrees, ruling that the NRC must include as a part and parcel of the EIS, of the environmental cost associated with a successful terrorist attack on the Indian Point facility. Depending on the method of attack, and the components attacked, those environmental costs will vary greatly, and each and every one must be evaluated as a part of the EIS. (IPEC-H-6, IPEC-PPP-4)

Comment: The Ninth Circuit of the Federal Courts has ruled that a terrorist attack must be considered in environmental impact decisions. (IPEC-O5-6)

Comment: FUSE examined the scope of site specific issues for completeness, given the dated list published in Appendix A subpart B, and as appropriate, provided additional emergent issues that, after review of all federal regulatory agency requirements, appear to be incomplete or absent in the present guidance documents. There appears to be a potential coordination failure between agencies, such as the one found under the recent 9th circuit appellate review of Mothers of Peace v. PG&E 449F. 3d 1016. (IPEC-U16-4)

Comment: NEPA's intent and purpose is not in weighing the odds of an event occurring, but instead is intended to measure the risks and costs to the environment should such an event occur. In San Luis Obispo Mothers of Peace v. NRC, 449 F.3d 1016, 1028 (9th Cir. 2006) the

courts Memorandum and Order in part states: NRC‘s "categorical refusal to consider the environmental effects of a terrorist attack" in this licensing proceeding was unreasonable under the National Environmental Policy Act (NEPA). It is abundantly clear in the Ninth District Court's ruling that the odds of a given event are not at issue, but instead the issue is the effects that such a postulated event or events would have on the environment. The Ninth Circuit Court Order made it abundantly clear that the NRC must take into consideration the environmental effects of a successful terrorist attack. (IPEC-Q17-287)

Response: *The Ninth Circuit Court of Appeals in San Luis Obispo Mothers for Peace, v. NRC, 449 F.3d 1016 (9th Cir. 2006), upheld the Commission's decision on the Atomic Energy Act issues, but, as to the NEPA issues, concluded that "the NRC's determination that NEPA does not require a consideration of the environmental impact of terrorist attacks does not satisfy reasonableness review," and held that "the EA prepared in reliance on that determination is inadequate and fails to comply with NEPA's mandate." Id. at 1035. The Supreme Court did not review a petition to review this matter. However, refusal to take review does not imply agreement with the Circuit Court’s decision.*

In a Memorandum and Order concerning the renewal of the operating license for the Oyster Creek Nuclear Generating Station, Amergen Energy Company, LLC (License Renewal for Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC 124 (February 26, 2007), ADAMS Accession No. ML070570511), the Commission reaffirmed its long-standing position that NEPA does not require inquiry into the consequences of a hypothetical terrorist attack. The Commission stated that it “respectfully . . . disagrees" with the Ninth Circuit Court of Appeals decision, and will follow the decision of the court as applicable to the Diablo Canyon matter. But, as to other proceedings, the Commission continues to believe that such inquiry is not required.

In the Oyster Creek Memorandum and Order, the Commission also reached the following conclusions. First, terrorist issues are unrelated to “the detrimental effects of aging” and are beyond the scope of license renewal. Second, the environmental effect caused by terrorists is simply too far removed from the natural or expected consequences of agency action to require a study under NEPA. Third, a NEPA-driven review of the risks of terrorism would not be necessary because the NRC has undertaken extensive efforts to enhance security at nuclear facilities. These ongoing post-9/11 enhancements provide the best vehicle for protecting the public. Fourth, substantial practical difficulties impede meaningful NEPA-terrorism review, while the problem of protecting sensitive security information in the quintessentially public NEPA and adjudicatory process presents additional obstacles. Finally, the GEIS documents “a discretionary analysis of terrorist acts in connection with license renewal, and concluded that the core damage and radiological release from such acts would be no worse than the damage and release to be expected from internally initiated events.”

Comment: Additionally, the NRC has failed to duly consider the numerous security risks filed by member groups of the Indian Point Safe Energy Coalition, especially those set forth in the filings of the Council on Intelligent Energy & Conservation Policy. (IPEC-C-28, IPEC-L5-44a)

Comment: Security cannot be created from weak suppositions. (IPEC-C-32)

Comment: Based on these findings, the NRC should amend the regulations to require that security of spent fuel pools and dry cask storage be comprehensively assessed during the relicensing process, and that the mitigation measures recommended by the NAS study be considered in the SEIS. (IPEC-F5-45, IPEC-K17-45)

Comment: It's secure: Numerous independent assessments of security programs by recognized law enforcement and intelligence experts have shown Indian Point to be extremely secure. (IPEC-H17-8)

Comment: The proposed 20-year license extension for the Indian Point Nuclear Power Station threatens significant adverse consequences to human health and safety and the environment. The Nuclear Regulatory Commission (NRC) must take the "hard look" required by the National Environmental Policy Act. NRC must thoroughly and accurately evaluate the impacts resulting from a fire, accident or attack on the stored spent nuclear fuel (SNF) at the site, as those risks will be profoundly increased by the continued operation of the facility over an additional twenty years. (IPEC-M5-1, IPEC-L17-1)

Comment: As described in a publication of the United States Government Accountability Office (GAO") submitted as testimony before the Subcommittee on National Security, Emerging Threats and International Relations on March 10, 2003, ("GAO Report"), there are serious concerns regarding "problems in emergency preparedness [for Indian Point that] remain after being repeatedly identified as needing attention." (GAO Report, pp. 14-15.) (IPEC-M5-11, IPEC-L17-45)

Comment: RESOLVED, that this Honorable Board does reaffirm with utmost urgency its call made through Resolution No. 265.2001 that security at Indian Point Nuclear Power Plants be placed under the control of the United States military and that this be done without any further delay. (IPEC-N5-29)

Comment: WHEREAS, we recognize that the debate on the long term future of Indian Point will take place but we are now most concerned about the immediate protection of the plant, and WHEREAS, we as representatives of all Westchester County residents need to know that the federal and state governments are taking all appropriate measures to protect the nuclear plants, and

WHEREAS, any plan to safeguard our people must involve federal, state, county, and local officials working together with clearly delineated responsibilities (IPEC-N5-50)

Comment: the questionable record of security amassed by Entergy, the plant operator. (IPEC-SSS-12)

Comment: The licensee must consider . . . Influence on effectiveness of both reactor emergency plans and reactor security plans. (IPEC-Q17-116d)

Comment: To prevent plant damage and possible radiological consequences to the public as a result of acts of sabotage, the characteristics of the site should not preclude development of adequate security plans. 10 CFR 100.21(f) states that site characteristics must be such that adequate security plans and measures can be developed.

10 CFR Part 73, "Physical Protection of Plants and Materials," prescribes requirements for establishment and maintenance of a physical protection system for the protection of special nuclear materials at fixed sites and of plants in which special nuclear material is used. (IPEC-Q17-239)

Comment: Accidents at present or projected nearby industrial, military, and transportation facilities may affect the safety of the nuclear power station. It should be noted that the West Point Military Academy is less than 8 miles from Indian Point and Fort Smith is less than 3 miles from Indian Point. (IPEC-Q17-243)

Comment: The NRC and other governmental agencies plan to change public sentiment regarding radioactive waste, rather than deal with the radioactive waste streams generated through the production of nuclear energy which directly impacts the Environmental Costs and Impacts to the Stakeholder community, and thus must be included in the EIS, as is witnessed in excerpts from a governmental task force report:

U.S. Nuclear Regulatory Commission Implementation Plan for the Radiation Source Protection and Security Task Force Report

Task: The Task Force recommends that there be a coordinated public education campaign (Federal, State, and industry) to reduce fears of radioactivity, diminish the impact of a radiological attack if one were to occur, and provide a deterrent to attackers considering the use of radiological materials.

Report Context: Another important aspect of response training is public education. Proactively educating the public about the radiation risks of an RDD may reduce the public's anxiety and ameliorate the psychological impacts in the event of RDD attack and thereby mitigate some of the physical and social disruption consequences caused by fear and panic. Agencies should coordinate this effort to avoid duplication of effort and ensure the consistency of the intended message. Therefore, the Task Force recommends that there be a coordinated interagency (Federal and State) campaign, which would work with industry groups, to educate the public on the effects of and response to an RDD event. (IPEC-Q17-290)

Comment: At Indian Point, Entergy is making a profit of nearly $2 million dollars a day but does not adequately cover the costs of its plant's security. (IPEC-Q17-297)

Comment: These are not alarmist statements but, rather, statements of fact. We all recognize that there is risk involved in many human enterprises, and we accept that some level of risk often is unavoidable. However, in this instance we are talking about the possibility of

devastation too great to even imagine. And the safeguards simply are not in place at Indian Point. (IPEC-X4-3)

Comment: In fact, if the security of Indian Point -- from either terrorist attack, natural disaster or accidents -- is not at the very highest level, it should be closed sooner rather than later. (IPEC-X4-10)

Comment: It was a grave mistake to even build the Indian Point plant in the first place. Aside from the fact that it is now in disrepair and a target for terrorists. (IPEC-A5-2)

Comment: The Applicants' Environmental Report Fails to Address, as Mandated by the National Environmental Policy Act (NEPA), the Environmental Impacts of a Terrorist Attack on Any and All Systems, Structures, and Components of IP2 and IP3 and the Consequent Radiation Releases. . . . What Effective Mitigating Methods are Available Regarding Said Terrorist Attacks. (IPEC-B-12)

Comment: The instant applicants for license renewals have wholly failed to address or consider the consequences of a terrorist attack on IP2 and IP3 in their applications. NEPA requires a thorough consideration of same for each applicant. (IPEC-B-14)

Comment: The applicants' Environmental Report has failed to address the consequences of a potential aircraft attack or other types or terrorist attacks on either or both reactors, the vulnerability of the spent fuel pool to a terrorist attack and the consequences of same, design basis threats that applicants are required to defend against with high assurances a (10 CFR sec 73.1) in the compensitory measures to defend against terrorism. (IPEC-B-15)

Comment: Further, the NRC's own guidelines specifically state that ALL Stakeholders must be treated equally and fairly. Therefore when the NRC grant the citizen's request of inclusion of this issue in the Pa'ina Hawaii, LLC Irradiator license application in Honolulu, Hawaii, it set the precedent by which the NRC must include the consequences of a terrorist attack in the issuance of a new superceding license. (IPEC-B-17)

Comment: Therefore since the applicant has failed to include the cite specific considerations of terrorism, such as that IP 2 and IP 3 are the only plant in the nation that the 9/11 terrorist planes flew directly over; that the 9/11 terrorist had originally planned to attack Indian Point; that Indian Point is located 25 miles from New York City; is surrounded by 20 million people, 8% of the United States population; is located less than 5 miles from West Point military academy, where our future military leaders are being trained; is located on the banks of the Hudson, a river that is easy to navigate from the air; does not have a non-fly zone; and is surrounded by at least 5 major airport and countless small ones. (IPEC-B-18)

Comment: Moreover the attacks of 9/11, pursuit to 10 CFR sec 51.53 (c)(3)(IV) present new evidence that was not available at the original licensing of either IP2 or IP3. (IPEC-B-19)

Comment: The undersigned respectfully request that both IP2 and IP3 be required, in their respective Environmental Reports, to fully delineate the consequences of a terrorist attack and how aging management of terrorism will be handled during the new superceding license, as well as a complete and thorough impact, mitigation, alternative analysis on each, prior to the NRC accepting the application for license renewal to be deemed complete and accurate. (IPEC-B-20)

Comment: The Stakeholders in and around IP contend that the effects of or associated with aging, embrittlement, corrosion, rust, heat, constant radiological bombardment, and chemical agents have destabilized and weakened the tensile strength of the reactor cores to a point where they are out of DB, and present an immediate and unacceptable risk of break up/explosion in a significant core thermal shock event or a terrorist attack, such as one involving a bomb laden truck, and/or large commercial aircraft still laden with fuel. (IPEC-C-24)

Comment: Security problems and breaches at IP and at other nuclear plants operated by the licensee occur at unacceptably high levels and are evidence of flawed security protocols. Recent examples include the employment of a severely emotionally impaired IP nuclear engineer and the mailing of national security software regarding IP emergency systems resulting in false nuclear event faxes being sent from Massachusetts into the four Emergency Management Centers for the counties surrounding IP. (Notably, because licensee at first failed to realize its own error, it made a false report to State Police that their computers had been hacked into.) (IPEC-C-27)

Comment: Astonishingly, the NRC has not even incorporated the lessons learned from the Sept. 11 terrorist attack. The NRC does not require the licensee to be able to fend off an attack by the number of attackers actively involved on Sept. 11 and the NRC does not require IP to be able to withstand the crash of a large commercial airliner, and the DBT's bomb laden vehicle was made far smaller to mitigate and misconstrue reactor core damage in such an attack scenario (as reported in the GAO Report on Reactor Security). (IPEC-C-29)

Comment: Indeed, evident collusion of the NRC with the nuclear industry's lobbying arm, the Nuclear Energy Institute ("NEI'), to change the NSIR DBT standards has reduced the safety of the plant. Such lowered security standards are unacceptable. Specifically, the NRC at its highest levels (commissioners) deliberately removed items from the DBT at the behest of NEI, even though elimination of these items create a situation where the nuclear reactor facility now has no chance of holding off a terrorist attack, let alone defeating it. Specific items include elimination of the inside actor, as well as the elimination of a host of weapons a facility should be capable of defending against including but not limited to the use of armor-piercing ammunition (routinely used by both American gangs and terrorists worldwide), rocket launched grenades, shaped charges, IEDs, and tube mortar rounds. Even more troubling, the NRC commissioners caved into the NEI, and greatly reduced the size and weight of an explosive laden vehicle, thus, defacto, making it impossible for the vehicle, even if successfully exploded to do any real damage to the structural stability of the facilities. This may allow the licensee to meet the bogus DBT criteria, but paints a woefully inaccurate picture of the size vehicle that would be used in an attempted suicide bombing of IP. The commission justified its decision by

stating the commisioners believed off site security would more than likely spot a larger vehicle before it reached the gates of a nuclear reactor. (IPEC-C-30)

Comment: THE ENVIRONMENTAL REPORT FAILS TO DISCLOSE OR DISCUSS THE SUBSTANTIALLY INCREASED LIKELIHOOD, DURING THE TERM OF THE RENEWED OPERATING LICENSE, THAT A MAJOR RELEASE OF RADIATION FROM THE SITE MAY OCCUR AS THE RESULT OF AN INTENTIONAL ACT. (IPEC-D-21)

Comment: NRC regulations require that the ER "contain sufficient data to aid the Commission in its development of an independent analysis." See 10 C.F.R. § 51.45 (c). Specifically, "the analyses for environmental reports shall, to the fullest extent practicable, quantify the various factors considered." Id. Moreover, the ER "should not be confined to information supporting the proposed action but should also include adverse information. See 10 C.F.R. § 51.45 (e).

Relying on probability analyses that were developed without consideration of the substantially increased threat of a terrorist attack in the United States, particularly in the area of New York where Indian Point 2 and 3 are located, Entergy engages in an analysis of the economic cost of a catastrophic event at the plant. Since the final economic cost of such an event is driven primarily by the probability of the event occurring during the 20-28 years of proposed operation, its failure to factor in the substantially increased risk of an intentional act directed against one or both of these reactors or their spent fuel storage facilities, particularly an aerial attack of the type that occurred on September 11, 2001, makes its economic analysis seriously deficient. It is common knowledge now that two of the jets hijacked on September 11, 2001 flew over or near Indian Point. See Nat'l Comm'n on Terrorist Attacks Upon the U.S., The 9/11 Commission Report, 32 (2004). (IPEC-D-22)

Comment: A properly conducted analysis would include (a) consideration of the likelihood of such an event occurring during the proposed 20-28 years of authorized operation, (b) the consequences of such an event, including an analysis of the capability of the existing structures to withstand an attack from the air either in the form of a missile or a large airplane, diverted from one of the nearby airports and loaded with fuel, and (c) the economic costs of implementing protective measures, such as barriers, to deflect the attack and mitigation measures to ameliorate the consequences of a release of radiation in the event of a successful or partially successful attack. However, the License Renewal Application does not contain such an analysis. In its current form, it does not comply with 10 C.F.R. § 54.13.

The License Renewal Application is incomplete in this respect and should be revised accordingly. (IPEC-D-23)

Comment: Moreover, nuclear power plants remain potential terrorist targets. The possible environmental impacts of a terrorist attack must be assessed in the DEIS. The 9/11 Commission Report indicated that Al Qaeda considered targeting nuclear power plants in their attack, but wrongly believed the plants were heavily defended. The Report also made clear that on 9/11, American Airlines Flight 11 flew down the Hudson River over the Indian Point power plant en route to the World Trade Center. Despite this “new and significant” information, the

NRC has consistently refused to revise its security requirements to include measures to defend against an aerial attack. The NRC must address the potential effects of a terrorist attack and consider the effects of jet fuel fires on vital areas of the plant, including the containment dome, the spent fuel pool building, and the control room building. (IPEC-E5-13)

Comment: Nuclear power plants remain high level terrorist targets; therefore the potential environmental impacts of a terrorist attack must be assessed by NRC in the draft EIS. (IPEC-F5-14)

Comment: The 9/11 Commission Report stated that Al Qaeda considered targeting nuclear power plants in their attack, but wrongly believed the plants were heavily defended. The Report also makes clear that on 9/11, American Airlines Flight 11 flew down the Hudson River passing the Indian Point power plant en route to the World Trade Center. Despite this "new and significant" information the NRC has consistently refused to revise its security requirements to require plant security forces to be able to defend against an air attack, or even the number of attackers that participated in 9/11. (IPEC-F5-15)

Comment: The 2006 study by the National Academy of Sciences on security of spent fuel storage at commercial nuclear power plants concluded that a successful terrorist attack on spent fuel pools was possible, and recommended that an assessment of current security measures for protecting spent fuel be performed by an independent organization, outside of the NRC. (IPEC-F5-43)

Comment: In the committee's opinion, there are several relatively simple steps that could be taken to reduce the likelihood of releases of radioactive material from dry casks in the event of a terrorist attack:
. . . .
Dry casks were designed to ensure safe storage of spent fuel, not to resist terrorist attacks. (IPEC-F5-52)

Comment: A terrorist attack that breached a dry cask could potentially result in the release of radioactive material from the spent fuel into the environment through one or both of the following two processes: (1) mechanical dispersion of fuel particles or fragments; and (2) dispersion of radioactive aerosols. The latter process would have greater offsite radiological consequences. (IPEC-F5-54)

Comment: Additional surveillance could be added to dry cask storage facilities to detect and thwart ground attacks. (IPEC-F5-56)

Comment: Certain types of cask systems could be protected against aircraft strikes by partial earthen berms. Such berms also would deflect the blasts from vehicle bombs. (IPEC-F5-57)

Comment: Visual barriers could be placed around storage pads to prevent targeting of individual casks by aircraft or standoff weapons; these would have to be designed so that they would not trap jet fuel in the event of an aircraft attack. (IPEC-F5-58)

Comment: The spacing of vertical casks on the storage pads can be changed, or spacers (shims) can be placed between the casks, to reduce the likelihood of cask-to-cask interactions in the event of an aircraft attack. (IPEC-F5-59)

Comment: Relatively minor changes in the design of newly manufactured casks could be made to improve their resistance to certain types of attack scenarios. (IPEC-F5-60)

Comment: In addition to assessing mitigation measures in the SEIS, the NRC should consider using the results of the NAS vulnerability analyses for possible upgrades of requirements in 10 C.F.R. 72 for dry casks, specifically to improve their resistance to terrorist attacks. (IPEC-F5-61)

Comment: Astonishingly, the NRC has not even incorporated the lessons learned from the Sept. 11 terrorist attack. The NRC does not require the plant operators to be able to repel an attack by the same number of attackers that were actively involved in September 11 attack, nor does it require IP facilities to be able to withstand the crash of a large commercial airliner of a size equivalent to the ones used in that real life disaster. (IPEC-GG-44b)

Comment: Would a terrorist attack not be a potential environmental issue? (IPEC-GGG-3)

Comment: It is respectfully submitted that the special circumstances of Indian Point - i.e., its siting in a uniquely congested demographic area, 24 miles north of New York City, within 50 miles of over 20 million people, and its status as an identified and widely recognized terrorist target - warrants a particularly stringent and comprehensive analysis of all environmental factors, including . . . [t]he environmental consequences of a terrorist attack that leads to a major and potentially rapid radiation release. (IPEC-I5-1)

Comment: Moreover, nuclear power plants remain potential terrorist targets. The possible environmental impacts of a terrorist attack must be assessed in the DEIS. The 9/11 Commission Report indicated that Al Qaeda considered targeting nuclear power plants in their attack, but wrongly believed the plants were heavily defended. The Report also made clear that on 9/11, American Airlines Flight 11 flew down the Hudson River over the Indian Point power plant en route to the World Trade Center. Despite this "new and significant" information, the NRC has consistently refused to revise its security requirements to include measures to defend against an aerial attack. The NRC must address the potential effects of a terrorist attack and consider the effects of jet fuel fires on vital areas of the plant, including the containment dome, the spent fuel pool building, and the control room building. (IPEC-I17-13)

Comment: This is a formal request under the guidelines of 10 CFR 2.206 to have the Environmental Costs of a Terrorist Attack included in the EIS Scoping for the Indian Point Nuclear Reactors. It has wrongfully been the contention of the NRC and the nuclear industry (NEI) that the odds of a terrorist attack on a nuclear reactor site are so remote as to be unworthy of consideration in the EIS Scoping process. As the below shown slide exhibits, another agency of the Federal Government disagrees with you, and your agency. If necessary,

I am prepared to offer proof found on OTHER United States Government sites in support of this Formal Petition that show the Federal Government does feel there exists a real chance that terrorists could mount a attack on a nuclear reactor facility. (IPEC-K5-1)

Comment: Is this slide proof that the NRC is lying to us when they say the risk of a Terrorist Attack on a nuclear reactor is so remote as to be not worth consideration in the License Renewal process under the requirements of NEPA? One can assume, that reasonable minds would say it is proof that the NRC is, and has been lying to the public in a wrongful attempt to protect their licensees, and provide them with and easier pathway to License Renewal Application approval. (IPEC-K5-2)

Comment: One thing is clear . . . the slide presents absolute governmentally created PROOF that a terrorist attack on a nuclear site, and the resultant Environmental Costs is worthy of INCLUSION in the EIS Scoping for Indian Point. (IPEC-K5-3)

Comment: The CDC slide is absolute proof that our Federal Government believes there is a VERY REAL CHANCE and/or the potential for such and attack on a nuclear reactor site, and thus the Environmental Costs of such a potential attack scenario MUST BE INCLUDED in the EIS Scoping process for Indian Point units IP2 and IP3. (IPEC-K5-4)

Comment: The question is begged, "If, as the NRC claims, said risk scenario is not worthy of consideration, then why does the Centers For Disease Control consider it at the top of their list of Radiological Terrorist Scenarios in one of their slide presentations?" (IPEC-K5-5)

Comment: In light of this GOVERNMENTAL PROOF, I hereby formally request that the Environmental Costs of a targeted terrorist attack on Indian Point be included in the scoping process for Indian Point. Specifically, I want included in the EIS Scoping process as a part of this 2.206 Petition the environmental cost studies for individual targeted terrorist attacks on individual locations/components at the facility, such as a successful attack on a singular spent fuel pool, or singular reactor, as well as the environmental costs of a targeted terrorist attack on multiple component parts of the facility, such as two spent fuel pools, a spent fuel pool and a reactor, or a successful attack on both reactors, or all three spent fuel pools. (IPEC-K5-6)

Comment: Nuclear power plants remain high level terrorist targets; therefore the potential environmental impacts of a terrorist attack must be assessed by NRC in the draft EIS. (IPEC-K17-14)

Comment: The 9/11 Commission Report stated that Al Qaeda considered targeting nuclear power plants in their attack, but wrongly believed the plants were heavily defended. The Report also makes clear that on 9/11, American Airlines Flight 11 flew down the Hudson River passing the Indian Point power plant en route to the World Trade Center. Despite this "new and significant" information the NRC has consistently refused to revise its security requirements to require plant security force to be able to defend against an air attack, or even the number of attackers that participated in 9/11. (IPEC-K17-15)

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Comment: In addition to assessing mitigation measures in the SEIS, the NRC should consider using the results of the NAS vulnerability analyses for possible upgrades of requirements in 10 C.F.R. 72 for dry casks, specifically to improve their resistance to terrorist attacks. (IPEC-K17-61)

Comment: Vulnerability to Terrorism: The NRC will NOT consider Indian Point's vulnerability to a terrorist attack or the unique terrorist risks associated with a nuclear plant 24 miles from NYC. (Mohamed Atta, the hijacker who piloted the plane that struck the North Tower, considered redirecting the strike to the nuclear plant on the Hudson, according to 9/11

Commission investigation findings. Had that plane gone down 60-seconds sooner it would have caused an even more profound disaster.) (IPEC-L5-42)

Comment: Security problems and breaches: IP and other nuclear plants operated by Entergy have occurred at unacceptably high levels and are evidence of flawed security protocols. A recent example is the security guard found sleeping on duty on ___. (IPEC-L5-43)

Comment: Nuclear Energy Institute: The industry's lobbying arm, the Nuclear Energy Institute ("NEI'), to change the NSIR DBT standards has reduced the safety of the plant. Such lowered security standards are unacceptable. Specifically, the NRC at its highest levels (commissioners) deliberately removed items from the DBT at the behest of NEI, even though elimination of these items create a situation where the nuclear reactor facility now has no chance of holding off a terrorist attack, let alone defeating it. Specific items include elimination of the inside malcontent, as well as the elimination of a host of weapons a facility should be capable of defending against including but not limited to the use of armor-piercing ammunition (routinely used by both American gangs and terrorists worldwide), rocket launched grenades, shaped charges, IEDs, and tube mortar rounds. Even more troubling, the NRC commissioners caved into the NEI, and greatly reduced the size and weight of an explosive laden vehicle, thus, de facto, making it impossible for the vehicle, even if successfully exploded to do any real damage to the structural stability of the facilities. This may allow the licensee to meet the bogus DBT criteria, but paints a woefully inaccurate picture of the size vehicle that would be used in an attempted suicide bombing of IP. The commission justified its decision by stating the commissioners believed off site security would more than likely spot a larger vehicle before it reached the gates of a nuclear reactor. Overall, the NRC has reduced its assessment of risk to fit the profit needs of the nuclear industry. (IPEC-L5-45)

Comment: A no-fly zone is presently NOT protecting the air space over this nuclear plant. (IPEC-L11-7)

Comment: Furthermore, NRC has not properly evaluated the consequences of terrorist attack on the spent fuel storage area and it must do so now. In an October, 2000, study, the NRC admitted that:

"the risk analysis in this study did not evaluate the potential consequences of a sabotage event that could directly cause off-site fission product dispersion, for example, a vehicle bomb driven into or otherwise significantly damaging the SFP [Spent Fuel Pool], even after a zirconium fire was no longer possible." (IPEC-L17-26)

Comment: The concerns raised by these reports find further support in the recent National Academy of Science (NAS) study regarding the risks posed by spent fuel pools. As the NRC is aware, the NAS Study concluded that a successful terrorist attack on spent fuel pools was possible and recommended an independent assessment of current security measures. (IPEC-L17-30)

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Comment: There has been so much written about potential terrorist attacks on Indian Point that we've virtually given them at least a dozen 'how to' blueprints! (IPEC-M17-3)

Comment: With a rapid increase in daily regional air flights and routes closer and closer to Indian Point, any chances of preventing a terrorist air attack are now virtually nil. (Most Indian Point plans seem to be to prevent only 'insider' ground attacks.) And even if such an attack was unable to penetrate to the core of the reactors, or the above ground waste-storage facilities, the ancillary damage to the plant and the potential release of nuclear discharges would endanger the whole area and put the plant out of action for years (so let's close it down today and avoid a catastrophe waiting to happen!). (IPEC-M17-14)

Comment: An attack on the spent fuel pool at IP-2 would render about 95,000 square kilometers of land 'uninhabitable' for 300-900 years (equivalent to about 75% of New York State) according to a special report by The Institute for Resources and Security Studies. The NRC estimates radiation induced cancer as far as 500 miles from Indian Point. Then there is also the question of the water contamination of Croton and all the other regional reservoir facilities . . . . (IPEC-M17-18)

Comment: The development of a plan that ensures that spent fuel rods will be immediately secured and properly protected on site from the threat of a terrorist attack or accident. (IPEC-N5-21)

Comment: Whereas, residents of Westchester County and other citizens have voiced their concern about the safety of Indian Point Nuclear Power Plants, particularly since the events of September 11, 2001. (IPEC-N5-36)

Comment: The development of a plan that ensures that spent fuel rods will be immediately secured and properly protected on site from the threat of a terrorist attack or accident. (IPEC-N5-42)

Comment: WHEREAS, in light of recent events and in this age of terrorism, the spectre of Indian Point being damaged by terrorists is too horrible to comprehend. (IPEC-N5-44)

Comment: WHEREAS, in light of recent events and our present and increasingly growing concern with Indian Point II and Indian Point III nuclear power plants as potential targets of terrorism, and

WHEREAS, an attack on the Indian Point nuclear facility could be devastating to all area Westchester residents as well as to approximately five percent of the nation's population living within fifty miles of Indian Point who would be at risk from a large-scale incident. (IPEC-N5-49)

Comment: RESOLVED, we the members of the Westchester County Board of Legislators call on the governments of the United States of America and the State of New York to develop a comprehensive plan to properly defend the Indian Point nuclear plants from all potential areas of attack. (IPEC-N5-51)

Comment: RESOLVED, we further call upon the appropriate Federal and State official, within the context of national security concerns, to assure that coordinated actions are being taken to protect out installations and facilities and to safeguard our citizenry, and

RESOLVED, that the above mentioned governments immediately and permanently deploy all appropriate military recourses, including anti-aircraft and anti-ship weaponry, as well as necessary United States military and New York State Guard personnel to properly defend the plants from any and all attacks. (IPEC-N5-52)

Comment: The Possibility of a Terrorist Attack Must Be Analyzed in the Supplemental EIS. (IPEC-N17-86)

Comment: Much has changed since the completion of the Generic EIS in 1996. As the world knows, on September 11, 2001, terrorists hijacked four jet airliners and crashed three of them into their intended targets. The impact of the fuel-laden planes caused explosions and large, long-lasting fires. Those explosions and fires destroyed a portion of the Pentagon in northern Virginia and caused the collapse of the World Trade Center towers and nearby buildings in New York City. (IPEC-N17-87)

Comment: Since then, government decision makers have recognized the risks to nuclear power facilities. Based on this information, it is imperative that the Supplemental EIS analyze the potential environmental impacts of a terrorist attack on Indian Point. (IPEC-N17-88)

Comment: A number of publicly known examples establish the need for this analysis. In his 2002 State of the Union address, President Bush stated that "diagrams of American nuclear power plants" had been found in Afghanistan, suggesting that Al-Qaeda may have been planning attacks on those facilities. On September 4, 2003, the United States General Accounting Office ("GAO") issued a report noting that the nation's commercial nuclear power

plants are possible terrorist targets and criticizing the NRC's oversight and regulation of nuclear power plant security. (IPEC-N17-89)

Comment: Five major airports are located within a few minutes flying time of Indian Point. The Federal Emergency Management Agency ("FEMA"), a federal agency responsible for assessing terrorist threats and for assuring the safety and security of the public, has taken actions signifying that it considers an aircraft attack on a nuclear power plant to be a credible threat. For instance, during a June 2004 exercise to assess emergency preparedness at Indian Point, the agency simulated a suicide attack by a large cargo jet. (IPEC-N17-90)

Comment: Based on this information, it is imperative that the NRC's Supplemental EIS analyze the potential environmental impacts of a terrorist attack on Indian Point. Of particular concern are the potential widespread environmental impacts if a terrorist attack damaged the reactor core, spent fuel pools, the storage casks, or other areas. San Luis Obispo Mothers for Peace v. NRC, 449 F.3d 1016 (9th Cir. 2006), cert. denied, 127 S. Ct. 1124 (2007). (IPEC-N17-91)

Comment: The NRC has implicitly recognized the gravity of the consequences of a terrorist air attack by requiring applicants for certain new nuclear reactors to consider such attacks. This concern over the damage that could be caused by an aircraft impact is reflected in other NRC documents as well. (IPEC-N17-92)

Comment: Other studies identify the threat as a significant issue. In 2005, the National Academy of Sciences released a report from a study it conducted at the request of Congress, with the sponsorship of the NRC and the Department of Homeland Security, of the security risks posed by the storage of spent fuel at nuclear plant sites. Based upon information provided by the NRC, the National Academy of Sciences judged that "attacks with civilian aircraft remain a credible threat." Protection of German Nuclear Power Plants Against the Background of the Terrorist Attacks in the U.S. on Sept. 11, 2001 (Nov. 27, 2002). Accordingly, New York State requests that the NRC analyze the environmental impacts of such a terror attack at Indian Point. (IPEC-N17-93)

Comment: Would a potential terrorist attack on the control room, reactor vessels or spent fuel storage not represent a potential environmental impact? (IPEC-O5-5)

Comment: These objections do not begin to address security concerns in a post 9-11 world, including the possible threat of a terrorist attack on the facility, the proximity of Stewart Airport and associated air traffic, and the potential increase in air traffic over Rockland and Westchester Counties associated with the New York/New Jersey/Philadelphia Airspace Redesign Project. (IPEC-Q4-9)

Comment: I'm Marie Quinten with the Pace Litigation Clinic. We have some comments on the safety concerns, some of them mentioned but are worth repeating. The Nuclear Regulatory Commission decision not to require Indian Point to address terrorist attacks, the threat of terrorist attacks during the relicensing review is wrong, and leaves nuclear power plants vulnerable to terrorist attacks in the future. (IPEC-R-1)

Comment: The 9/11 Commission report indicated that Al Qaeda terrorists considered targeting nuclear power plants in their attack but wrongly believed that these plants were heavily defended. The report also made clear that at least one of the planes that struck the World Trade Center flew down the Hudson River past Indian Point power plant on its way to New York. (IPEC-R-2)

Comment: A recent independent government study concluded that certain types of spent fuel pools were vulnerable to terrorist attack that could lead to fuel pool fire, resulting in catastrophic public health, environmental and economic impacts. Despite these facts, the NRC has consistently refused to review its security requirements, to defend against the size and scale of 9/11 attacks. (IPEC-R-3)

Comment: The security of both wet fuel pool and dry cask storage should also be considered during the relicensing process. Studies have shown that a successful terrorist attack on spent fuel pools is possible. Based on these findings, NRC should amend the regulations to require that the security of spent fuel pools and dry cask storage be comprehensively assessed during the relicensing period. (IPEC-R-6)

Comment: These potential impacts, environmental impacts of a terrorist attack on the spent fuel pools, must be assessed because it is based on new and significant information that was not considered at the time the general environmental impact statement was prepared, that being a higher risk of attack after 9/11, higher density fuel storage, failure of Yucca Mountain to open, etcetera. (IPEC-R-8)

Comment: Isn't it a most logical target for a terrorist enemy that would want to destroy New York? Isn't it likely that the months left in this Bush administration would be an obvious time to attack. It would refute all the rhetoric about how safe we are in this country under this administration. We may now be living in a very worrisome time. (IPEC-R11-11)

Comment: Thirdly, on top of the current risks of terrorism that we are now very aware of in the New York area, this dry cask pad is a beautiful target from the air. So that must be looked into as well as the current risks of the spent fuel pools that are in unprotected, basically unhardened sites, as well as the lack of a proper security plan. Those all affect the environmental impact of this site. (IPEC-S-7)

Comment: ... The issue of terrorism and new security threats (for example, complicated by onsite waste storage). (IPEC-SSS-13)

Comment: You have nearly a million people within 20 miles. Now if anybody around here remembers 9/11, and what the attack on the World Trade Center did to this area, that's "a walk in the park" compared to what either an attack or even a large accident would be on Indian Point. (IPEC-U-4)

Comment: Perhaps we are ostriches. Perhaps we choose to forget that our nation's nuclear power plants have been identified as potential terror targets, by the terrorists. Does it take a disaster to bring about the closure of this facility in such a developed area, with the potential for such a huge loss of life? Enough! (IPEC-U4-3)

Comment: The residents in the Hudson Valley have recently been advised of the FAA's decision to increase air traffic in the region. Entergy's Environmental review reports that no foreseeable related Federal projects were identified. As the FAA Redesign Project is a Federal project that has been considered since 1999, we ask what effect increased air traffic on increasing crash risks, and the background noise of increased air traffic might have on the efficacy of the emergency alert system. (IPEC-Q17-199)

Comment: In Entergy's Environmental Report it's LRA failed to identify this significant change by another federal agency with regard to the residents in an area within 50 miles of Indian Point, despite the fact that the FAA has posted such increases in the Federal Registry.

Therefore by regulation, and because of the potential significant MODERATE Environmental Impacts and Costs, such increased air traffic is new information that must be considered as new information and circumstances, on a plant-specific basis as a Category 2 issue in the EIS. (IPEC-Q17-201)

Comment: Air traffic, including but not limited to, helicopters, as well as airplanes (private planes, private jets, large commercial planes) fly over Indian Point, as there is no no-fly zone. This presents a clear and significant danger with serious Environmental Costs, impacts and risk. (IPEC-Q17-202)

Comment: There are 6 major airports within the 50 miles of Indian Point, including Westchester Airport, Stewart Airport, JFK International Airport, La Guardia Airport, Newark International Airport and Bradley Airport, as well as numerous private airports. An inadvertent crash will have serious Environmental Impacts and Costs which must be considered in the EIS. (IPEC-Q17-203)

Comment: Recent accidents in New York area highlight the necessity of a comprehensive study of the air traffic within the 50 miles of Indian Point to be included in the EIS. Two recent examples are set forth below:

a) NEW YORK (CNN) Yankees pitcher Cory Lidle and his flight instructor were killed Wednesday when the 34-year-old ballplayer's plane crashed into a high-rise apartment building in New York, city baseball team officials said.

b) American Airlines Flight 587 on November 12, 2001 crashed into the Belle Harbor neighborhood of Queens in New York City shortly after takeoff from John F. Kennedy International Airport. This was the second deadliest U.S. aviation accident to date. (IPEC-Q17-204)

Comment: On January 1, 2006 The National Transportation Safety Board said 44 aviation accidents took place in New Jersey in the past year, double the number in 2004 and the most in more than 10 years. (IPEC-Q17-205)

Comment: The Star-Ledger reported that eight fatal accidents killed 13 people, and half of those accidents involved home-built aircrafts. (IPEC-Q17-206)

Comment: Robert Stephan, Homeland Security's Assistant Secretary for Infrastructure Protection reported in the Journal News, March 23, 2006 that, "The Nuclear Regulatory Commission has ranked Indian Point 'in terms of potential human consequences as the No. 1 site in the nation.'" (IPEC-Q17-251)

Comment: On 9/11 at least one of the hijacked planes flew directly over Indian Point 2 and 3 before it destroyed the World Trade Center. (IPEC-Q17-258)

Comment: Since 9/11 Indian Point is considered one of the most attractive and vulnerable terrorist targets in the nation. (IPEC-Q17-259)

Comment: On 9/11 at least one of the hijacked planes flew directly over Indian Point 2 and 3 before it slammed into the World Trade Center. Since 9/11 Indian Point is considered one of the most attractive and vulnerable terrorist targets in the nation. (IPEC-Q17-278)

Comment: Additionally, over 9,438 terrorists events have occurred around the world since September 11, 2001. The risk of a terrorist attack on a nuclear reactor site is a very real possibility. (IPEC-Q17-279)

Comment: The aftermath and significant impacts on the environment as a result of a successful terrorist attack at the Indian Point Energy Facility located in Buchanan, New York would have LARGE adverse environmental consequences, including but not limited to, unmonitored radioactive releases into the air, water and ground from breaks in components, and pipes, a spent fuel fire causing a radioactive steam cloud, the inability for the plant to maintain safe shut down, or a total core melt down . All of these result in significant LARGE adverse effect on public health and safety of the surrounding population and environment, and are sufficient to destabilize important attributes of the resource and of the environment. (IPEC-Q17-281)

Comment: Indian Point is distinguished from all other nuclear facilities in that the terrorists flew directly over the plant and the Hudson River on 9/11, and the terrorists considered attacking Indian Point on 9/11 and those plans may still be on the table. There is no no-fly zone over Indian Point. (IPEC-Q17-282)

Comment: The GEIS Category I standards do not apply an analysis of terrorist effects at Indian Point, nor does it consider mitigation measures warranted for Environmental impacts and costs of a terrorist attack on Indian Point, nor is a terrorist attack an issue of single significance, nor have mitigation of adverse impacts associated with the issue of a terrorist attack been

considered in the analysis. Therefore the issue of Terrorism is a Category 2 issue and requires additional plant-specific review in the EIS. (IPEC-Q17-286)

Comment: NEPA requires the NRC and the licensee to answer what are the environmental costs of a successful attack of a terrorist attack on a Nuclear Reactor site. Such postulated events should include, but not be limited to, evaluation of the risks associated with attacking various components of the facility independently and jointly, including, for instance, the reactor itself, the control room, the spent fuel pools, and the water intake and/or discharge channel. The attack scenarios should include the attacking force of 9/11, which means scenarios and their aftermaths should include an attacking force of no less than 18 terrorists and the potential use of up to four large commercial airplanes. (IPEC-Q17-288)

Comment: The real threat of Terrorism, as confirmed by the Department of Homeland Security, the State Department, the Pentagon, and other agencies of the United States government, including the Executive and Legislative Branches, must be comprehensively studied and evacuated for the 20 year period of the proposed new superceding licenses as a Category 2 issue, which has a LARGE impact on the public and the region within 50 miles of the plant. (IPEC-Q17-289)

Comment: Missile projectile damage to reactor coolant and steam piping systems is a key accident pathway that results in significant off site release of radiological contaminants into the air, water and ground that must be investigated, and thereby associated significant Environmental Impacts must be included in the EIS. The impact may be LARGE, and therefore a comprehensive study of the Missile projectile damage to reactor coolant and steam piping system as a Catergory 2 issue must be included in the EIS. (IPEC-Q17-357)

Comment: We know that human error is always a possibility, and this in itself presents challenges. Today, we must also think in terms of the possibility of a terrorist attack, since we are well aware that terrorist organizations have very clear goals to disrupt the financial infrastructure of our country, based in New York, as well as to kill the maximum amount of people possible with any single act. Sabatoge of Indian Point provides the possibility for accomplishment of both these goals. (IPEC-X4-2)

Comment: The security of Indian Point is highly questionable, as evidenced by a recent expose and other investigations. (IPEC-X4-4)

Comment: My name is Tom Hallsel. I'm a citizen, an American, living in Croton-on-Hudson, and I have no organization or affiliations. . . . So I'd like to enter into the record this, what I feel is a very important editorial from the New York Observer, and I think it really represents the feelings of many people who live in this community.

The title is, "Indian Point: A Scary Comedy of Errors." Six years after the attacks of September 11th, New York City and its suburbs remain vulnerable to an even worse nightmare. A well-planned assault on the Indian Point nuclear plant in the Hudson Valley, just 35 miles north of midtown Manhattan. (IPEC-Y-1)

Comment: Again the question must be asked, why is this time bomb still ticking? The latest news from the Hudson Valley is almost comical. An inspector from the Federal Nuclear Regulatory Commission found a security guard asleep on the job at 2:00 o'clock in the afternoon. (IPEC-Y-3)

Comment: Nobody has to tell the city and its suburbs about the post 9/11 world. We know all about it because that dangerous era was born here. We saw, firsthand, the bloody work of America's enemies. Nobody who lived through that day, nobody who has grieved ever since, can deny any possibility, however terrible. A 2004 study concluded that a terrorist attack on Indian Point could kill 44,000 people immediately, cost the U.S. economy 2.1 trillion, and cause the long-term cancer deaths of half a million people. It's true that New York and the nation have not lived through a repeat of 9/11, but only a fool would argue that we are safer today, or that those who wish to harm us have given up. Recent arrests of terror suspects in the United Kingdom and Germany remind us that the enemy we face is global, it is active, and it remains intent on causing mass destruction. (IPEC-Y-5)

Comment: The presence of a nuclear plant so close to Manhattan is intolerable. It is a threat not only to the city but to some 20 million people in the immediate tristate region. In the awful calculations of our terrorist enemies, an attack on Indian Point would deliver the "most bang for the buck," and don't think for a minute they don't know that plans for the U.S. nuclear plants were found in Al Qaeda caves during the 2001 invasion of Afghanistan. (IPEC-Y-6)

Comment: Enough already. Forget Indian Point's facility sirens. We've already received a warning that came on 9/11, when those planes hit the twin towers. One of those planes actually flew over Indian Point on its way downtown. It's time for Governor Eliot Spitzer and Senator Charles Schumer, and Hillary Clinton, to work together to shut down Indian Point for the good of the city and the country. (IPEC-Y-7)

Comment: Idiot Point is a prime terrorist target. (IPEC-Y4-2)

Comment: Indian Point is an obvious terrorist target that does not appear to be adequately defended. (IPEC-Y8-3)

Comment: Entergy's security is grossly inadequate (a guard literally asleep on the job is but the latest in a long string of problems). (IPEC-Z15-2)

Response: *The issue of security and risk from malevolent acts at nuclear power plants is beyond the scope of license renewal. These matters will continue to be addressed through the ongoing regulatory oversight process as current and generic regulatory issues that affect all nuclear facilities. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans. Any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed under the operating license. (See Amergen Energy Co, LLC (Oyster Creek Nuclear Generating Station), CLI-07-8, 65 NRC-124 (February 26, 2007, ADAMS Accession No. ML070570511)).*

The NRC's environmental review is confined to environmental impacts related to the extended period of operation. To the extent that these comments urge the NRC staff to consider environmental impacts of potential terrorist attacks, the Commission's long-standing position is that NEPA does not require inquiry into the consequences of a hypothetical terrorist attack. The comments are not within the scope of the license renewal environmental review under 10 CFR Part 51 and will not be evaluated further.

Comments Regarding Operational Safety

Comment: All of these factors point to the imperative necessity for a complete inspection and comprehensive corrosion analysis of all underground piping. Compromised pipes can cause or fail to mitigate a serious accident, including a core damage event. Therefore, any compromised pipes must be replaced including the ones under the reactor where information from discussions with Indian Point workers leads us to believe the seal may be leaking. (IPEC-C-9)

Comment: Repetitive valve problems have not been addressed globally at IP. A complete comprehensive inspection of all valves in the plant must be conducted. Any compromised valve must be replaced in order to maintain intended function, and bring Indian Point into full compliance with NRC rules and regulations, as well as IP's original DB. (IPEC-C-11)

Comment: Complete inspection of all critical radiation barriers must be conducted. The NRC's allowance of the regularly scheduled inspection of the dome liner, to be wrongly delayed by 5 years (i.e., until 2008), must not enable the evasion of the requirement that the entire reactor containment structure ("Containment") meet DB. (IPEC-C-19)

Comment: In particular, traces of borate acids may indicate that the spray nozzles are deteriorating and could expose the Containment to be at excessive risk in the event of a criticality/core meltdown event. (IPEC-C-22)

Comment: Critical chemical test results regarding the newly installed emergency sump pumps are not yet available and therefore the safety of the sump pumps cannot be confirmed. (IPEC-C-26)

Comment: Significantly, on April 29, 2005, the NRC acknowledged that Hemyc fire barrier wrap systems had failed to perform to American Society of Testing and Materials standards ("Inadequate Fireproofing System"). This Inadequate Fireproofing System continues to be utilized at IP and, interalia, fails to assure the protection of the control room and other critical operations in the event of a significant fire. This situation is especially egregious in view of NRC "Severe Accidents" study (NUREG-1150) which states that "a typical nuclear power station will have three to four significant fires" and that "fire is a significant risk contributor to core damage frequency, as much as 50 percent of the total risk. Fire can initiate a nuclear accident and compromise the operator's ability to control the reactor shutdown and maintain it in stable cool down." (IPEC-C-37, IPEC-L5-21)

Comment: Instead of demanding remediation of the problem, the NRC has simply backed away from enforcement and from plain common sense by deeming it acceptable for the licensee to engage in purportedly mitigating measures such as sending IP workers into a blaze to manually operate (pull circuit breakers, turn valves, etc.) equipment. Apparently, the NRC either does not realize workers are human beings who require the use of their faculties such as seeing, hearing and breathing to work effectively, or the NRC does not realize that fires can be very hot and can burn, blind and asphyxiate people. The NRC evidently does not also comprehend that electricity and fire can - in combination with certain chemicals and gasses that are present within IP - initiate explosions, which, in turn, can blow both people and sensitive equipment to smithereens. (IPEC-C-38)

Comment: Reports of a recent change in the methods of quality control inspections have indicated that the new peer review methodology functions inadequately and does not allow for independent third party evaluation.

This goes to the heart of proper and safe maintenance throughout the plant. It has been instituted by the licensee as a money-saving technique that involves a smaller management level team and reduced staffing. This shortcut is unacceptable at the high level industrial complex Indian Point, where the lives of over 20 million people depend on the complete, thorough, and independent inspection of all repairs. (IPEC-C-48)

Comment: IP has been plagued by a host of pump and cooling system problems which are indicative of a scopic level of deterioration in these safety-critical systems. For example, in February 2007, cooling water levels at IP 3 dropped precipitously, due in part to debris from the Hudson River clogging intake structures. The licensee labeled the amount of debris "significant" and an Unusual Event level emergency was declared. (IPEC-C-51)

Comment: Significantly, the last time the screen involved was cleaned was in November of 2005. Thus, it is beyond cavil, that the regular maintenance program used by the licensee and approved by the NRC failed. (IPEC-C-52)

Comment: Such problems demonstrate the need for a full inspection and analysis of the IP pumps and cooling system problems, as well as all related maintenance programs. (IPEC-C-53)

Comment: IP has long been plagued by steam generator problems which are indicative of ongoing equipment malfunctions and/or maintenance program inadequacies. The most recent of such problems occurred in May 2007 when a malfunctioning water valve in an IP 2 steam generator malfunctioned, requiring the shut down of the plant. (IPEC-C-54)

Comment: In April 2007, IP 3 was forced to be taken off line when low water levels were detected in that plant's steam generators. (That particular incident was initiated by a malfunctioning boiler pump control.) (IPEC-C-55)

Comment: Such problems demonstrate the need for a full inspection and analysis of the IP steam generators, as well as all related maintenance programs. (IPEC-C-56)

Comment: Further the article reports Kathy McMullin, an Indian Point spokeswoman, said the matter was "really much ado about nothing" and wouldn't have reached the level of public notification without the current regulatory climate surrounding the plant.

"In this particular environment, the NRC erred on the abundance-of-caution side, as we have done on issues that on their face might not seem all that significant," she said. "It's not necessarily routine that an inspection would be postponed, but it's not that unusual either."

So we are to understand that the NRC has made an error in judgment and that postponement of an inspection because the operator of a nuclear facility was unprepared to answer questions about the operation of its facility would not have been revealed if not for the regulatory climate surrounding the plant. Does this infer out of sight out of mind is an acceptable position for a nuclear facility operator? (IPEC-D5-5)

Comment: Steam Generators: Indian Point has long been plagued by steam generator problems, which are indicative of ongoing equipment malfunctions and/or maintenance program inadequacies. The plant was closed for eleven months in 2001, secondary to steam generator rupture. In April 2007, IP-3 was forced to be taken off line when low water levels were detected in that plant's steam generators due to a malfunctioning boiler pump control. In May 2007 a malfunctioning water valve in an IP-2 steam generator caused another unplanned shut down of the plant. (IPEC-L5-15)

Comment: Pumps and Cooling System: Indian Point has been plagued by a host of pump and cooling system problems, which are indicative of a wider level of deterioration in these safety-critical systems. For example, in February 2007, cooling water levels at IP 3 dropped precipitously, due in part to debris from the Hudson River clogging intake structures. The licensee labeled the amount of debris "significant" and an Unusual Event level emergency was declared. Significantly, the last time the screen involved was cleaned was in November of 2005 – another example of the failure of the plant's regular maintenance program to predict problems and assure safe operation. (IPEC-L5-16)

Comment: Instead of demanding remediation of the problem, the NRC has simply backed away from enforcement and from plain common sense by deeming it acceptable for the licensee to engage in purportedly mitigating measures such as sending IP workers into a blaze to manually operate (pull circuit breakers, turn valves, etc.) equipment. Apparently, the NRC either does not realize workers are human beings who require the use of their faculties such as seeing, hearing and breathing to work effectively, or the NRC does not realize that fires can be very hot and can burn, blind and asphyxiate people. The NRC evidently does not also comprehend that electricity and fire can - in combination with certain chemicals and gasses that are present within IP - initiate explosions, which, in turn, can blow both people and sensitive equipment to smithereens. (IPEC-L5-22)

Comment: Containment: Complete inspection of all critical radiation barriers must be conducted. The NRC allowed the regularly scheduled inspection of the dome liner to be delayed by 5 years, until 2008 (note comments on delayed inspection of steam boiler system in 2001). Must not enable the evasion of the requirement that the entire reactor containment structure ("Containment") meet DB. (IPEC-L5-25)

Comment: History of breakdowns, failures, backlog of work orders, etc. Because it claims that ongoing inspections are adequate, the NRC will NOT consider the overall safety and security track record of this aging facility's operation. For many years, Indian Point was considered to have the worst (106th of 106) track record of any operating nuclear power facility in the nation, and remains in the worst six. (IPEC-L5-48)

Comment: The problems inherent in significantly extending the useful life of a facility that was designed to operate for a set period of time are manifold and extremely problematic. These concerns are accentuated by the fact that the plant operators have an unfortunate history, as described in the GAO Report, of failing to meet accepted operational standards. (IPEC-L17-15, IPED-M5-15)

Comment: Foremost among the critical risks are the problems inherent in determining whether a nuclear power station can safely operate for twenty years beyond its original design specifications . . . If the NRC cannot ensure safe solutions to all of these problems, then it cannot relicense this facility. (IPEC-L17-49, IPEC-M5-49)

Comment: Indian Point is the only plant in the USA to ever have received a 'Red Rating' for releasing radioactive toxins in the air and river in 2000. Also, according to Riverkeeper, the number of unplanned shutdowns at Indian Point is six times higher than at any of the nation's other 103 nuclear plants. (IPEC-M17-22)

Comment: According to a 'special evaluation by the Inspector General of the NRC' in 2002, NRC surveys have showed that almost half of all NRC employees thought their careers would suffer if they raised safety concerns and nearly one third felt they had actually already suffered harassment and/or intimidation. (IPEC-M17-28)

Comment: According to a NRC study: 'The NRC has become aware of incidents where individuals were treated negatively by management for raising problematic issues at Indian Point. . . . [S]ome workers expressed reluctance to raise issues under certain circumstances." (IPEC-M17-29)

Comment: WHEREAS, there are concerns over the historical safety record of Indian Point, especially in light of the age of the Indian Point facilities, which could compromise the health and safety of Westchester residents. (IPEC-N5-9)

Comment: WHEREAS, the citizens of Westchester County, because of their close proximity to Indian Point, deserve to have a clear and accurate assessment of any and all safety problems

or issues that are currently known or may be discovered at Indian Point; and these issues should be presented to the public in a timely manner after discovery. (IPEC-N5-10)

Comment: In order to make sure that we don't have more leaks, you need to inspect all of the pipes at the plant. Now that's difficult. There are tens of thousands of feet of piping at that plant. But in order for the plant to be safely run, it would need to be fully inspected. (IPEC-NN-6)

Comment: There are serious environmental and safety concerns related too Indian Points inadequate Aging Management Plans for their Fuel Rod Control System that can include dropped rod events, unplanned plant trips, complete equipment failure, shut-downs, and in the case of employees, highly dangerous at-power-maintenance attempts. Such equipment failure creates off site release scenarios to the environment, and public safety issues that must be addressed in the EIS. (IPEC-PPP-16)

Comment: Severe Duty Valve failure, further complicated with sourcing issues for many approved valves which are no longer available, create serious potential risks to Indian Point‘s ability to accomplish and maintain a safe shutdown of the facility. These valves include, but are not limited to, Feedpump recirculation control valves, Feedwater regulating valves, Atmospheric dump valves, Condenser dump valves, Feedpump discharge check valves, feedpump discharge check valves and Pressurizer spray valves. Failure of these valves, or inability to find and obtain approved replacement valves, directly impacts safety and reliability of the plant during the 20 years of the new superseding license period, and therefore the associated. Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-PPP-17, IPEC-Q17-332)

Comment: Entergy fails to address adequately the issue of PWSCC (Primary Water Stress Corrosion Cracking) of Alloy 600 and its weld metals.

This serious issue impinges on both upper and lower reactor pressure vessel head penetrations. Additionally, this issue potentially manifests itself in reactor coolant system piping, lower head pressurizer penetrations and other components at Indian Point. On-going weld failures, couple with a serious shortfall in technology keeping up with site degradation, weld failures and fatigue makes this a potentially significant pathway for environmental contaminations and or accident pathways. (IPEC-PPP-24)

Comment: Entergy in their environmental supplement fails to address the obsolescence concerns as relates to digital upgrade of the rod control logic and power cabinets at Indian Point. (IPEC-PPP-27)

Comment: Entergy fails to address in the EIS the known industry wide problem of securing and having on hand contingency spare parts and making them available in a timely fashion in and emergency event. (IPEC-PPP-29)

Comment: Entergy fails in the Supplement to the GEIS to address the shortage of seasoned engineers with the knowledge pool too maintain the aging, Indian Point Reactors. This severe intellectual shortage becomes crucial in numerous cases where reverse engineering would be necessary to build replacement parts which are no longer available on the open market. . . . further, even if said reverse engineering is possible, the replacement part would no longer be a like-for-like replacement. (IPEC-PPP-30)

Comment: Entergy fails in their application and Appendix E to adequately address known premature failing of incontainment coatings. (IPEC-PPP-31)

Comment: Entergy fails to address the industry wide, and site specific problem of ever increasing obsolescence issues with original equipment installed for Indian Point's instrumentation, control and safety system applications. (IPEC-PPP-32)

Comment: Reactor Pressure Vessel is the critical component for plant life management, due to the unacceptable consequences of its failure and due to the difficulty of its replacement. The RPV is subjected to neutron irradiation in the core region, which results in irradiation induced embrittlement that may lead to a shift of the ductile-to-brittle transition temperature. Entergy fails to adequately address this issue in their LRA, their UFSAR, and in Appendix E EIS supplemental report. Further, both industry and NRC have admitted to a severe lack of knowledge in this area. (IPEC-PPP-33)

Comment: In a letter from the NRC to all licenses dated August 1, 1985 U.S. Nuclear Regulatory Commission Commercial Storage at Power Plant Sites of Radioactive waste Not Generated by the Utility HPPOS-092 PDR- 9111210185, W.J. Dircks states that:

NRC is opposed to any activity at a reactor site that is not supportive of authorized activities. Interim storage of low-level radioactive waste matter of policy, NRC is opposed to any activity at a nuclear reactor site which may divert attention of licensee management from its primary task of safe operation or construction of the power reactor. The operator must demonstrate that the increased use of the low level waste facility do not involve a safety or environmental question, and that safe operation of the reactor will not be affected. (IPEC-Q17-115)

Comment: The licensee must consider . . . Diversion of utility management and personnel attention from safe reactor operation. (IPEC-Q17-116b)

Comment: Precipitation, wind, or seismically induced flooding (e.g., resulting from dam failure, from river blockage or diversion, or from distantly and locally generated sea waves) can affect the safety of a nuclear power station. (IPEC-Q17-240)

Comment: In addition, the Indian Point site already has numerous non-compliance issues that place it in violation of NRC Rules and Regulations, with said issues that are already contaminating the environment, and increasing the risk to the general public. (IPEC-Q17-260)

Comment: IP2 is one of the few reactors in America to have suffered a significant Tube Rupture. This occurred back in 2000. Further, a recent Industry study has shown that tube fouling becomes a significant safety issue in pipes adjoining plugged pipes. Indian Point 2 and Indian Point 3 together have literally hundreds of plugged pipes in the reactor cooling system. (IPEC-Q17-270)

Comment: Indian Point cannot meet the Fire regulations of 10 CFR, and, in fact, Entergy has just requested the NRC further lower the SAFETY MARGINS although they were already granted exemption from the rules and regulations. (IPEC-Q17-273)

Comment: Both facilities currently have in place one or more EXEMPTIONS, EXCEPTIONS OR DEVIATIONS from NRC rules that will need to be carried forth into a new superceding license. Entergy is required as a part of the license renewal application to supply an analysis justifying why such exemptions should be carried forth into the new superceding license. Fire Protection, or the compromise of it, is very much an Environmental Cost and Impact issue that must be thoroughly investigated in the EIS Scoping. The Environmental Costs of a significant fire at Indian Point are monumental in scope. (IPEC-Q17-325)

Comment: Any fires that compromise the reactor, damages the reactor core, breaches the spent fuel pools, or impinges upon Entergy‘s ability to conduct and maintain Safe Shutdown of the reactors, are potentially catastrophic in nature and scope. The issue of whether both facilities can adequately protect human health and the environment with regard to Fire Protection, includes, but is not limited to, any exemptions, exceptions or deviations granted by the NRC, and must be included in the EIS, as Fire Protection issues have significant Environmental Costs and Impacts. (IPEC-Q17-326)

Comment: The potential accident pathways and associated significant Environmental Costs and Impacts associated with Indian Point reactor vessel internals having been, and continue to be, exposed to neutron irradiation which in turn causes a severe reduction in the fracture toughness and ductility of the PWR internals. This must be included in the EIS. (IPEC-Q17-335)

Comment: Primary Water Stress Corrosion Cracking (PWSCC) which appear in heat affected zones of the stub runner/divider plate weld, though not mentioned in Entergy‘s LRA Appendix E, will result in significant Environmental Costs and Impacts, and therefore all associated Environmental Costs and Impacts must be included in the EIS. (IPEC-Q17-337)

Comment: Entergy‘s LRA fails to adequately address the issue of PWSCC (Primary Water Stress Corrosion Cracking) of Alloy 600 and its weld metals. This serious issue impinges on both upper and lower reactor pressure vessel head penetrations. Additionally, this issue potentially manifests itself in reactor coolant system piping, lower head pressurizer penetrations and other components at Indian Point. (IPEC-Q17-339)

Comment: Ongoing weld failures, coupled with a serious shortfall in technology keeping up with site degradation, and fatigue make this a potentially significant pathway for environmental

contaminations and or accident pathways, therefore the associated significant Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-340)

Comment: Entergy's LRA Environmental Supplement fails to address the obsolescence concerns as relates to digital upgrade of the rod control logic and power cabinets at Indian Point which will result in significant Environmental Costs and Impacts of such accident pathways, and therefore all associated Environmental Impacts and Costs must be included in the EIS. (IPEC-Q17-343)

Comment: Entergy's LRA Environmental Supplement fails to address the known industry wide problem of securing and having on hand contingency spare parts. Availability, or lack thereof, in an emergency event, would result in significant Environmental Impacts and Costs of such accident pathways, and therefore all associated Environmental Costs and Impacts must be included in the EIS. (IPEC-Q17-345)

Comment: Entergy's LRA Environmental Supplement to the GEIS, fails to address the shortage of seasoned engineers with the knowledge pool to maintain the aging Indian Point Reactors. This severe intellectual shortage becomes crucial in numerous cases, such as where reverse engineering would be necessary to build replacement parts which are no longer available on the open market. Even if said reverse engineering is possible, the replacement part would no longer be a like-for-like replacement, therefore resulting in significant Environmental Impacts and Costs of such accident pathways, and therefore all associated Environmental Costs and Impacts must be included in the EIS. (IPEC-Q17-346)

Comment: Entergy's LRA Environmental Supplement Appendix E fails to adequately address known premature failure of containment coatings, resulting in significant Environmental Impacts and Costs of such accident pathways, and therefore all associated Environmental Costs and Impacts must be included in the EIS. (IPEC-Q17-347)

Comment: Reactor Pressure Vessel is the critical component for plant life management, due to the unacceptable consequences of its failure and due to the difficulty of its replacement. The RPV is subjected to neutron irradiation in the core region, which results in irradiation-induced embrittlement that may lead to a shift of the ductile-to-brittle transition temperature. Entergy fails to adequately address this issue in their LRA, their UFSAR, and in Appendix E EIS supplemental report. Further, both industry and NRC have admitted to a severe lack of knowledge in this area. Therefore all associated significant Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-349)

Comment: Internal reactor chemistry corrosion induced incidents are key accident pathways that results in significant off site release of radiological contaminants into the air, water and ground that must be investigated, and thereby associated significant Environmental costs and impacts must be included in the EIS. The impact may be LARGE, and therefore a comprehensive study of the internal reactor chemistry corrosion induced incidents as a Category 2 issue must be included in the EIS. (IPEC-Q17-358)

Comment: Pipe burst and leaks caused by plugs, and vibration redistribution are key accident pathways that results in significant off site release of radiological contaminants into the air, water and ground that must be investigated, and thereby associated significant Environmental costs and impacts must be included in the EIS. The impact may be LARGE, and therefore a comprehensive study of the Pipe burst and leaks caused by plugs, and vibration redistribution as a Category 2 issue, must be included in the EIS. (IPEC-Q17-360)

Comment: Crack propagation leading to design basis accidents include a loss of coolant accident insufficiently monitored as evidenced by Indian Point 2 and 3 histories, a steam generator tube rupture accident on Unit 2, as well extreme near misses. These raise environmental impact issues as well as safety concerns. (IPEC-Q17-370)

Comment: On October 9, 2007, an NRC metallurgical engineer, James A. Davis, who was part of the agency's augmented inspection team that was sent to the Davis Besse plant within hours after the near-rupture of the reactor vessel head was discovered, testified that cracks in the old reactor head's most problematic nozzle likely started about 1990—six years before any sizable leakage was documented and 12 years before the lid nearly blew to Kingdom Come. Mr. Davis made a point of saying he was testifying as an independent witness and not as an NRC employee. He said the nuclear industry and his agency have long settled on the average crack growth rate for reactor-head nozzles at 4 millimeters a year. (IPEC-Q17-371)

Comment: The notorious history of the Indian Point Plant is fraught with near misses of DBAs along with actual events that have never had EIS ex post facto and therefore require these studies prior to license renewal. FUSE stake holders are entitled to environmental impact analysis that include this as well as the actual history of the Indian point plants. (IPEC-Q17-373)

Comment: Deception of the Nuclear Regulatory Commission about the dangerous state of the plant's old reactor head in the fall of 2001, when it was leaking boric acid from its reactor, is only part of the issue. When the plant was shut down in early 2002, the NRC learned so much acid had leaked and burned through the plant's reactor lid that it nearly burst—an event that would have allowed radioactive steam to form in containment for the first time since half of Three Mile Island Unit 2's reactor melted in 1979. (IPEC-Q17-374)

Comment: Cracks of four millimeters per year compel SEIS, for all high energy lines of less than wall thickness of 6 inches, and in particular all reactor head nozzles, inspection frequencies of less than, or at least once per four years are required yet not addressed in Entergy‘s LRA. (IPEC-Q17-375)

Comment: In 2001, the stakes were raised when the NRC learned that several U.S. reactor heads, especially Davis-Besse's, were susceptible to a more dangerous form of nozzle cracks, one that could form a circular pattern and pop off like champagne corks under an operating reactor's extreme pressure of 2,200 pounds per square inch. Under that scenario, a flash of radioactive steam could form. Mr. Davis testified that the cavity in Davis-Besse's reactor head - 5 inches wide, 7 inches long, and 6 1/2 inches deep - could not have been missed during

FirstEnergy Corp.'s previous inspection in 2000 if the utility had done a credible job of inspecting the device. (IPEC-Q17-376)

Comment: Greg Gibbs, a onetime Davis-Besse quality-assurance director and engineering director, who left the plant in 1994, said he was disappointed after coming back as a consultant in 2001 to learn the utility never acted upon his insistence for larger holes in the reactor head's service structure to be used for inspections and cleaning. (IPEC-Q17-377)

Comment: In 2002 it was shown that First Energy vetoed a work order during the early 1990s for larger inspection ports, known as "mouse holes," to save $250,000, even after being encouraged to do the modification by officials at a plant in Crystal River, Fla., with a similar design. The modification, which officials have said could have headed off Davis-Besse's problems, was done after the old reactor head nearly experienced a catastrophic burst in 2002. (IPEC-Q17-378)

Comment: Since 2001 it has been known that there is at least a two inch path of rust in the dome at Indian Point Unit 2. Entergy received an exemption for design basis of inspection with regard to this rust for 5 years. Even after the NRC ordered industry wide inspections after Davis-Besse, this issue was not comprehensively inspected. (IPEC-Q17-379)

Comment: Therefore, any and all rust in the dome at Indian Point has significant LARGE impact on the Environment, is a new circumstance and must be included in the EIS as a Category 2 issue. (IPEC-Q17-380)

Comment: Because of this fact, we cannot believe that they strive in any way, to run a safe and efficient facility. (IPEC-Z4-2)

Comment: Entergy has repeatedly failed to keep its promise to inform, in a timely manner, Westchester County of safety and environmental problems at the plant, thus limiting governmental response to environmental problems. (IPEC-Z15-3)

Comment: The NRC should expand its scope of issues beyond non-moving parts - the review should reflect what is happening and may continue to happen should the plant be relicensed. (IPEC-ZZZ-2)

Response: *The NRC's environmental review is confined to environmental impacts associated with the extended period of operation for Indian Point. These comments provide no specific information about environmental issues or the environmental review. Operational safety issues are addressed as part of the ongoing regulatory process, and are outside the scope of 10 CFR Part 51. Issues related to the aging of structures and components are evaluated as part of the license renewal safety review process, and are also outside the scope of 10 CFR Part 51. The comments provide no new information within the scope of the environmental review and, therefore, will not be evaluated further in the context of the environmental review.*

Comment: As recent as September 11, 2007, the Journal News reported Feds Suspend Inspection at Indian Point 3 (http://www.thejournalnews.com/apps/pbcs.dll/article?AID=2007709110344).

“BUCHANAN - The Nuclear Regulatory Commission has suspended an inspection at Indian Point 3 after federal experts found plant officials unprepared to answer questions about a series of unplanned shutdowns that led the agency to lower the reactor's safety rating in April.

"They just didn't have the documentation we needed," said NRC regional spokesman Neil Sheehan, noting that such suspensions are rare. "But also, the types of questions we are asking, they did not have answers for at this point."

Again, public confidence for the safety of this facility is marginalized. (IPEC-D5-4)

Comment: We have a guard caught sleeping at the plant again. We have an incredible number of unplanned shutdowns. We have an owner-operator who is not ready for inspectors when they come to do an inspection at the plant. That's the environmental impact. The impact of having an environment of a plant run by Entergy in this way is a danger. (IPEC-NN-3)

Response: *The comment is noted. The inspection event cited is addressed as part of the ongoing regulatory process, and outside the scope of 10 CFR Part 51. The comment provides no new information within the scope of the environmental review and will not be evaluated further.*

Comment: WHEREAS, the NRC has the power and authority to order an Independent Safety Assessment (ISA) of IP2 and IP3.

Whereas, such an ISA was conducted at the Maine Yankee Nuclear Plant. (IPEC-N5-8)

Comment: WHEREAS, the NRC, in spite of the problems and safety issues experienced by IP2 and IP3, has refused to order and ISA of IP2 and IP3. (IPEC-N5-11)

Comment: RESOLVED, that the Westchester County Board of Legislators requests that the 110th United Stated Congress enact legislation that would require the Nuclear Regulatory Commission to conduct an Independent Safety Assessment of the Indian Point Nuclear Power Plants through the reintroduction and passage of H.R. 4891 and S.2488 (109th Congress). (IPEC-N5-13)

Comment: Numerous members of Congress, and a majority of the elected officials and local communities, question whether Indian Point is safe, and have repeatedly called for, and asked the NRC for an Independent Safety Assessment (ISA). (IPEC-Q17-261)

Response: *The NRC's environmental review is confined to environmental impacts associated with the extended period of operation for Indian Point. The request for an Independent Safety*

Assessment (ISA) is outside the scope of license renewal and will not be evaluated further in the context of the environmental review.

Comment: Any and all exemptions, exceptions and deviations of the Design Basis or Current Licensing Basis of Indian Point 1, 2, or 3 have potentially significant Environmental Impacts and Costs and must be included in the EIS. (IPEC-Q17-85)

Comment: My name is Ulrich Witte. . . . and I'm going to raise two issues. One, I'm going to ask that this goes on the record. That is, just exactly what general design criteria is Unit 2 licensed to? Tell us, for the world, what your licensing basis is, because in order for you to renew this plant, to get a so-called extended license, you need to know what you've got. (IPEC-X-1)

Comment: And the second question is, tell us what your general design basis is. That's my short--I think I saved you some time. That's it. Thank you very much. (IPEC-X-4)

Response: *The comments are noted. The Commission has determined that issues related to the adequacy of the CLB are outside the scope of license renewal. Additionally, CLB issues are not within the scope of an environmental review under 10 CFR Part 51. The comments do not provide any new information and will not be evaluated further.*

Comments Regarding Aging Management

Comment: All identified problems - including failing or degraded rebar/steel reinforcements - must be fully repaired in order for the licensee to meet full DB compliance before the grant of a new superseding license. (IPEC-C-20)

Comment: The aforesaid must include a complete inspection of cracks and fissures in the dome, walls and floor of the Containment and must include comprehensive analysis of deterioration that has occurred over 30 plus years of operation resulting from or associated with aging, embrittlement, corrosion, rust, heat, constant radiological bombardment, pressurization, and chemical agents such as boric acid. (IPEC-C-21)

Comment: Moreover, studies on the effects of embrittlement, aging and radiological bombardment and their effects on thermal core shock on reactor core are woefully incomplete. Notwithstanding, studies on high pressure/high heat steam boiler systems failures and explosions provide enough clues to mandate a full exploration of this issue before relicensing is allowed to move forward. (IPEC-C-23)

Comment: Numerous electrical system problems and several fires have arisen at IP in recent years, pointing to the strong possibility that many cables, wiring, and other electrical systems and components ("Electrical Systems") may be failing, degraded, or insufficiently protected. (IPEC-C-35)

Comment: Inaccessibility has limited the inspection and testing of substantial portions of the Electrical Systems. It is thus difficult to understand how the NRC can have confidence that the effects of aging, corrosion, water, heat, pressurization, chemical agents and/or physical reactions have not resulted in dangerous degradation of safety margins. Such degradation can result in the initiation of or the inability to adequately mitigate a major accident. (IPEC-C-36)

Comment: All of these factors point to the imperative for a complete inspection and comprehensive corrosion and deterioration risk analysis of all Electrical Systems. In light of the NRC's patent ignorance or disregard of the realities of fires, such inspection must incorporate the unredacted findings and analyses of an independent fire expert. (IPEC-C-39)

Comment: And finally, we were concerned then--a major issue was this was untested technology and nobody really had any idea how these plants would weather the years. How would the plant's pipes stand up? Would they become embrittled? Would things wear out that had never, in fact, ever been tested? (IPEC-CC-5)

Comment: And then, it's also important to require that aging infrastructure be repaired and replaced, and we cannot afford a 20-year extension to be a human experiment in how far you can allow aging equipment to go before a plant is closed. (IPEC-GG-7)

Comment: Knowing that others here tonight will address some of these more commonly known issues of concern, I am going to be more specific.

Boric acid corrosion (BAC) represents a significant aging management issue affecting primary systems at Indian Point that could lead to release of radioactive contaminants into the environment. Indian Point's aging management plan for this important issue fails to adequately address, as one example valve packing and valve body-to-bonnet gaskets. The fact that IP2 and IP3 are already working on the engineering difficulties involved in a complicated and dangerous reactor vessel head replacement shows this is a significant issue and that the result of accident release into the environment from reactor vessel head failure must be included in the EIS. (IPEC-H-14)

Comment: The reactor vessel internals bolting at Indian Point is susceptible to age-related degradation, which could lead to a off-site release of radioactive contaminants. The LRA, and the updated FSAR documents, fail to lay out an adequate aging management plan for inspection and replacement, when necessary reactor vessel internal baffle bolts fail. This creates an accident pathway which could lead to off-site release of radioactive contaminants, with the resultant environmental risks ripe for inclusion in the EIS. (IPEC-H-15)

Comment: There are serious environmental and safety concerns related to Indian Point's inadequate aging management plans for their fuel rod control system, that can include dropped rod events, unplanned plant trips, complete equipment failure, shutdowns, and in the case of employees, highly dangerous at-power-maintenance attempts. Such equipment failure creates off-site release scenarios to the environment and public safety issues that must be addressed in the EIS. (IPEC-H-16)

Comment: Pipes and Valves: Pipes and valves are aging and vulnerable to leakage and failure. (IPEC-L5-17)

Comment: Fires and Electrical System Hazards: In spite of NRC required maintenance plans and inspection procedures, Indian Point has experienced numerous electrical system problems and in recent years, including a major transformer explosion in __ 2007. This indicates that cables, wiring, and other electrical systems and components may be failing, degraded, or insufficiently protected. (IPEC-L5-18)

Comment: Inaccessibility has limited the inspection and testing of substantial portions of the electrical systems to determine the effects of aging, corrosion, water, heat, pressurization, chemical agents and/or physical. (IPEC-L5-19)

Comment: Such degradation can result in the initiation of or the inability to adequately mitigate a major accident. (IPEC-L5-20)

Comment: All of these factors point to the imperative for a complete inspection and comprehensive corrosion and deterioration risk analysis of all Electrical Systems. In light of the NRC's patent ignorance or disregard of the realities of fires, such inspection must incorporate the unredacted findings and analyses of an independent fire expert. (IPEC-L5-23)

Comment: All identified problems – including failing or degraded rebar/steel reinforcements– must be fully repaired in order for the licensee to meet full DB compliance before the grant of a new superseding license. (IPEC-L5-26)

Comment: The aforesaid must include a complete inspection of cracks and fissures in the dome, walls and floor of the Containment and must include comprehensive analysis of deterioration that has occurred over 30 plus years of operation resulting from or associated with aging, embrittlement, corrosion, rust, heat, constant radiological bombardment, pressurization, and chemical agents such as boric acid. (IPEC-L5-27)

Comment: In particular, traces of borate acids may indicate that the spray nozzles are deteriorating and could expose the Containment to be at excessive risk in the event of a criticality/core meltdown event. (IPEC-L5-28)

Comment: Moreover, studies on the effects of embrittlement, aging and radiological bombardment and their effects on thermal core shock on reactor core are woefully incomplete. Notwithstanding, studies on high pressure/high heat steam boiler systems failures and explosions provide enough clues to mandate a full exploration of this issue before relicensing is allowed to move forward. (IPEC-L5-29)

Comment: The Stakeholders in and around IP contend that the effects of/with aging, embrittlement, corrosion, rust, heat, constant radiological bombardment, and chemical agents have destabilized and weakened the tensile strength of the reactor cores to a point where they

are out of DB, and present an immediate and unacceptable risk of break up/explosion in a significant core thermal shock event or a terrorist attack, such as one involving a bomb laden truck, and/or large commercial aircraft still laden with fuel. (IPEC-L5-30)

Comment: My background is an architectural background. I understand about the viability of facilities, the need for proper inspection of facilities as they age, buildings throughout New York City. I hear things about aging pipes in the nuclear plant. I would hope that the NRC does inspect the pipes and make sure that the facility is safe. (IPEC-OO-2)

Comment: The reactor vessel internals bolting at Indian Point is susceptible to age-related degradation which could lead to a off site release of radioactive contaminants. The LRA and UFSAR documents fail to lay out and adequate aging management plan for inspection and replacement when necessary of reactor vessel internal baffle bolts. This creates and accident pathway which could lead to off site release of radioactive contaminants, with the resultant environmental risks ripe for inclusion in the EIS. (IPEC-PPP-15)

Comment: Resultant environmental costs associated with Indian Point reactor vessel internals having been, and continuing to be exposed to neutron irradiation which in turn causes a severe reduction in the fracture toughness and ductility of the PWR internals. (IPEC-PPP-20)

Comment: Unaddressed in adequate fashion in the LRA or Appendix E is the issue of Primary Water Stress Corrosion Cracking (PWSCC). Of primary concern would be cracks which appear in heat affected zones of the stub runner/divider plate weld. (IPEC-PPP-22)

Comment: Fatigue of metal components, void swelling of reactor internals as well as serious issues regarding Entergy's inability to visually examine certain difficult if not impossible to reach components and containments create serious potential pathways for significant release accidents that should be included in the EIS Scoping process. (IPEC-PPP-25)

Comment: Entergy fails to address any of the risks associated with temperature flow-accelerated corrosion (FAC), including unanticipated emergency shutdowns. (IPEC-PPP-28)

Comment: Such continuous problems, however, illustrate the deterioration of an aging and outdated facility that can no longer be called "safe and secure." (IPEC-Q4-8)

Comment: And how is the likelihood of failure (and plant safety) affected by the continued operation of a nuclear reactor well beyond its original design life? (IPEC-SSS-4)

Comment: FUSE points out that many component parts and systems reviewed in the technical review, in the weighing of the adequacy of Entergy‘s Aging Management Plans, do carry Environmental Impacts and Costs if those component parts and systems or the Aging Management plans fail. (IPEC-Q17-17)

Comment: Both reactors are suffering severe BAC (Boric Acid Corrosion) of the reactor vessel heads . . . in fact, the corrosion issues are significant enough that Entergy has a standing order

for new reactor vessel heads for IP2 and IP3 with delivery slated for 2011 and 2012 respectively. In order to install these vessel heads, it is probable that containment will have to be breeched. (IPEC-Q17-269)

Comment: The series 400 stainless steel roller bearings on the traveling water screens for IP3 have huge holes, which is believed to be caused by corrosive microbes or lack of maintenance, This condition has existed since 1991, yet remains un-remediated. (IPEC-Q17-271)

Comment: One of the steel containment plates at Indian Point is failing. (IPEC-Q17-272)

Comment: In the ER Entergy's states that there are no impacts from Microbiological (Thermophilic) Organisms . . . the series 400 stainless steel roller bearings on the traveling water screens for IP3 have large holes, which are caused by corrosive microbes or a horrific lack of maintenance. This condition has existed since 1991, yet remains un-remediated. (IPEC-Q17-320)

Comment: Workers at the plant have found that stainless steel nuts and bolts thrown into water are rapidly disintegrated, "eaten", by the microbes.

The microbial corrosion potentially effects all the 400 series stainless steel, inspected and uninspected, components, pipes, fillers, and valves at Indian Point. Therefore the ability of Entergy to maintain a safe, once through, or closed system that does not contaminate the environment is jeopardized. (IPEC-Q17-321)

Comment: The population affected by this corrosion is the entire community within 50 miles of the plant. Such rapid corrosion caused by the microbes, can lead to a significant release of radioactive nuclides into the air, water, or ground. (IPEC-Q17-322)

Comment: The significance of the huge holes in the roller bearings on the traveling water screens is MODERATE, as it does not destabilize important attributes, however, the possibility of the corrosive microbes damaging other stainless steel components, pipes, filters and valves is LARGE. Corrosion that is clearly noticeable with the bare eye at any nuclear plant is completely unacceptable and is more than sufficient to destabilize important attributes of Indian Point. (IPEC-Q17-323)

Comment: The GEIS does not include analysis of this microbial corrosion and is site specific to Indian Point. The GEIS does not consider additional mitigation measures to prevent the adverse effects of the microbial corrosion, yet such mitigation would be warranted.

Therefore the criteria of Category 1 have not been met, and an additional plant specific review in the EIS is required. (IPEC-Q17-324)

Comment: Boric acid corrosion (BAC) represents a significant aging management issue affecting primary systems at Indian Point that could lead to release of radioactive contaminants into the environment. Indian Point's Aging Management plan for this important issue fails to

adequately address, as one example, valve packing and valve body-to-bonnet gaskets. The fact that IP2 and IP3 are already working on the engineering difficulties involved in a complicated and dangerous reactor vessel head replacement is a significant issue that can result in an accidental release of radioactivity into the environment from reactor vessel head failure. Therefore the significant Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-329)

Comment: The reactor vessel internals bolting at Indian Point is susceptible to age-related degradation which could lead to an off site release of radioactive contaminants. The LRA and UFSAR documents fail to lay out an adequate aging management plan for inspection and replacement of reactor vessel internal baffle bolts. This creates an accident pathway which could lead to off site release of radioactive contaminants, with the resultant environmental risks, and therefore associated Environmental Costs and Impacts of such accident pathways must be included as a Category 2 issue in the EIS. (IPEC-Q17-330)

Comment: There are serious environmental and safety concerns related to Indian Point‘s inadequate Aging Management Plans for the Fuel Rod Control System, that includes dropped rod events, unplanned plant trips, complete equipment failure, shut-downs, and highly dangerous at-power-maintenance attempts. Such equipment failure creates significant off site release scenarios to the environment, and public safety issues. Therefore the associated Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-331)

Comment: Fatigue of metal components void swelling of reactor internals, as well as serious issues regarding Entergy‘s inability to visually examine certain difficult, if not impossible, to reach components and containments creates pathways resulting in significant release accidents, and therefore all associated Environmental Impacts and Costs that must be included in the EIS Scoping process. (IPEC-Q17-341)

Comment: Entergy‘s LRA Environmental Supplement fails to address the risks associated with lo-temperature flow-accelerated corrosion (FAC), including unanticipated emergency shutdowns, which would result in significant Environmental Impacts and Costs of such accident pathways. Therefore, all associated Environmental Costs must be included in the EIS. (IPEC-Q17-344)

Comment: Cables are CRITICAL for plant safety and operation and shut down at Indian Point, yet Entergy fails to present an adequate aging management program for this critical component for safe plant operation and shut down. Degradation of these cables could lead to catastrophic accidents at the site resulting in an electric fire destroying major plant components and infrastructure, including, but not limited to, key safe components necessary for safe shut down, that would in turn lead to core meltdown. Therefore, all associated significant Environmental Costs and Impacts of such accident pathways must be included in the EIS. (IPEC-Q17-350)

Comment: Old reactors well past their anticipated age of expected retirement are embrittled due to various factors, key amongst them is constant radiological bombardment. Any rapid

significant change in temperature, such as a sudden flooding of the reactor core could cause said core to literally crack, or worse break apart. (IPEC-Q17-352)

Comment: Specifically, we believe that the spent fuel pools should be considered within the scope of the Aging Management Review. (IPEC-E5-5, IPEC-I17-5)

Comment: Specifically, I believe that the spent fuel pools should be considered within the scope of the aging management review. (IPEC-EE-7, IPEC-RRR-7)

Response: *The comments are noted. The NRC's environmental review is confined to environmental impacts associated with the extended period of operation. Issues related to the aging of structures and components are evaluated as part of the license renewal safety review process, and are outside the scope of the environmental review under 10 CFR Part 51. The comments will not be evaluated further in the context of the environmental review.*

Comment Regarding Energy Costs

Comment: The Rockland Business Association (RBA) is the county's largest business organization, representing 991 corporate, mid-size and small businesses. We are the advocates for Rockland's business community at the local, state and federal levels and work to enhance economic opportunities in Rockland by addressing a broad range of public affairs and area development, economic and business development issues that affect the growth of business in the county.

Recently, the Business Council of New York State, of which the RBA is a member, surveyed almost 1,100 Council members to identify top priorities for action in 2007. These members ranked "the cost of doing business" as their greatest concern in New York - with a special focus on energy costs. Electric rates in New York run 70 percent above the national average, and there is a clear need for more generating capacity to keep costs down, as well as a great demand to direct low-cost power to employers and growth industries throughout the State. (IPEC-A4-1, IPEC-JJJ-1, IPEC-ZZ-1)

Comment: According to recent studies, replacing Indian Point's 2,000 megawatts of electricity would cost over $1 billion a year in electricity costs and could lead to electricity shortages, rolling blackouts and price increases. (IPEC-C4-3, IPEC-I4-3, IPEC-III-3)

Comment: Rising energy cost affects all communities across the US and especially New York, which has some of nation's highest energy bills. The costs of residential and transportation energy represent even larger shares of household expenditures for minority citizens. (IPEC-DDD-2, IPEC-XXX-3)

Comment: The poorest and most vulnerable families, are being hit the hardest by energy cost increases. The high energy costs also impact small and minority businesses and provide barriers for those who want to go into business. (IPEC-DDD-3, IPEC-XXX-4)

Comment: It's affordable: Nuclear power consistently remains one of the cheapest sources of power in the world. Its price is predictable and stable, unlike oil or natural gas. Indian Point has saved NYC and Westchester residents billions of dollars. (IPEC-H17-4)

Comment: We strongly believe that reducing the area's energy supply by closing Indian Point would have a destructive impact on the region's economy. (IPEC-I4-6, IPEC-C4-6, IPEC-III-6)

Comment: This is particularly true today where we are experiencing price volatility and significant increases in the fossil fuel marketplace. (IPEC-J4-10, IPEC-MMM-10, IPEC-D4-10)

Comment: If Indian Point's license is not renewed, New York will feel this impact in many ways including increased electricity costs. New York's Energy Costs are already among the highest in the United States., according to the Public Policy Institute. (IPEC-K4-2)

Comment: Not only does Indian Point's operation keep energy costs manageable, (IPEC-K4-6)

Comment: Good afternoon. My name is Lloyd Douglas. I'm the owner of a small minority business consulting firm. We do minority and women-owned business opportunities. I'm also representing an association of minority and women entrepreneurs.

Entergy has been partnering with us in terms of creating opportunities for minority and women-owned business. When minority and women-owned businesses get contracts, they hire from the community. Part of why we are in support of their request for license renewal has to do with what we perceive as a less costly form of energy. (IPEC-L-1)

Comment: I've had the good fortune of being part of an advisory group, working with our current lieutenant governor, one of his responsibilities is energy, along with minority and women-owned business, and we have concerns about a dependency on foreign oil. For those of you who drive, you know that on the market, oil is going about $80 a barrel, and we can feel it at the pump. (IPEC-L-2)

Comment: The closure of the facility will result in higher taxes and the lack of affordable and reliable energy. (IPEC-L4-8)

Comment: Eager promises in the 'early age' of nuclear power suggested a source 'too cheap to even meter.' Now Entergy and others claim it might be 'almost on a par' with coal and hydroelectric but still requires massive subsidies. There is nothing cheap about nuclear energy! (IPEC-M17-9)

Comment: According to Peter Bradford, Former NRC Commissioner, "A nuclear revival is financially risky. The likelihood of new nuclear units being, built is very unlikely." (IPEC-M17-31)

Comment: The inconvenience and initial higher energy costs of alternative power from the grid and eventually other new power sources (although Entergy's own consultants estimate a mere 5% increase in local costs if Indian Point is closed!). (IPEC-M17-34)

Comment: We cannot afford to lose any of the vital existing generating capacity that the Indian Point provides to serve New York City and the lower Hudson Valley. Without Indian Point's 2,000 megawatts, energy costs would rise over an estimated $1 billion a year in the New York area. There could be wholesale price spikes as high as 40 percent and impacts to electric system reliability. (IPEC-NNN-6)

Comment: Nuclear power consistently remains one of the cheapest sources of power in the world. Its price is predictable and stable, unlike oil or natural gas. Indian Point has saved NYC and Westchester residents billions of dollars. (IPEC-O4-4)

Comment: I also interface with many business people on our Engineering Advisory Board, who understand the needs and demands of small businesses and entrepreneurs. High energy and electric costs here in New York State are driving small businesses out of the state and stifling innovation and economic activity. I forget who said that "computer chips without electricity are just sand." (IPEC-OOO-2)

Comment: With regard to nuclear power and Indian Point, here's what I think--

It's Affordable: Nuclear power consistently remains one of the cheapest sources of power in the world. Its price is predictable and stable, unlike oil or natural gas. Indian Point has saved NYC and Hudson Valley businesses and residents billions of dollars on the price of energy. (IPEC-OOO-3, IPEC-N-3)

Comment: Major deposits of uranium are located right here in North America, and because you only need a small amount to generate a large amount of energy, (one gram of uranium is equal in energy output to one ton of coal, with almost zero carbon emissions) nuclear energy in the U.S. will be affordable for decades to come. (IPEC-PP-8)

Comment: We'd like to know the true costs of Indian Point. We're being told, by some people in the audience here, that it's less expensive than other forms of energy, when, in truth, if we do the studies, and we look at the cost to the taxpayer dollar, it is much, much more expensive. These true costs must include evacuation planning. (IPEC-S-3)

Comment: The nuclear industry enjoys financial incentives far beyond what is available to other more environmental friendly renewable energy sources.

Between 1947 and 1999, the nuclear industry was given more than $115 billion in direct taxpayer subsidies, compared to a mere $5.7 billion for wind and solar over the same period. The Energy Policy Act of 2005, was filled with nuclear industry largesse with an additional $3 billion dollar subsidy to the mature nuclear industry that already has received the lion's share of

federal energy funds over the past 50 years. These ongoing subsidies to the nuclear industry have resulted in a violation of Fair Trade doctrine. (IPEC-Q17-295)

Comment: Ratepayers and taxpayers are the victims of this violation of fair trade. Specifically, New York State taxpayers, and the residents surrounding Indian Point, are footing the majority of the costs for Emergency Preparedness, and due to the short fall in decommissioning trust funds, will be burdened by the cost of site clean up. (IPEC-Q17-296)

Comment: Due to the deregulated electricity market, where free trade is a core tenet, there needs to be a fair analysis of increased costs and exposures to the community as it relates to Indian Point. Economic subsidies from tax dollars are going to support nuclear energy facilities, such as Indian Point. (IPEC-Q17-299)

Comment: The claim that nuclear power is cheap energy should be fully explored, including but not limited to, operational costs, the costs of research and development, and costs borne by taxpayers by way of subsidies and research paid for through DOE hand outs to EPRI and universities such as MIT. (IPEC-Q17-300)

Comment: In order to mitigate this imbalance, the NRC would be warranted in requiring Entergy to pay for the legal expenses of the community Stakeholders, and require a comprehensive study of the actual costs to taxpayers for the operation of Indian Point, including, but not limited to:
a. Annual Federal, State and local Subsidies and tax credits
b. State and local pilot tax deferments
c. Price Anderson Insurance Liability Limitation-specifically the costs to citizens should an accident occur, since the act makes it impossible for citizens to insure against the losses that would be incurred from a significant nuclear incident or terrorist attack at the facility.
d. Costs of emergency preparedness (at all levels of government).
e. Costs of security for all nuclear facilities that are absorbed or offset by all levels of government.
f. Federal and state funded research and development. This is to include all research for the ENTIRE fuel cycle.
g. Costs of mining, including clean up of contaminated sites involved in the nuclear fuel cycle, including specifically Paducah and Portsmouth Gaseous Diffusion Plants. Further, all pay outs to former nuclear workers for health related issues should be included in this figure.
h. Cost of processing, including transportation at all steps of the process, governmental paid expenses associated with construction of fuel processing facilities, such as the Gaseous Diffusion Plants, and the proposed GNEP reprocessing plant. These costs should also include environmental restoration and clean up costs associated with these processing facilities, such as Hanford and other locations.
i. Costs of plant construction (including loan guarantees, and siting grants.
j. Costs of transportation
k. Costs of radioactive waste storage (which should include the monthly surcharge being added to our bills to cover the expected costs of off site storage).
l. Costs of decommissioning and returning site to green field.

m. Cost of health effects, including deaths associated with the entire fuel cycle, including up through the long term storage of nuclear waste streams.
n. Costs of regulatory enforcement not covered by licensee fees. As example, the $980 million dollar budget this year for the NRC. (IPEC-Q17-303)

Comment: The One Hundred supports the creation and distribution of safe, affordable, reliable and clean energy for not only our communities, but the greater community that is New York. We believe that Entergy is a good corporate citizen, and we support any efforts to balance the delivery of safe energy with initiatives that will soften the burden of these costs on our communities and the environment. (IPEC-XXX-7)

Comment: Good evening, and thank you for the opportunity to speak. I'm with the Rockland County Conservation Association, one of those very ill-funded organizations. We're all volunteers, founded in 1930.

Before I read the comment, I just have an observation. In a de-regulated electricity market, I'm wondering, with all these subsidies that we're hearing about going to the community, we understand that the government has great subsidies going to the nuclear industry, and I wonder how that is affected and what the considerations are in a free trade open commerce market, what the implications are, where these great subsidies are going, and why the nuclear industry seems to be getting a leg up.

Further, the money that we hear being passed through offered to the communities to willing takers, I wonder, is this money that is just being passed through from government subsidies than then Entergy can come out looking like the great community hero, actually using federal funding. That's something I would hope that someone is going to pursue the financial implications of a free trade, deregulated electricity market where there is fair and balanced commerce. (IPEC-YY-1)

Response: *The economic costs and benefits of renewing an operating license are specifically outside of the scope of license renewal, as defined in 10 CFR 51.95(c)(2). The comments will not be evaluated further.*

Comments Regarding Energy Needs

Comment: Without Indian Point's 2000 megawatts, electricity costs would rise, and there would be wholesale price spikes, and there would be impacts on the reliability of your electricity service.

In addition to the importance of Indian Point as an energy provider for the people of the state, in an increasingly energy-starved area, the area you live in in New York, the facility also is significant for its economic impact and you've heard some examples of that. (IPEC-BB-6)

Comment: Since 1973, nuclear energy has displaced 4.3 billion barrels of imported oil and reduced our trade deficit by $12 billion. (IPEC-K4-10)

Comment: High energy and electric costs here, in New York State, are driving small businesses out of the state and stifling innovation and economic activity. I forget who said computer chips without electricity are just sand. (IPEC-N-2)

Comment: The second part is Homeland Security. Nuclear power helps reduce our dependence on foreign sources of energy. Right now, gas controlled by Russia is $6. By reducing our need to buy natural gas from abroad at expensive market rates, domestic nuclear power helps reduce our dependence on foreign energy sources and currency. (IPEC-PP-4)

Comment: We have seen the economic devastation caused by the dramatic disruption of electricity supply both in recent memory (Blackout of 2003), as well as the continuing hardship faced by thousands of Long Island residents who pay some of the highest utility bills in the United States because of the infamous Shoreham nuclear plant debacle. Shoreham was a clear example of the needs of the few outweighing the on-going needs of the many and the Council does not wish to see Indian Point (or the residents surrounding the facility) suffer the same fate. (IPEC-B4-3, IPEC-H4-3, IPEC-KKK-3)

Response: *The economic costs and benefits of renewing an operating license are specifically outside of the scope of license renewal, as defined in 10 CFR 51.95(c)(2). The comments provide no new information and, therefore, will not be evaluated further.*

Comment: With regards to the coal-fired plants that are on the other side of the river that we also work in, there is a plant for those plants over there. And the plan is to close them down by the end of this year. And if you think that's a positive thing, try and think of where you're going to get the lights, where are you going to get the electric, because the same thing will happen over here. And as hot as this room was when we first started this meeting, I'm sure everybody appreciates the fact that there's electric. (IPEC-AAA-4)

Comment: Indian Point is a baseload power plant that is capable of providing electricity, 2000 megawatts, 24 hours a day, 7 days a week, 365 days a year. It's power you can count on. (IPEC-BB-2)

Comment: Reliable electricity is critically important to New York's future, and nuclear energy is reliable, affordable, and it is an important component of our state's diverse fuel mix. Indian Point should continue to play a role in the state's energy plan, now and into the future. (IPEC-BB-5)

Comment: IPPNY believes that not relicensing this facility is simply unworkable, and given the critical electricity needs of the state in this area, and we support the relicensing of the facility. Thank you for your time and attention. (IPEC-BB-7)

Comment: Indian Point generates 2,000 megawatts of electricity that powers New York City's most essential resources such as homes, businesses, subways, hospitals and public schools. (IPEC-C4-2, IPEC-I4-2, IPEC-III-2)

Comment: The 21st Century businesses that New York City must retain and attract require a resilient, reliable and redundant source of power. The closure of Indian Point would reduce the amount of power for New York State's electrical grid by 11 percent, jeopardizing economic growth and limiting our competitiveness. New York cannot afford to lose any existing generating capacity serving the downstate area. (IPEC-C4-4, IPEC-III-4, IPEC-I4-4)

Comment: The New York Independent System Operator (NYISO), whose mission is to operate the state's electricity grid and wholesale electric markets, projects that, even assuming the continued operation of the Indian Point facility, the City of New York and the lower Hudson Valley (which encompass the 4 counties of Westchester, Rockland, Orange and Putnam that surround Indian Point) will need 1,250MW to 2,250MW of additional capacity between 2010 and 2015. How that additional capacity will be obtained is an issue currently presenting enormous challenges to the state of New York. It is daunting to contemplate how insurmountable those challenges would become without the continuing presence of the Indian Point facility. (IPEC-D4-2, IPEC-J4-2, IPEC-MMM-2)

Comment: First, Indian Point is a "base-load" power plant capable of providing 2000MW of electricity 24 hours a day, seven days a week, 365 days a year. Because it provides necessary voltage support at a critical juncture in the state's transmission system, it is favorably located to serve the vital down-state "load-pocket" and because the power it produces is relatively low cost, it is generally relied upon proportionally more than event other base-load facilities. (IPEC-D4-3, IPEC-MMM-3, IPEC-J4-3)

Comment: Another critical benefit of the facility is that it helps provide the state and region with a healthy, diversified fuel mix in the generation of electricity. Because a diverse portfolio of fuel alternatives avoids undue risk in the marketplace and to state and national security, a premium should be placed on a diversified energy mix to fuel our electric generation facilities. (IPEC-D4-9, IPEC-MMM-9, IPEC-J4-9)

Comment: A full discussion of the purpose and need to relicense Indian Point Units 2 and 3, quantifying energy demand and the need for such facilities in the region. (IPEC-E17-2)

Comment: In looking at the scoping of the unit, I guess I would ask that the NRC consider the study that was done by the National Academy of Science, which says that even with Indian Point, there's going to be a major shortfall of electricity for southeast New York, and then it gives eight conditions which have to be met, so that the possibility of closing Indian Point can exist.

I will note that since the report was issued, not one of those conditions have been met. (IPEC-G-2)

Comment: There has to be an alternative to the energy at Indian Point if it is shut down. It provides nearly a third of New York's power on some days, and runs the whole mass transit system. (IPEC-HH-7)

Comment: Any substantial reduction in the amount of electricity generated by Indian Point 2 and 3 will spark demand for replacement electricity from nearby power plants. (IPEC-JJ-5)

Comment: Despite protest by environmental groups, Indian Point is responsible for generating an average of 38% of the lower Hudson Valley and New York City's electricity - enough to power 2,000,000 homes, according the New York Independent System Operator. (IPEC-K4-11)

Comment: And I must point out to you, there are none in the pipeline, there's no New York State siting law, there's nothing going on, there's nothing coming downline, so we can't be cavalier about the potential for the fact that a lot of people in this room may face the possibility one day of hitting that light switch and nothing happens. (IPEC-LL-3)

Comment: Our mass transit system in New York City, our local hospitals, our emergency rooms, our sporting arenas, can't wait for the wind to blow and the sun to shine. They need power on demand, and Indian Point provides that for them. (IPEC-LL-5)

Comment: It is a historical fact that demand for electricity has always grown and will continue to grow, even as efficiency increases and new technologies are brought online. (IPEC-LLL-1)

Comment: Nuclear power helps reduce our dependence on foreign sources of energy . . . by reducing our need to buy natural gas from abroad at expensive (and fluctuating) market prices, domestic nuclear power helps reduce our dependence on foreign energy sources. (IPEC-LLL-7)

Comment: Disaster scenarios of 'energy blackouts' for the New York area as a result of Indian Point's 'retirement' ignore the fact that we already have surplus capacity, that efficient power-import grid systems already exist, and that 10 new power plants have been approved for New York State. (IPEC-M17-11)

Comment: Now, that's my prepared speech. You know, it wasn't that bad. One thing I'd like to say, I'd like to put it in layman's terms for a lot of people out there that don't fully understand what's going on and the eloquent speeches that everybody is giving. Energy or electricity is generated at 60 cycles a second. That means every 30 seconds, or 30 times a minute, the lights in this room are going off, and we don't see it.

Without Indian Point and the 20 percent of power that it produces, I'd like each and every one of you to go home and turn off the lights and everything that electricity runs for one out of every 10 minutes or 2.4 hours a day each and every day, because, like the gentleman before me said, there is nothing down the line that's going to replace it. Thank you very much. (IPEC-MM-4)

Comment: My name is Mark Jacobs. I'm with the Indian Point Safe Energy Coalition. I guess we're one of the supposedly well-funded groups that is being talked about. But if anyone wants to see our budget, I think that very quickly you would see that that just isn't actually the case. I'm a volunteer. I've worked on this issue as a volunteer for almost 10 years. And that's what I'm getting paid for at volunteer pay. That's nothing.

I want to address a number of points. Mr. McDonald brought up the issue of the environmental impact of the plant and environmental justice issues. In order to defend that point, he cited plants solely within the boroughs of New York City. But what should be very clear, and I'm sure that if he does a little more research he'll find this for himself, that were Indian Point to be shut down it would not impact at all the running of the power plants within New York City. They are still going to be required to produce 80 percent of the power, and they are still going to be importing approximately 20 percent of the power, whether Indian Point is open or closed. (IPEC-NN-1)

Comment: Indian Point is a "base-load" power plant that is capable of providing 2,000 megawatts of electricity 24 hours a day, 7 days a week, 365 days of the year. The facility provides 20 to 40 percent of the lower Hudson Valley's and New York City's power. As New York's energy demand continues to grow, so does the importance of Indian Point. Millions of homes, thousands of businesses and hundreds of critical transportation, health and municipal systems rely on Indian Point's reliable, low-cost power. (IPEC-NNN-3)

Comment: Reliable electricity is critically important to New York's future, and nuclear energy is a reliable, affordable component of our state's diverse fuel mix. Indian Point should continue to play a role in the state's energy plan now and well into the future. (IPEC-NNN-5)

Comment: Indian Point provides between 20-40% of the region's power and is a primary source of baseload electric power for the region. (IPEC-O4-6)

Comment: "With the Indian Point nuclear power plants producing between 18% to 38% of the energy in the area served, Entergy's application deserves the endorsement of the business community." (IPEC-O17-4)

Comment: My only concern is that to shut the plant down right now is going to be a big hardship on the region itself. There are no viable energy substitutions. I think back to my days coming out of college when they were building the Shoreham plant out in Long Island.

Long Island didn't build that plant, and now kind of they're suffering for power shortages, and don't want to let them lay cables across the Sound, nor do they want to be able to bring cables from New Jersey. So what are we going to do if we shut down the plant? (IPEC-OO-3)

Comment: I know the special interest groups try to say that they're looking out for my interest, my family's interest, my son's interest, but I'll tell you right now, without this plant, there's going to be big hardship in the area, yes. (IPEC-OO-5)

Comment: The only solution that we have in this community, in the region itself, is this plant. Close it down; you're going to be left with a gap. I've heard people say, "Gee, other facilities will fill the gap." Come here on a hundred-degree day, and most of your businesses are draining power from our grid, and so where are you going to find that extra power? (IPEC-OO-8)

Comment: So basically, in conclusion, again, as a citizen of this community, for the average citizen who probably won't get up and have a voice, at least in a forum like this, listen to us as the average citizen and not as a special interest party. You turn out that plant, you're going to wind up turning out the lights on a lot of us. Good night. (IPEC-OO-9)

Comment: It's critical: There is currently no viable energy alternative to replace the more than 2,000MW of power generated by the Indian Point Energy Center. Indian Point provides between 20-40% of the region's power. (IPEC-OOO-6, IPEC-N-6, IPEC-H17-6)

Comment: It is also a critical base load source of power close to its utility center . . . the further electricity has to travel, the less reliable it is. (IPEC-OOO-10, IPEC-N-10)

Comment: What we believe in is we want to make sure that NRC does the best job possible when they are reviewing the Indian Point and nuclear energy and how it affects our community. And there's a couple of points I just want to make. One is that, as the gentleman said earlier, that the demand for electricity has always grown, will continue to grow, even as efficiencies increases and new technologies are brought online. Right now, 50 percent of our electricity comes from coal, which results in billions of tons of greenhouse gas emissions annually. (IPEC-PP-2)

Comment: Any substantial reduction in the amount of electricity generated by Indian Point 2 and 3 will spark demand for replacement electricity from nearby power plants. (IPEC-QQQ-9)

Comment: If generation at Indian Point 2 and 3 were to be significantly limited or were to cease altogether, the lost electricity would most likely be replaced by nearby facilities, including the above-referenced in-city facilities and the Lovett coal-burning facility. (IPEC-QQQ-22)

Comment: For instance, in a study by Synapse Energy Economics, Inc., dated November 3, 2003 and entitled, The Impact of converting the Cooling systems at Indian Point Units 2 and 3 on Electrical System Reliability (attached hereto as Exhibit D), Synapse finds that New York electricity generators, particularly in-city generators, have excess capacity which would supplant capacity losses at Indian Point if Indian Point were brought offline. (IPEC-QQQ-23)

Comment: Similarly, in an August 2002 study by the TRC Environmental Group entitled, Entergy Nuclear Indian Point 2, LLC and Entergy Nuclear Indian Point 3, LLC Emissions Avoidance Study (the "TRC Report"), TRC concluded that "it is reasonable to assume that the majority of lost output [(if Indian Point were brought offline)] would be made up by increased generation of units nearest to the New York City/Westchester load pocket." (IPEC-QQQ-24)

Comment: New York needs the power. (IPEC-R4-3)

Comment: Energy Impacts. An event at Indian Point would impact energy availability and potentially cause additional energy impacts. Regional fires might cause microclimnatic effects, reducing the effectiveness of solar panels, etc. (IPEC-SSS-40)

Comment: Nuclear power provides electricity safely and reliably, (IPEC-TTT-5)

Comment: Indian Point is one of 103 other commercial nuclear power plants that provide 20 percent of our nation's electricity. (IPEC-TTT-12)

Comment: The Indian Point facilities, located in the affluent and predominantly white Westchester County, have a combined generating capacity of approximately 2000 MW. The facilities provide approximately 20-30% of the electricity for New York City and its northern suburbs. (IPEC-TTT-23, IPEC-QQQ-28)

Comment: The ER contains an exhaustive description of benefits it provides to local entities in terms of income. All of the counties around the facility are growing rapidly and will be challenged to meet electrical capacity needs and the aforementioned atmospheric regulations. Indian Point is a positive factor for growth in the region. (IPEC-TTT-35)

Comment: We have been the economic devastation. . . . We have seen the economic devastation caused by the dramatic disruption of electricity supply both in recent memory -- the blackout of 2003 -- as well as the continued hardship faced by thousands of Long Island residents who pay some of the highest utility bills in the United States because of the infamous Shoreham nuclear plant debacle. Shoreham was a clear example of the needs of the few outweighing the ongoing needs of the many, and the Council does not wish to see Indian Point, to the residents running the facility, suffer the same fate. (IPEC-WW-3)

Comment: Given this business climate of an ever-increasing demand for affordable, reliable, and environmentally sound power generation, the RBA believes the closure of Indian Point Energy Center would create a dramatically adverse effect on the state's energy grid and impose undue hardship upon thousands of businesses and millions of residents throughout the state. (IPEC-ZZ-2, IPEC-A4-2, IPEC-JJJ-2)

Response: *The purpose and need for the proposed action (renewal of an operating license) is to provide an option that allows for power generation capability beyond the term of the current nuclear power plant operating license to meet future system generating needs, as such needs may be determined by State, utility, and where authorized, Federal (other than NRC) decisionmakers. The need for power is outside of the scope of license renewal, as defined in 10 CFR 51.95(c)(2). These comments provide no new information within the scope of the environmental review and will not be evaluated further.*

Miscellaneous Out of Scope

Comment: I came up here because I'm part of the building trades of Westchester County and New York City. I'm also a resident of Dutchess County that lives 19 miles from here. I would just like to see the conversation and the dialogue take a little bit of a different turn where people talk level-headed, unemotional, and about the facts. Thank you for the time. (IPEC-AAA-5)

Comment: Failure to ensure same constitutes a complete abrogation of the NRC's originating mandate to protect the public health and safety and demonstrates an arbitrary and capricious disregard for the public's health and safety. (IPEC-C-58)

Comment: My name is Laura Seitz and I live in Croton-on-Hudson. I've been involved with the licensing of atomic energy plants since 1970, when the first plants, of these plants were first licensed.

What is particularly striking is that the issues that were raised then are the very ones that are being raised now. Nothing has been solved or resolved. (IPEC-CC-1)

Comment: Based on the schedule established by the NRC, the Department anticipates receiving Entergy's application for water quality certification in approximately May 2008. Pursuant to the New York State uniform procedures regulations, the water quality certificate application will be subject to public review and comment. The Department has one year to issue, deny, or waive the certificate from the date of receipt. The Department looks forward to full participation by the public in that process. (IPEC-DD-6)

Comment: In addition to the Department's role in the NRC relicensing process, there are two other matters related to the facility in which the Department has primary responsibility. Under the RCRA authority -- authority delegated to the Department by the EPA -- DEC regulates hazards waste management and remedial efforts at Indian Point, including any potential groundwater contamination.

In addition, as the agency that administers the environmental side of the NRC agreement state program, DEC has taken the lead for the state in the ongoing radiological groundwater investigation. Staff has been actively involved throughout this process and soon will be reviewing the completed site hydrology report and any remediation plans. (IPEC-DD-7)

Comment: That concludes my statement. If you have any questions with regard to the Department's involvement in the groundwater investigation, and the relicensing and the SPDES process, we have a table out front with two fact sheets that you can pick up. And we'll be available to answer any questions. (IPEC-DD-9)

Comment: Based on the schedule established by the NRC, the department anticipate receipt of Entergy's water quality cert application in approximately May 2008. Pursuant to New York State uniform procedures regulations, the water quality certificate application will be submit to public review and comment. From the date of submission of the water quality cert application, the department has one year to issue, deny or waive the certificate. The department looks forward to full participation by the public in that process. (IPEC-E-6a)

Comment: In addition to the department's role in the NRC relicensing process, there are two other matters related to the facility in which the department has primary responsibility. Under the RCRA authority delegated to the department by the EPA, DEC regulates hazardous waste

management and remedial efforts at Indian Point, including any potential groundwater contamination.

In addition, as the agency that administers the environmental side of the NRC agreement state program, DEC has taken a lead for the state in the ongoing radiological groundwater investigation. Staff have been actively involved throughout this process and will be reviewing the soon-to-be-completed site hydrology report and any remediation plans. (IPEC-E-6b)

Comment: If you would like additional information on the department's responsibilities with regard to Indian Point, we have a table in the lobby. We have two fact sheets that cover the groundwater remediation and our role in the relicensing process and we'd be happy to talk to you about either. (IPEC-E-8)

Comment: In fact, I wish there was a federal agency assigned, like the NRC is assigned, to oversee nuclear powerplants, to oversee the operations of fossil fuel burning plants like those right across the river. I thank you. And if there's any questions, I'll be glad to answer them. (IPEC-FF-9)

Comment: This letter was sent to my home address and subsequently sent as a copy to every individual person who participated in the first release of our action alert, approximately 400 people. It's bad enough that the NRC found it acceptable to send the letter to my Riverkeeper office and to my home address not once but four times, and violated my right to privacy by sharing my home address with hundreds of people. What's worse, however, is that the NRC deemed it appropriate to attach to every response letter a list of names and addresses of all those private citizens who sent in a letter of concern.

The Nuclear Regulatory Commission is a federal agency set up by Congress. Your job is to protect the public. It is not your job to harass and intimidate concerned citizens from providing you feedback on your regulatory process. We live in a democratic society. We are supposed to have a government that is open, transparent, and concerned about the public good, on a variety of issues, from the food we eat to the air we breathe to the medications we take to the entertainment we receive on television and the radio.

In all my years of actively participating in our democracy, and the hundreds of action alerts that I have participated in in a variety of issues -- and believe it or not, just not nuclear -- not once has a federal agency or a state agency or a federal bureau or a state bureau publicly distributed the names and addresses of those who contacted them out of concern over a particular issue. There is a term for the actions taken by the NRC under Mr. Dyer's direction: citizen intimidation. (IPEC-KK-6, IPEC-VVV-6)

Comment: The NRC has allowed the parent company, Entergy Corporation, to combine its application for two separate LLCs: Indian Point 2 LLC and Indian Point 3, LLC, in spite of the fact that this $10 billion corporation elected to let its New Orleans LLC subsidiary file for bankruptcy after the Katrina disaster, rather than lend it the money needed for repairs. (IPEC-L5-4)

Comment: Whereas, Entergy Corp., owner and operator of the Indian Point Nuclear Power Plants, has expressed its intent to apply for operating license extensions of 20 years for IP2 and IP3, and being that the Westchester County Board of Legislators has previously expressed its concern over the continued operation of the nuclear power plants at the Indian Point Energy Center through several resolutions passed by this Honorable Board, including Resolution No. 142-2002 which calls on officials to develop a plan that includes the below listed action steps . . . . (IPEC-N5-17)

Comment: Resolved, that officials from the Federal, State and Local governments working with relevant parties develop a plan that includes the below listed action steps. (IPEC-N5-38)

Comment: Indian Point is nearest to the Jones Point subunit (HH-14) of the Hudson Highlands SASS. The Jones Point subunit is located on the west bank of the Hudson River at the base of Dunderberg Mountain and extends to the mean high tide line on the eastern shorelands. It is located in the Town of Stony Point, Rockland County and the City of Peekskill, Town of Cortlandt, and Village of Buchanan, Westchester County. This subunit is composed of a narrow, gently rising bank of the Hudson River to the south of Jones Point, adjacent to the steep wooded hillside of Dunderberg Mountain. The Hudson River adjacent to the subunit is nearly one mile wide. Jones Point is a landmark on the Hudson River and, along with Dunderberg Mountain, forms part of the southern gateway to the Hudson Highlands. (IPEC-N17-68)

Comment: According to the recent report by The Analysis Group, competition in the wholesale power industry has resulted in an eleven percent increase in nuclear plant power output. (IPEC-NNN-2)

Comment: I worked in operations my entire career and under Entergy Nuclear ownership over the last 7 years as a Shift Manager. I have seen significant positive cultural changes. As an unregulated business we rely on becoming increasingly efficient by having far reaching safety and performance goals. We are reliant on our annual goals to measure our success. When successful we are compensated financially when we fail we receive no compensation for additional hours worked. (IPEC-P17-2)

Comment: At the meeting in September about the environmental consequences of another 20 years of Indian Point, I was amazed that the environmental issues included so much money: specifically that many of the Indian Point supporters have received or are receiving so much financial support from Entergy - African American business groups, local non-profits - so they're all keen on Indian Point continuing . . . probably forever. (IPEC-S11-1)

Comment: Nuclear power plants can use nuclear bomb warhead material as a fuel. (IPEC-TTT-11)

Comment: A NEPA review is not concerned with these specific component parts and systems, but instead focuses specifically on Environmental Costs should they fail. (IPEC-Q17-18)

Comment: The responsible agencies, the NRC and DOE, as well as Entergy and the NEI, must disclose any and all costs, funds incentives and contributions used in this propaganda campaign, including, but not limited to, donations to community groups, paid and unpaid advertisements for Indian Point and/or the nuclear renaissance and proliferation, as part of the EIS scoping. (IPEC-Q17-293)

Comment: Yet, as an example of the gross inequity and the violation of Fair Trade standards, last year Entergy's Chairman received a salary of $27 million dollars, even though Entergy New Orleans filed for bankruptcy, and received a government bailout of almost $300 million, while at the same time ratepayers in New Orleans were smacked with greatly increased electrical bills. (IPEC-Q17-298)

Comment: Entergy‘s large stake in unregulated wholesale markets for nuclear energy give it a big edge over traditional utilities. With profits for its nuclear operations growing much more quickly than for its regulated utilities, Entergy plans to spin off its six unregulated nuclear plants, including Indian Point, into a different company. In fact, Entergy has filed a license transfer application, after filing the license renewal applications, for both IP2 and IP3 to Entergy Nuclear Operations. (IPEC-Q17-301)

Comment: It is imperative that promises made to create publicly accessible infrastructure be kept when significant projects such as Indian Point are built and constructed. The time has come for Entergy to fulfill those commitments, irrespective of the decision on their license renewal. (IPEC-Q17-366)

Comment: We ask that $25 million dollars be placed into a trust by Entergy for the creation of the 80 acre park on site, and that a committee is formed consisting of not less than nine people, and not more than twelve people, to oversee the Indian Point Woodland Park creation on the Indian Point site and the management of its long term viability. Said committee must include on its board one member from each of the following: Riverkeeper, Clearwater, IPSEC and FUSE USA, and at least one citizen at large. The remaining board members should be nominated by the governments of Buchanan and Peekskill. Committee members will serve for a term of ten years, and no committee member can serve more than three consecutive terms. Additionally, no current or past employee of any utility company, or company that has worked for a utility company, can serve on this committee. Lastly, the 80 acre park area on the Indian Point land shall be signed over to a living trust managed by the committee. (IPEC-Q17-367)

Comment: Furthermore, to keep their promise to the community, Entergy needs to earmark five percent of their pretax profits from the operation of Indian Point for landscaping of the Indian Point site, park management and maintenance, and community beautification. Entergy claims to be GREEN, and the time has come for them to put their money where their propaganda campaign is at. All funds will be managed and awarded by the committee. (IPEC-Q17-368)

Comment: Further, in keeping commitments already made to the community, licensee should be ordered to build a publicly accessible information center that includes an auditorium of not less than 2500 seats to be used for various public stakeholder meetings. Said auditorium size

is conservative in size, and would only house one percent of the stakeholders within a ten mile radius of the reactors. All expenses of constructing, operating and managing this public access building shall be born by Entergy (parent company). (IPEC-Q17-369)

Comment: I've been at Indian Point for about 17 years, and over the years I've heard many, many comments from many individuals, everything from hey, the place can blow up like a nuclear bomb, or as I heard earlier, before, a billion fish are killed annually at Indian Point. Generally, what I hear from people are statistics, and you've got to be careful about statistics, cause statistics can be fragmented facts quoted out of context. Like, for example, everybody knows that the reactors run with a nuclear fuel. However, the nuclear fuel that the reactors run with do not contain enough fissile material to detonate like a nuclear weapon. (IPEC-V-2)

Comment: So not only am I cautioning people to use judgment when they hear something, or when they believe they know something. But I'm also cautioning people to come and investigate it. The plant is open for public tours, and I've not only given a couple myself, but we have a communications department that will be more than happy to give a tour. You could even go and talk to a senior reactor operation such as myself. There's only about 45 of us at the plant, and we know the facility very, very well.

You know, you can come and see that the spent fuel pools, for yourself, with your own eyes, are not only quite hardened but definitely resilient. So I'd like to thank you for listening to me at this time, and remind everybody again, please be careful with statistics and actually investigate the full facts and get the full statement. I would be more than happy to give a personal tour and answer any questions somebody has. As long as you want to sit down and communicate openly, I'd be more than happy to do so. Once again, my name is Ron Carpino and I can be available for any questions, or give you my personal cell phone number, so I can arrange, help arrange a tour for you. Thank you. (IPEC-V-4)

Comment: I've been coming to these meetings for a really long time, and this is really my point I want to make for the record. I've been coming to these meetings for a really long time, but tonight I think, with the statements of some of the speakers, I witnessed a unique event in the history of nuclear technology. I really think that as a result of some of the statements of tonight's speakers that a new radioactive isotope, in amounts clearly above regulatory concern, has been released into the environment. Bullshittium. (IPEC-VV-6)

Comment: [In response to the statement read on behalf of Al Samules] And we have -- and for him to speak on our behalf, there was never a vote for the Rockland Business Association. That's his personal statement. Let the record show that. (IPEC-VV-7)

Comment: Several speakers before me have alluded to 9/11. I did not know we were here to speak about 9/11 but since you gave me that entre, and because someone else cautioned me about using statistics, I'll not use statistics.

I will talk about a community in Brooklyn. Some of my younger brothers and sisters in the audience may know Jay-Z, and know the building in the Marcy Projects that he speaks of.

When I stand before audiences, I say I am the Jay-Z of environmental justice in the United States. I grew up on the first floor. He grew up on the sixth floor. My mother still lives in that building, as does the mother of Captain Vernon Richards, who, on his day off, went to the towers, assisting others so that they may breathe one more day, and he gave his life for that cause. (IPEC-W-4)

Comment: It is important to note that NRC does not have a clearly defined definition of "reasonable assurance" or of "adequate protection." (IPEC-Q17-237)

Response: *The comments are noted. However, they are general in nature and do not address specific issues of environmental impacts associated with the extended period of operation. Environmental justice will be addressed in Chapter 4 of the SEIS. The comments are out of the scope of the environmental review process and will not be evaluated further.*

Comment: We have a guard caught sleeping at the plant again. We have an incredible number of unplanned shutdowns. We have an owner-operator who is not ready for inspectors when they come to do an inspection at the plant. That's the environmental impact. The impact of having an environment of a plant run by Entergy in this way is a danger. (IPEC-NN-3)

Comment: As recent as September 11, 2007, The Journal News reported "Feds suspend inspection at Indian Point." The Nuclear Regulatory Commission has suspended an inspection at Indian Point 3 after federal experts found plant officials unprepared to answer questions about a series of unplanned shutdowns that led the agency to lower the reactor's safety rating in April. "They just didn't have the documentation we needed," said NRC regional spokesman Neil Sheehan, noting that "such suspensions are rare, but also the types of questions we were asking they did not have the answers for at this point." Again, public confidence for the safety of this facility is marginalized. (IPEC-YY-5)

Comment: Further, the article reports Kathy McMullin, an Indian Point spokeswoman, said the matter was "really much ado about nothing" and wouldn't have reached the level of public notification without the current regulatory climate surrounding the plant. So she is getting a little Shakespearean on us.

In this particular environment, the NRC -- or the abundance of caution side, as we have done on issues that on their face may not seem all that significant, she said, "It's not necessarily routine that an inspection would be postponed, but it's not that unusual either." So we are to understand that the NRC has made an error in judgment, and that the postponement of an inspection because the operator of a nuclear facility was unprepared to answer questions about the operation of its own facility would not have been revealed if it were not for the regulatory climate surrounding the plant. (IPEC-YY-6)

Response: *The comments are noted. The inspection event in question is an operational safety issue and outside the scope of license renewal. The comments provide no new information and will not be evaluated further.*

Summary of Scoping Process

Issues that NRC staff will address in the IP2 and IP3 SEIS

As indicated on page 20 of this document, the NRC staff has reviewed the comments received during the scoping process. The NRC staff has responded to these comments in the previous section of this document, and has indicated the issues it will and will not address as it prepares the SEIS for Indian Point Nuclear Generating Units 2 and 3 (IP2 and IP3) license renewal review.

During the scoping process, the NRC staff has identified the following issues to be addressed in the SEIS, to the extent appropriate:

- information related to water use and water quality;
- environmental impacts of identified leaks at Indian Point, including spent fuel pool leaks;
- radiation monitoring programs;
- status of NYSDEC water quality permits;
- impacts from the plant's cooling system, including aquatic ecology, specifically the site-specific issues of impingement, entrainment, and heat shock;
- the alternative of replacing Indian Point's existing once-through cooling water system with a closed-cycle cooling system, as well as other possible mitigation measures to reduce entrainment, impingement and thermal discharges;
- potential effects of license renewal and any associated refurbishment on threatened and endangered species, such as the shortnose sturgeon;
- critical and important habitats, to the extent that they exist;
- impacts to socioeconomic factors such as housing, transportation, and offsite land use;
- severe accident mitigation alternatives (SAMAs);
- environmental justice;
- effects of continued operation and potential refurbishment activities on cultural and historical resources;
- air quality issues associated with potential refurbishment in the SEIS;
- the relative carbon footprint of nuclear power and other energy alternatives in the SEIS;

- cumulative impacts to the Indian Point environment, including effects from other past, present, and reasonably foreseeable future actions undertaken by the applicant and other actors;

- alternatives to the continued operation of IP2 and IP3, including the no-action alternative (not renewing the licenses), natural gas-fired generation, conservation, renewable energy sources, and the continued operation of one unit along with a combination of other energy sources; and

- the environmental impacts of decommissioning IP2 and IP3 if the license is renewed.

NRC staff will address all site-specific (Category 2) issues identified in the GEIS that are applicable to IP2 and IP3. The SEIS will also contain a brief description of each applicable Category 1 issue and any new and significant information that challenges the findings contained in the GEIS. Category 1 issues addressed in comments from interested parties include impacts from discharge of chlorine or other biocides, environmental impacts of design basis accidents, transportation of nuclear fuel, onsite spent fuel storage, and air quality effects of continued operation. The NRC staff will also prepare an essential fish habitat assessment.

Issues that NRC staff will not address in the IP2 and IP3 SEIS

The SEIS for IP2 and IP3 license renewal review will not address the following issues raised in the scoping comments, either because they are outside the scope of the license renewal process, because they are addressed by other NRC regulatory processes, or because they fall under the jurisdiction of other agencies or actors:

- comments related to support for or opposition to license renewal;

- operational safety, plant maintenance, security, and emergency preparedness in the SEIS, because they are all addressed in other NRC oversight or review processes (operational safety and plant maintenance are addressed by ongoing oversight—including oversight by onsite resident inspectors—while emergency preparedness and notification are addressed on an ongoing basis by NRC and other governmental bodies like the Federal Emergency Management Agency, in cooperation with area governments);

- the adequacy of the emergency siren system at Indian Point;

- requests for an Independent Safety Assessment;

- issues related to the aging of structures and components in the SEIS (these issues will be addressed by the license renewal safety review and safety evaluation report [SER]);

- deliberate malevolent acts or terrorism (any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed as part of the current operating license);

- safety issues associated with IP1 except to the extent systems, structures or components constructed as part of IP1 are currently used by or affect the safety of IP2 or IP3;

- the adequacy of the current licensing basis (CLB), or other CLB issues in the SEIS;

- the New York State Department of Environmental Conservation's (NYSDEC's) water permits for IP2 and IP3, other than to confirm the status of these permits;

- economic costs or benefits of renewing an operating license or of instituting alternatives, except as relevant to the range of alternatives considered;

- the need for power from IP2 and IP3;

- the status of Indian Point's decommissioning trust fund; and

- Entergy's preparedness for recent inspection events.

NRC staff expects to publish the draft SEIS in December of 2008. The draft SEIS will be made available for public comment. The comment period will offer the next opportunity for the applicant; interested federal, state, and local government agencies; local organizations; and members of the public to provide input to the NRC's environmental review process. The comments received on the draft SEIS will be considered in the preparation of the final SEIS. The final SEIS, along with the staff's Safety Evaluation Report, NRC Region I inspections, and independent review by the Advisory Committee on Reactor Safeguards, and the outcomes from any hearings will be considered by the NRC in reaching a decision on the IP2 and IP3 license renewal application.