

## **Appendix A**

### **Comments Received on the Environmental Review**



## Appendix A: Comments Received on the Environmental Review

On August 11, 2004, the U.S. Nuclear Regulatory Commission (NRC) published a Notice of Intent in the *Federal Register* (69 FR 48900) to notify the public of the staff's intent to prepare a plant-specific supplement to the *Generic Environmental Impact Statement for License Renewal of Nuclear Plants* (GEIS)<sup>(a)</sup>, NUREG-1437, Volumes 1 and 2, to support the renewal application for the Nine Mile Point Nuclear Station (Nine Mile Point) Units 1 and 2 operating licenses and to conduct scoping. The plant-specific supplement to the GEIS has been prepared in accordance with the National Environmental Policy Act of 1969 (NEPA), Council on Environmental Quality guidelines, and Title 10 of the Code of Federal Regulations (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, tribal, and local government agencies; local organizations; and individuals to participate in the scoping process by providing oral comments at the scheduled public meetings and/or submitting written suggestions and comments no later than October 11, 2004.

The scoping process included two public scoping meetings, which were held at the Town of Scriba Conference Room in Oswego, New York, on September 21, 2004. Approximately 60 members of the public attended the meetings. Both sessions began with NRC staff members providing a brief overview of the license renewal process and the NEPA process. After the NRC's presentation, the meetings were open for public comments. Attendees provided either oral or written statements that were recorded and transcribed by a certified court reporter. The meeting transcripts are in an attachment to the Scoping Meeting Summary dated November 4, 2004. In addition to the comments received during the scoping meetings, comment letters were received by the NRC in response to the Notice of Intent.

At the conclusion of the scoping period, the NRC staff and its contractors reviewed the transcripts and all written material to identify individual comments. All comments and suggestions received orally during the scoping meetings or in writing were considered. Each set of comments from a given commenter was given a unique identifier (commenter ID number), so that each set of comments from a commenter could be traced back to the transcript or letter by which the comments were submitted. Several commenters submitted comments through multiple sources (e.g., afternoon and evening scoping meeting and/or written comments). All of the comments received and the staff responses are included in the Nine Mile Point Scoping Summary Report, dated November 2004.

Table A-1 identifies the individuals who provided comments and the commenter ID number associated with each person's set(s) of comments. To maintain consistency with the Scoping

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a) The GEIS was originally issued in 1996. Addendum 1 to the GEIS was issued in 1999. Hereafter, all references to the GEIS include the GEIS and its Addendum 1.

Summary Report, the unique identifier used in that report for each set of comments is retained in this appendix.

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

<b>Commenter ID</b>	<b>Commenter</b>	<b>Affiliation (If Stated)</b>	<b>Comment Source and ADAMS Accession Number<sup>(a)</sup></b>
NMS-A	Ben Banta	Executive Assistant to the Mayor of Oswego	Afternoon Scoping Meeting
NMS-B	Reuel Todd	Oswego County Sheriff's Department	Afternoon Scoping Meeting
NMS-C	Maureen Quinlan	United Way of Greater Oswego County	Afternoon Scoping Meeting
NMS-D	Jim Spina	Nine Mile Point Nuclear Station	Afternoon Scoping Meeting
NMS-E	Patricia Egan	Oswego County Emergency Management Office	Afternoon Scoping Meeting
NMS-F	Russell Johnson	Oswego County Legislature	Evening Scoping Meeting
NMS-G	Melanie Trexler	United Way of Greater Oswego County	Evening Scoping Meeting
NMS-H	Tim Judson	Citizen's Awareness Network	Evening Scoping Meeting
NMS-I	Tom Dellwo	Citizen's Awareness Network	Evening Scoping Meeting
NMS-J	George Joyce	Operation Oswego County	Evening Scoping Meeting
NMS-K	Ian Smith	Citizen's Awareness Network	Evening Scoping Meeting
NMS-L	Linda Bond-Clark	Citizen	Evening Scoping Meeting
NMS-M	Linda Clark	Citizen	Evening Scoping Meeting
NMS-N	Katherine Hobbs	Citizen	Evening Scoping Meeting
NMS-O	Farouk Baxter	Citizen	Email (ML050050016)
NMS-P	William A. Barclay	Assemblyman, 12 <sup>th</sup> District	Letter (ML050050455)

a The afternoon and evening transcripts can be found under accession numbers ML043130369 and ML043130393.

Specific comments were categorized and consolidated by topic. Comments with similar specific objectives were combined to capture the common essential issues raised by the commenters. The comments fall into one of the following general groups:

- Specific comments that address environmental issues within the purview of the NRC environmental regulations related to license renewal. These comments address Category 1 or Category 2 issues or issues that were not addressed in the GEIS. They also address alternatives and related Federal actions.
- General comments (1) in support of or opposed to nuclear power or license renewal or (2) on the renewal process, the NRC's regulations, and the regulatory process. These comments may or may not be specifically related to the Nine Mile Point license renewal application.
- Questions that do not provide new information.
- Specific comments that address issues that do not fall within or are specifically excluded from the purview of NRC regulations related to license renewal. These comments typically address issues such as the need for power, emergency preparedness, security, current operational safety issues, and safety issues related to operation during the renewal period.

Each comment applicable to this environmental review and the staff's responses are summarized in this section. This information, which was extracted from the Nine Mile Point Scoping Summary Report, is provided for the convenience of those interested in the scoping comments applicable to this environmental review. More detail regarding the disposition of general or inapplicable comments can be found in the summary report, which was assigned an accession number to facilitate access to the document through the Public Electronic Reading Room (ADAMS) at <http://adamswebsearch.nrc.gov/dologin.htm>. The ADAMS accession number for the summary report is ML050060373.

The following pages summarize the comments and suggestions received as part of the scoping process. The parenthetical alpha-numeric identifier after each comment refers to the comment set (commenter ID) and the comment number.

Comments in this section are grouped in the following categories:

A.1.1 Comments in Support of License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2

A.1.2 General Comments in Opposition to License Renewal and Its Processes

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- A.1.3 Comments in Opposition to License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2
- A.1.4 Comments Concerning Air Quality Issues
- A.1.5 Comments Concerning Human Health Issues
- A.1.6 Comments Concerning Socioeconomic Issues
- A.1.7 Comments Concerning Alternatives
- A.1.8 Comments Concerning Environmental Justice
- A.1.9 Comments Concerning Radiological Impacts
- A.1.10 Comments Concerning Issues Outside the Environmental Scope of License Renewal: Operational Safety, Emergency Preparedness; Safeguards and Security; Aging Management; Need for Power; and Cost of Power

## Comments Received During Scoping

### A.1.1 Comments in Support of License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2

**Comment:** I'm here today on behalf of the Honorable John J. Gosek, Mayor of the City of Oswego, New York, to express his support for the operating license renewal of Constellation Energy's Nine Mile Point nuclear energy facility by the United States Nuclear Regulatory Commission. This support is based on several socio-economic reasons. (NMS-A-1)

**Comment:** With the demise of our area's once dominant manufacturing-based economy and the emergence of Oswego as the energy producing capital of the Northeastern United States, it is incumbent upon the NRC to ensure that Constellation, a good corporate citizen to the city of Oswego, continues to operate and thrive in this area. (NMS-A-3)

**Comment:** In summary, Constellation's license renewal for its Nine Mile Point nuclear facility will ensure future Oswegonians a healthy and stable socio-economic environment, while continuing to make a vital contribution to our country's national security. (NMS-A-8)

**Comment:** And I want to say thank you to the people out there. They are wonderful people to work with and they are wonderful neighbors. (NMS-B-3)

**Comment:** So on behalf of the agencies that I represent, I want to just take this opportunity to be able to speak to the group today. The support that Constellation gives us does not go unrecognized. We do appreciate everything that Constellation does for our county. (NMS-C-2)

**Comment:** In summary, the reason that we've applied for license renewal is that Nine Mile Point is important to the local community. We provide jobs, we pay taxes, and we play a part in our country's energy future. The improvements we've made ensure that we meet today's exacting standards of operation for commercial nuclear facilities. (NMS-D-5)

**Comment:** I believe in Constellation's commitment to not only its on site safety issues, but also to the protection of the Oswego County community. Their proven track record in preparedness efforts and attention to the response needs of Oswego County strongly attest to the validity of the request for licensing extension. (NMS-E-2)

**Comment:** As the host community, we expect that if re-licensing is granted, Constellation will continue to remain a responsible operator, and maintain a commitment to training its personnel to the highest standards. And they do now, and I think they'll continue in the future. As the host community, we look forward to maintaining our relationship with Constellation, in our joint efforts in emergency management planning and response. (NMS-F-6)

**Comment:** During most of my life, I've been a resident with nuclear facilities here in my county. I've always been okay with that. Many of the employees at Unit 1 and 2 are county residents. My hope, and it's greedy hope, is that that number will grow to 100 percent and we'll get all the employees here in Oswego County. We have a great county with loads of beautiful properties and quality of life programs and events that are second to none. Constellation plays a big part in that. (NMS-F-8)

**Comment:** As President of Operation Oswego County's Board of Directors, Oswego County's primary economic development agency, it makes good sense to continue operation of Nine Mile Point, for a number of economic reasons. (NMS-J-1)

**Comment:** It is essential that we continue to market Oswego County as an energy-generating powerhouse and Constellation as a major contributor to this distinction. (NMS-J-8)

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

### **A.1.2 General Comments in Opposition to License Renewal and its Processes**

**Comment:** The other issue is that the NRC changed its regulations in January, so that the public no longer has a right to formal hearings on licensing matters. Just because you live in

the, I mean even if you live within the evacuation zone of Nine Mile Point, you don't necessarily have standing within the NRC's jurisdiction to oppose the license renewal.

I mean this is completely crazy. And all we can figure out is that this is basically a way that the NRC has created a license extension process that's a rubber stamp. That as long as Constellation filed its paper work pro forma, that they get the 20 years. Now what's being glossed over in this. (NMS-H-3)

**Response:** *The NRC amended its regulations concerning its rules of practice in 10 CFR Part 2. The final rule was published in the Federal Register on January 14, 2004 (69 FR 2182) and became effective on February 13, 2004. The Commission directed the staff to reexamine the procedures governing NRC hearings, with the goal of improving the NRC's hearing process. The rule makes the process for hearings more efficient and effective by establishing different hearing "tracks," consolidating procedures common to all NRC hearings, and improving methods of case management. The purpose of the rule is to reduce the duration, cost, and burden of hearings, while enhancing public participation in NRC proceedings and reducing regulatory burdens on all parties. The requirements for standing, however, remain unchanged.*

**Comment:** But, to be clear for the rest of the people in the room, the issue, one of the main issues that's really relevant in the rule change is that, the right to a formal hearing is now discretionary by the Commission. That previously most licensing issues would be naturally decided under a Subpart G, in which you would have rights to cross examination, you would have rights to discovery. There would be a panel of three Administrative Law Judges who would hear it and issue a ruling. And we've gone through the type of informal hearing that's likely to be typical under the new NRC rules.

We actually had an informal hearing and then, when we challenged the sale of FitzPatrick to Entergy. And in that process, it was an informal hearing. We had no rights to cross-examination of witness. We had no rights to discovery, and the Judges didn't actually get to make a ruling. In fact, there was only one Judge, and it was the Commission, the political appointees of the President that made the ruling. And this is a substantial change. Because we, because CAN has also gone through formal hearings with NRC, before the Atomic Safety and Licensing Board Panel, in decommissioning cases at Yankee Rowe and Connecticut Yankee, and in other issues. And this is a radical departure from what's existed in the past. (NMS-H-9)

**Response:** *The FitzPatrick case was a license transfer case conducted under 10 CFR Part 2, Subpart M, which applies to license transfers only and not to license renewal cases. Most licensing actions, including license renewal, which were previously decided under 10 CFR Part 2, Subpart G, will now be decided under 10 CFR Part 2, Subpart L, which is a less formal hearing procedure. Under Subpart L, formal discovery and cross-examination have been eliminated. The Commission believes that this will improve case management by avoiding needless delay and unproductive litigation, while easing the burdens of participation in the hearing process for all participants.*



*With regard to discovery, the final rule requires the early disclosure of documents, information, and witnesses by all parties, and mandates that the NRC staff prepare a hearing file in proceedings conducted under Subpart L, giving all participants access to relevant information at the start of the hearing process without the need for more formal discovery. This mandatory disclosure mechanism provides for discovery equal to or greater than the "discovery" provisions for on-the-record adjudicatory hearings under the Administrative Procedure Act (APA).*

*With regard to cross examination, the final rule retains cross-examination for Subpart G hearings. In less formal hearings like Subpart L, the questioning of witnesses will be conducted by the presiding officer, although the parties may submit suggested questions or seek permission to cross-examine witnesses themselves. The Commission believes that cross-examination performed by the parties is usually not the most effective means for ensuring that all relevant and material information with respect to a contested issue is efficiently developed for the record of the proceeding. By contrast, the questioning of witnesses by the presiding officer, complemented by the form of questions submitted by the parties, provides a means for the expedient, focused and well-managed development of an adequate record for decision. Given that the presiding officer bears the ultimate responsibility for the preparation of the initial decision on the contentions or contested matters, it follows that the presiding officer is well suited to assess the record information and the state of the record as the hearing progresses to determine where the record requires further clarification.*

*After the presiding officer makes an initial decision on the contentions or contested matters, the rules do provide for Commission review of the initial decision.*

**Comment:** Also, I think that a couple of comments simply, you know, just from, I guess just from a member of the community that, why do we have these meetings at places like this, where you can't access information for us? Why don't we have, why don't we have people, are there any members of the community that sit on the Council that gives you, that, you know, that NRC consults with for these kinds of things?

Is there somebody, are there people from Oswego that you invite to come down and talk with you along with all these esteemed scientists? It just seems like people from outside the community, they're scientists. I'm sure that they're very intelligent people, that they know, you know, they know a lot of things about all this stuff. But, it seems like people from the community should be on that panel. I mean, why wouldn't you, why wouldn't you want people from the community to come there and speak about the issues that they would only know, because they're from the community? (NMS-I-5)

**Comment:** Some of your categories kind of scared me as I heard that, you know, a significance would be a destabilization of the environment. Wow, I guess is all I can say there. And the other thing, you know, in coming back to the NRC, and I keep in the back of mind is where your salary comes from. And I believe you're paid from the production of nuclear power. (NMS-L-2)

**Comment:** And I'm a little bit concerned that the facilitator here is not neutral. In the classes that I'm studying, it's basically, you know, recommended that the facilitator be neutral, so as to, you know, basically, it's a way to help the participants gain trust in the process, because, you know, they're not feeling like they're up against a panel of experts. But that, you know, there's a neutral facilitator who is not, you know, taking sides to run the meeting. So, that would be one suggestion that I would have.

And I'm also very concerned at the lack of participation here, at the lack of residents. And I would say that, you know, that's really something that, you know, in future meetings I think you really need to work on, is how to reach out to the affected public in this case. (NMS-N-1)

**Response:** *The primary purpose of the scoping process is to elicit comments from concerned members of the public, regardless of their scientific background, regarding issues that should be considered during the environmental review. Comments received either during public meetings or in written form help the NRC determine the scope of their review. Accordingly, comments from any member of the public are encouraged. Public notices were published prior to the public meeting to notify the public of the opportunity for comment. A website has been established by the NRC specifically to accept e-mail comments. In addition, during the site audit, members of the NRC audit team meet with members of the community specifically to gain insight into the plant's impact on the local environment and economy. The locations of public meeting are usually at public facilities in the community closely surrounding the plant, in this case, the Town of Scriba, and about 60 members of the public attended the public meetings. All comments are welcome and encouraged.*

*The NRC attempts to notify all stakeholders of any upcoming reviews. This includes Federal, State, and local agencies, as well as utility staff, and members of the public or citizen advocacy groups that have previously indicated an interest in the regulatory activities related to a specific nuclear power facility. This also includes members of the public and organizations that oppose nuclear power. In addition to notices placed in the Federal Register or in local newspapers, the NRC staff maintains a list of stakeholders (including members of the public or representatives of groups) that have previously attended public meetings related to a specific nuclear power facility or to license renewals, and these stakeholders are sent copies of the meeting notices. Frequently, these groups also receive a courtesy phone call to ensure they have been notified of public meetings on scoping and the preliminary conclusions in the draft SEIS.*

*The NRC's budget is provided by Congress. Licensees pay fees to the U.S. Treasury to reimburse the government for the cost of the review. Thus, the costs of the development of the license renewal application and the costs of the review are paid for by the licensee and ultimately by electricity consumers.*

*The NRC, like other state and federal agencies such as the EPA, uses internal, professionally trained, facilitators to facilitate public meetings. This not only allows the agency to supplement its use of external facilitators who would be under contract to NRC, but also can contribute to a*

*more productive meeting from the public's perspective because of the internal facilitator's knowledge of agency policy and process. The internal facilitator can use this knowledge to prompt the NRC staff to provide more comprehensive and pertinent information to the public on various issues of concern. Since the NRC facilitator in the Nine Mile case, the Special Counsel for Public Liaison, has no responsibilities for carrying out the NRC review of the NMPNS license renewal application, there would be no basis for bias either for or against the proposed action.*

### **A.1.3 Comments in Opposition to License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2**

**Comment:** And so the risks are getting greater and greater and the benefits are getting worse and worse. And we think that that needs to be included in the environmental impact statement. Not that we believe that it will stop it, but it at least needs to be considered, thank you. (NMS-H-8)

**Comment:** The biggest concern I have, that's come to my mind in listening to what's going on here, is that the message coming out of this room to residents of Oswego, which I count myself among, which I count my family amongst, is that we're economically dependent, indebted to, have no alternatives to living with nuclear energy. That they provide jobs, an ever dwindling number of jobs, as we've heard, which compromises the safety of the plant, staffing it with fewer and fewer people, but jobs nonetheless. (NMS-K-1)

**Comment:** There's just a lot of things that I think need to be looked at a little bit closer, and I wish that the community at this point didn't feel so beat down, you know, after so many years that they couldn't get a little bit more involved in. (NMS-M-7)

**Response:** *The comments are noted. The comments oppose license renewal at NMP, and do not provide new information. These comments are not within the scope of 10 CFR Part 51 for the environmental review associated with the license renewal application for Nine Mile Point. Therefore, these comments will not be evaluated further in the SEIS.*

### **A.1.4 Comments Concerning Air Quality Issues**

**Comment:** The other thing that I would like to totally debunk, is this notion that there are no greenhouse gases associated with nuclear power. For every single gram of water vapor that comes off of those nuclear plants, you're talking 540 calories. For every single gallon or gram of heat, of heat pollution that's pumped into that lake, is adding to global warming.

And I've yet to see any scientific studies come out of this, but certainly maybe that's something the NRC could do. What is the global warming potential coming out for vaporization as well as the heat coming off of the nuclear plant.

The Day After, that film was catastrophic. And maybe it's not going to happen as quickly as what was portrayed in that movie. And I'm not sure if any of you know The Day After, but it shows global warming and, you know, the flooding of New York City, melting of the ice caps and so on.

But our ice caps are melting like they never have before. The earth is warming, whether that's human-caused or nature-caused, there's a great debate on that. But the fact remains that in order for a nuclear plant to operate safely, the water has to be a certain degrees. And as the water continues to increase and increase in temperature, you're looking at potential problems. (NMS-L-6)

**Response:** *Our atmosphere is a dynamic system in which climate naturally fluctuates from warm to cold and back again. These fluctuations are kept in balance by naturally occurring clouds and greenhouse gases (i.e., water vapor, CH<sub>4</sub>, NO<sub>2</sub>, O<sub>3</sub>, and CO<sub>2</sub>). This energy balance can be gradually influenced by human activities, primarily CO<sub>2</sub> emissions from consumption of fossil fuels (such as coal and natural gas), CH<sub>4</sub> emissions coming from the production of fossil fuels (e.g., from the decomposition of organic wastes in municipal solid waste landfills, and the raising of livestock), and O<sub>3</sub>, which is formed from the emissions of nitrogen oxides and volatile organic compounds (from automobile exhausts, industrial stack emissions, gasoline vapors, and solvents). Although water vapor is a greenhouse gas, releases from human sources such as a nuclear power plant cooling tower are inconsequential since atmospheric water vapor tends to provide a self-regulating mechanism. For example, clouds are regulators of the radiative heating on our planet as they reflect a large part of the incoming solar radiation but also absorb the outgoing longwave (LW) radiation (also known as infrared or thermal radiation) emitted by the warmer earth. Although water vapor emitted from a cooling tower forms a cloud, it is a localized phenomena of inconsequential influence on natural global cloud formation-dissipation.*

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

### **A.1.5 Comments Concerning Human Health Issues**

**Comment:** Well, one of the issues that's been talked about a lot tonight is the issue of the health impact on the community from these nukes operating. I mean we live, you know, within a few miles here of the fifth most polluting nuclear station in the country. Nine Mile Point has released something like 3.7 million curies of radioactive waste into the surrounding environment in the last 35 years. I mean and, you know, since these numbers are all sort of arcane, I mean, to give you a sense of it.

You know, your typical large medical research center, like Sloan-Kettering down in New York, with about a thousand labs where they use radioactive materials, typically has about two curies of radioactive material on-site. And that's almost two million times more radioactive waste that's been released into this community, than you have in a large medical research facility at any one time. What's the impact of that? And I mean, and the thing is, it doesn't take a rocket scientist to know that there's severe public health problems in this county. I mean you can hardly go to a grocery store in Oswego and not see tin cans sitting out collecting money for people who have cancer who can't afford treatment. (NMS-H-4)

**Comment:** I mean essentially, you know, in terms of this issue of epidemiological studies in reactor communities, reactor communities are in rural communities where there aren't a whole lot of people. And any epidemiologist will tell you that epidemiology is a crude science, in terms of the fact that if you don't have a whole lot of people in your sample, you can't necessarily detect a problem, even if there is one.

One of the things that I think is most dismaying about this process, because, you know, I'm one of these sort of crazy people who stays involved and going to these meetings. And I was at the meetings for the Ginna reactor that had a license extension last year. And at this, at one of these environmental meetings, for the Ginna reactor, this issue of the routine releases came up and the health effects on the community.

Somebody from the community was asking about it. And one of the NRC staff people, who was portrayed as the expert, NRC's expert on that issue, in the room, actually got up and said, well, you don't really notice health effects from radiation exposure until you get a dose of about 10,000 millirem.

And I was sort of flabbergasted by this. I mean, millirems, who knows what the hell they are. But the NRC's legal limit for exposure to radiation for a member of the public, from a plant, is 100 millirem. And the reason that I thought this was crazy that he said this, is because the NRC actually has a standard that they use when they look at this. And separate from their statement that 100 millirems is the legal limit, the NRC's estimate of what would happen in a population exposed to 100 millirem, is that you would have one additional cancer fatality, per year, for every 286 people that's exposed.

Now, so that's the legal limit that NRC has declared for public exposure to the operation of these plants. That means in a county the size of Oswego, hundreds of people could you dying a year, from the operation of the plant, and it's legal. It's within legal limits. And so when they say that they're, you know, within, well within the NRC's limits for releases from the plant and public exposure, what does that mean? Ten people are dying a year because of these plants, 20 people, five? I mean how many people is it worth to keep these plants going? (NMS-H-6)

**Comment:** As a matter of fact, the Yucca Mountain Site, they have to guarantee safety for 10,000 years. Ten thousand years. There was comments on people on the panel. I would like

you to add to that list teachers, who are seeing a raise in learning disabilities, especially in various pockets where there might be high accumulation. Nurses, home health aides, who actually get into the homes and see these people. I did an environmental impact, well actually I did a study called *The Protocols of Radionuclide Sampling* in 1990. And as I did the study, I evaluated both NRC data and New York State health data. And what I saw was poor science, I guess to put it the best. They were comparing apples to oranges. Your control site was way too close to your sample site. (NMS-L-8)

**Comment:** The other thing that concerns me with the environmental studies is they are assessed for, you know, how are they easiest to get to. In other words, you put your sampling stations, you know, beside the road and not really where the high quotient areas might be. And I think maybe even though it might be difficult to get to, perhaps, I would like to see sampling sites changed and a little bit more consistency in the data, and also timely reports published. (NMS-L-10)

**Response:** *The comments are noted. Radiation exposure to the public during the license renewal term is a Category 1 issue that was evaluated in the GEIS. Health effects from radiation are a well-studied environmental hazard according to the General Accounting Office. Over 86,000 studies have been performed on the biological effects of radiation, and none of the scientifically valid studies shows any radiation effects at doses less than 10,000 millirem. According to the Health Physics Society (www.hps.com), "below the dose of 10,000 milliirem, estimations of adverse health effect is speculative. Collective dose remains a useful index for quantifying dose in large populations and in comparing the magnitude of exposure from different radiation sources. However, for a population in which all individuals receive lifetime doses of less than 10,000 millirem above background, collective dose is a highly speculative and uncertain measure of risk and should not be quantified for the purposes of estimating population health risks."*

*In 1990, the U.S. Congress requested the National Cancer Institute to study cancer rates in the areas surrounding nuclear facilities, such as nuclear power plants, to determine if there are detrimental effects on the population. Nine Mile Point was included in the study. This extensive report found no evidence of a link between operating nuclear power plants and any increase in cancers. In addition, there are no indications in any of the scientific studies that low-level radiation exposure is harmful to children or a contributory factor to infant mortality. The evaluation of health effects due to radiation exposure is an ongoing activity involving public, private, and international institutions. The staff is not aware of any new information or studies that would call into question the conclusion in the GEIS.*

*The NRC is reviewing recent radiological effluent and environmental monitoring reports to ensure that there is no significant new information specific to Nine Mile Point. The amounts of radioactive materials released to the environment in the effluents from Nine Mile Point are limited by NRC and EPA regulations. 40 CFR Part 190 limits the radiation dose to a member of the public to 25 millirem/year to the whole body from the entire fuel cycle including Nine Mile*

*Point. NMPNS's most recent annual radiological effluent monitoring reports indicate that the dose to the maximally exposed individual living, working, or recreating near the plant boundary would be less than a few millirem/year. By comparison, the annual average radiation dose due to natural sources of radiation is over 200 millirems/year. Between 1971 and 1976, Nine Mile Point released approximately 3.7 million Curies of fission and activation gases before the augmented offgas system was installed. The largest annual releases from Nine Mile Point (approximately 1.3 million Curies) occurred in 1975. These were within the regulatory limits enforced at the time in 10 CFR Part 20. The dose to a member of the public would have been much less than 500 millirem/year—probably less than 100 millirem/year, and considerably less than the dose from natural sources of radiation. The amount of fission and activation gases released from Nine Mile Point was significantly reduced after the augmented offgas system was installed in 1977.*

*The comments will not be evaluated further.*

**Comment:** I remember the first question I ever asked the NRC was pertaining to the 765-kilovolt lines, and if I would get shocked, you know, by them on our farm. And the Public Relations man for the NRC said to me, Linda, your animals have learned to avoid shock and so can you. And from that moment on, I decided that maybe this ought to be something I should look into. (NMS-M-1)

**Response:** *There are no 765-kilovolt (kV) transmission lines connected to Nine Mile Point. The highest voltage in any of these lines is 345 kV. NRC has determined that the potential impacts of electric shock during the license renewal period are small if transmission lines connected to Nine Mile Point are constructed and operated in compliance with the National Electrical Safety Code. Chapter 4 of the SEIS describes the power transmission system in the vicinity of Nine Mile Point and will describe the impacts associated with the power transmission lines. The need for any additional mitigation measures during the license renewal term has been evaluated and the results of this evaluation are presented in Chapter 4 of the SEIS.*

#### **A.1.6 Comments Concerning Socioeconomic Issues**

**Comment:** Constellation's presence in Oswego is reflected not only by its healthy payroll and considerable purchasing clout, but also by its social commitment to Oswego. Constellation's community-spirited employees volunteer hundreds of their personal time, undertaking many civic minded projects, all for the betterment of our community. (NMS-A-4)

**Comment:** Constellation Energy is the largest giver of our campaign. They raise, a combination of employee and corporate support, approximately a quarter of a million dollars for our campaign, that's 27 percent. Not only the financial resources are critical to the county and to our health and human service agencies, but also the man and women power that we so generously receive, not only United Way but the many health and human service organizations. (NMS-C-1)

**Comment:** In terms of community support, last year Constellation Energy and its employees provided a total of \$270,000 in support of community organizations and events. (NMS-D-4)

**Comment:** Revenues from Constellation help pay for police protection, road maintenance, health services, mandated social services, books and supplies for schools and payroll. (NMS-F-2)

**Comment:** I'm here to tell you that Constellation is a significant supporter for the United Way here in our community, as well as many other not-for-profits in our town. Through the generous contributions of their employees and the corporate match, make up about 27 percent of our annual campaign. As well as a wonderful volunteer base of people power, which is really hard to put a price on. If Constellation, if we no longer have the support of Constellation, it could have a tremendous adverse affect to the delivery of human service needs in our county. (NMS-G-1)

**Comment:** The contributions of over \$270,000, in 2003, as you've already heard, have helped support community organizations such as Harborfest, the United Way, which Melanie Trexler spoke to. Oswego Hospital, which is obviously the primary hospital in the Oswego County area and SUNY, Oswego, and all of these benefit our community from an economic standpoint. (NMS-J-3)

**Response:** *The comments are noted. The comments are supportive of license renewal at NMP. Public services involving education and social services were evaluated in the GEIS and were determined to be Category 1 issues. The comments provide no new information on these public service issues, and therefore, will not be evaluated further.*

**Comment:** The primary reason, obviously, is economic. Constellation provides hundreds of well paying jobs in this area to its employees and contractors. These important jobs contribute, via home ownership and purchasing power, significant property tax and sales tax revenues to the local economy, revenues that are essential to providing the quality of life we enjoy here in Oswego. (NMS-A-2)

**Comment:** Constellation employs roughly 1300 people in Oswego County. We're the largest private employer in the county. Our payroll is more than \$115 million annually, and we pay nearly \$30 million in local taxes. (NMS-D-3)

**Comment:** The importance of the nuclear plants at Nine Mile Point to the local economy cannot be overstated. Constellation Units 1 and 2 employ over 1200 people locally. Under the current tax agreement from 2005 to 2011, Constellation will be making annual payments of about \$7.5 million to Oswego County, \$11.6 million to Oswego City School District, and about \$990,000 to the town of Scriba. In addition, the utility is making performance payments to local government based on the reactor's outputs. All of Constellation's payments are a significant



portion of the annual revenue that local governments and schools depend on to provide the public services it does now. (NMS-F-1)

**Comment:** Local purchases by Constellation and the people that it employs help keep local businesses open and in turn, 700 additional jobs are in the community as a result. Constellation has generously contributed to important local community support organizations in the fields of education, economic development and the environment. Therefore, if Constellation's re-licensing application is unsuccessful and the plants must be decommissioned, the economic impact on Oswego County and the surrounding area would be quite damaging to say the least. (NMS-F-3)

**Comment:** As you've already heard from Russ Johnson, there's over 1260 good paying jobs. And as Jim Spina, already spoke to, that's well in excess of \$150 million in payroll. The \$30 million in tax revenue annually, added to the payroll and the multiplier affect, turning that money over in this region in this economy, at least five to seven times, is a very significant and substantial economic impact. (NMS-J-2)

**Comment:** The energy generation and transmission sector, as a whole, within Oswego County, far surpasses any other single economic sector, with jobs and financial impact. Along with hydro, oil and gas-fired facilities, transmission network and the potential of wind-powered facilities, which are already in discussion, the nuclear production capacity contributes to a diverse and adaptive industry, that is a major part of our county identity. (NMS-J-7)

**Comment:** But I would like to say to our legislator, that was here, Russell, that farming is still the largest industry in Oswego County. You know, and I think that even our legislature sometimes forgets that we do have, farming is the largest industry. And we also, you know, do an awful lot of the fishing industry now too.

In the past it has been very discouraging. I mean, when we went to our legislature, let's face it, it was at a time when the Niagra Mohawk and Long Island Lighting Company and all of the other industries wined and dined the legislature to the ultra max. (NMS-M-2)

**Comment:** First, the plants are vital suppliers of electricity to the region. They have a combined capacity of 1,775 MW. During the late 1990s, New York State's demand for electricity came dangerously close to outpacing supply. It is estimated that as the economy in New York continues to improve, demand for electricity in New York will again meet and even exceed supply. The loss of the electricity generated at the Nine Mile Point units would greatly exacerbate this problem and deny the central New York region a reliable source of electricity. (NMS-P-1)

**Comment:** Second, the Nine Mile Point nuclear plants play a substantial role in the economy of Oswego County. Constellation Energy is the largest employer in Oswego County providing 1300 good-paying jobs and a \$115 million payroll. As a result of this employment and the

substantial payroll, spin-off jobs in food service, hotel, retail and other service industries have been created. (NMS-P-2)

**Comment:** In addition, the plants provide tax revenue totaling nearly \$30 million annually for our localities. This revenue helps our municipal governments function and also provides much needed funding for our local school districts. The loss of the Nine Mile Point facilities would reap economic havoc on central New York and severely hamper our local governments' abilities to provide important services to the citizens of central New York. (NMS-P-3)

**Response:** *The comments are noted. Socioeconomic issues specific to the plant are Category 2 issues and are addressed in Chapter 4 of the SEIS. The comments support license renewal at NMP.*

**Comment:** And as these plants get older and as the risk gets greater and as the effects of the operation of these plants get worse, Constellation is paying less taxes. They are employing fewer and fewer people. I mean Constellation announced a year and a half ago that they're going to be laying off more than 20 percent of the workforce by next May. And they're paying less and less taxes every year. I mean they make a big deal out of paying 20 million dollars in taxes in a few years, but that's less than half of what Nine Mile used to pay.

And so it seems to us that, you know, that in terms of this issue about what the community is getting out of it and what Constellation is giving to the community, they'd rather, you know, pay for bands to play at Harborfest, than they would pay an actual property tax. (NMS-H-7)

**Comment:** So now the nuclear plants are benefitting from our tax base for their security. It seems to me that if anything, the amount of taxes coming out of Constellation should be raised so as to offset the risk of terror in this community. (NMS-L-5)

**Response:** *The comments are noted. Socioeconomic issues specific to the plant are Category 2 issues and are addressed in Chapter 4 of the SEIS. The comments oppose license renewal at NMP.*

### **A.1.7 Comments Concerning Alternatives**

**Comment:** But my foremost concern in dealing with the environmental impact statement is the fact that the only thing that's, the only way that other sources of energy are looked at in this environmental impact statement, are, say for example, they look at how much power can be generated on the site that Constellation now occupies with wind or with hydroelectric, stuff like that. So even if we could make just as much energy with wind energy, in a large section of the lakeshore, say for example, which gets a great deal of wind. That's not considered because that's not on the site.

I would like to see an environmental impact statement that includes, that looks at how much wind power could be gotten from, from the whole, you know, from the whole Lakeshore of Oswego, in the area of Oswego. Not just on the site where the plant is right now. (NMS-I-1)

**Response:** *When evaluating alternatives such as wind power, the staff recognizes that while the existing site might not be feasible to support a specific alternative, the regional area may. Therefore, an evaluation is done on the regional area as a whole rather than focusing specifically on the existing plant site. This area will include the lakeshore of Lake Ontario. The feasible wind power alternatives are discussed in Chapter 8 of the SEIS.*

**Comment:** But, it seems to me if we have to have, if we have to have an emergency evacuation plan for a plant. If we have to have, you know, if there are acceptable limits of radiation being released into the community. Whatever they are, you know, whatever they are. Why would we accept that when we could go to other forms of energy generation that are not, that don't require an evacuation plan? That don't require releases of radiation? I mean, it seems to me that, you know, these plants, they've been here for 40 years now, or at least Nine Mile 1, has. They've had their run, and it just seems like we should be looking at other forms of energy, of energy production. Energy production that doesn't include, you know, radiation releases. (NMS-I-2)

**Comment:** You know, it seems like why would we go, why would we take that risk when we could use other forms of energy that don't, that don't give us that risk, and at the same time, you know, we could probably have just as many jobs. Or bring other jobs in that don't require that kind of risk. It just seems like that would be something that you should take into consideration. (NMS-I-4)

**Response:** *NRC's requirements to consider the environmental impacts of various alternatives is based on the National Environmental Policy Act (NEPA) of 1969. The purpose of NEPA is to ensure that relevant agencies examine and disclose the potential environmental impacts of their actions before taking the action. NEPA is a procedural statute that does not dictate a decision based on relative environmental impacts. Furthermore, the NRC has no authority or regulatory control over the ultimate selection of future energy alternatives. Likewise, the NRC can not ensure that environmentally superior energy alternatives are used in the future. The NRC makes its decision whether or not to renew the license based on safety and environmental considerations. The final decision on whether or not to continue operating the nuclear plant will be made by the utility, State and Federal (non-NRC) decision-makers. This final decision will be based on economics, energy reliability goals, and other objectives over which the other entities may have jurisdiction. Moreover, given the absence of the NRC's authority in the general area of energy planning, the NRC's identification of a superior alternative does not guarantee that such an alternative will be used.*

*As a result, based on the uncertainties involved and the lack of control that the NRC has in the choice of energy alternatives in the future, the Commission decided to exercise its NEPA*

*authority to reject license renewal applications only in cases where there is such an imbalance between the impacts of license renewal and the impacts of the alternatives that it would be unreasonable to allow further consideration of license renewal.*

#### **A.1.8 Comments Concerning Environmental Justice**

**Comment:** And this is one of our major concerns, is that this is the issue of the routine releases from these plants and the continued operation of them is an environmental justice issue. I mean, here we are in, you know, one of the poorest counties in the state with typically some of the highest unemployment rates in the state, usually 25 to 50 percent higher than the state average, who is saddled with the burden of a polluting nuclear facility that's causing, in part, a large public health problem in the community. Where people are sick, people are getting cancer, and there's, but it's basically undiagnosed because we live in a poor, rural area, with a low population density, that makes epidemiology irrelevant in most cases. (NMS-H-5)

**Comment:** Maybe if we were more affluent we could make a different decision, but we're not. They give us money, they provide entertainment over the summer, so we can take our mind off what's on the horizon every morning when we get up. We can listen to music, you know. So maybe we can't make the decision. That seems to be the, what's coming out of this meeting. I don't think that's necessarily the case.

And I couldn't help but think of, in thinking of how we're wedded to this institution, I couldn't help but think of a line that I'd heard of a different institution about how at this point in our history it's like we're holding a wolf by the ears, and we can neither continue to hang on or safely let go. Thomas Jefferson described our relationship with slavery that way. And if Hugh Downs described us as the company's county, maybe the two institutions aren't too far apart. (NMS-K-2)

**Comment:** So in the past, and awful lot of the citizens in this area have just been knocked down, and knocked down and knocked down, to the point where we felt like we did not really have any say in what's going on. And, yes, we, this county has definitely prostituted itself to the nuclear industry for years here. And it's, you know, it's because we're a rural community, you know, we all know that.

They can't build in an area that has any good, you know, densely populated, that is more than densely populated. And we're a poor community. That's why we ended up with the nuclear plant to begin with. (NMS-M-3)

**Response:** *On February 11, 1994, the President issued Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. This Order requires each Federal agency to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects on minority and low-income populations resulting from its actions. The memorandum accompanying the*

*Executive Order directed Federal executive agencies to consider environmental justice under NEPA. The CEQ provided guidance for addressing environmental justice. On August 24, 2004, the Commission published a Final Policy Statement in the Federal Register on the treatment of environmental justice matters in the NRC regulatory and licensing actions. The Final Policy Statement reaffirms that the Commission is committed to full compliance with the requirements of NEPA. Although the Executive Order is not mandatory for independent agencies, the NRC has voluntarily committed to undertake environmental justice reviews. Specific guidance is provided in NRC Office of Nuclear Reactor Regulation Office Instruction LIC-203 Rev 1, Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues.*

*To perform a review of environmental justice in the vicinity of the nuclear power plant, the NRC staff examines the geographic distribution of minority and low-income populations within 80 km (50 miles) of the site being evaluated. The staff uses the most recent census data available. The staff also supplements its analysis by field inquiries to such groups as county planning departments, social service agencies, agricultural extension personnel, and private social service agencies. Once the locations of minority and low-income populations are identified, the staff evaluates whether any of the environmental impacts of the proposed action could affect these populations in a disproportionately high and adverse manner.*

*The comments are noted. Environmental justice is an issue specific to the plant and is addressed in Chapter 4 of the SEIS.*

### **A.1.9 Comments Concerning Radiological Impacts**

**Comment:** Consistency of samples throughout the years. My brother had a potato farm. And they, the Department of Health came there one time and got his potatoes. Now potatoes would be something that would probably uptake, and I'm not sure if it would be strontium or cesium, I can't really remember.

But they never used his potatoes, and I'm just wondering, you know, maybe they made some french fries or something like that with them. It just didn't make sense to me that they came and they sampled, you know, at least 200 pounds of potatoes and yet never used them. And certainly he was in a high deposition zone. (NMS-L-9)

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

*In annual reports, licensees identify the amount of liquid and airborne radioactive effluents discharged from plants and the associated doses. Licensees also must report environmental radioactivity levels around their plants annually. These reports, available to the public, provide*

*the results of the sampling of ingestion sources such as milk, fish, invertebrates, and broad leaf vegetation. Radiological environmental monitoring program reports have not shown any significant elevation in radiological contamination of foodstuffs from surrounding farms. The comments provide no new information; therefore, they will not be evaluated further.*

**Comment:** Even when Cornell University's Veterinary College came into our county and said we will pay 100 percent for a study to be done, to see if the radiation is what's killing the fetuses of these cows. Our county legislature said no. We do not want them in this county, it doesn't look good, you know. So for that reason there was too much political hostility for Cornell to feel that they could come in and still get seed money. (NMS-M-2)

**Response:** *The staff believes that, if the Cornell University's College of Veterinary Medicine had sufficient interest in conducting a study, it is unlikely that political hostility would have prevented researchers from pursuing an investigation into the purported stillbirths. The commenter should contact the Field Veterinarian with the New York State Department of Agriculture and Markets responsible for the oversight of agricultural animals if future multiple stillbirths occur.*

*The NRC staff does not believe that radiological releases from Nine Mile Point were responsible for the stillbirths. Releases from Nine Mile Point have been within regulatory guidelines established to protect human health. The NRC has not established radiation exposure standards for fish and wildlife because it is assumed that radiation guidelines which are protective of human health also provide adequate protection to plants and animals. The validity of this assumption has been upheld by national and international bodies that have examined the issue, including the National Council on Radiation Protection and Measurement (NCRP Report No. 109, Effects of Ionizing Radiation on Aquatic Organisms, 1991), the International Atomic Energy Agency (IAEA Technical Report Series No. 332, Effects of Ionizing Radiation on Plants and Animals at Levels Implied by Current Radiation Protection Standards, 1992), and the International Commission on Radiological Protection (ICRP Publication 26, 1977). In all of these cases, it has been emphasized that individual organisms may be adversely affected by such radiation levels, but effects at the population level are not detectable. Radiological issues will be addressed in the SEIS.*

**Comment:** We also have, you know, there's so many things that we've learned over the years that I feel like are being ignored. We learned by being on the farm that if we lime heavily, we won't uptake cesium 137 and strontium 90, into our soil as much. We planted red clover on our farm, in a herd at that time, of 59 dairy cows, we had 43 sets of twins. Which would be the exact same thing as if we had 43 women, you know, in this room have that many twins in that kind of a population. We found out through Cornell and extensive testing at the time, that it was because red clover takes up cesium 137, much more than, you know, like cesium is taken up by mushrooms.

So we were probably getting some kind of a split embryo affect at the time. We learned when we went on 20/20 we got farmers all across the nation that live by nuclear plants who experienced the exact same problems we were experiencing. And told us to feed toxic levels of minerals to our cows and that it would help. And we did. And it did help, you know, the cows, depending on what crops we put in, depending on how heavily we limed the soil, you know, all of that made a difference in the amount of isotopes in our milk, and the different kinds of isotopes in our milk.

And sometimes I wonder, you know, you talk about the environmental impact statements, I've never seen anything like that, in any of the environmental impact statements. I feel like they don't really understand the farming community. We have a perfect animal here, we have an animal who is eating in the summer, 80 percent of what goes into its mouth is coming directly off the land around it. It's a lactating animal that is pregnant, and it's very easy to get the milk from the animal, you know. It would be a perfect study, but yet, has there ever been one done? No, you know. (NMS-M-6)

**Response:** *The comments are noted. The radiological impacts of expected releases from NMP during the renewal period are discussed in the Chapter 4 of the SEIS. The health effects on ecological receptors including cows are not specifically addressed by the regulations. However, it is generally accepted by the scientific community that the regulatory limits established for the protection of the people are also protective of the nonhuman receptors, including plants and animals. The notion of multiple births in cows as a result of low level radiation exposure as suggested by the commenter has not been established scientifically. Such effects are not expected under the current conditions or under the conditions expected during the renewal period around the site.*

#### **A.1.10 Comments Concerning Issues Outside the Environmental Scope of License Renewal: Operational Safety, Emergency Preparedness; Safeguards and Security; Aging Management; Need for Power; and Cost of Power**

##### **Operational Safety**

**Comment:** We're based in reactor communities in the northeast, and one of the issues I want to sort of begin by talking about is our lack of confidence in the NRC's license renewal process. This process is, you know, we experience it as a sort of schizophrenic, bifurcated process in which basically the issues that are relevant to the public, that would actually be something that you'd, you know, consider stopping a relicensing for, precluded from being reviewed by things like the generic EIS, and by the way that safety problems are dealt with in the review process. For instance, there actually was one license extension that was stopped in the history of the nuclear industry, as far as I know, and that was the Yankee Row reactor which was, in 1991, the NRC still had regulations on the books in relation to the license extensions, that actually required that they inspect the reactor components to see how well they're aging and whether they could stand up to another 20 years embrittlement.

And so Yankee Atomic was looking at the reactor pressure vessel to see if it was going to be able to withstand another 20 years of operation. And this was after the reactor had operated for 30 years, which is five less years than what Nine Mile One has run for. And what they actually find in this, you know, pre-inspection, before they even decided to put in their license extension application, was that the reactor vessel was already in violation of NRC standards for embrittlement. And, that in fact, instead of a one in a million chance of a melt down happening, if they needed to put cool water in the reactor. The reactor was only within a one in ten thousand chance of having a meltdown.

But in fact the reactor vessel could have shattered like glass if they had dumped cold water in it. And curiously enough, after the community rose up in anger about this, and discovered that the NRC was negotiated with the utility to allow them to continue operating the plant, even though it was outside of the safety parameters, the reactor shut down.

And following that, I'm not sure exactly what year it was, but the NRC revised its regulations on license extensions to preclude, so you don't have, so that Nine Mile One doesn't have to go in, or Constellation doesn't have to go in and actually test the systems in the reactor to see how well they're aging before they go ahead and issue a blanket 20-year license renewal. We find this is completely insane. (NMS-H-1)

**Response:** *The NRC has established a license renewal process with clear requirements, which are codified in 10 CFR Part 51 and 10 CFR Part 54. 10 CFR Part 54 specifically requires a safety review that includes an evaluation of time-limited aging analyses that monitors vessel embrittlement. The process and requirements were developed to assure safe and environmentally sound plant operation for the extended plant life. In addition, as a basis for the review, the NRC staff uses regulatory documents (including two standard review plans), which describe the methods acceptable to the NRC staff for implementing the license renewal and the techniques used by the NRC staff in evaluating applications for license renewals.*

*To date, at the conclusion of the review, the NRC has approved all of the applications for license renewal. The NRC can deny an applicant's request to renew a license. However, the process to renew a license is a reiterative process, such that if the licensee did not provide appropriate or adequate information in their initial application, the NRC would identify the deficiencies and the licensee would be allowed to supplement the application. This process could, and has, continued until the NRC concludes that the application is sufficient to complete the review. Furthermore, if it appeared to the applicant that the NRC may deny the request for license renewal, the applicant would likely withdraw the request in advance of the formal denial.*

*The NRC has clearly defined the requirements for license renewal and the nuclear industry has the experience of over a dozen successful license renewal requests. If problems with systems, structures or components of the facility were identified during the review, the applicant would likely be able to make the required modifications or put in place a mitigation plan that would be acceptable to the NRC. Identified problems with active structures, systems, or components*



would be addressed immediately, and any necessary changes made under the current operating license rather than waiting for the period of extended operation.

*The principal safety concerns associated with license renewal are related to the aging of structures, systems and components important to the continued safe operation of the facility. When the plants were designed, certain assumptions were made about the length of time each plant would be operated. During the safety review for license renewal, the NRC must determine whether aging effects will be adequately managed so the original design assumptions will continue to be valid throughout the period of extended operation or verify that any aging effects will be adequately managed. For all aspects of operation, other than the aging management during the period of extended operation, there are existing regulatory requirements governing a plant that offer reasonable assurance of adequate protection if its license were renewed. Reactor embrittlement is just one example of structure aging that is reviewed during the license renewal process. The Commission requires an applicant to detect and mitigate the effects of aging beginning with examination and verification that the systems, structures or components function as they were originally intended to when they were designed, and that their functions have not been compromised or degraded.*

*The comments address the license renewal process. Operational safety is outside the scope of evaluation under 10 CFR Part 51 and 54. The comments provide no new information and, therefore, will not be evaluated further.*

**Comment:** We must be certain that issue No. 1 is safety in operating this facility, and that the security in guaranteeing it to operate safely is assured. (NMS-A-5)

**Comment:** But what hasn't changed is our continued focus on safety, the focus of all of our employees on safety for the people that work at the plant and the people that live around the plant. (NMS-D-1)

**Comment:** Some examples that attest to Constellation's commitment to the country's preparedness planning program, include some of the following: A well-organized approach to drill and exercise developments, which always includes attention to the county's preferences related to training initiatives; a consistent dialogue with the county that addresses safety concerns off site; a willingness to support with expertise, personnel and finances, projects that enhance the county's ability to effectively oversee the radiological preparedness program. (NMS-E-1)

**Comment:** Safety has been a concern and always will be with the people of Oswego County who live and work, especially in the communities that host nuclear power plants. Constellation has an acceptable safety record at both Units 1 and 2. (NMS-F-4)

**Response:** *The comments are noted and are supportive of license renewal at Nine Mile Point. Operational safety, security, and emergency preparedness are outside the scope of evaluation under 10 CFR Part 51 and 54. The comments provide no new information and, therefore, will not be evaluated further.*

**Comment:** Nine Mile Point does not meet NRC's safety requirements for multi-unit stations. The two-unit Nine Mile Point Station is adjacent to the single-unit James FitzPatrick Station, separated only by a chain link fence. For all practical and safety purposes, Nine Mile Point and FitzPatrick meet the definition of a multi-three-unit station, even though the license holder's of the two facilities are different. This issue becomes especially significant because the Nine Mile Point/FitzPatrick complex share systems important to safety, and as such NRC regulations must be applied to this as a three-unit complex when evaluating the Nine Mile Point License Renewal Application. Supporting details are provided below.

Both Nine Mile Point and FitzPatrick share the same 115 kV preferred offsite power supply that is required by General Design Criteria 17 (GDC-17) for accident mitigation and safe shutdown. The same 115 kV circuit is utilized by all three units of this multi-station complex. This preferred offsite power circuit has marginal capacity and capability such that it may be not be able to support an accident in one unit, an orderly shutdown and cooldown of the remaining two units, as required by General Design Criteria 5.

Criterion 5—Sharing of Structures, systems, and components, states: "Structures, systems, and components important to safety shall not be shared amongst nuclear power units unless it can be shown that such sharing will not significantly impair their ability to perform their safety functions, including, in the event of an accident in one unit, an orderly shutdown and cooldown of the remaining units."

The safety requirements invoked by General Design Criteria 5 are applicable to all multi-unit stations that share systems important to safety; and these safety systems include the preferred offsite power supplies. The fact that ownership of Nine Mile Point and FitzPatrick are different is incidental to this safety concern, and the technicality of separate ownership, should not preclude the NRC from applying its regulations to the three-unit complex.

In August/September 2001 both plants entered 7-day LCOs because it was determined that the common 115 kV lines feeding both stations did not have the capacity or capability required by each station's Technical Specifications (GDC-17 requirement). Though corrective actions were taken to resolve these Technical Specification non-compliance issues, the resolutions were station specific, and failed to address the three-multi-unit Nine Mile Point/FitzPatrick complex. (NMS-O-1)

**Response:** *The comments involve concerns that are relevant to current Nine Mile Point operation. In accordance with 10 CFR 54.30, these issues are outside the scope of license renewal. The comments have been referred to the NRC operating plant project manager for disposition.*

### **Emergency Preparedness**

**Comment:** It doesn't include, you know, having to have a plan to how we're going to evacuate the community if something were to happen. And I know that most people say that, you know, that's very unlikely, and it probably is very unlikely. But why even, why even, you know, have that as an option, I mean it just doesn't seem to make sense to me. Even if, even if the plant is bringing in a great deal of money and, you know, Tim just outlined the fact that they are cutting back on jobs. (NMS-I-3)

**Comment:** I did get some paperwork on the evacuation and once again I do not see any amount of, the dose that we will be exposed to before evacuations take place, and it's definitely something that I want to know.

I hear a lot about, as far as the evacuation plan, drills for the professionals. What about the citizens? What about the citizens that live in that evacuation plan? And certainly, radiation does not stop at the five mile, at the ten mile, it goes beyond. There's many people in the county who say, hey, I live outside the zone, I don't have any fear. Now, you know, we live in the prevailing westerlies, but that doesn't mean the winds don't zip around to the east under a low pressure system. Now certainly there should be different calls for evacuation depending upon wind direction, or given certain circumstances.

And the thing that I have real concern about is what about letting the citizens participate in these drills. What are you going to do when you have children in an elementary school that are being sent to Watertown and their parents happen to live in a different part and their parents are sent to Syracuse, which is without an evacuation plan. (NMS-L-7)

**Comment:** When they first came here, Pat, we talked an awful lot about evacuation, and they laughed in our faces, you know, until Three Mile Island happened, and they decided that maybe evacuation would be a good idea. But really, if we look back over the past 30 years of us working with the evacuation, we have flunked an awful lot more evacuation, you know, mock evacuation procedures than we have passed, you know. (NMS-M-4)

**Response:** *The staff considered the need for a review of emergency planning issues in the context of license renewal during its rulemaking proceedings on 10 CFR Part 54, which included public notice and comment. As discussed in the Statement of Considerations for rulemaking (56 FR 64966), the programs for emergency preparedness at nuclear plants apply to all nuclear power plant licensees and require the specified levels of protection from each licensee regardless of plant design, construction, or license date. Requirements related to emergency*

*planning are in the regulations at 10 CFR 50.47 and Appendix E to 10 CFR Part 50. These requirements apply to all operating licenses and will continue to apply to plants with renewed licenses. Through its standards and required exercises, the Commission reviews existing emergency preparedness plans throughout the life of any plant, keeping up with changing demographics and other site-related factors. Therefore, the Commission has determined that there is no need for a special review of emergency planning issues in the context of an environmental review for license renewal.*

*The 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 requested by the applicant. An NRC safety review for the license renewal period is conducted separately. Although a topic may not be within the scope of review for license renewal, the NRC is always concerned with protecting health and safety. Any matter potentially affecting safety can be addressed under processes currently available for an existing operating license absent a license renewal application. The comments provide no new information, and do not pertain to the scope of license renewal under 10 CFR Part 51 and Part 54. Therefore, they will not be evaluated further.*

### **Safeguards and Security**

**Comment:** We as a nation owe it to our citizens to protect them, so providing a safe and secure operation for Nine Mile Point's nuclear facility is of major importance to fulfilling that mandatory obligation. (NMS-A-6)

**Comment:** I can tell you that throughout some thirty some years, the cooperation with the plants out here, with Nine Mile 1 and 2, have been absolutely astronomical. They have helped us train our people. They have provided us not only with equipment but with money to provide more equipment, to train their people with our people. We have procedures set up that if we go into the plants, and I'm not going to get into everything, where they put their people with our people so that we are familiar with the way they operate. And we train; once, twice, three times, whatever time we think is needed throughout the year to do this type of training. (NMS-B-1)

**Comment:** 9/11 when you talk and you read the newspapers and saw it on the TV, some of the other plants had some what I would call some publicity problems, some press problems, you didn't see it in this area. The people up here have become so used to our people and seeing our people and the police out there with the nuke plants, they are so used to seeing us train and work with the operation out there was not a major flow problem where people were the least bit worried. There was nothing in the press because they train their people to be ready for any type of activity that can happen out there.

And not to say that something never could happen out there, but I would be, I rest well assured and I have relatives that work at that plant, both in the building, and now I rest very comfortably knowing between their security people and our security people, their plant is probably one of the

best protected and have some of the best personnel out there -- their security people -- are trained as well as any police agency that I know of. And I certainly have no problem putting my people out there to work and train with these people, and would certainly have no problem if we had another emergency stationing my people out there again. (NMS-B-2)

**Comment:** However, in our post-911 world, concerns have expanded beyond every day operational safety, to questions about the nuclear plant's vulnerability to attack. Constellation's nuclear plants are located on international boundaries and are approachable by land and water, as we all know. (NMS-F-5)

**Comment:** We also recognize that the county and Constellation have a shared responsibility when it comes to the nuclear power plant's security. And I see Sheriff Todd out there, he played a big part in that, in light of what occurred on September 11th, his Department did. We look forward to a cooperative and effective partnership with Constellation, in regard to fulfilling this critical responsibility. (NMS-F-7)

**Comment:** Besides that, we're now taking the risk of terror. I can remember going to legislative meetings saying to them, there's the possibility of terror, and we were laughed at. Come on, people, you know, you're way out of line now. And now it's become a real issue. So now we're taking the risk of terror and we are paying now for our security of our county out there. (NMS-L-4)

**Response:** *Security issues such as safeguards planning are not tied to license renewal but are considered to be issues that need to be dealt with constantly as a part of the current operating licenses. Security issues are periodically reviewed and updated (and extended) at every operating plant. These reviews will continue throughout the period of any extended license. If issues related to security are discovered at a nuclear plant, they would be addressed immediately, and any necessary changes reviewed and incorporated under the operating license rather than waiting for the period of extended operation.*

*NRC and other Federal agencies have heightened vigilance and implemented initiatives to evaluate and respond to possible threats posed by terrorists, including the use of aircraft against commercial nuclear power plants and independent spent fuel storage facilities. NRC routinely assesses threats and other information provided to them by other Federal agencies and sources. The NRC also ensures that licensees meet appropriate security requirements. Although NEPA does not require consideration of intentional malevolent acts on a case-by-case basis in conjunction with an environmental review, the NRC, as part of its mission to protect public health and safety and provide for the common defense and security, will continue to focus on prevention of terrorist acts for all nuclear facilities. The issue of security and risk from malevolent acts at nuclear power plants is not unique to facilities that are renewing their licenses. These matters will continue to be addressed through the ongoing regulatory process as a current and generic regulatory issue that affects all nuclear facilities and many of the activities conducted at nuclear facilities.*

*The comments are noted. The NRC's environmental review is confined to environmental matters relevant to the extended period of operation requested by the applicant. Appropriate safeguards and security measures have been incorporated into the site security and emergency preparedness plans. Any required changes to emergency and safeguards contingency plans related to terrorist events will be incorporated and reviewed under the operating license. The comments provide no new information and do not pertain to the scope of license renewal under 10 CFR Part 51 and 54. The comments will not be evaluated further.*

### **Aging Management**

**Comment:** Especially with the oldest reactor in the country. A reactor that, you know, seven years ago was known as the most embrittled reactor in the U.S., because of its core shroud. And that continues to have embrittlement problems causing leaks and other safety problems in the other cooling systems in the plant, that are essential for safety. So in a certain sense, you know, the relevant issues have already been excluded from the process. (NMS-H-2)

**Comment:** There are some things that concern me, especially the long-lived components and being less confident in these long-lived components. And we certainly know in Unit 1 there is, you know, Number one, there's terrorist trouble, there's core shroud trouble, and certainly as these plants continue to age and continue to get metal fatigue, there's certainly of high importance to be looking at. (NMS-L-1)

**Comment:** And there's a lot of problems that just aren't even being looked at. There's horizontal cracks in Nine Mile One. Nine Mile One is a very old reactor. Wasn't in less than a month that we had an unusual occurrence at Nine Mile One, and it had to be manually scrammed, isn't that right? Were you notified, Pat? You know, at what point does, do you get notified of an incident at the plant. We've all been so trained that you notice we never say accident here. It's incident or unusual occurrence, you know. (NMS-M-5)

**Response:** *The principal safety concerns associated with license renewal are related to the aging of structures, systems and components important to the continued safe operation of the facility. When the plants were designed, certain assumptions were made about the length of time each plant would be operated. During the safety review for license renewal, the NRC must determine whether aging effects will be adequately managed so the original design assumptions will continue to be valid throughout the period of extended operation or verify that any aging effects will be adequately managed. For all aspects of operation, other than the aging management during the period of extended operation, there are existing regulatory requirements governing a plant that offer reasonable assurance of adequate protection if its license were renewed.*

*The comments are noted. The NRC's environmental review is confined to environmental matters relevant to the extended period of operation requested by the applicant. Safety matters related to aging are outside the scope of this review. An NRC safety review for the license*

*renewal period is conducted separately. The comments provide no new information and will not be evaluated further in the context of the environmental review. However, the comments will be forwarded to the project manager for the license renewal safety review for consideration.*

### **Need for Power**

**Comment:** In a larger context, however, another way to protect ourselves is by controlling our destiny. If we could lessen our dependence on foreign-based energy sources, such as oil from the Middle East, we as a nation will be far better off. With the continued turmoil in the Middle East, nuclear powered energy plays a vital and ever increasing role in our government's goal to strengthen our national security by helping us to become energy independent. (NMS-A-7)

**Comment:** Nuclear energy and Nine Mile Point specifically is an important source of clean cost-effective electricity. About one in five homes in the United States are powered by nuclear energy. This avoids dependence on foreign oil. Nine Mile Point currently generates enough electricity to power more than 2 million homes. I firmly believe that nuclear energy needs to be part of our country's diversified energy supply now and going forward in the future. (NMS-D-2)

**Comment:** The electricity generated at Nine Mile Point is critical to meeting the current and future needs of our region, and that's a very important reason. (NMS-J-4)

**Comment:** The plants are reliable and environmentally-friendly, in that they don't emit any greenhouse gases, and they seem to be safe as their almost 40 year history is shown. Cost and reliability are two things that are critical to the future of economic development. Companies looking to come into our county, need to know that they have a reliable and consistent source of power on which to depend. (NMS-J-6)

**Response:** *The regulatory authority over utility economics (including the need for power) falls within the jurisdiction of the States and to some extent within the jurisdiction of the Federal Energy Regulatory Commission. The proposed rule for license renewal had included a cost-benefit analysis and consideration of utility economics as part of the NEPA review. However, during the comment period, State, Federal and utility representatives expressed concern about the use of economic costs and cost-benefit balancing in the proposed rule and the Generic EIS for License Renewal. They noted that Council on Environmental Quality regulations interpret NEPA to require only an assessment of the cumulative effects of a proposed Federal action on the natural and man-made environment and that the determination of need for generating capacity has always been the States' responsibility. For this reason, the purpose and need for the proposed action (i.e., license renewal) is defined in the GEIS as follows:*

*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 a 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.*

*The comments are noted. The need for power is specifically directed to be outside the scope of license renewal in 10 CFR 51.95(c)(2). The comments are interpreted as expressing support for license renewal at Nine Mile Point; however, they provide no new information and, therefore, will not be evaluated further.*

### **Cost of Power**

**Comment:** Low cost electricity from Nine Mile Point will help insulate New Yorkers from the full economic impact of the ever-rising oil and gas prices that we see. (NMS-J-5)

**Comment:** I'd like to address risk versus benefit. You know, I can remember being a youngster in this county and saying, oh, the benefits, the benefits, too cheap to meter. You'll have all the electricity that you'll ever want. Well now come to find out, nuclear energy is one of our most expensive forms of energy. And often the cost of the mining is hidden. We're not getting the true picture of what this energy is costing us. (NMS-L-3)

**Response:** *The comments are noted. The economic costs and benefits of renewing an operating license are specifically directed to be outside the scope of license renewal in 10 CFR 51.95(c)(2). The comments provide no new information and, therefore, will not be evaluated further.*



## Part II - Comments Received on the Draft SEIS

Pursuant to 10 Code of Federal Regulations (CFR) Part 51, the staff transmitted the *Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Regarding Nine Mile Point Nuclear Station, Units 1 and 2, Draft Report for Comment* (NUREG-1437, Supplement 24, referred to as the draft Supplemental Environmental Impact Statement [SEIS]) to Federal, State, and local government agencies; certain Indian tribes; and interested members of the public. As part of the process to solicit public comments on the draft SEIS, the staff:

- placed a copy of the draft SEIS in the U.S. Nuclear Regulatory Commission's (NRC's) Public Electronic Reading Room, on its license renewal website, and at the Penfield Library, located at State University of New York, Oswego, New York;
- sent copies of the draft SEIS to the applicant, members of the public who requested copies, representatives of certain Indian tribes, and certain Federal, State, and local agencies;
- published a notice of availability of the draft SEIS in the *Federal Register* on October 6, 2005 (70 *Federal Register* 58489);
- issued public announcements, such as advertisements in local newspapers and postings in public places, of the availability of the draft SEIS;
- announced and held two public meetings in Oswego, New York, on November 17, 2005, to describe the results of the environmental review and answer related questions;
- issued public service announcements and press releases announcing the issuance of the draft SEIS, the public meetings, and instructions on how to comment on the draft SEIS; and
- established an email address to receive comments on the draft SEIS through the Internet.

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

The staff has reviewed the public meeting transcripts and the six comment letters that are part of the docket file for the application, all of which are available in the NRC's Electronic Public Document Room. Appendix A, Part II, Section A.2 contains a summary of the comments and the staff's responses. Related issues are grouped together. Appendix A, Part II Section A.3 contains excerpts of the November 17, 2005, public meeting transcripts and comment letters.

Each comment identified by the staff was assigned a specific alpha-numeric identifier (marker). That identifier is typed in the transcript at the end of the discussion of the comment or in the

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margin at the beginning of the discussion of the comment in a letter. A cross-reference of the alpha-numeric identifiers, the speaker or author of the comment, the page where the comment can be found, and the section(s) of this report in which the comment is addressed is provided in Table A-2. The speakers at the meetings are listed in speaking order along with the page of the transcript excerpts in this report on which the comment appears. Public testimony and written comments are identified by a specific letter representing the commenter, followed by a number that identifies each comment in approximate chronological order in which the comments were made.

There was no significant new information provided on Category 1 issues or information that required further evaluation on Category 2 issues. Therefore, the conclusions in the GEIS and draft SEIS remained valid and bounding, and no further evaluation was performed.

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

Within each section of Part II of this appendix (A.2.1 through A.2.14), similar comments are grouped together for ease of reference, and a summary description of the comments is given, followed by the staff's response. Where the comment or question resulted in a change in the text of the draft report, the corresponding response refers the reader to the appropriate section of this report where the change was made. Revisions to the text in the draft report are designated by vertical lines beside the text.

**Table A.2** Comments Received on the Draft SEIS

<b>Comment ID</b>	<b>Commenter</b>	<b>Source</b>	<b>Comment Location</b>	<b>Section(s) Where Addressed</b>
NMS-A-1	Hutton	Afternoon Meeting Transcript (11/17/05)	A-41	A.2.2
NMS-A-2	Hutton	Afternoon Meeting Transcript (11/17/05)	A-63	A.2.13
NMS-A-3	Hutton	Afternoon Meeting Transcript (11/17/05)	A-63	A.2.13
NMS-A-4	Hutton	Afternoon Meeting Transcript (11/17/05)	A-52	A.2.8
NMS-A-5	Hutton	Afternoon Meeting Transcript (11/17/05)	A-42	A.2.2
NMS-B-1	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-39	A.2.1
NMS-B-2	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-64	A.2.13

<b>Comment ID</b>	<b>Commenter</b>	<b>Source</b>	<b>Comment Location</b>	<b>Section(s) Where Addressed</b>
NMS-B-3	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-52	A.2.8
NMS-B-4	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-42	A.2.4
NMS-B-5	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-40	A.2.1
NMS-B-6	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-60	A.2.11
NMS-B-7	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-40	A.2.1
NMS-B-8	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-44	A.2.5
NMS-B-9	Bond-Clark	Evening Meeting Transcript (11/17/05)	A-55	A.2.9
NMS-C-1	Dellwo	Evening Meeting Transcript (11/17/05)	A-60	A.2.11
NMS-C-2	Dellwo	Evening Meeting Transcript (11/17/05)	A-42	A.2.3
NMS-C-3	Dellwo	Evening Meeting Transcript (11/17/05)	A-40	A.2.1
NMS-D-1	Hobbs	Evening Meeting Transcript (11/17/05)	A-39	A.2.1
NMS-D-2	Hobbs	Evening Meeting Transcript (11/17/05)	A-56	A.2.9
NMS-E-1	Herter	November 25, 2005 Letter	A-53	A.2.8
NMS-E-2	Herter	November 25, 2005 Letter	A-53	A.2.8
NMS-F-1	Gurdziel	December 7, 2005 Email	A-66	A.2.14
NMS-F-2	Gurdziel	December 7, 2005 Email	A-60	A.2.11
NMS-F-3	Gurdziel	December 7, 2005 Email	A-62	A.2.12
NMS-F-4	Gurdziel	December 7, 2005 Email	A-62	A.2.12
NMS-G-1	Raddant	December 13, 2005 Letter	A-44	A.2.5
NMS-G-2	Raddant	December 13, 2005 Letter	A-45	A.2.5
NMS-G-3	Raddant	December 13, 2005 Letter	A-45	A.2.5
NMS-G-4	Raddant	December 13, 2005 Letter	A-46	A.2.5
NMS-G-5	Raddant	December 13, 2005 Letter	A-46	A.2.5
NMS-G-6	Raddant	December 13, 2005 Letter	A-43	A.2.4

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<b>Comment ID</b>	<b>Commenter</b>	<b>Source</b>	<b>Comment Location</b>	<b>Section(s) Where Addressed</b>
NMS-G-7	Raddant	December 13, 2005 Letter	A-43	A.2.4
NMS-H-1	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-2	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-3	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-4	Spina	December 15, 2005 Letter	A-57	A.2.9
NMS-H-5	Spina	December 15, 2005 Letter	A-57	A.2.9
NMS-H-6	Spina	December 15, 2005 Letter	A-59	A.2.10
NMS-H-7	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-8	Spina	December 15, 2005 Letter	A-47	A.2.5
NMS-H-9	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-10	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-11	Spina	December 15, 2005 Letter	A-51	A.2.6
NMS-H-12	Spina	December 15, 2005 Letter	A-51	A.2.6
NMS-H-13	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-14	Spina	December 15, 2005 Letter	A-51	A.2.6
NMS-H-15	Spina	December 15, 2005 Letter	A-58	A.2.9
NMS-H-16	Spina	December 15, 2005 Letter	A-58	A.2.9
NMS-H-17	Spina	December 15, 2005 Letter	A-59	A.2.9
NMS-H-18	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-19	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-20	Spina	December 15, 2005 Letter	A-66	A.2.14
NMS-H-21	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-22	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-23	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-24	Spina	December 15, 2005 Letter	A-67	A.2.14

<b>Comment ID</b>	<b>Commenter</b>	<b>Source</b>	<b>Comment Location</b>	<b>Section(s) Where Addressed</b>
NMS-H-25	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-26	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-27	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-28	Spina	December 15, 2005 Letter	A-47	A.2.5
NMS-H-29	Spina	December 15, 2005 Letter	A-48	A.2.5
NMS-H-30	Spina	December 15, 2005 Letter	A-47	A.2.5
NMS-H-31	Spina	December 15, 2005 Letter	A-48	A.2.5
NMS-H-32	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-33	Spina	December 15, 2005 Letter	A-49	A.2.5
NMS-H-34	Spina	December 15, 2005 Letter	A-49	A.2.5
NMS-H-35	Spina	December 15, 2005 Letter	A-49	A.2.5
NMS-H-36	Spina	December 15, 2005 Letter	A-51	A.2.6
NMS-H-37	Spina	December 15, 2005 Letter	A-59	A.2.9
NMS-H-38	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-39	Spina	December 15, 2005 Letter	A-53	A.2.8
NMS-H-40	Spina	December 15, 2005 Letter	A-54	A.2.8
NMS-H-41	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-42	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-43	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-44	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-45	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-46	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-47	Spina	December 15, 2005 Letter	A-61	A.2.11
NMS-H-48	Spina	December 15, 2005 Letter	A-62	A.2.11
NMS-H-49	Spina	December 15, 2005 Letter	A-67	A.2.14

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<b>Comment ID</b>	<b>Commenter</b>	<b>Source</b>	<b>Comment Location</b>	<b>Section(s) Where Addressed</b>
NMS-H-50	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-51	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-52	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-H-53	Spina	December 15, 2005 Letter	A-67	A.2.14
NMS-I-1	Bond-Clark	December 19, 2005 Letter	A-39	A.2.1
NMS-I-2	Bond-Clark	December 19, 2005 Letter	A-41	A.2.1
NMS-I-3	Bond-Clark	December 19, 2005 Letter	A-51	A.2.7
NMS-I-4	Bond-Clark	December 19, 2005 Letter	A-63	A.2.13
NMS-I-5	Bond-Clark	December 19, 2005 Letter	A-59	A.2.9
NMS-I-6	Bond-Clark	December 19, 2005 Letter	A-59	A.2.9
NMS-I-7	Bond-Clark	December 19, 2005 Letter	A-64	A.2.13
NMS-I-8	Bond-Clark	December 19, 2005 Letter	A-65	A.2.13
NMS-I-9	Bond-Clark	December 19, 2005 Letter	A-65	A.2.13
NMS-J-1	Filipelli	December 23, 2005 Letter	A-49	A.2.5
NMS-J-2	Filipelli	December 23, 2005 Letter	A-50	A.2.5
NMS-J-3	Filipelli	December 23, 2005 Letter	A-50	A.2.5
NMS-J-4	Filipelli	December 23, 2005 Letter	A-50	A.2.5
NMS-J-5	Filipelli	December 23, 2005 Letter	A-50	A.2.5
NMS-J-6	Filipelli	December 23, 2005 Letter	A-50	A.2.5
NMS-J-7	Filipelli	December 23, 2005 Letter	A-54	A.2.8
NMS-J-8	Filipelli	December 23, 2005 Letter	A-59	A.2.10
NMS-J-9	Filipelli	December 23, 2005 Letter	A-65	A.2.13

### A.2 Comments and Responses

Comments in this section are grouped in the following categories:

- A.2.1 Comments Regarding the License Renewal Process
- A.2.2 Comments in Support of License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2
- A.2.3 Comments in Opposition to License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2
- A.2.4 Comments Concerning Water Use and Quality
- A.2.5 Comments Concerning Aquatic Ecology
- A.2.6 Comments Concerning Terrestrial Resources
- A.2.7 Comments Concerning Air Quality
- A.2.8 Comments Concerning Socioeconomics
- A.2.9 Comments Concerning Human Health
- A.2.10 Comments Concerning Uranium Fuel Cycle and Waste Management
- A.2.11 Comments Concerning Alternatives
- A.2.12 Comments Concerning Postulated Accidents
- A.2.13 Comments Concerning Issues Outside the Scope of the Environmental Review for License Renewal: Emergency Response and Preparedness, Safeguards and Security, Operational Safety, Aging Management, Need for Power and Regulatory History
- A.2.14 Editorial Comments

**A.2.1 Comments Regarding the License Renewal Processes**

**Comment:** I guess if I might ask the question of how many public officials are here tonight, people representing the public? And - two people? Public officials, people who hold offices? Elected officials? Any elected officials here tonight? None. Let the record show there are no elected officials. Of those people, if there had been any, I was going to ask them how many had actually read the draft SEIS. (NMS-B-1)

**Comment:** In addition to that, it would be nice to see maybe some sort of task force whose task it is to educate particularly local residents about some of the technical issues and in terms of the environmental impacts for instance. I think even in terms of Rick's communication to the public, and specifically local residents. And just seeing my second public meeting, and I appreciated

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Linda's [Bond-Clark] question about how many elected officials are here, and I would ask also how many local residents are here. And that is one of my big concerns, why aren't more people, stakeholders, local people who are affected by the potential risks involved represented or here? (NMS-D-1)

**Comment:** I was extremely disheartened by the fact there were no elected officials in the audience. This reinforces the notion felt by many citizens that elected officials are not concerned about the socio implications for the nuclear plants. Rather concern lies with the economics, only. These facilities have often been referred to as the "Golden Goose" of Oswego County. (NMS-I-1)

**Response:** *The comments are critical of local elected officials and residents that failed to attend the meetings. The NRC staff makes an effort to inform the public and local officials of the public meetings using a variety of media. The public notification process included publication of several notices in the Federal Register, multiple advertisements in four newspapers distributed in New York, press releases, meeting notices, and flyers. Contacts were also made with interest groups and elected officials. This issue is not within the scope of this environmental review. The comments provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** I would also suggest that you create a new category. You've got low, medium, great. Perhaps you should include one called catastrophic. When something is totally demised and made unavailable at any bottom, zero, it seems to me that should be a category. (NMS-B-5)

**Response:** *The comment disagrees with the staff's analysis approach. The environmental review was conducted in accordance with NUREG-1555, Supplement 1, Environmental Standard Review Standard Review Plan Supplement 1: Operating License Renewal. The comment provided no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** I happen to review the report of the NRC and the utilities back in the 1990s in a report that I worked while I worked at Oswego State. I made 42 recommendations on improving the environmental impact, environmental impact assessment. Of these absolutely none were incorporated. The last time that I received a report from the New York State Department of Health, which is the agency with which the utilities share their data, their reports are anywhere from five years late in coming, at that time, too, no one in our public arena was looking or reading the report. (NMS-B-7)

**Response:** *The staff is in receipt of the recommendations identified in the comment. The staff responded to the commenter's recommendation in a letter dated June 5, 1991 (ML060480033). The comment provided no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*



**Comment:** And I would like to see possibly the nuclear power plants pay for a totally independent - from the NRC or anybody else - somebody who could come to possibly look it over, look over the GEIS, look over the work that was done by the scientists who were paid by the NRC, a number of different things that they could look at, because I don't have the expertise to do that. I work all day. I didn't even have the time to read the whole document. And so I think that that is something that could really benefit the public, that we had somebody who has the money and the time to go out and follow up with this and do the study independent from anything having to do with the NRC. (NMS-C-3)

**Response:** *The NRC is an independent regulatory agency that is charged with the responsibility of overseeing the nuclear power industry. The staff independently reviews the licensee's submittals and related documents. The staff performs an onsite audit, meets with Federal, State, and local officials, receives comments, and responds to comments from a variety of sources. After carefully considering all this information, the staff prepares an independent assessment of environmental impact during the license renewal period. No additional independent assessment is necessary. The comments provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** I am concerned the informal comment and concerns that were voiced are not being transcribed as comments for license renewal. The citizens asked important questions during this time. The facilitator should have stressed that no comment made during the informal meeting were going to be put into the comments for consideration or be addressed. Had this been addressed, the potential for more oral comments might have existed. (NMS-I-2)

**Response:** *It has been the consistent policy of the staff to not include comments made during informal discussions between the NRC staff and the public conducted before and after the transcribed meetings. This was done for two reasons: first, to foster informal discussions without causing a chilling effect, and second, the recognition of the practical limitations that the staff is unable to accurately transcribe or record comments and questions posed by members of the public during the informal discussions. The public has the opportunity to formally record any comments or questions during the transcribed public meeting. The comments provide no new and significant information; therefore, the comments were not evaluated further. There was not revision to the text of the SEIS.*

#### **A.2.2 Comments in Support of License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2**

**Comment:** The first thing that all our employees see and anyone else who comes to our site, every day as they come to work is an illuminated sign. And on that sign it states our commitment to safety and to environmental stewardship. Constellation Energy has an unceasing focus on safety, the safety of our employees and the safety of the people who live

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and work around our facility in this area. We continue to ensure that our operations have little or no impact on the air or the wood or our endangered species. (NMS-A-1)

**Comment:** Nine Mile Point is important to the local community. It plays a part in our country's energy future. The improvements we've made ensure that we meet today's exacting standards of operation. I assure you if given permission to operate each station for an additional 20 years, our employees will continue to demonstrate their ongoing commitment to all aspects of safety, reliability, performance, and environmental stewardship. (NMS-A-5)

**Response:** *The comments are noted. The comments are supportive of license renewal at Nine Mile Point Nuclear Station, Units 1 and 2, and are general in nature. The comments provide no additional information; therefore, there were no changes made to the supplement.*

### **A.2.3 Comments in Opposition to License Renewal at Nine Mile Point Nuclear Station, Units 1 and 2**

**Comment:** My concerns fundamentally deal with, number one, the idea that I don't know of any other type of power that puts at risk as many lives as nuclear energy does. And I think that is borne out by the fact that we have the Nuclear Regulatory Commission, which is specifically for nuclear power plants. We have to have this organization that regulates them and looks after them because of the possible damage that they could cause, that's catastrophic as Linda [Bond-Clark] said. (NMS-C-2)

**Response:** *The comment opposes nuclear power and is general in nature. The comment provides no additional information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

### **A.2.4 Comments Concerning Water Use and Quality**

**Comment:** Another thing, the draw down, the cone of depression around the Nine Mile Plant point, hasn't been thoroughly investigated as far as how this is affecting the groundwater availability for resident of Oswego County. For example when the town of New Haven, many residents along the shoreline are complaining about not having the water available in their wells, and I'm wondering if this constant drawdown isn't affecting the groundwater table. (NMS-B-4)

**Response:** *The text of Section 2.2.2 of the SEIS was modified to better describe the cone of depression associated with dewatering at Unit 2. The elevation of Lake Ontario, which ranges between 74.2 to 75.4 m (243 to 247 ft) International Great Lakes Datum (IGLD) or National Vertical Geodetic Datum (NGVD) (see Section 2.2.3 of the SEIS for explanation of the lake level and datums), establishes the regional base level of the groundwater. The data, as cited in the SEIS, from a monitoring well between Unit 2 and the plant boundary to the northeast (i.e., the New Haven shoreline) shows the groundwater elevation to be at least 77.4 m (254 ft) NGVD.*

*The existing information described in this SEIS is sufficient to demonstrate that the extent of the cone of depression due to the drawdown of water around the foundation of Unit 2 is well within the plant boundary and does not affect the availability of water outside of the plant proper.*

**Comment:** Page 2-22, Section 2.2.2 Water use, lines 13-22: It may be appropriate to do periodic water-quality analyses of the discharge from the dewatering activity to ensure that pumping of the groundwater does not draw contaminated water from the petroleum contaminant plume. This may not be necessary if the text included technical discussion as to the fate and transport of the petroleum contaminant plume. The discussion should include information about whether the cone of depression has reached equilibrium or is still expanding; and distance from the former vehicle maintenance area to the dewatering pumps. (Figure 2-4 on page 2-6 is too blurry to determine this information). (NMS-G-6)

**Response:** *The text of Section 2.2.2 of the SEIS was modified to address the comment. The site investigation report cited in the SEIS, Section 2.2.1 (Geomatrix Consultants, Inc. 2002) shows the area affected by petroleum compounds to be approximately 18 m x 23 m (60 ft x 75 ft). Periodic monitoring conducted since that report and required by the State of New York shows no growth of the affected area and concentrations of petroleum compounds declining to near or below cleanup levels (email communication, Constellation Energy Group 2006 ML060620591). The nearest edge of the area affected by petroleum compounds is over 150 m (500 ft) from the edge of the drawdown cone of depression (email communication, Constellation Energy Group 2006 ML060620591). Because concentrations within the affected area are very near the cleanup criteria and declining and are geographically separated from the effects of the Unit 2 dewatering, monitoring of the dewatering effluent is not conducted. The State of New York Department of Environmental Conservation regulates and regularly evaluates the monitoring of all plant discharges through the State Pollutant Discharge Elimination System permit currently in effect for the NMP. Because the dewatering system has been operating for over fifteen years, the cone of depression is at equilibrium with the surrounding groundwater system.*

**Comment:** Page 2-23, Section 2.2.3 Water Quality, lines 30-32: This section describes the sources of water for Lake Ontario, but only describes surface water sources. As much as 42 percent of the water supply for the lake may be groundwater entering by direct and indirect pathways, which has implications for impacts of human activities on the quantity and quality of lake water. Information about the interaction of groundwater and surface water in the Great Lakes can be found on the internet at: <http://mi.water.usgs.gov/splan8/sp08400/intljoint.php>. (NMS-G-7)

**Response:** *Direct discharges of groundwater directly into the lake through the lake bottom are not typically large factors in the overall water budgets for the Great Lakes (<http://water.usgs.gov/ogw/pubs/WRI004008/sum-con.htm>). The citation provided in the comment states that "...indirect discharge of ground water to the Great Lakes ranges from 22 percent of the basin water supply of Lake Erie to 42 percent of the basin water supply for Lake*

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Ontario.” Note that though this water may originate as groundwater, it flows into the lakes as surface water (<http://mi.water.usgs.gov/splan8/sp08400/intljoint.php> accessed 20 January 2006). The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.

### **A.2.5 Comments Concerning Aquatic Ecology**

**Comment:** I would suggest that even though they are not edible, that I think that zebra mussels should be included into the environmental assessment. They are filter feeders, and they incorporate a lot of water, and I think that maybe they would be a good indicator as to radionuclides in the environment. (NMS-B-8)

**Response:** *The staff agrees that the zebra mussel (Dreissena polymorpha) is a species with a capacity to filter large quantities of water while feeding, but they are not an important food source for recreationally or commercially valuable species and therefore do not represent an important human exposure pathway for radionuclides. The NRC has comprehensive programs in place to monitor radionuclides in the environment around the vicinity of nuclear power plants. NRC requires licensees to annually submit reports of plant discharges including liquid and airborne radioactive effluents discharged from plants. Licensees also must report environmental radioactivity levels around their plants annually. These reports, available to the public, cover sampling from TLDs (thermoluminescent dosimeters); airborne radioiodine and particulate samplers; samples of surface, groundwater, and drinking water and downstream shoreline sediment from existing or potential recreational facilities; and samples of ingestion sources such as milk, fish, invertebrates, and broad leaf vegetation. The NRC conducts periodic onsite inspections of each licensee's effluent and environmental monitoring programs to ensure compliance with NRC requirements. The current program is adequate to determine the movement of radioisotopes in the environment, for these reasons the staff does not recommends the use of zebra mussels as indicator species for radionuclides. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** Both Ninemile 1 and Ninemile 2 have the potential to entrain and impinge fish and other organisms. For example, during the period of 1973 – 1997, an average of approximately 700,000 fish were impinged annually at Ninemile 1. In 1997, an estimated 86.8 million ichthyoplankton were entrained at Ninemile 1 between April and August. We disagree that these impingement and entrainment losses can be characterized as “small”, as concluded in the GEIS. We also disagree with the analysis presented in the GEIS that minimizes the significance of these losses by expressing them as a percentage of the total fish in Lake Ontario. The GEIS indicates that measures in place at Ninemile 1 provide mitigation for impacts related to entrainment and impingement, but the mitigative measures are not presented. We recommend that the Final GEIS present the specific mitigative measures employed, with an analysis of how these measures serve to minimize and compensate for entrainment and impingement losses. (NMS-G-1)

**Response:** *Based on the information currently available, the NRC staff concluded that losses of fish and shellfish from impingement and entrainment are SMALL when compared to lake-wide estimates of population size (a small fraction of less than one percent). Based on the magnitude of these losses relative to lake-wide population, the staff believes that additional mitigation is not warranted at this time for Nine Mile Point Unit 1. Nine Mile Point Unit 2 uses a closed-cycle cooling system and this facility therefore meets the performance standard for establishing the use of the best technology available for minimizing adverse environmental impacts at the facility. The NRC staff recognizes that further studies may be required for Nine Mile Point Unit 1 under the 316(b) Phase II EPA rule. The studies may result in additional mitigation measures for this facility. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** The NRC has determined that entrainment and impingement impacts are “small” for all plants using closed cycle cooling systems (such as Ninemile 2) and do not require site-specific analyses for purposes of license renewal. Ninemile 2 has an intake flow of about 77 million gallons per day (based on 53,600 gpm), compared to 418 million gallons per day at Ninemile 1. Although the volume of water is considerably less at Ninemile 2 than Ninemile 1, the water velocity at the intake of Ninemile 2 is 3 feet/second, compared with the 2 feet/second at Ninemile 1. This high water velocity at the intake may contribute to greater entrainment and impingement than may be anticipated with the flows at Ninemile 2. We recommend that data be collected to demonstrate actual entrainment and impingement losses at Ninemile 2, and that measures be taken to mitigate for impacts. (NMS-G-2)

**Comment:** The GEIS indicates in section 4.1.1. that the U.S. Environmental Protection Agency (EPA) published a final rule in 2004 addressing cooling water intake structures at existing power plants whose flow levels exceed a minimum threshold of 50 million gallons per day (Phase II of EPA 316(b) regulations). Therefore, Ninemile 2 may have to comply with these EPA guidelines to further reduce entrainment and impingement. This point should be clarified in the Final GEIS. (NMS-G-3)

**Response:** *The NRC staff recognize that Nine Mile Point Unit 2 must demonstrate compliance with the 316(b) Phase II EPA rule. Five alternatives for meeting the performance standards for reducing impingement mortality and entrainment are available under this EPA rule. One alternative is for the facility to demonstrate that it has already reduced its flow to that of a closed-cycle system. Nine Mile Point Unit 2 already uses a closed-cycle cooling system. Its intake structure has a design intake velocity of 0.15 m/s (0.5 ft/s) as described in Section 2.1.3.2. This also meets the design intake velocity required under the 316(b) Phase II EPA rule. Nine Mile Point Unit 2 also uses a fish diversion system to further reduce the number of fish impinged on traveling screens (also described in Section 2.1.3.2). A Phase II existing facility that demonstrates that it has already reduced its flow commensurate with a closed-cycle recirculating system, or that has already reduced its design intake velocity to 0.5 ft/s or less has met the performance standard required and does not need to submit a Comprehensive*



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*Demonstration Study with their SPDES application. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** There is the potential for heated return water to adversely affect biota at the site of discharge. Heat shock surveys from 1969 – 1974 demonstrated that no aspect of the biotic community was impacted by the heated discharge of Unit 1. Due to changes in the biotic community in the past 30 years, we recommend that additional studies be performed in the vicinity of the heated discharge to support the preliminary conclusion of the GEIS that the potential impacts to fish and shellfish due to heat shock are “small”. (NMS-G-4)

**Response:** *The staff interprets the comment as implying that the heat shock studies done between 1969 and 1974 may not be applicable now due to the biotic changes in Lake Ontario over the last 30 years. Heat shock events are generally quite visible and reported to state and federal officials by licensees and observant citizens. No such reports have been found. Furthermore, the biotic changes in the lake have not been so significant that new or previously more heat shock intolerant species are now more prevalent. Finally, the conditions conducive to heat shock events (rapid increase in temperature in a confined area to organisms that are adapted to cold or colder temperatures) is not likely to occur and evidently has not occurred at the NMP site. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** A filter boom, such as the Gunderboom System, may prevent fish larvae and eggs from entering the water intake pipes. Fish larvae, eggs, and debris are removed and released downstream of the boom with small bursts of air along the length of the filter. This system is currently being used at three other major power plants in New York and has been determined to be the Best Technology Available, where its use is feasible. It is recommended that this type of technology be considered as a means to reduce fish entrainment and impingement. (NMS-G-5)

**Response:** *The NRC acknowledges that Nine Mile Point Unit 1 may require further studies under the 316(b) Phase II EPA rule and that further mitigation may be warranted after evaluation of the results. The NRC staff also recognize the potential benefits of using filtering systems as an option to decrease fish impingement and entrainment. These systems need to be evaluated considering flow, fouling, and ice conditions found in Lake Ontario as well as the seasonal activity of the fish, fish eggs, and larvae. The NRC expects that the NYSDEC, in implementing the 316(b) Phase II EPA rule for Nine Mile Point Unit 1 will work with staff to determine if such a filter system is warranted in the future. However, based on the rate of filtering per square foot and the water requirements of Unit 1, such a system is likely to be impracticable. Additionally, the NRC may have significant safety concerns related to maintaining flow to the facility under all circumstances. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** Page 2-33, Lines 2-3. The text states the Oswego River is the spawning area for lake sturgeon. While it has been identified in the past as a spawning area based on 1982 observations as documented in NYSDEC 2004b, it is not certain if it is still a viable spawning area. More recently, NYSDEC has identified four areas where distinct and reproducing populations remain (St. Lawrence River downstream of Massena, Niagara River above and downstream of the Falls and the Grasse River in St. Lawrence County as indicated in a NYSDEC 2003 press release [<http://www.dec.state.ny.us/website/reg6/press/2003/6ro322.html>]. (NMS-H-8)

**Response:** *The comments are noted and Section 2.2.5 has been updated. To clarify Section 2.2.5, the text has been changed to reflect that the Oswego River is considered a historic spawning area of the state threatened lake sturgeon. Historically, Lake sturgeon have been collected in the Oswego River (NYSDEC undated). It is noted that the NYSDEC currently identifies only four areas with distinct and reproducing lake sturgeon populations; that is, St. Lawrence River downstream of Massena, the Niagara River above the Falls, the Niagara River downstream of the Falls and the Grasse River in St. Lawrence County (NYSDEC 2003). As recently as 1993, The NYS Oneida Fish Hatchery released Lake sturgeon into the Oswego River (Rathje 2000).*

*Reference: New York State Department of Environmental Conservation (NYSDEC).(Undated). Similarities and Differences Among New York's Sturgeon. Accessed at: <http://www.dec.state.ny.us/website/dfwmr/fish/fishspecs/sturgtbl.html> on January 27, 2006.*

*Reference: New York State Department of Environmental Conservation (NYSDEC).(2003). Lake Sturgeon Restoration Looks Promising in North Country (September 25, 2003). Accessed at: <http://www.dec.state.ny.us/website/reg6/press/2003/6r0322.html> on January 27, 2006.*

*Reference: Rathje, C. (2000). NYS Oneida Fish Hatchery Lake Sturgeon Stocking History. Lake Sturgeon Research Meeting, Update on Lake Sturgeon in New York State Waters, Abstracts and Meeting Summary (January 27, 2000). Accessed at: <http://www.fws.gov/midwest/sturgeon/cornell.html> on January 27, 2006.*

**Comment:** Page 4-12, Lines 20-21. Clarify that the Phase II performance standards are designed to significantly reduce entrainment losses due to plant operation from a baseline condition. This fact is important because NMP already had some “credits” against the baseline condition as defined in the Phase II rule. (NMS-H-28)

**Comment:** Page 4-15, Lines 29-30. Clarify that the Phase II performance standards are designed to significantly reduce entrainment losses due to plant operation from a baseline condition. This fact is important because NMP already had “credits” against the baseline condition as defined in the Phase II rule. (NMS-H-30)

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**Response:** *The staff notes that the Phase II performance standards are designed to reduce impingement mortality by 80 to 95 percent and entrainment by 60 to 90 percent from the calculated baseline for each facility regulated under this EPA rule. However, the wording in this section is intended to provide a broad description of the Phase II performance standards and the introduction of the concept of comparison to a baseline is more detail than is necessary. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** Page 4-13, Line 34. The text states that there is a discharge canal. Given that there is no discharge canal at Nine Mile Point, please revise. (NMS-H-29)

**Response:** *The comment is noted. The staff agrees that a discharge canal does not exist at Nine Mile Point. The text in Section 4.1.1 of this SEIS has been changed to reflect that sampling collection occurred at the greenhouse building's discharge tunnel.*

**Comment:** Page 4-16, Lines 1-12. Percent of Individuals Collected values appear to be averages of percent per year. Given the variation in total numbers impinged each year, a better representation of the percentages would be to divide the total number impinged of each species by the total impinged. For example, the latter calculation results in 82% for alewife and 7% for smelt compared to 60% and 20% as stated on page 4-16. (NMS-H-31)

**Response:** *The Percent of Individuals Collected column in the table (Table 4-3, Section 4.1.2) is the average annual impingement abundance for each species of interest at Nine Mile Point Unit 1 for 24 years. For example, on average for any given year, alewife comprised approximately 60 percent of all fish impinged. If not averaged over 24 years, annual alewife impingement abundance ranged from 0 to 93 percent of all fish impinged; the median annual alewife impingement abundance was 54 percent during that time period. This average annual impingement abundance provides a value that, despite variations in total fish impinged each year, provides a more accurate estimation of which species comprise those most often impinged. A calculation that divides the total number of individuals impinged for each species by the total number of fish impinged for all species, over the entire 24 year time period, provides less understanding of the year-to-year variation of the total make up of species involved in impingement losses and the impact of impingement across all species. That is, the values from this latter calculation maximizes the perceived impact to more abundant species (e.g., alewife now 82 percent rather than 60 percent) and minimizes the perceived impact to less abundant species (e.g., smelt now 7 percent rather than 20 percent). It is the staff's determination that more information is conveyed when one represents the annual average impingement abundance for each species rather than a total impingement abundance over 24 years. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*



**Comment:** Page 4-16, Line 16. Over the period discussed (1972-1983), rainbow smelt were also the most abundant species impinged in 1982, in addition to 1979 as documented in reference NMPNS 2004b. (NMS-H-33)

**Comment:** Page 4-16, Line 22. As documented in reference NMPNS 2004b, the highest number of fish impinged was in 1973 rather than 1976. Greater than 5 million fish were estimated to be impinged during that year. Please revise. (NMS-H-34)

**Comment:** Page 4-18, Line 6. As documented in reference 2004b, large die-offs of alewife typically occur during winter, not spring. Please revise. (NMS-H-35)

**Response:** *Section 4.1.2 has been modified in response to comments.*

**Comment:** The EPA's new rules under Section 316(b) of the Clean Water Act (in 40 C.F.R §125) require Nine Mile Point Nuclear Station to reduce its entrainment of fish and shellfish in early life stages. Although the draft SEIS makes mention of the new rules that are in effect, it does not identify any measures that the facility has taken or will take to mitigate for entrainment and impingement, such as a high-frequency fish deterrent system or fish return troughs. The draft SEIS seems to imply that the main reason for the high rate of entrainment and impingement of fish is the fact that there is an abundance of fish in the water near the intake, rather than the fact that the facility draws in such a great volume of water. If specific location is the problem, then mitigation measures to reduce that abundance near the intakes should be instituted, thereby reducing the entrainment and impingement rates. Of particular concern is the fact that the important forage species, alewife and rainbow smelt, are in decline in the lake overall, and that these are the species found most entrained in the facility's flows. To be in accord with the new 316 (b) regulations, the facility will have to propose mitigation measures to minimize these impacts and we recommend that the final SEIS address which measures the Nine Mile Point station will employ. As such, we recommend the final SEIS not include the following statement: "The staff concludes that the potential impacts of entrainment of fish and shellfish in the early life stages into the cooling water intake system are SMALL, and further mitigation measures are not warranted." This conclusion is premature since mitigation will be deferred to the NYSDEC permit process. NYSDEC will determine what mitigation measures are necessary and need to be reflected in the plant's next discharge permit. (NMS-J-1)

**Response:** *The NRC staff recognizes that further studies may be required for Nine Mile Point Unit 1 under the 316(b) Phase II EPA rule. The studies may result in additional mitigation measures for this facility. However, based on a comprehensive review of the information currently available, the NRC staff concluded that losses of fish and shellfish from impingement and entrainment are SMALL and additional mitigation is not warranted at this time for Nine Mile Point Unit 1. The conclusion of SMALL impact is based on an assessment of losses of individuals due to station operation to the standing crop of targeted species in the lake. Nine Mile Point Unit 2 uses a closed-cycle cooling system and this facility therefore meets the performance standard for establishing the use of the best technology available for minimizing*

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*adverse environmental impacts at the facility. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** We also recommend that the final SEIS not view entrainment and impingement as mutually exclusive impacts, but instead assess the combined effects of entrainment and impingement, particularly since both impacts substantially affect a discrete number of species. (NMS-J-2)

**Response:** *The comment is noted and wording in Section 4.8.1 of the Supplement have been changed to address the combined effects of entrainment and impingement.*

**Comment:** The draft SEIS states that the results of biological studies demonstrated that no aspect of the biotic community was influenced or impacted by the heated discharge. However, these studies were done from 1969 to 1974, and at this point are far too old to be relied upon to determine that there continues to be no influence or impact to biota in the lake from the heated discharge. (NMS-J-3)

**Comment:** In a related matter, the study of the thermal plume and mixing zone is also too old (1975), to be a reliable determination of current effects and impacts. (NMS-J-4)

**Comment:** Also the draft SEIS does not contain enough information to support these conclusions and should have summarized these results in either tabular or narrative form to allow the reviewers the opportunity to come to the same conclusion. EPA Region II gave direction to NRC for choosing representative important species for the studies. We strongly recommend that new and current studies should be done for these representative species and those results be presented in the final SEIS. The studies should also address the less conspicuous ability of heat to preclude the use of affected areas by temperature sensitive species, attract and expose organisms to areas of elevated temperature during spawning periods, and expose eggs and larvae to water temperatures far exceeding naturally ambient levels. (NMS-J-5)

**Comment:** The draft SEIS also contains the conclusion that the potential impacts to fish and shellfish are small. As we have stated before, we believe that these kinds of conclusions are premature, particularly in this instance where current studies to determine the significance of the impact need to be done. The final SEIS should refrain from that terminology until that has been proven to be the case. (NMS-J-6)

**Response:** *The staff found no new and significant information indicating that Nine Mile Point cooling-system operations or aquatic resources potentially influenced or impacted by heat discharge have significantly changed to render the thermal discharge studies unrepresentative for present SEIS determinations. To the contrary, the staff found the area experiencing elevated temperatures due to station operation are small and easily avoided by thermally*

*intolerant species. The thermal plume rapidly ascends the water column and does not significantly interact with the lake bottom. The NYSDEC is responsible for the SPDES permit conditions and will decide if any further studies to determine if additional mitigation of the thermal discharge is warranted. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

#### **A.2.6 Comments Concerning Terrestrial Resources**

**Comment:** Page 2-38, Lines 18-21. Reference NMPNS 2004e does not support the information presented and should be removed and/or replaced. (NMS-H-11)

**Comment:** Page 2-40, Line 20. The date of the survey should be changed from 1979 to 1976 as documented in NMPC 1985. (NMS-H-12)

**Comment:** Page 4-20, Line 34. Cited reference NMPNS 2004b does not support information presented in Lines 27-32 regarding tree trimming, herbicide use, mowing, and use of buffer strips. Please revise to clarify the source of this information. (NMS-H-36)

**Response:** *The comment is noted, and wording in the identified section of the SEIS has been changed to reflect this information.*

**Comment:** Page 2-43, Line 25. Suggest adding the following: 'Occurrence at the Nine Mile Point site or associated rights-of-way has not been documented.' as supported by reference NMPNS 2004e. (NMS-H-14)

**Response:** *Staff is aware of the referenced survey but decided not to include its findings because the data set was collected more than 20 years ago. There were no changes made in the SEIS from these comments.*

#### **A.2.7 Comments Concerning Air Quality**

**Comment:** The generic impact statement indicates that the diversity of climate at Nine Mile Point is not usually encountered within such a small area. It further states that the meteorological data recorded for Ithaca, located in north central New York, are generally representative of the Nine Mile Point Area. What the report fails to communicate is that Oswego County may have notable snowfall from October to May. Snowfall, up to 3 feet have accumulated in this area overnight. The area experiences blizzard conditions during the winter and many snow advisory or warning are issued. Because this area is very unique, the meteorological data could be collected on site. (NMS-I-3)

**Response:** *Snow events are associated with large scale meteorological phenomena (several kilometers to hundreds of kilometers). Snowfall magnitudes along with other relevant weather*

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*measurements are captured well by current and historical data being taken in Oswego and adjacent counties bordering Lake Ontario. This includes the onsite measurements at the Nine Mile Point 61-m meteorological tower (see Section 2.2.4).*

*The comment provided no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

### **A.2.8 Comments Concerning Socioeconomics**

**Comment:** We continue to be committed community partners. We provide community support in the form of good, stable jobs. And in terms of participating in funding events and organizations important to the local area. Last year, Constellation Energy and its employees provided more than 300,000 dollars in donations to community organizations and events. (NMS-A-4)

**Response:** *The comment is noted and is supportive of license renewal. The comment provided no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** The other thing is, I read through the draft report, I noticed that it talked about a transient population. We have a very large transient population here in Oswego County, because much of our land is farm land. We have a lot of immigrants coming in from whether it's Mexico or Puerto Rico or whatever. And I didn't see them included in the large transient population. (NMS-B-3)

**Response:** *Data on the number of migrant farm workers in both counties is presented in Section 2.2.8.5 of the Draft SEIS, and the number is very small relative to the total population in both counties (less than 0.05 percent). The SEIS states that there may have been additional migrant workers present in each county that were not counted by the census as they may not have been resident in the area at the time the census was taken. However, while large increases in the number of migrant workers in parts of both counties might affect housing, schools and public services in certain parts of both counties, the location and length of employment and residence of migrants in the two counties cannot be determined. In general, the undercounting of migrants in census data is not likely to have significantly understated the importance of the migrant population relative to the total population in the two counties. As indicated in Section 2.2.8.5, there is also a transient population in both counties, primarily associated with recreation activities and college attendance. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** Based upon this review, the NYSHPO understands that there are no ground disturbing activities associated with the relicensing and has no further concerns with this undertaking. (NMS-E-1)

**Response:** *The comment is noted. The comment provided no new and significant information; therefore, the comments were not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** However, we would like to note that the NYSHPO does not accept probability models as discussed on pages 4-33 to 4-35. It is our policy to require Phase I archaeological investigation for the entire area of potential effect (APE) and not just those areas ranked as having a moderate to high probability of containing archaeological resources. (NMS-E-2)

**Response:** *The discussion in Section 4.4.5 does not conflict with the NYSHPO policy. The text of that section was modified to make the NYSHPO policy clear; that archeological investigations are required for the entire area of potential effect from ground disturbing projects.*

**Comment:** Page 2-53, Table 2-10 and Page 2-52, Line 25. Percent of total acres for Oswego County in the land use categories of "Public" and "Commercial and Industrial" are not documented in Reference NMPNS 2004e. An additional reference is needed. (NMS-H-19)

**Comment:** Page 2-58, Line 5-14; Page 2-59, Table 2-13. Footnote should be added to Table 2-13 explaining conversion of actual dollars as found in the cited reference to '2005 dollars' used in the text and table. (NMS-H-21)

**Comment:** Page 2-58, Line 12. Data for the year 2001 is not in the cited reference, NMPNS 2004e. If the 2001 data is available, add appropriate reference. (NMS-H-22)

**Comment:** Page 2-63, Line 9. FitzPatrick Nuclear Power Plant is no longer owned by the New York Power Authority. The text should be corrected to reflect ownership by Entergy. (NMS-H-23)

**Comment:** Page 4-32, Line 14. Text should be changed to reflect that tax payments to the City have fallen from 56 percent to 43 percent over the period from 1995 to 2000. Data was not available for the year 2001 in the cited reference, NMPNS 2004b. Or, if data available, add appropriate reference. (NMS-H-38)

**Response:** *The comments are noted, and wording in the identified sections of the SEIS have been changed to reflect this information.*

**Comment:** Page 4-37. Figure 4-1. Shaded areas on Figure 4-1 do not appear to correspond to areas noted in text of page 4-38 as having minority populations. No minority populations were identified in Oswego or Seneca Counties in the text and there are some depicted on the figure. Jefferson County is noted as having minority populations, yet none are apparent on the figure. The minority populations depicted on the figure in Cayuga County do not appear to correspond to those in the cited reference NMPNS 2004b. (NMS-H-39)

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**Response:** *The comment is noted, figure 4-1 and the text in the SEIS have been modified to more clearly depict the information provided in reference NRC 2006.*

**Comment:** Page 4-39, Figure 4-2. Shaded areas on Figure 4-2 do not appear to correspond to areas noted in text on page 4-38 as having low-income populations. The low-income populations depicted on the figure in Cayuga, Oswego, Oneida, and Jefferson Counties do not appear to correspond to those in the cited reference NMPNS 2004b. (NMS-H-40)

**Response:** *Figure 4-2 has been modified in response to comment.*

**Comment:** We are concerned that the Environmental Justice evaluation is too broad and therefore, inadequate to evaluate the impacts to environmental justice communities. The draft SEIS discussed that an examination of minority and low income populations was done for a 50 mile radius around the Nine Mile Point Station. While this is helpful to determine locations EJ communities, it is too wide an area for an EJ impact evaluation of a specific facility. A more meaningful evaluation would be a thorough examination of the census blocks one to five miles from the facility (for example, Oswego has 8 census blocks that are considered low-income) and then a smaller scale analysis down to the neighborhoods immediately adjacent to the facility. Though the draft SEIS did identify some EJ community census blocks, the document was not specific as to their exact location. Our concern is that typically, low income and minority communities will be living near facilities such as Nine Mile Point, due to the relatively cheaper housing that is often located adjacent to large industrial facilities. Should this turn out to be the case and an EJ community is identified within these narrower bounds, the final SEIS should provide an evaluation on the communities environmental burden and Nine Mile Point's impact to those communities. (NMS-J-7)

**Response:** *The analysis of environmental justice issues in the SEIS provides a description of all census block groups with minority and low-income populations, identified using NRC criteria, within a 50-mile radius of the plant, including those block groups that are located in the vicinity of plant itself. The precise locations of these block groups are provided in Figures 4-1 and 4-2 of the SEIS. The 50-mile radius was used in the analysis to assess the potential impacts of radiological releases from the plant in the event of an accident, with any human health or environmental impacts resulting from an accidental release most likely to occur within an area up to 25 miles from the plant. Any high and adverse impacts that could potentially affect minority and low-income populations in this area were included in the analysis, regardless of the exact location of census block groups in which these populations have been identified. Figures 4-1 and 4-2 have been modified to more clearly show the location of low-income and minority populations.*

### **A.2.9 Comments Concerning Human Health**

**Comment:** Also if the plants are releasing 100 curies per year, I am really questioning the one millirem per person dose factor of people around the plants. (NMS-B-9)



**Comment:** I do not believe I received a clear and concise answer to my questions about meteorological data and highest exposure to radiation from the Nine Mile Point facilities. I was told that highest exposure occurs at the fence boundary. Does the highest exposure equate to highest deposition of particulate matter thus highest exposure, or from gamma ray exposure? If this is due to particulate matter, do sheering winds exist at the site that would cause radioactive isotope releases from the emission stacks to be directed in a downward plunge to the fence line? It would be my understanding that isotopes with greater atomic mass would settle faster and closer to the site, and that lighter, less dense isotopes would be transported by wind and be deposited further from the site. Depending on the wind speed carried miles from the site. (NMS-I-5)

**Comment:** I asked about the maximum dose calculation and what were the gender, age and relative health of the individual for which dose is calculated. The answer I received was that a person living at the fence boundary, growing and eating vegetables, was the dose that is used. This answer does not quantify my question and is vague at best. I understand that that the releases of radiation are as low as reasonably achievable (ALARA). ALARA does not formulate a quantitative answer because of the variables of equipment and "normal" operations at the facility. ALARA aside, is this radiation exposure and calculation based on a young child who is a vegetarian and fed exclusively from the vegetables that would be grown on this fence boundary? Or, is this a healthy adult male who prefers to eat few vegetables in their diet? What type of vegetables do these hypothetical people eat? Certain vegetables would have greater uptake of specific radionuclide than others.

There are many variables in the human population. However, I would hope that the most conservative example would be used for the potential health effects of radiation exposure for local residents. Consider the infant that nurses from a mother that drinks the milk from a cow that grazes on the vegetation in the area around the nuclear plants. This mother also grows her family's vegetables on this same site? Also consider that this same cow becomes the meat the family consumes. Some of the families in Oswego County are getting radionuclide through much more than vegetables. This is the situation that exists for some of the residents around the nuclear plants in this area. (NMS-I-6)

**Response:** *The annual releases from NMP and the estimated doses to individuals in the vicinity of the plants are provided in the annual radioactive effluent release reports and summarized in Sections 2.1.4 and 2.2.7 of this SEIS. As stated in Section 2.2.7, the average annual maximum whole body dose received by a member of the public outside the site boundary over the five-year period 2000 to 2004 was estimated to be 0.0059 mSv (0.59 mrem). The offsite dose calculation manual (ODCM) included as part of these reports provides information about the models used to estimate the doses. All the models have been reviewed by the NRC.*

*For the purposes of demonstrating compliance with the applicable regulations, the doses for hypothetical maximally exposed individuals (MEIs) are calculated at Nine Mile Point. In*

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*calculating the doses for these MEIs, a series of conservative assumptions are made to maximize the MEI's dose and thus ensure that the dose received by any real person living near the plant is not likely to be greater than the calculated MEI doses. The methodology and assumptions used to calculate the MEI's dose are given in the ODCM.*

*Average meteorological data are used for dose and dose rate calculations. Since the atmospheric releases are continuous or intermittent spread over a year, it is appropriate to use annual average meteorology. Meteorological models account for both ground level and elevated releases such as the main stacks for both units..*

*The MEI's doses are calculated for each radionuclide and each pathway separately using assumptions about the individual (infant, child, teen, and adult) and individual's location (site boundary or a location beyond the site boundary where the dose would be higher depending on the pathway of exposure). Using the age-specific dose factors the doses are calculated for different combinations of individual types and locations, and then summed such that the total dose received by the MEI is maximized. As a result, the MEI dose reported in the RERRs and the SEIS may actually be the sum of doses received by an individual who may be an adult at the site boundary for the external exposure pathway, but a child at more than 2 mi (3.2 km) away for the grass-cow-milk or grass-goat-milk pathways. Locations for some of the pathway doses are also likely to change from time to time. For example, the grass-cow-milk, grass-goat-milk, and grass-cow-meat pathways are applied at locations where the ground deposition per unit release is greatest and where cows and goats can be found. These locations are determined in conjunction with the annual land use census and are subject to change.*

*The comments provide no new information. There were no changes made to the SEIS because of these comments.*

**Comment:** And then my other big thing is about the assumption, that I know I need to speak more with some of you about this. But the one assumption, particularly with the health studies, you mentioned based on Chernobyl, and based on the effluents. But that seems like a pretty big assumption, to go from like what might be predicted to happen from the radiological effluents or based on other data from other sources. It seems to me, why not be more certain? Isn't that what science - you are supposed to be reducing uncertainty. So it seems to me that more efforts - you know, you have the resources to do it. Why aren't you doing it? Why aren't you going into the community and actually monitoring the health of people in the community? (NMS-D-2)

**Response:** *The comment proposes monitoring the health of people living near Nine Mile Point. The evaluation of health effects from exposure to radiation, both natural and man-made, is an ongoing activity involving public, private, and international institutions. International and national organizations such as the International Commission on Radiological Protection and National Council on Radiation Protection and Measurements provide consensus standards developed from recent and ongoing research.*



*NRC's regulatory limits for effluent releases and subsequent dose to the public are based on the radiation protection recommendations of these organizations. NRC provides oversight of all licensed commercial nuclear reactors to ensure that regulatory limits for radiological effluent releases and the resulting dose to the public from these releases are within the established limits. The regulations related to radiological effluents and dose to the public can be found in 40 CFR 190, 10 CFR Part 20, and 10 CFR Part 50, Appendix I.*

*Gaseous and liquid effluent releases are monitored at NMP to demonstrate that they are within regulatory limits. As stated in Section 2.2.7, the dose to the hypothetical maximally exposed individual is less than one millirem per year. Health effects due to radiation exposure at this level are highly unlikely and would be indistinguishable from effects due to background radiation. The average dose from all sources of radiation including the natural background is approximately 360 mrem per year. Therefore, neither the NRC nor the licensees directly monitor the health of the people in the communities around nuclear power plants. In 1990, at the request of Congress, the National Cancer Institute conducted a study, "Cancer in Populations Living Near Nuclear Facilities," to look at cancer mortality rates around 52 nuclear power plants (including NMP) (NCI 1990). The study concluded that there was no evidence to indicate that an excess occurrence of cancer resulted from living near nuclear power plants.*

*The comment provides no new information. There were no changes made to the SEIS because of this comment.*

**Comment:** Page 2-14, Line 34. Value for particulates should be  $2.71 \times 10^{-2}$  Ci and 1003 Mbq, as documented in Attachment 2 of the following references: NMPNS 2001b and c, NMPNS 2002b and c, NMPNS 2003d and e, NMPNS 2004a and b, and NMPNS 2005a and b. (NMS-H-4)

**Comment:** Page 2-15, Line 5. Unit 2 value for particulates should be  $2.29 \times 10^{-3}$  Ci and 84.7 Mbq, as documented in Attachment 2 of the following references: NMPNS 2001b and c, NMPNS 2002b and c, NMPNS 2003d and e, NMPNS 2004a and b, and NMPNS 2005a and b. (NMS-H-5)

**Response:** *Staff verified the referenced sources and calculations performed for the numbers given in Table 2-2 and in text for the release of particulates in gaseous effluents to the atmosphere. To fully cover the period 2000 to 2004, these references include NMPNS 2005a,b; 2004a,b; 2003d,e; 2002b,c; 2001a–c; 2000a,b. References NMPNS 2000c and NMPNS 2000d were included in the list in the draft SEIS but were not used to generate the numbers in the draft SEIS. The reference list has been changed to remove references NMPNS 2000c and NMPNS 2000d.*

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**Comment:** Page 2-47, Lines 38-39. The maximum organ dose is incorrect. Revise value to 0.0000073 mSv (0.00073 mrem) as documented in references NMPNS 2005a and 2005b. (NMS-H-15)

**Response:** *The organ doses for members of the public due to their activities inside site boundary are calculated based on inhalation of effluents from each unit separately. The organ dose for a hypothetical maximum exposed member of the public inside the site boundary due to releases from Unit 1 in 2004 is given as  $7.25 \times 10^{-4}$  mrem in (NMPNS 2005a). The organ identified is the lungs. The organ dose for a hypothetical maximum member of the public from Unit 2's releases in the same year is given as  $1.71 \times 10^{-4}$  mrem in (NMPNS 2005b). The organ for that individual is also identified to be the lungs. Even though the two hypothetical individuals may not be the same, for the purposes of these analyses, the staff conservatively assumed that the same person is subjected to releases from both Units in the same year, and the organ doses from the two units have been added to obtain the total organ dose for the individual as  $8.96 \times 10^{-4}$  mrem. The number has been changed to 0.0009 mrem (rounded off from  $8.96 \times 10^{-4}$  mrem) in the text.*

**Comment:** Page 2-48, Line 20. The range for the maximum organ dose is incorrect. Revise the values to  $8.03 \times 10^{-7}$  mSv and  $4.0 \times 10^{-5}$  mSv ( $8.03 \times 10^{-5}$  mrem and  $4.0 \times 10^{-3}$  mrem) as documented in the references NMPNS 2001b and c, NMPNS 2002b and c, NMPNS 2003d and e, NMPNS 2004a and b, NMPNS 2005a and b. (NMS-H-16)

**Response:** *The organ dose for a hypothetical maximum exposed member of the public due to his or her activities inside the site boundary for each of the years from 2000 to 2004 was calculated separately for each unit. The organ with the maximum dose was not always the same for each unit from year to year or from one unit to the other in the same year. To estimate the maximum organ dose in a given year, the staff conservatively assumed that the maximum organ doses from the two units were additive in a given year. In response to this comment, staff reviewed the calculations performed for the draft SEIS and determined that the upper bound of the range remains the same as was given in the draft SEIS, but the lower bound of the range increases to  $6.63 \times 10^{-4}$  mrem (from the  $5.5 \times 10^{-4}$  mrem value given in the draft SEIS). References NMPNS 2000c and NMPNS 2000d in the draft SEIS were also removed because they were not used. The text of Section 2.2.7 of this SEIS has been modified to reflect these changes.*

**Comment:** Page 2-48, Lines 23-24. The maximum organ dose presented (0.23 mrem) is the calculated average, not the maximum organ dose, for the period 2000 to 2004 (References NMPNS 2001b and c, NMPNS 2002b and c, NMPNS 2003d and e, NMPNS 2004a and b, NMPNS 2005a and b). The text should be corrected to so note. (NMS-H-17)

**Comment:** Page 4-24, Lines 18-24. Cited reference NMPNS 2004b does not fully support statements on Lines 20-23 indicating that field measurement demonstrated compliance with NESC and that Nine Mile Point transmission lines are below the size of concern for induced

shock. Suggest revising to indicate that compliance with the NESC code was demonstrated by field measurements and computer analyses, and deleting sentence regarding size of transmission lines. (NMS-H-37)

**Response:** *The comments are noted, and wording in the identified sections of the SEIS has been changed to reflect this information.*

#### **A.2.10      Comments Concerning Uranium Fuel Cycle and Waste Management**

**Comment:** Page 2-16, Line 39; Page 2-17, Line 1. Revise "...which can handle up to 454m<sup>3</sup>/d (120,000 gpd)" to read "...which is permitted for 454m<sup>3</sup>/d (120,000pgp) as a 30-day average. Daily flows range from 132-908m<sup>3</sup>/d (35,000-240,000 gpd)." to be consistent with information in NMPNS 2004e. (NMS-H-6)

**Response:** *The comment is noted, and wording in the identified section of the SEIS has been changed to reflect this information.*

**Comment:** One of the Department of Energy's (DOE) goals in their 2005 budget is to identify opportunities for recycling spent fuel, and a DOE lab is testing a process to make reprocessing spent fuel more viable. However, the draft SEIS did not address the issue of spent uranium fuel recycling in its discussion of the Uranium Fuel cycle. Since there has been significant progress in the area of recycling spent uranium fuel from commercial nuclear power plants, we believe that the final SEIS should address this issue and the likelihood that Nine Mile point may employ some recycling technology in the future. (NMS-J-8)

**Response:** *Environmental impacts of the uranium fuel cycle including the impacts associated with the recycling of spent nuclear fuel are addressed in Section 6.1 of the SEIS. Such impacts were considered by the Commission in developing Table S-3 of 10 CFR 51.51 (b). There has been considerable recent discussion on the possibility of recycling spent fuel. Such programs reported to employ a new technology are outside the scope of the SEIS. The actual recycling program for spent nuclear fuel, on any significant scale, will not occur for many years. Appropriate NEPA reviews will be conducted by the NRC and/or DOE prior to the implementation of any recycling program for spent fuel. The comment provides no new information. There were no changes made to the SEIS because of this comment.*

#### **A.2.11      Comments Concerning Alternatives**

**Comment:** Another thing I didn't see was, although alternative energy sources were looked at as far as the implication of how they would affect the Nine Mile Plant, they weren't noted as how they would affect the general employment. Oswego County has very high unemployment rate. And perhaps if wind, and solar, were invested in, it would create more job opportunities for the people in Oswego County, and not just being able to work with the nuclear plant. (NMS-B-6)

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**Response:** *The comment relates to the potential for more job opportunities using other forms of power generation. The comment does not pertain to the scope of the license renewal as set forth in 10 CFR Parts 51 and 54. However, the staff analysis is based on the GEIS which states that both wind and solar alternatives would have relatively small peak work forces and fewer long-term community benefits than large baseload plants (Table 8.1 of the GEIS).*

*The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** How so? How is it not? Because if the idea is that the plant would stop, would cease doing what it's doing right now, and the effects would be positive, then obviously what's happening now is negative. (NMS-C-1)

**Response:** *The comment refers to a statement in the draft SEIS in Section 8.1 under the heading "Ecology" in which the environmental impacts associated with cessation of operations at Nine Mile Point are described as being "generally positive." This statement does not conform with the three-level standard of significance described in Section 8.0 and has been removed from the text.*

**Comment:** page 8-45, Section 8.2.5.10 Delayed Retirement: It is my recollection that fossil plants are designed with a life of either 60 or 65 years, not the 40 years mentioned here. (NMS-F-2)

**Response:** *The comment relates to the design life of fossil plants. The comment does not pertain to the scope of the license renewal as set forth in 10 CFR Parts 51 and 54. However, the staff analysis is based on the GEIS which states that the average age of all types of fossil units is over 30 years and that utilities have been exploring repowering older fossil units to avoid large capital outlays for new plants. Older plants (units with in-service dates prior to 1970) that may be candidates for retirement tend to use less efficient generation and pollution control technologies than modern plants. Substantial upgrades are typically required to achieve efficiencies necessary to cost-effectively extend their operations and meet applicable environmental standards. If utilities were to make these upgrades, it is conceivable that a fossil plant could run for 60 to 65 years.*

*The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** Page 8-8, Line 8. Mention is made of the "Lakeview Subdivision immediately west" of NMP (also shown in Figure 2-3). This area is now occupied by the Ontario Bible Conference Camp, which is mentioned on page 2-1, Line 23 and shown in Figure 2-2 of the DSEIS. NRC may wish to revise this sentence to clarify this point. (NMS-H-41)

**Comment:** Page 8-14, Lines 16-17; Page 8-10, Line 13. The DSEIS states particulate emissions estimate data as 181 tons PM<sub>10</sub>. The correct data are 181 tons total (filterable) and 41 tons PM<sub>10</sub> (NMPNS 2004, page 7-35) (NMS-H-42)

**Comment:** Page 8-19, Line 1. The assumption of a 40-year operating life as stated here is not supported by the applicant's ER (NMPNS 2004), which is cited as the source of assumptions and numerical values in Section 8.2.2 unless otherwise indicated (page 8-18, Lines 32-33). Consider resolving the inconsistency by using the ER assumption (25 years) or citing another appropriate source. (NMS-H-43)

**Comment:** Page 8-19, Line 20. The estimated land requirement for the gas-fired alternative of 1600 acres is inconsistent with the 110 acre estimate cited elsewhere in this section (page 8-23, Line 12) and NMP ER (NMPNS 2004). (NMS-H-44)

**Comment:** Page 8-34, Line 25. The statement that no groundwater is currently used for NMP operation could be viewed as inconsistent with the fact that a dewatering system is employed for NMP Unit 2 (see Section 4.5.1 of the DSEIS). Acknowledgment of the dewatering system here should be considered for clarity. (NMS-H-45)

**Comment:** Page 8-46, Lines 6-8. For clarity and consistency with the analysis presented in DSEIS Section 8.2.5.10 and in the NMP ER Section 7.2.3.2 (NMPNS 2004), the phrase "retirement of other Constellation Energy Group generating units" should be replaced with "retirement of other generating units directly controlled by owners of Nine Mile Point". (NMS-H-46)

**Comment:** Page 8-48, Line 7; Page 8-50, Line 1. Adverse impacts for Nine Mile Point Site alternative in the Ecology and Aesthetics impact category in this table are greater than those presented in Table 8-3, yet the primary contributor to impact is a comparable but smaller capacity gas-fired combined-cycle plant. This apparent inconsistency in the DSEIS should be resolved. (NMS-H-47)

**Comment:** Page 8-52. The NMP ER (NMPNS 2004) is cited in Chapter 8 (e.g., page 8-7), but is not included in the list of references in Section 8.4. (NMS-H-48)

**Response:** *The comments are noted, and wording in the identified sections of the SEIS have been changed to reflect this information.*

#### **A.2.12 Comments Concerning Postulated Accidents**

**Comment:** pages A-25 and A-25: Can the presently existing 115 kV offsite power support an accident in one unit and orderly shutdown and cooldown of the remaining two units? Apparently

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this is required by General Design Criteria 5, according to this comment. I note that "these comments have been referred to the NRC operating plant project manager for disposition."

Until these comments have been completely addressed, I do not feel it is appropriate to extend the license of these plants. (NMS-F-3)

**Response:** *The comment refers to statements made by the commenter during the scoping process (see NMS-O-1 on pages A-24 and A-25). The commenter's statements were referred to the NRC operating plant project manager. In a letter dated July 26, 2005, (ML 050900353), from Mr. Peter S. Tam, NRC, to Mr. Farouk D. Baxter, PE (the commenter), the NRC addressed the commenter's safety concerns and concluded that Nine Mile Point meets the appropriate design criteria for offsite power supplies. The comment provides no new and significant information: therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** page G-21: I see a note 2 but am not able to identify what item(s) it refers to. In any event, why aren't the compensatory measures already in procedures, and when will they be? (NMS-F-4)

**Response:** *The comment pertains to "Note 2" at the bottom of Table G-4 on page G-21 of the draft SEIS, which refers to SAMA U2-214, "Enhance SBO procedures," on page G.20. The note indicates that compensatory measures are currently in use and will be included in planned revisions to the appropriate plant procedures.*



### **A.2.13 Comments Concerning Issues Outside the Scope of License Renewal: Aging Management, Need for Power, Emergency Preparedness, and General Comments**

#### Aging Management

**Comment:** Nine Mile Point, like every nuclear plant, is continuously being upgraded. Every critical operating part is routinely inspected and monitored by both us and the NRC's resident inspectors that are here today. Our normal routine for maintaining our nuclear plant involves inspection, repair, refurbishment, replacement of primary operating components every 24 months during regularly scheduled refueling and maintenance outages. And as technology advances, obsolete and early design components and systems are upgraded. (NMS-A-3)

**Response:** *The comment is noted. The comment does not pertain to the scope of the license renewal as set forth in 10 CFR Parts 51 and 54. The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

#### Need for Power

**Comment:** Nuclear energy at Nine Mile Point specifically is an important source of clean, cost-effective energy. About one in five homes in the United States is powered by nuclear energy. Nuclear energy avoids dependence on foreign oil. Nine Mile Point currently generates enough electricity to power more than two million homes. Nuclear energy needs to be a part of our country's diversified energy supply. (NMS-A-2)

**Response:** *The comment is noted. The comment does not pertain to the scope of the license renewal as set forth in 10 CFR Parts 51 and 54. The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

#### Emergency Preparedness

**Comment:** Oswego County's Evacuation Plan requires revision. The safety of the local citizens should be a primary concern and this plan should be updated regularly. The evacuation information is now located on the back of a scenic Oswego County calendar. Rather than address the potential and serious consequences of a possible release of radiation, spectacular landscape now captivates citizens and weakens the importance of evacuation. Calendars may be good, if the citizens actually use these, thereby keeping the escape routes handy. However, the gravity of the information is buried. The problems that might arise from mass exodus have not been addressed. The citizens themselves have never been asked to act as volunteers, to take part in the evacuation plan, nor are they informed about contamination.

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The evacuation plan has not considered the population expansion or decline in some areas. For example, there are four pick up sites for twelve homes on Lily Marsh Road and on Albright Road there is one pick up site for thirty one homes. Also in the aforementioned air quality, Oswego County experiences bleak weather conditions, which might make evacuation impossible or difficult at best.

The city of Oswego also hosts Harborfest. Upwards of 150,000 people attend this festival. I know of no brochures that are handed out to the tourists to assist in case of an evacuation. The evacuation plan should extent to the 50-mile radius around the nine Mile Point area. At the Chernobyl nuclear accident, contamination spread as far as Europe.

Propaganda is dispersed through these calendar/evacuation brochures. It states that the release of radiation was minimum at the Three Mile Island accident, when indeed the radiation monitors were inoperative and the actual release of radiation is unknown. (NMS-I-4)

**Response:** *The comments concern the County's plan in the event of an evacuation. The NRC's environmental review is confined to environmental matters relevant to the extended period of operation requested by the applicant. Through its standards and required exercises, the Commission ensures that existing emergency preparedness plans are adequate. While this is a legitimate matter of concern, emergency preparedness should continue to be addressed through the ongoing regulatory process as a current and generic regulatory issue that affects all nuclear facilities. All licensees of nuclear power stations are required to conduct a full-scale emergency exercise every two years. Offsite entities such as the State and local governments and the U.S. Federal Emergency Management Agency, have responsibility for offsite emergency planning. Perceived deficiencies in the emergency plans should more appropriately be directed to the governmental entities that have responsibility for the specific portions of the plan that are judged to be deficient. The comments do not provide new and significant information and they do not pertain to the scope of license renewals set forth in 10 CFR Parts 51 and 54. Therefore, the comments will not be evaluated further.*

**Comment:** One thing is, as I'm looking and hearing, I'm not hearing the human factor. Many times to model and to look at scientific analogy doesn't always bring in the human factor, and I'm seeing that missing here. For example, the latest reports indicate that 20 percent of the population in Oswego County have not picked up their potassium iodide pills. This is indicating that either the NRC or the utilities are doing an awfully good job of lulling the public into believing that there is no inherent risk associated with nuclear plants. (NMS-B-2)

**Comment:** The Post Standard reported that only 20 Percent of residents in Oswego County have received potassium iodide (KI) pills. KI could help protect the thyroid gland in the case of a radiation release and exposure. With 80 percent of the population unprotected, concern should be raised about the potential health threat for the local citizens. Perhaps the KI pills could be mailed out with the batteries for the citizens in the five-mile radius that are used for the emergency alarms. Schools located out of the ten-mile radius are discouraged from acquiring



KI pills even though these may be in areas of prevailing winds and potentially high deposition of radionuclide, or in areas that still may be affected by the fall out. (NMS-I-7)

**Comment:** Oswego County's migrant population should also receive information on the evacuation plan and have a chance to receive the KI pills. (NMS-I-9)

**Response:** *The comments concern the distribution of potassium iodide pills in Oswego County. The comments do not pertain to the scope of license renewal as set forth in 10 CFR Parts 51 and 54. The programs for distribution of potassium iodide pills to people living in the vicinity of nuclear power plants are administered by State and local governments. The NRC does not require use of potassium iodide by the general public because the NRC believes that current emergency planning and protective measures – evacuation and sheltering – are adequate and protective of public health and safety. However, the NRC recognizes the supplemental value of potassium iodide and the prerogative of State and local governments to decide the appropriateness of the use of potassium iodide by their citizens.*

*The comments provide no new information. There were no changes made to the SEIS because of these comments.*

#### General

**Comment:** Fourteen farms were noted to exist at the time of the nuclear plants construction. To date, there are only two dairy farms located near the nuclear plants. Small farms, which once supplied a number of jobs in the area, are lost. While farms are not as profitable as the nuclear facilities, these did add many jobs to the area. This area is prime farmland and has more tillable soils and a longer growing season than Jefferson County. (NMS-I-8)

**Response:** *The comment is noted. The comment does not pertain to the scope of the license renewal as set forth in 10 CFR Parts 51 and 54. The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

**Comment:** The draft SEIS was also silent on the issue and options for pollution prevention (P2). The final SEIS should discuss the internal and external processes and the waste streams that would be candidates for pollution prevention technologies. Some P2 opportunities can be as simple as specific landscaping and reduction of herbicides with the facility grounds, to reduction of sanitary or hazardous (non-radioactive) wastes. We encourage consultation with the DOE's Pollution Prevention office to obtain recommendations that would fit with the processes at Nine Mile Point. (NMS-J-9)

**Response:** *The comment encourages consideration of potential pollution prevention opportunities at Nine Mile Point. Pollution prevention and waste minimization are ongoing activities at NMP. Environmental releases and quantities of waste sent offsite for treatment and*

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*disposal are minimized as part of these activities. The staff concludes that additional mitigation measures are not likely to be sufficiently beneficial as to be warranted. The comment provides no new and significant information; therefore, the comment was not evaluated further. There was no revision to the text of the SEIS.*

### **Editorial Comments**

**Comment:** page x: Change "Table 2-12. Mayor Employers.." to "Table 2-12. Major Employers.." (NMS-F-1)

**Comment:** Page xxi, Line 1. Acronym 'NMP' should refer to Nine Mile Point Units 1 and 2. It is used once in Draft Supplement Environmental Impact Statement (DSEIS) on page 5-5, Line 31 and is in context of Nine Mile Point. (NMS-H-1)

**Comment:** Page 1-7, Line 23. NMP Units 1 and 2 produce enough electricity to power 2 million homes. (NMS-H-2)

**Comment:** Page 1-7, Line 25. Change reference citation (NMPNS 2000) to (NMPNS 2004) to reflect cited reference in DSIES). (NMS-H-3)

**Comment:** Page 2-31, Lines 13-23. Reference NMPNS 2004e does not support the information presented and should be removed and/or replaced. (NMS-H-7)

**Comment:** Page 2-34, Line 23. The date 1070 should be changed to 1970 as documented in reference NMPNS 2004e. Also, Provence should be changed to Province. (NMS-H-9)

**Comment:** Page 2-35, Line 11. Dreussena should be Dreissena as documented in reference NMPNS 2004e. (NMS-H-10)

**Comment:** Page 2-41, Line 4. 'The FWS' should be changed to 'the FWS' where it occurs. (NMS-H-13)

**Comment:** Page 2-51, Line 12. "Independence Station" should be capitalized as it is a proper name. (NMS-H-18)

**Comment:** Page 2-53, Line 32. Height of the cooling tower is 541 feet as documented in reference NMPNS 2004e. (NMS-H-20)

**Comment:** Page 2-67, Lines 7-8. Information is needed to complete NOAA references 2004b and 2004c. (NMS-H-24)

**Comment:** Page 2-69, Lines 11-12. Reference NMPC 1975 appears to be a duplicate of NMPC 1976 and should be deleted or corrected. Associated change will be required on page 2-27, Line 15. Also, delete 'West' from 'West Syracuse.' (NMS-H-25)

**Comment:** Page 2-72, Lines 10-11. Reference RREDC 2004a appears to be incomplete. Additional information is needed. (NMS-H-26)

**Comment:** Page 2-73, Line 17. Reference EPA 2004 appears to be incomplete. Additional information is needed. (NMS-H-27)

**Comment:** Page 4-16, Line 13. "Proceeding" should be revised to "Following." (NMS-H-32)

**Comment:** Page 9-8, Lines 8, 30. Adverse impacts for Combination of Alternatives Nine Mile Point Site alternative in the Ecology and Aesthetics impact categories in this table are greater than those presented in Table 8-3, yet the primary contributor to impact is a comparable but smaller capacity gas-fired combined-cycle plant. NRC may wish to consider revising to resolve this apparent inconsistency in the DSEIS. (NMS-H-49)

**Comment:** Page 9-8, Line 29. Adverse impacts for New Nuclear Generation Alternate Site in the Aesthetics impact category in this table are different than those presented in Table 8-5, page 8-33. This inconsistency in the DSEIS should be resolved. (NMS-H-50)

**Comment:** Page G-5, Line 2. Correct  $7.5 \times 10^{-5}$  to  $7.5 \times 10^{-6}$ . (NMS-H-52)

**Comment:** Page G-17, Line 9. Revise value of CDF from 23 to 2.3 (or 2 considering significant digits) used in table to be consistent with the NMP ER (NMPNS 2004). (NMS-H-53)

**Response:** *The comments are noted, and wording in the identified sections of the SEIS has been changed to reflect this information.*

**Comment:** Page G-1, Line 16. Revise the initial number of potential SAMA candidates from 223 to 220 to be consistent with Chapter 5 of the DSEIS. (NMS-H-51)

**Response:** *The comment questions the number of potential SAMA candidates. The staff re-checked the description of candidate SAMAs in the ER and the responses to requests for additional information. Based on the re-check, the total number of candidate SAMAs was confirmed to be 220. Wording in the identified section of the SEIS has been changed to reflect this information.*

Appendix A

**A.3 Public Meeting Transcript Excerpts and Comment Letters**

**A.3.1 Transcript of the Afternoon Public Meeting on November 17, 2005, in Oswego, New York**

[Introduction by Chip Cameron]  
[Presentation by Rani Franovich]  
[Presentation by Leslie Fields]  
[Presentation by Bruce McDowell]  
[Presentation by Bob Palla]  
[Presentation by Leslie Fields]

MR. HUTTON: Hi. Good afternoon.

I'd first just like to thank the NRC staff for organizing this meeting here for us today. Thank you very much.

Here with me today are some of the individuals involved in managing license renewal -- our licensing rule effort. And I'm going to point to Dave Delaria who has been managing that for some time, Carla Logan, who is involved in our environmental management efforts. And some others from Nine Mile Point Nuclear Station.

NMS-A-1 The first thing that all our employees see and anyone else who comes to our site, every day as they come to work is an illuminated sign. And on that sign it states our commitment to safety and to environmental stewardship.

Constellation Energy has an unceasing focus on safety, the safety of our employees and the safety of the people who live and work around our facility in this area. We continue to ensure that our operations have little or no impact on the air or the water or our endangered species.

NMS-A-2 Nuclear energy at Nine Mile Point specifically is an important source of clean, cost-effective energy. About one in five homes in the United States is powered by nuclear energy. Nuclear energy avoids dependence on foreign oil.

Nine Mile Point currently generates enough electricity to power more than two million homes. Nuclear energy needs to be a part of our country's diversified energy supply.

Nine Mile Point was the first nuclear power station to obtain international accreditation, ISO 14001, for its environmental programs. We're very proud of that. At Nine Mile Point, protecting the environment is part of each employee's day-to-day job.

In addition, a significant part of the site provides habitat for wildlife such as deer, turkey, fox, and various birds. Part of Constellation Energy's responsibility in the license renewal process is

to prepare an environmental report. And evaluate the environmental impacts of extended operation of Nine Mile Point Units 1 and 2. And assess their level of significance.

Our assessment included in the environmental report submitted to the NRC in May 2004 concluded that continued operation of our nuclear station will not result in significant adverse environmental effects.

We received formal notification from the NRC staff of their preliminary conclusions that they have discussed here today. That continued operation of Nine Mile Point Units 1 and 2 does not pose an unacceptable risk of adverse environmental impacts.

NRC's conclusions are consistent with our analysis as contained in our environmental report. We work not only to improve our environmental performance but also to invest in our equipment and our operational improvements.

NMS-A-3 Nine Mile Point, like every nuclear plant, is continuously being upgraded. Every critical operating part is routinely inspected and monitored by both us and the NRC's resident inspectors that are here today.

Our normal routine for maintaining our nuclear plant involves inspection, repair, refurbishment, replacement of primary operating components every 24 months during regularly scheduled refueling and maintenance outages. And as technology advances, obsolete and early design components and systems are upgraded.

NMS-A-4 We continue to be committed community partners. We provide community support in the form of good, stable jobs. And in terms of participating in funding events and organizations important to the local area. Last year, Constellation Energy and its employees provided more than 300,000 dollars in donations to community organizations and events.

Every employee at Nine Mile understands that all our community efforts are only worthwhile if we operate our facility with an unceasing commitment towards safety and environmental protection.

NMS-A-5 Nine Mile Point is important to the local community. It plays a part in our country's energy future. The improvements we've made ensure that we meet today's exacting standards of operation.

I assure you if given permission to operate each station for an additional 20 years, our employees will continue to demonstrate their ongoing commitment to all aspects of safety, reliability, performance, and environmental stewardship.

We look forward to hearing comments from members of the public here this afternoon. And we're willing to work with anyone who is generally interested in learning more about our power generation operation, environmental performance, or safety culture.

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Again, I thank you for the opportunity.

MR. CAMERON: Okay. Thank you, Mr. Hutton.

Is there anybody else who wants to address us today to give us any comments?

(No response.)

MR. CAMERON: And we will be back at seven o'clock tonight, informal, open house, at six o'clock.

And I guess, Rani, would you close this meeting out for us?

MS. FRANOVICH: Thanks, Chip.

Just wanted to thank you all again for coming to our meeting. And as I said earlier, it is a very important part of our process to involve the public.

As you came in to the meeting room today, you should have received an NRC public meeting feedback form. If you have any idea on how we might be able to improve our meetings, make them more effective, any ways we might be able to meet your needs better, please fill out that form and send it to us. Or leave it here. It's postage prepaid. All you have to do is fold it up and put it in the mail or you can leave it with us here.

So thank you again for coming. I just wanted to remind everyone that comments on the scope of the environmental -- I'm sorry -- comments on the environmental -- the draft environmental statement will be received through December 22nd, 2005. And Leslie Fields, the project manager, is the point of contact.

So thanks again for coming. And Chip, I guess that's the end of the meeting.

MR. CAMERON: Okay. Thank you.

(Whereupon, the above-entitled public meeting was concluded at 2:31 p.m.)

**A.3.2 Transcript of the Evening Public Meeting on November 17, 2005, in Oswego, New York**

[Introduction by Chip Cameron]  
[Presentation by Rani Franovich]  
[Presentation by Leslie Fields]  
[Presentation by Bruce McDowell]

MS. CLARK: My name is Linda Bond-Clark. I'm a local resident. I have a question. Your maximum dose to the public, how is it calculated? And could you tell me, what you took in for mileage around for the nuclear plant, the age and health of the people that you inspected, to figure maximum dose? How was that calculated?

MR. McDOWELL: The basic assumptions are what we consider to be worst case assumptions, that the person lives very close to the plant

MS. CLARK: Could you define very close, because I don't know what very close means.

MR. CAMERON: Okay define very close for the transcript.

MR. McDOWELL: At the site boundary.

MR. CAMERON: And the site boundary is considered where?

MR. McDOWELL: The site boundary, the fence line around the plant.

MR. CAMERON: Okay, and the other question had to do with - or the other part of the question I think had to do with age, health, gender, which gets into how our regulations to protect people from radiation are formulated.

And maybe, can we go to Rich Emch to have Rich talk about how differences in age, gender, infants, et al, all of that are factored into our Part 20 regulations?

MR. McDOWELL: Before you go there, I just want to say a couple of more things about how we do this one calculation.

We assume that the person that - we're assuming in our worst case assumption that that person lives at the site boundary; that person spends most of his time at the site boundary; he eats home grown vegetables that he grows at the site boundary; uptake is from any radiation that would be released could be ingested, could be inhaled, or there could be dermal exposure.

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And so there is a variety of ways that he could actually be exposed, and we consider that all of them happen, and all of them happen very closely to the plant. And so most of this person's life is spent at that site boundary.

MR. CAMERON: For purposes of the analysis?

MR. McDOWELL: For purposes of the analysis.

MR. CAMERON: Thanks very much, Bruce. And let's go to Rich, and then we'll go back to Linda to see if there are other questions on that.

MR. EMCH: Okay, trying to remember all the various aspects that you asked. For example Bruce has already talked about that there are several different pathways that are evaluated. Ingestion of agricultural products, milk, vegetables, nearest residents. We look at ingestion of fish, shoreline activity, recreation, exposure to the radiation plume itself.

As far as age, I believe that was one of the ones you mentioned, there are dose factors, and usage factors, meaning, we think of that as how much of this food stuff does an infant consume, does a child consume, and does an adult consume, and there are different dose factors for different age groups. And all those are checked to see what the worst case, what the highest dose would be for the age of the individual. So that's part of the calculations.

Were there other questions?

MR. CAMERON: Let me check back. Is there other things you need to know about this, Linda?

MS. CLARK: Well, I'll assume that, because you were referring to he, he, he, he, so I'm assuming that you are referring to probably an adult male; you are not referring to infants. I'm assuming that, because I'm not hearing you say that it would be specifically in infant living at the boundary.

MR. CAMERON: Okay. Does this go to how the Part 20 dose is calculated?

MR. EMCH: Actually, just a moment ago, I said we do look at infants, teens, children, adults, women, men, the whole gamut is included in those calculations. And what we do is, we look for the worst case calculation, and what Bruce is talking to you about is the worst case calculation, the worst case individual, the highest - the individual who would receive the highest dose.

MR. CAMERON: It's not necessarily the adult male --

MR. EMCH: Well, we don't usually go into a lot of discussion about which one it happened to be. It's the worst case individual.



To help to kind of tie the ends on this a little bit, that worst case individual, the dose is well below one millirem per year, which is - you can compare that to the regulations 40 CFR 190, the EPA regulation is 25 millirem per year from the entire fuel cycle. Again, we're talking less than one millirem per year.

Natural background - that's the dose that you and I receive by living on this planet and getting dental X-rays and things like that - that's in the range of 360 millirem per year. Again, compare that to the one millirem per year from the effluents from this plant.

MR. CAMERON: And is that all set forth in the draft environmental impact statement, Bruce, so that if Linda wants to look at those calculations, she can look at a place in the draft environmental impact statement and see how that was done?

MR. McDOWELL: We have the numbers in there, yes.

MR. CAMERON: All right. Linda, do you have anything else on this right now?

MS. CLARK: One other question. You made the statement that the emissions from the plant aren't expected to increase. What is that based on?

MR. McDOWELL: As far as I know there is no planned uprates for the plant, and so the plant would continue at its same level of operation.

MR. CAMERON: Anyone want to add anything to Bruce's answer on that? Rich?

MR. EMCH: We use as the basis, basically we look at what the releases from the plant have been over the last several years, and we look to see if there is anything that is expected to happen at this plant that would make the releases any higher. And Bruce's statement is, we don't see anything that is going to make it any worse or make it higher.

So we use the example of what they've released over the last few years as the best example, best way to judge what's going to be released during the 20 years of additional operation.

MR. CAMERON: And are these releases all monitored? And is that information available to the public if they want to see it? Rich?

MR. EMCH: Yes, the releases are all monitored. Each year the licensee publishes a report, which is publicly available - there are two reports, actually, one of them is the annual effluent release report, and the other one is the annual environmental monitoring report.

That report basically summarizes the information. In addition to effluent monitoring, the plant carries out a program of environmental monitoring. They take milk samples, fish samples, air

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samples, and evaluate them to make sure that there is nothing unusual, that the levels that are being released are what they expect.

So that is what's shown in that environmental radiological monitoring report each year.

MR. McDOWELL: And the trends have been going down over the last year or so. We would expect them to continue to decline, but we have assumed for the purposes of our analysis that they would remain level; that they would remain level during a license renewal period.

MR. CAMERON: Okay, and if Linda is still here after the meeting, Rich could you - okay, anybody else, questions about the findings in the draft environmental impact statement at this point?

Hi, how are you, and please introduce yourself.

MR. DELLWO: Tom Dellwo. So I'm looking at the drafts right now. Actually had a chance to read some of it, as much as I could.

Under the nuclear environmental impacts of no action - the no action alternatives, so I'm assuming - correct me if I'm wrong - but that means that in the event you were to deny this, that would be the no action, right? You wouldn't extend, is that correct? Okay.

Under --

MR. McDOWELL: Yes. So it gets in the transcript.

MR. DELLWO: So this is assuming - this is effects on ecology assuming that you do not relicense the plant. The environmental impacts to aquatic species including transient, threatened and endangered species associated with these changes are generally positive.

So would that mean that the effects now are negative? The effects on the ecology of --

MR. McDOWELL: That was not a relative statement, that is, positive compared to what is happening now. If the plant --

MR. DELLWO: If the plant stopped doing what it was doing, the effects would be positive; that's what it says.

MR. McDOWELL: That's true. That is not relative to what is happening now, though.

MR. DELLWO: How so? How is it not? Because if the idea is that the plant would stop, would cease doing what it's doing right now, and the effects would be positive, then obviously what's happening now is negative.

NMS-C-1

MR. McDOWELL: No, what's happening now, we have determined that the effects were small; we didn't say that they were negative. We said that the effects were small.

MR. DELLWO: Okay. I don't understand how stopping what it's doing would be positive then?

MR. McDOWELL: Excuse me?

MR. DELLWO: I don't understand how stopping what it's doing now would be positive if what it's doing now isn't negative?

MR. MASNIK: This is Mike Masnik from the NRC staff.

The staff acknowledges that the plant is having some impact because it does kill some fish and organisms through the operation of the plant.

But our analysis has demonstrated that this impact is small; in other words, it's not destabilizing; it's not detectable.

We recognize that --

MR. DELLWO: It's not detectable?

MR. MASNIK: It's not detectable in the population. We can detect the fact that it's killing fish, but the population of fish in the immediate vicinity of the plant isn't being affected. At least we can't detect that it's being affected.

So when you cease operations --

MR. DELLWO: You can or you can't detect it?

MR. MASNIK: we cannot detect changes in the population --

MR. DELLWO: Population, okay.

MR. MASNIK: -- of fishes in the area.

Okay, now if you permanently cease operation, the plant stops. You've stopped pumping as much water. You will still pump some water, but it's a significant reduction, which means that you will be killing considerably less fish because you are pumping a very small amount of water. So in that case the impact would be positive.

MR. DELLWO: Follow up question? You said earlier, just a second ago, that the plant monitors and gives you reports. That's correct?

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Where are the monitors, and how many of them are there? And all that good stuff? Monitors of radiation.

MR. CAMERON: If we could just try to give as comprehensive an answer to this as possible. I think you just assume that the question is very broadly based in terms of the monitoring issue.

All the types of different monitoring that is going on, can we do that?

MR. EMCH: I'll try, Chip.

It is an extensive monitoring system. Okay? There are – I don't know the exact number, but from driving around, at least 30 what we call thermoluminescent dosimeter locations. There's at least five or six air monitoring locations.

We don't have an extensive discussion of where they all are in the environmental statement. However, there is a document called the offsite dose calculation manual, which is sort of a bible of how the plant does their environmental monitoring, their effluent monitoring, and everything.

And that document is publicly available. And we can help you find it if you want to see where the monitoring locations are; they would be laid out in that document.

MR. CAMERON: All right. Let me see if there are other questions, and then we'll get back to you? Anybody else? Let's go up here, and then we'll come back to you Linda, okay?

Okay, if you could just introduce yourself to us.

MS. HOBBS; My name is Katherine Hobbs. Okay, my first question was related to the maximum dose calculation. And I was wondering if that calculation is based on actual field studies of the human impact of actual people living on the boundary, or if that is sort of more like a prediction?

MR. CAMERON: I think, Bruce, if you could just --

MR. McDOWELL: Actually, Rich would be better for this.

MR. CAMERON: You want to do that, Rich? Okay.

MR. EMCH: Yes, I believe I understand.

What does happen, we've talked about - I think we will get to the heart of your question - the licensee monitors the amount of radioactive material that is released from the plant.

The licensee also does sampling in the environment to see how much radioactive material they see in the environment, in the air and things like that.

The calculations that Bruce was talking about earlier of the doses to humans is based on the effluent monitoring data that releases from the plant. And they say how much - you know, we know where the wind goes, we know where the water goes - what would be the doses to these people who might be exposed to this?

That's those calculations, those are the ones that come up to less than a millirem per year.

I think that what you are asking about is, does anybody go door to door and do blood studies and things like that, and the answer to that is no, we do not.

Now let me go on a little bit further, however. At one millirem per year, the NRC uses what we call the linear non-threshold theory, which simply put means that there is some risk of damage, health risk to a human, from any amount of radioactive exposure. That's what it means.

However, at the levels that we're talking about, the less than one millirem per year, the likelihood of any kind of risk is extremely small, and in fact, all the various health studies, and all the calculations and things that have been done by international groups have never seen any kind of damage down at that level.

The levels that they see the damage is, about the bottom of the damage is -- I said one millirem per year. I gave the example of 25 is the standard, and I gave 360 as the amount that is received just from living on planet Earth.

The health studies by the international groups, national groups, those are up around 10,000 millirem per year is where they start to see some damage.

The calculations are based on data from things like Hiroshima, Nagasaki, that sort of thing.

MR. CAMERON: Okay, before we go back to Linda, and then back over here, do you have anything else you want to ask?

MS. HOBBS: Yes. Well, I actually have a lot of questions.

But so how do you determine what is an acceptable level of risk?

MR. CAMERON: I think maybe the question goes to, how did the NRC set the standards in Part 20 as to what is an acceptable risk?

MS. HOBBS: And actually I was wondering if the public was involved in that determination at all?

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MR. CAMERON: I think that it was a rulemaking, so you can talk about how the public was involved in that, Rich?

MR. EMCH: As Chip pointed out, the Part 20, the Appendix I to Part 50, 10 CFR Part 50, which is the regulation that applies specifically to a reactor, nuclear power reactors. There is also the EPA, Environmental Protection Agency regulations, 40 CFR 190 which limits the amount of exposure to any member of the public to 25 millirem per year from the entire fuel cycle - that's the reactors, the enrichment plant, that's everything, transportation, everything.

Now as to how did they decide that that is a safe level, the 25 millirem per year or whatever, that was based on extensive studies, extensive discussions and input from international groups, the International Commission on Radiation Protection, the National Council on Radiation Protection and Measurements, a wide variety. And there are a number of documents that have been published by these international groups.

And basically, like I said before, there has been no damage, no health risk, no health impacts, identified, specifically identified, below 10,000 millirems. So by setting the levels down at at the 25 rem level, and in fact Appendix I is even lower than that; 25 millirem per year level, and in fact, Appendix I which specifically applies to nuclear power reactors is even below that.

The belief of the Nuclear Regulatory Commission and the international bodies, the national bodies, is that those levels are safe.

Now as far as public input, as Chip mentioned, all those regulations would require public input. They would be published for public comment, just pretty much the same way we're doing with this draft document here.

Most of those regulations - I wasn't here for some of them, so I can't tell you exactly what, but they are as constant - there are studies that are constantly ongoing to evaluate whether those are still appropriate.

In fact, just a few months ago the draft of something called BEIR 7, Biological Effects of Ionizing Radiation, which was put out by an international panel, reconfirmed the linear non-threshold theory, and reconfirmed the level of expected risk from radiation exposure that we've been using for doing estimates for many years.

I'd be happy to spend more time with you. I can go more directly to some of your questions afterwards.

MR. CAMERON: Did we do a set of questions on the BEIR study that Rich mentioned? There is some handouts over here on radiation that help explain some of this.

And was it Katherine? Katherine, we're going to go back to Linda, and then it's Tom, right? We'll go over here. Then we'll see where we are, and maybe get Bob Palla on for his presentation, and then go back out to you for questions.

Linda.

MS. CLARK: Yes, I've got a couple of questions here again.

How much radiation, radionuclides in the amount of curies, have been released from the plant since its first set operation in 1969? Total curies, effluents, total?

MR. CAMERON: And that may be - I'm not sure we have that. We could do a calculation on that, and get that number for you. I'm not sure that anybody knows offhand. Rich?

MR. EMCH: I don't have that number at my fingertips. We could find it. We could go to the reports from the plant for all those years and add it all up. I don't know, were you at the scoping meeting when we held it before? There was an issue that was brought up during the scoping meeting, I think, just as an example, a gentleman made an example about 3.7 million curies of radioactive materials in the early years of the plant, and we went back and confirmed that that was indeed the case, between 1971 and 1976, and shortly - right after that is when the plant installed what we call an augmented off-gas system which drastically reduced the amount of radioactive materials.

Actually the draft environmental document that we have over there has a table that talks about what the releases were. I think in 2004 - 2003 or 2004, and the releases from the plant on an annual basis now, gaseous releases, are on the order of 100 curies per year from each reactor.

And again, as I said, that results in an offsite dose of less than one millirem per year.

MR. CAMERON: Okay. Another question, Linda? Oh, Bruce, did you want to say something?

MR. McDOWELL: Yes, those tables are on page 213 and 215.

MR. CAMERON: Okay. Go ahead.

MS. CLARK: Question for you. The fence at the site boundary is relatively close to the plant, and you've got the effluent - the discharge stacks are probably average 200 feet in the air. What type of meteorological data did you use to indicate that the radionuclides must fall directly down on the fence boundary and not be blown more by the prevailing wind?

MR. McDOWELL: Well, Rich can take a stab at this too, but let me take a shot.

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Generally, when the meteorology is such that it does go straight down to the site boundary, the closest site, that is going to be the most concentrated. If it goes, I think like what you are suggesting, over the top of that near site boundary and farther downwind, it tends to be more dispersed.

And so the assumption that it goes straight down and hits the near-site boundary would be the worst case.

MR. CAMERON: Okay, thanks, Bruce. Rich.

MR. EMCH: Actually, as Bruce was just explaining it, as you mentioned, because of the stacks, under many conditions, the actual highest spot may actually be some distance from the site boundary, you're right. And those are included, that fact is included in the models that they have in the off site dose calculation manual.

And the meteorology is based on the - they have a large meteorological tower that they use to monitor that condition all the time, and they use the information from that to help them determine just how far the wind is blowing, how fast it's blowing, whether it's raining or not. That also affects where the radionuclides come out. There is a concept called rain out where particles will come to the ground faster if it's raining.

And all this is included, you are right. We usually speak of - and what Bruce was talking about - we usually speak of the maximum exposed individual being at the site boundary. Pretty much by the time you get to the site boundary, a lot of the plume has come to the ground.

But the reality is, we understand the fact that there is an elevated release, and the calculations include that. So when we say the maximum exposed individual, that's also accounting for the fact that it may not actually be at the site boundary all the time, yes.

MR. CAMERON: Let's go over to Tom, right, and then we'll go back up to Katherine, and then we're going to go to Bob Palla for severe accident presentation.

Go ahead.

MR. DELLWO: Thanks. A couple of quick questions. The capacity for electricity generation, how much left over space is there in the lines that go from here? In other words, are we at capacity right now currently for this area, for the lines that go from this area?

MR. McDOWELL: You are going to have to talk to somebody else about that. My scope is looking at the environmental impacts of the alternatives, and the main action. So there may be somebody from the plant or the NRC that knows that answer.



MR. CAMERON: Does anybody want to hazard a rough statement on that? And maybe you want to tell us where you're going with that, okay? Tell us what the implications of that question are.

MR. DELLWO: The implications deal with the EIS, because I guess what I'm getting at is, in the EIS it looks at the possibilities of alternatives. And I'm wondering if in those possibilities of alternatives you took into account the likelihood - I know in the EIS you said, you took into account the likelihood of those things happening based on cost or anything like that. But did you take into account the likelihood of those things happening if there is no space for that energy to be brought down to wherever it needs to go? What that taken into account?

So in other words, it's very unlikely that some other type of energy like wind or solar or coal or whatever would possibly be built here if they would have to build a whole bunch of new generative power lines to do that. So is that taken into account?

MR. CAMERON: Okay, I think we see what the - so it's not just a question of how much more capacity could through the lines. It's whether the particular form of alternative source of electricity, whether you use those same lines.

MR. McDOWELL: I think so. One of the reasons why we considered the impacts of some of these alternatives to be either moderate or large is because of partially the possibility that we would have to build new transmission lines.

So that is certainly a possibility. And when you look at particularly wind projects, where some of the best wind locations are located in remote areas where you would have to build roads, or you would have to build transmission lines, in some cases the roads and the transmission lines are the main impact of the project. So that is definitely included in what we looked at in determining that some of these impacts of the alternatives could reach either moderate or large scale.

MR. CAMERON: Okay, another question?

MR. DELLWO: So what you're saying is that they took that into account, based on the fact that they probably would have to build new lines, because they are at capacity right now?

MR. McDOWELL: Not so much at capacity. It's more the situation that some of the sites that might be ideal for alternative technologies are not right at the Nine Mile Point site.

If you were just going to replace it with another plant at that site, since you are kind of replacing in kind as far as generation is concerned on the lines, then that would just replace it on the lines also. So we didn't really consider that there be new lines needed, or replacement plant at the Nine Mile Point site.

## Appendix A

MR. DELLWO: Two more questions, and then I'll probably be one. In the environmental impact statement, according to what it says, there's 69 issues that are seen as generic for all plants, and that aren't really dealt with on a plant specific base; is that correct?

MR. McDOWELL: Our job is to go in for each plant and to verify that the assumptions that were made to make that determination are still valid, and that there is no new and significant information.

So it's not like we ignore those. We do look and see if there is anything new and significant at Nine Mile Point that would invalidate the conclusion, the generic conclusions, that they came up with in the GEIS.

MR. CAMERON: I'm glad you asked that, just in terms of the number itself, how many category one issues were there?

MR. McDOWELL: 69; there's 92 total.

MR. CAMERON: All right, and one more?

MR. DELLWO: Yes, if that's okay.

Okay, the - it refers to the staff over and over again. And I know that they are - actually, I couldn't - maybe it was just me, but I couldn't find their backgrounds in here. Where they worked, were they worked previously.

MR. McDOWELL: Their names are listed in Appendix B. But their backgrounds are not specifically included in the document.

MR. DELLWO: Do you have any of that information? I'm assuming that this project was funded by NRC.

MR. McDOWELL: Yes. Well, yes.

MR. DELLWO: So the people who made this were paid by NRC to do that?

MR. McDOWELL: Yes.

MR. DELLWO: I was just wondering if there was any sort of background information you could give me?

MR. McDOWELL: We've given that the NRC, and that would be up to the NRC to decide whether that would be made available.

MR. CAMERON: Let's hear from Leslie and Rani on this.

Go ahead, Leslie.

MS. FIELDS: Appendix B does have the expertise level of the person who participated in the review, and normally it is reflective of their particular expertise and professional backgrounds as well.

MS. FRANOVICH: Tom, I think that you are getting at is, what were the credentials of the experts that were used to conduct the environmental reviews?

MR. CAMERON: I think he may be thinking about perhaps conflict of interest, and if you could just talk about how we screen or contract organizations for conflict of interest, I think that is what he wants to know.

MS. FRANOVICH: The teams usually are comprised of those members of the NRC staff who are credentialed experts in their areas of expertise.

And in the past we've used DOE labs, national laboratories, who don't do work with nuclear utilities, if that's your concern.

As Chip just mentioned, in order for the NRC to contract a consultant or a team of experts, we have to go through a rigorous process to verify that they are not engaged with a nuclear utility because of the conflict of interest.

MR. CAMERON: We have to get this on the transcript. So Rani's comments, if they aren't connected. And you questioned --

MR. DELLWO: They never were before in their careers connected with a nuclear power plant or this particular nuclear power plant?

MS. FRANOVICH: I don't know that we would do that kind of a research on individuals. I think we would look at the contractor themselves, like if we went to a commercial contractor, the company, we would see if the company has done work for the private sector, for nuclear power in particular.

But I don't know that we actually looked to see if the individuals at any time in their career did work for a utility.

MR. CAMERON: And it might be - Bruce, do you want to add something?

MR. McDOWELL: We had a candidate from Livermore that was going to be on the team that I had for the Peach Bottom Power Plant, and he had worked for a contractor that had not been

## Appendix A

actively involved with Peach Bottom directly, but had been working on Nine Mile, so there was a connection there. And NRC did not choose to include him on our team.

MR. CAMERON: Okay, thank you, Bruce, that's very helpful. And you know our conflict of interest reviews and regulations are all public if you need more information on that. I'm sure we can get that for you.

And I'm going to go to Katherine to see if she has any other questions, and then we're going to go to Bob Palla's severe accident presentation, and then come back to all of you for questions.

Katherine, do you have anything else?

MS. HOBBS: Yes. The first question was, in regards to the radiological monitors that are - my understanding was, that is carried out by the staff of the plant; is that correct? That the actual monitoring and logging of the monitoring data takes place by plant employees?

MR. CAMERON: Who does that? And is there a related question, because we are going to go back to Rich to answer this, and maybe he can answer the second one.

MS. HOBBS: Okay, well I'm just wondering if there is - what kind of oversight the NRC has of that monitoring.

MR. CAMERON: All right, Rich Emch.

MR. EMCH: Yes. The licensee does all the data recording, and evaluation, the counting of samples and all that sort of stuff, although they are overseen. That whole process is inspected by the Nuclear Regulatory Commission.

We have experts in health physics who come out from our regional offices and conduct inspections of the process.

And in addition to that, the state of New York does environmental monitoring as well, so that they are able to look for themselves. That's another source of the checks, so to speak, against what the licensee is doing.

MS. FRANOVICH: Chip, if I can add one thing to this, and Rich, correct me if I'm wrong, when licensees are required to submit information to the NRC, there is a requirement under 10 CFR Part 50, it's called 50.9, and it requires licensees to provide complete and accurate information. And if they fail to do that, then they're subject to enforcement action.

MR. CAMERON: And Katherine, do you have one more question before we move on?

MS. HOBBS: I just also in regards to the environmental impacts for each of the categories that you talked about, in addition to contractors, I'm wondering if you'd consider having members of the public participate in the process of determining what the environmental impacts are, members of the public to be included in that process.

MR. CAMERON: And maybe that has two aspects of it. One aspect of that is, these types of meetings, where we get questions and suggestions from the public about, you really should look at this type of environmental impact. And sometimes it's very specific. It might be a specific type of organism that we didn't know about. So that's one way that the public is involved.

The other way was mentioned by Bruce on a slide of where we get information in terms of all the different state and local government agencies that we talk to gather information.

And Bruce, maybe you could just go into a little more detail on who we talk to in terms of state agencies, like department of health, whatever, so that Katherine can get an idea of that.

MR. McDOWELL: Well, primarily what she said though is true. The first meeting that we conducted here last September was just for that purpose; it was to find out what impacts the public thinks are important. So we tried to get that.

And when we made our side audit during that same time, last September, we not only met with state and federal agencies, but we met with local services agencies. We met with people from the city and people from the county, and tried to get information from the people here, not from people at the state office, or from the U.S. Fish & Wildlife Service, even though we did talk to them also about what is going on here at the ground level.

And that's again why we are here tonight. We are here tonight to see did we miss anything. Is there anything that maybe we've come to wrong conclusion about? Is there any more information that we should have that's pertinent?

And so this is really the process where you would be involved.

MR. CAMERON: Okay, great, and I believe that Rich Emch has given Katherine a list of the agencies or whatever that we've talked to.

Do you want to add anything before we go on? Go ahead.

MR. EMCH: I just gave her a copy of the draft environmental impact statement and opened it to Appendix D, which is the list of agencies that were contacted.

MR. CAMERON: Okay, Katherine, that may not be completely what you wanted to hear, but I think it's sort of responsive to your question.

## Appendix A

Did you want to know whether we had an independent public advisory group or something like that?

MS. HOBBS: Yes, I think that is what I was wondering.

MR. CAMERON: And in some cases, the NRC does have advisory groups that are part of the public to advise us on particular issues, but usually when we go to do the site specific analyses, we talk to the public in situations like this, comments. We talk to the state agencies. But we usually don't have any sort of an independent advisory commission, because our job is to be the independent agency that looks at these particular issues to make sure that the environment and public health and safety is protected.

MR. CAMERON: Let's go to Bob Palla, severe accidents. We'll come back to you for questions, and you don't have to limit your questions to severe accidents. You can ask other questions.

But at some point we'll need to go to the public comment part of the meeting, and give you all an opportunity to comment.

Bob Palla.

[Presentation by Bob Palla]

MR. CAMERON: Yes, questions on the severe accident mitigation alternatives. Tom?

MR. DELLWO: Thanks.

So you are not going to make them do these things that you have identified as possibly making the plant safer, if I hear you correctly?

MR. PALLA: We're not requiring that as a part of the license renewal process. These are being --

MR. DELLWO: Just because they don't deal with aging?

MR. PALLA: That is the primary purpose, that's the reason.

MR. DELLWO: All right.

MR. CAMERON: Okay. I think we need to take that a step further. Yes, sir, and please introduce yourself.

MR. FALLON: I'm Mike Fallon. I'm with the license renewal team and with the SAMA lead. Many of these 15 identified potentially cost beneficial SAMAs have been implemented at Nine

Mile, and the ones that involved actual plant - some of these are like procedure changes, things like that have been implemented.

Ones that involve actual modifications to the plant are part of conceptual design packages that are in the plant modification review process to determine if in fact they are cost beneficial for implementation.

MR. CAMERON: Okay, so certain things are being done. And when he identified himself as part of the license renewal team, part of the Nine Mile license renewal team, not the NRC license renewal team, just to get that clear.

Any other questions on severe accidents? Yes, Katherine.

MS. HOBBS: This part of the presentation was a lot like Greek for me, who is not learned in this technical speak.

And it might have been presented but I didn't get it. So does the risk of an explosion or a meltdown or a terrorist attack get included - is it included in this assessment?

MR. PALLA: Well, what we do here is look at the complete risk profile from the plant. Now it typically doesn't involve explosions, because these reactor designs are not like Chernobyl where you have the potential, where the design itself has inherent weaknesses that could lead to explosions.

But we look at core melt down events, TMI type events, events that lead to core melt with intact containments; core melt with failed containments. And the PRAs tend to look only at things that go to core melt, but most of the things that occur at a plant don't go to core melt.

So we look at successes. We tend to focus on those things that get you to core damage. And we look at the full range of events that go to core damage, including with and without effective containments.

And we look at, and there are more details in the appendix, it includes internally initiated events, events that were initiated by internal fires within the plant, seismic events.

MR. CAMERON: And I guess that the one issue we should be clear about for people is in terms of this particular evaluation looks at, although it looks at seismic, earthquakes, things like that, sabotage is - I don't know, I'm just asking - sabotage is dealt with under a different regime.

In other words Katherine mentioned terrorism. So in other words, does a SAMA evaluation take into account something that could happen because of a terrorist attack?

## Appendix A

MR. PALLA: It's a good question. We actually are unable to quantify those types of threats. And these are - that's my number one answer is, it's not in the model. It's difficult if not impossible to quantify the likelihood of such events in the same way that we deal with all the other events that we can conceive of.

Second way that I might answer that is to say that these events are not really looked at part of license renewal. These are events we're concerned about today as part of the current operating license, and there is a large number of activities that have occurred since 9/11 and actually are continuing to occur. And they range from - there were security advisories, safeguard advisories. There were orders. There is a rulemaking in progress now on the design basis threat, a new design basis threat. There are vulnerability analyses that are ongoing, looking at aircraft impacts on plants. And the ability of plants to withstand that.

So these things are all being done. They are being done as part of the current operating license; they are not being done as part of the license renewal activity.

MR. CAMERON: Bob, that is very helpful. And I think, Katherine, you might have come in after Rani Franovich talked about, mentioned the fact that security - what we call security-related events are not part of license renewal.

It doesn't mean that they are not being taken care of or addressed by the NRC; it just means they are not being addressed as part of license renewal, because they are a thing that is happening that has to be paid attention to everyday in the operating life of a plant.

Rani, do you want to add anything to this other than what Bob said? Okay. Good question.

MS. HOBBS: So the risk of that happening let's say a meltdown happening is not then - the environmental impact of that potential are not considered?

MR. PALLA: No, they are. In fact that's the focus of - what we're looking at here is the residual risk of the plant. You could build the latest plant, advanced reactors. There is still a possibility that some bizarre combination of failures that could occur, that would lead to core damage.

What we do here is, we look at the risk profile of the plant as it exists, we looked at both units. These are two different reactor designs inside two different containment types.

We looked at those risk profiles, and looked at what was driving the risk. What are the dominant sequences.

We looked, for each of these dominant contributors, we looked - when I say, we looked, the licensee in their environmental report describes a very systematic analysis in which they looked at it - we looked at their analysis to confirm that it was in fact rigorous and systematic.



But we look at all of the different contributors, and we look at ways that we could reduce those contributors further.

And we try here, the purpose of this whole SAMA review is to identify ways that the risk could be further reduced, that are cost beneficial and would give you some substantial reduction in risk.

So that is the whole focus of what we are doing, and we do look at - obviously we are looking at the core melt accidents. That is where most of the risk is coming from.

MR. CAMERON: Bob, I think one of the things that is sometimes confusing for people with this, and you just touched on it there when you said further reduce the risk, these things are all over and above what is needed to make the plant safe. These are things that might be cost beneficial to do that is just going to further reduce any risk.

And you can explain this better than I am, but you know where I'm going.

MR. PALLA: Well, I can make it as complicated as you like, Chip.

MR. CAMERON: I know you could. Could you make it simple?

MR. PALLA: That's harder. The plant has a certain level of risk, and although we do not regulate the risk, the Commission has safety goals for plants. And the level of risk at these plants meets the safety goals.

Now just to give you a rough feeling for how are these safety goals expressed, and I won't go through the numerics of how one demonstrates that you meet it, but basically the safety goal says that the risk to the population living in the vicinity of the plant, the risk to that population from the reactor should be less than one-tenth of one percent of the risk that the public has from other like for example for early fatalities. It should be less than one-tenth of one percent of the risk that the public has from all other cancer fatalities.

And these goals exist for early fatalities, and they exist for late and cancer fatalities. But a tenth of a percent is generally thought - you want to be less than that in order to meet the safety goals, and the plants meet these safety goals.

We don't regulate them to it. I mean the regulations are more deterministic; they are not probabilistic. We don't regulate to certain levels of risk. In fact, when the regulations were developed, these kind of risk assessment techniques were nonexistent or in their infancy, really.

MR. CAMERON: Okay, so the plants all meet the safety goals, and then we might --

## Appendix A

MR. PALLA: And then what this does is just to see, is there a way to further reduce it? It's safe enough, okay, but is there something that can be done that makes sense to do and it's reasonable, it doesn't adversely impact in terms of cost and it's effective, it gives substantial risk reduction.

MR. CAMERON: Okay, thank you, Bob. That's great.

We are going to go to the public comment part of the meeting. But are there any questions.

Linda, you look a little puzzled back there. Do you have another question for us before we go on?

MS. HOBBS: Number one, the whole notion of cost versus benefit has always I guess been a thorn in my side. By doing the math here, it's my understanding if you take one-tenth of one percent, you are really talking about one thousandth.

So am I to assume that it is okay to take the risk as long as only one in every one thousand persons die? I mean that's the math.

And I guess also, we speak of how much does it cost to keep the public safe. And as long as it doesn't cost too much we can keep some of them safe.

I mean this whole risk versus benefit is - I remember this from way back, made comments on that later.

MR. PALLA: Did you want me to sit back down again?

MR. CAMERON: Well, I think you just need to emphasize the fact that our regulations in terms of safety are not based on cost considerations.

MR. PALLA: No, if it was a matter of meeting the regulation, there are no cost considerations. The licensees are required to comply with the regulations.

You don't bring a cost - you don't do cost-benefit analyses on compliance issues. What you do, though, if you - and as you can imagine, you can always come up with additional improvements to make a plant even safer.

And what this cost benefit is, it's part of the back fit. We have a back fit rule that basically says, if it's a compliance issue, you have to comply, but if it is something that is viewed as an enhancement, it's not an adequate protection issue. It's not a question that the plant has inadequate protection for the public.

Let's say it already has adequate protection, and you are looking at a further enhancement. There is a back fit rule, 50.109 that describes that is necessary to demonstrate in order to require a licensee to make further improvements.

And that is where you get into cost benefits. And it is basically a check on the ability of the staff to require a lot of things that maybe are expensive and don't provide the commensurate benefit with it really.

And what we try to do in SAMA is, we're focused on where the risk is coming from, and we're trying to find the least expensive ways to fix it, because those are likely to be the most cost effective.

But you have to balance the costs and the benefits when you are trying to make additional requirements.

This isn't a matter of trying to make the plant safe enough that it's in an unsafe state. It's already judged to be safe enough. It's judged that there is adequate protection at this point. And we're just trying to see if we can justify further improvements.

MR. CAMERON: Okay. Let's go on to - pardon me? Oh, I guess that Rich is pointing out that the one out of a thousand reference that Linda made - why don't you try to do that. Well, he may be better than you at explaining it, but I'm not sure that he knows what you are talking about.

Do you know what he's talking about?

MR. PALLA: Well, in case I was sloppy in how I tried to explain it, there is a certain level of risk that you can calculate in the general population of the United States. So many cancer deaths per year for a certain - over a certain population, and so many accidental deaths over the population in a year. And that is the background level of risk if you will. So that is the risk that exists, in general.

And when what the policy statement said is, if you took the additional risk represented by the plant should be less than one-tenth of one percent of that. That's what I was trying to say.

MR. CAMERON: And maybe we can talk to Linda to make sure that that is clear.

Okay, we're going to go to the public comment part of the meeting. But I want to make sure that Rich points out something about the site boundary, and Rani wants to say something.

Go ahead, Rani.

MS. FRANOVICH: Actually, I'm going to talk about what Rich brought to my attention.

## Appendix A

There was a question about where the staff assumed the maximum radiological impact to a human being would be, and the answer was at the site boundary. And the question was, well, where is that in relation to the plant. And the answer was, at the fence, but we're not really sure that the fence really represents completely around the perimeter of the plant where the site boundary is.

So I just want to make sure that the record is correct. If you have a copy of the draft site, figure 2-3 has a layout of the site, and there is a black line around the site perimeter that represents the site boundary. So that is the correct and complete and accurate answer to the question.

So I just wanted to correct that, Chip. Thank you.

MR. CAMERON: Thank you very much, Rani. And before we go to comments, Leslie is just going to wrap up some details for us. Go ahead, Leslie.

[Presentation by Leslie Fields]

We're going to go to public comment now. And usually we ask the representative of the license applicant to explain what their rationale is for license renewal.

And we have Mr. Jim Hutton with us, who is licensing manager at the Nine Mile Point nuclear station.

And then we are going to go to Linda Bond-Clark after Mr. Hutton is done.

Sure, what is your question?

MS. HOBBS: I was wondering what is the purpose of the comments here today? What is the expectation that the comments should involve?

MR. CAMERON: Well, we're looking for any comments, do you want to answer that?

MS. FIELDS: Yes, I can answer it. We are requesting that if you have comments on the draft SEIS, the book that we provided in the back, if you have any comments that you would like included in the draft SEIS, or if there are areas that you feel were missed and you would like to add to the document, those are the types of comments that we are requesting today.

MR. CAMERON: And if you have some concerns that are related to the environmental review, even though it's not related to a particular part of it, you can give us those, too.

All right, thanks, Leslie.

Mr. Hutton.

MR. HUTTON: Thank you, good evening.

I'd first like to thank the NRC staff for their efforts in organizing the meeting here tonight.

Here with me today is Dave Dellario, who helped manage our license renewal effort, and Carla Logan, who his involvement in our environmental management at Constellation Energy, along with some others from Constellation Energy, Nine Mile Point nuclear plant.

The first thing all our employees see everyday when they come into our site is an illuminated sign that states our commitment to safety and environmental stewardship.

Constellation Energy has an unceasing focus on safety - the safety of our employees, the safety of the people who live and work in the local are.

We continue to ensure that our operations have little or not impact on the air, water or endangered species.

Nuclear energy, and Nine Mile Point specifically, is an important source of clean cost-effective energy.

About one in five homes in the United States is powered by nuclear energy, and nuclear energy avoids dependence on foreign oil.

Nine Mile Point currently generates enough electricity to power more than - about 2 million homes. Nuclear energy needs to be part of our country's diversified energy supply.

Nine Mile Point was the first nuclear power station to obtain international accreditation, ISO 14001, for its environmental management program. We're very proud of that.

At Nine Mile Point protecting the environment is part of each employee's job everyday. In addition, a significant part of the site provides habitat for wildlife such as deer, turkey, fox, various birds.

Part of Constellation Energy's responsibility in the license renewal process is to prepare an environmental report, and to evaluate the environmental impacts of extended operation of Nine Mile Point unit one and two, and assess their level of significance.

Our assessment, included in the environmental report that we submitted to the NRC in May, 2004, concluded that continued operation of our nuclear station will not result in significant adverse environmental effects.

## Appendix A

We received formal notification from the NRC staff of their preliminary conclusion that continued operation of the Nine Mile Point nuclear plants one and two does not pose an unacceptable risk of adverse environmental impact.

NRC's conclusions are consistent with our analysis as contained in the environmental report.

We work not only to improve our environmental performance, but also invest in our equipment and operational improvements.

Nine Mile Point, like every nuclear plant, is continuously being upgraded. Every critical operating part is routinely inspected and monitored by us and the NRC, resident inspectors who were introduced here tonight and others.

Our normal routine for maintaining our nuclear plant involves inspection, repair, refurbishment, replacement of primary operating components every 24 months during regularly scheduled refueling and maintenance outages.

And as technology advances, obsolete and early design components are upgraded.

We continue to be committed community partners. We provide community support in the form of good stable jobs, and in terms of participating in and funding events and organizations important to the area.

Last year Constellation Energy and its employees provided more than \$300,000 in donations to community organizations and events.

Every employee at Nine Mile Point understands that all our community efforts are only worthwhile if we operate our facility with an unceasing commitment towards safety and environmental protection.

Nine Mile Point is important to the local community. It plays a part in our country's energy future.

The improvements we've made ensure that we meet today's exacting standards of operations.

I assure you that if given permission to operate this station for an additional 20 years, our employees will continue to demonstrate their ongoing commitment to all aspects of safety, reliability, performance, and environmental stewardship.

We look forward to hearing comments from the public this evening. We are willing to work with anyone who is interested in hearing more about our power generation operation, environmental performance, or safety culture.

Again, we thank you for the opportunity to speak today.

MR. CAMERON: Okay, thanks, Mr. Hutton.

We're going to go to Linda Bond-Clark now to address us. Do you want to come up here, Linda? All right.

MS. BOND-CLARK: Good evening. Thank you for allowing me the opportunity to speak tonight.

NMS-B-1 I guess if I might ask the question of how many public officials are here tonight, people representing the public? And - two people? Public officials, people who hold offices? Elected officials? Any elected officials here tonight?

None. Let the record show there are no elected officials.

Of those people, if there had been any, I was going to ask them how many had actually read the draft SEIS.

NMS-B-2 One thing is, as I'm looking and hearing, I'm not hearing the human factor. Many times to model and to look at scientific analogy doesn't always bring in the human factor, and I'm seeing that missing here.

For example, the latest reports indicate that 20 percent of the population in Oswego County have not picked up their potassium iodide pills.

This is indicating that either the NRC or the utilities are doing an awfully good job of lulling the public into believing that there is no inherent risk associated with nuclear plants.

NMS-B-3 The other thing is, I read through the draft report, I noticed that it talked about a transient population. We have a very large transient population here in Oswego County, because much of our land is farm. We have a lot of immigrants coming in from whether it's Mexico or Puerto Rico or whatever. And I didn't see them included in the large transient population.

NMS-B-4 Another thing, the draw down, the cone of depression around the Nine Mile Plant point, hasn't been thoroughly investigated as far as how this is affecting the groundwater availability for resident of Oswego County.

For example when the town of New Haven, many residents along the shoreline are complaining about not having the water available in their wells, and I'm wondering if this constant drawdown isn't affecting the groundwater table.

## Appendix A

NMS-B-5 I would also suggest that you create a new category. You've got low, medium, great. Perhaps you should include one called catastrophic. When something is totally demised and made unavailable at any bottom, zero, it seems to me that should be a category.

NMS-B-6 Another thing I didn't see was, although alternative energy sources were looked at as far as the implication of how they would affect the Nine Mile Plant, they weren't noted as how they would affect the general employment. Oswego County has very high unemployment rate.

And perhaps if wind, and solar, were invested in, it would create more job opportunities for the people in Oswego County, and not just being able to work with the nuclear plant.

NMS-B-7 I happened to review the report of the NRC and the utilities back in the 1990s in a report that I worked while I worked at Oswego State. I made 42 recommendations on improving the environmental impact, environmental impact assessment. Of these absolutely none were incorporated.

The last time that I received a report from the New York State Department of Health, which is the agency with which the utilities share their data, their reports are anywhere from five years late in coming, at that time, too, no one in our public arena was looking or reading the report.

NMS-B-8 I would suggest that even though they are not edible, that I think that zebra mussels should be included into the environmental assessment. They are filter feeders, and they incorporate a lot of water, and I think that maybe they would be a good indicator as to radionuclides in the environment.

NMS-B-9 Also if the plans are releasing 100 curies per year, I am really questioning the one millirem per person dose factor of people around the plants.

And that's it for my comments. Thank you.

MR. CAMERON: Okay, those are good examples of the type of information that we like to hear in comments for consideration.

One question for you. The study or the 42 recommendations from Oswego State, are you going to submit a copy of that to us?

MS. BOND-CLARK: They were submitted.

MR. CAMERON: And when was that?

MS. BOND-CLARK: I did the study in 1990.

MR. CAMERON: Okay, but they weren't submitted as part of this license renewal?



MS. BOND-CLARK: I can.

MR. CAMERON: I think that should be something that we should look at. So please submit it to us.

MS. BOND-CLARK: You've got a copy somewhere.

MR. CAMERON: Thank you.

And Bruce, did you have something.

MR. McDOWELL: We will look at all the comments that you made.

But I did want to address the migrant farm labor, just because I found it quickly. It's on page 256, we did talk about the amount of migrant labor here.

MR. CAMERON: And I think the comment was that there were some groups that needed to be addressed further?

MS. BOND-CLARK: Yes. I was just questioning the number there, that's all.

MR. CAMERON: Okay, thank you.

Some of you came in after - you might not have had an opportunity to fill out the yellow card that we asked people to fill out if they wanted to make a comment. But you are certainly free to comment.

I didn't know, Katherine, if you wanted to say anything, comment to us or Tom, or anybody else at this point? If you want to, please come up and talk to us.

Okay. And there is a written comment period too. And part of the reason for the public meeting is not only to give people an opportunity to talk tonight, but to give you a chance to hear information that you might want to use to submit a written comment to us, or email.

Tom, did you want to say something? Go ahead.

MR. DELLWO: I'm not prepared either, but I just like getting up in front of podiums.

In my questions and stuff like that, I didn't mean to disparage the people that work at Nine Mile, or the NRC, or any of that.

My concerns fundamentally deal with, number one, the idea that I don't know of any other type  
NMS-C-2 of power that puts at risk as many lives as nuclear energy does. And I think that is borne out by

## Appendix A

the fact that we have the Nuclear Regulatory Commission, which is specifically for nuclear power plants. We have to have this organization that regulates them and looks after them because of the possible damage that they could cause, that's catastrophic as Linda said.

And so I think that - and I think that one comment that I have, and I'm going to make this really short, but one comment that I would have about the GEIS and this whole process is that I'm not a scientist, and I know of only one person who is a scientist here, that was a member of the public that came of her own volition, and that is Linda.

And I guess, I mean I understand that the NRC has staff, and that they hire people to do this, and they hire scientists to do this, but the public, and especially in a community like Oswego, in a county like Oswego, doesn't have the money to do something like that on their own.

NMS-C-3 And I would like to see possibly the nuclear power plants pay for a totally independent - from the NRC or anybody else - somebody who could come to possibly look it over, look over the GEIS, look over the work that was done by the scientists who were paid by the NRC, a number of different things that they could look at, because I don't have the expertise to do that. I work all day. I didn't even have the time to read the whole document.

And so I think that that is something that could really benefit the public, that we had somebody who has the money and the time to go out and follow up with this and do the study independent from anything having to do with the NRC.

And that would be my comment.

Thank you.

MR. CAMERON: Okay, thank you, Tom. Do you want to go up?

MS. HOBBS: Do I have to go up?

MR. CAMERON: You don't need to. You want to talk from right here with this?

MS. HOBBS: Well, yes, okay. In addition to that, it would be nice to see maybe some sort of task force whose task it is to educate particularly local residents about some of the technical issues and in terms of the environmental impacts for instance.

NMS-D-1 I think even in terms of Risk communication to the public, and specifically local residents. And just seeing my second public meeting, and I appreciated Linda's question about how many elected officials are here, and I would ask also how many local residents are here. And that is one of my big concerns, why aren't more people, stakeholders, local people who are affected by the potential risks involved represented or here?

NMS-D-2 And then my other big thing is about the assumption, that I now I need to speak more with some of you about this. But the one assumption, particularly with the health studies, you mentioned based on Chernobyl, and based on the effluents.

But that seems like a pretty big assumption, to go from like what might be predicted to happen from the radiological effluents or based on other data from other sources.

It seems to me, why not be more certain? Isn't that what science - you are supposed to be reducing uncertainty. So it seems to me that more efforts - you know, you have the resources to do it. Why aren't you doing it? Why aren't you going into the community and actually monitoring the health of people in the community?

MR. CAMERON: Okay, thank you for those comments on education and maybe when you get together with people and talk after this, they can talk about a little bit about what the NRC's authority is in this area to do things like that. Because there may be some limitations there, and what other agencies do things like that.

But I think that generally my colleagues would say that their conclusions and their evaluations are based on science. And I think that I would just exhort them to talk to you about that, and to demonstrate that.

Okay, thank you all, from the facilitator's point of view, for your comments and courtesy, and being concise. And I would just ask Rani if she would close the meeting out for us so that we can have some informal discussions.

MS. FRANOVICH: Thank you, Chip.

I just wanted to again thank you all for coming out. I know that we're all busy and have hectic lives, and your participation really is very important. It's also an opportunity for the NRC to meet with members of the public. It's an opportunity to we don't get very often, and we really enjoy it. So thank you again for coming.

As you came into the room, one of the things that you hopefully received is an NRC public meeting feedback form; it looks like this. If you have any ideas or suggestions on how we can improve our public meeting process we'd like to hear them. Any way we might be able to conduct the meetings that would meet your needs a little bit better, please share those with us.

These forms are prepaid. The postage is prepaid, so just fold them up and send them in, or you can leave them with us when you leave tonight.

If you have any comments on the draft document, for Nine Mile Point, that you didn't want to provide tonight as we've said earlier, you can submit them by email or in writing. We will be taking those comments until December 22nd, 2005.

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MR. CAMERON: And Leslie Fields, who is the environmental project manager, is the point of contact for that.

And finally, if you wish to speak with any of us after the meeting, several of us will be hanging around for a few minutes afterwards, and we'd be delighted to talk with you more.

So thanks again for coming out, and we appreciate your participation in our process.

(Whereupon the proceeding in the above-entitled matter was adjourned)