

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION

Title: Draft EIS: James A. Fitzpatrick
Nuclear Power Plant: Afternoon Session

Docket Number: 50-333

Location: Oswego, New York

Date: Wednesday, August 1, 2007

Work Order No.: NRC-1696

Pages 1-23

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3 NUCLEAR REGULATORY COMMISSION

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5 OFFICE OF NUCLEAR REACTOR REGULATION (NRR)

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7 PUBLIC MEETING

8 TO DISCUSS THE

9 DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT

10 FOR THE LICENSE RENEWAL OF

11 JAMES A. FITZPATRICK NUCLEAR POWER PLANT

12 + + + + +

13 1:30 P.M. SESSION WEDNESDAY,

14 AUGUST 1, 2007

15 + + + + +

16 SCRIBA TOWN HALL

17 42 CREAMERY ROAD

18 OSWEGO, NEW YORK 13126

19 + + + + +

20
21 NRC STAFF PRESENT:

22 RANI L. FRANOVICH, NRR/ADRO/DLR/REB

23 JESSIE M. MUIR, NRR/ADRO/DLR/REB

P R O C E E D I N G S

MS. FRANOVICH: Welcome, everyone. Can everyone hear me? Okay; good. I just want to take a few minutes to welcome you all to our public meeting.

The meeting is to solicit comments on the Draft Environmental Impact Statement for FitzPatrick.

I am Rani Franovich. I am the branch chief of the Environmental Branch in headquarters of the NRC, that manages the environmental reviews for license renewal.

This is an important part of our environmental review process.

NEPA, the National Environmental Policy Act, mandates that we include the public in our environmental review process, and so soliciting comments on the Draft Environmental Impact Statement is something that we get a lot of good information from. So thank you all for being here.

We're going to have a brief presentation.

Jessie Muir, who is the project manager for the environmental review, is going to give a brief 15 minute presentation, to talk with you about our preliminary determinations for the environmental review, and then we will go into a brief question-and-answer period, if there are any questions that members

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1 of the public have.

2 And after that, we will go right into
3 selecting people to come up and offer their comments
4 to us. The comments will be transcribed. We have
5 Peter sitting over here. He's going to record the
6 entire meeting. So I would ask that each of you come
7 up to the microphone to make your comments, state your
8 name and affiliation, if any. One person speaks at a
9 time, so that we can get a clean transcript, and if
10 you could all take a few minutes to make sure your
11 cell phones are off, so we don't have any disruptions
12 during the meeting, that'd be great.

13 And with that, I will invite Jessie to
14 come on up and make her brief presentation.

15 Jessie.

16 MS. MUIR: Thank you, again, all, for
17 taking the time to come to this meeting. I hope the
18 information that we provide you will help you to
19 understand the process we're going through, what we've
20 done so far, and the role you can play in helping us
21 make sure that the final EIS is accurate.

22 I'd like to start off by briefly going
23 over the agenda and the purposes of today's meeting.

24 We're going to present the preliminary
25 findings of our environmental review, which assesses

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1 the impacts associated with renewing the operating
2 license for FitzPatrick.

3 Then we'll give you some information about
4 the schedule for the remainder of our review, and how
5 you can submit comments in the future.

6 And then finally, really, the most
7 important part of tonight's meeting, like Rani said,
8 is we'll receive any comments that you may have. Next
9 slide.

10 The Atomic Energy Act gives the NRC the
11 authority to issue operating licenses to commercial
12 nuclear power plants for a period of up to 40 years.

13 For FitzPatrick, that license will expire
14 in 2014. Our regulations make provisions for
15 extending plant operation for an additional 20 years.
16 FitzPatrick Nuclear Power Plant, owned and operated by
17 Entergy, has requested license renewal.

18 As part of the NRC's review of that
19 license renewal application, we perform an
20 environmental review to look at the impacts of an
21 additional 20 years of operation on the environment.

22 We held a meeting here, in October of
23 2006, to seek your input regarding the issues we
24 needed to evaluate. Now we are here to present the
25 preliminary results in the draft supplemental EIS, and

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1 afterwards, we'll open the floor for comments on the
2 draft document. Next slide.

3 Now this slide illustrates the
4 environmental review process. This review, which is
5 the subject of today's meeting, evaluates the impacts
6 of license renewal. It involves scoping activities
7 and the development of a document called the
8 Supplemental Environmental Impact Statement, or an
9 EIS.

10 The Draft Supplemental EIS provides the
11 staff's preliminary assessment of environmental
12 impacts during the period of extended operation. The
13 Draft Supplemental EIS for FitzPatrick was published
14 for comment in June. Next slide.

15 Next, I would like to give some
16 information on the statute that governs the
17 environmental review, and that statute is the National
18 Environmental Policy Act of 1969, commonly referred to
19 as NEPA.

20 NEPA requires that all federal agencies
21 follow a systematic approach in evaluating potential
22 environmental impacts associated with certain actions.

23 We, at the NRC, are required to consider
24 the impacts of the proposed action, which in this case
25 is license renewal, and also any mitigation for those

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1 impacts.

2 We are also required to consider
3 alternatives to the proposed action.

4 The NRC has determined that an EIS will be
5 prepared for any proposed license renewal of a nuclear
6 plant. NEPA and our EIS are disclosure tools.
7 They're specifically structured to involve public
8 participation and obtain public comment.

9 This meeting facilitates the public
10 participation in our environmental review.

11 In the 1990's, the NRC staff developed a
12 Generic EIS that addresses a number of issues common
13 to all nuclear power plants. As a result of that
14 analysis, the NRC was able to determine that a number
15 of environmental issues were common to or similar for
16 all nuclear power plants.

17 The staff is supplementing that Generic
18 EIS with a site-specific EIS that addresses issues
19 specific to the FitzPatrick facility.

20 Together, the Generic EIS and the
21 supplemental EIS form the staff's analysis of the
22 environmental impacts of license renewal for the
23 FitzPatrick site.

24 Also during the review, the NRC staff
25 looks for and evaluates any new and significant

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1 information that might call into question the
2 conclusions we reached previously in the Generic EIS.
3 In addition, the staff searches for new issues not
4 already addressed in the Generic EIS. Next slide.

5 This slide is our decision standard for
6 the environmental review, and simply put, is license
7 renewal acceptable from an environmental standpoint?
8 Next slide.

9 Now we use information we received in the
10 environmental report that was submitted as part of
11 Entergy's license renewal application. We also
12 conducted an audit in December of last year, where we
13 toured the facility, we observed plant systems, and
14 evaluated the interaction of the plant operations with
15 the environment.

16 We talked to plant personnel and reviewed
17 specific documentation. We also spoke to federal,
18 state, and local officials, permitting authorities and
19 social services. We also consider the comments
20 received during the public scoping period.

21 All of this information forms the basis of
22 our preliminary conclusions presented in the Draft
23 Supplemental EIS. Next slide.

24 And this slide presents the overall team
25 expertise for the FitzPatrick environmental review,

1 and it includes various disciplines.

2 Now in the mid 1990's, the NRC evaluated
3 the impacts of all operating nuclear power plants
4 across the U.S. The NRC looked at 92 separate impact
5 areas, and found that for 69 of those areas, the
6 impacts were the same for all plants with similar
7 features. The NRC called these Category 1 issues and
8 they were able to make the generic conclusion, that
9 all of the impacts on the environment would be small.

10 The NRC published that Generic EIS in
11 1996.

12 The NRC was unable to make similar
13 determinations for the remaining 23 issues, and as a
14 consequence, NRC decided that we would prepare a
15 supplemental EIS for each plant, to address the
16 remaining 23 issues, and this slide lists some of the
17 major impact areas addressed for FitzPatrick.

18 This slide outlines how impacts are
19 quantified. The Generic EIS defined three impact
20 levels--small, moderate and large. And I'm going to
21 use the fishery in Lake Ontario to illustrate how we
22 use these three terms.

23 The operation of the FitzPatrick plant may
24 cause a loss of fish at the intake structure. If the
25 loss of fish is so small, that it cannot be detected

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1 in relation to the total population in Lake Ontario,
2 then the impact would be small.

3 If losses cause the population to decline,
4 but then stabilize at a lower level, the impact would
5 be moderate.

6 If losses at the intake cause the fish
7 population to decline to the point where it cannot be
8 stabilized, or it continually declines, then the
9 impact would be large.

10 Now the first set of issues I'm going to
11 talk about relate to the cooling system. There are
12 three Category 2 issues relevant to the cooling
13 system. These are entrainment, impingement and heat
14 shock.

15 Entrainment refers to the process where
16 very small aquatic organisms are pulled into the
17 cooling system. The majority of these organisms
18 experience mortality due to physical, chemical, or
19 thermal impacts.

20 Impingement refers to larger organisms
21 being pulled into the cooling system and getting
22 pinned on the debris screen. Impinged organisms
23 generally experience a lower mortality rate than
24 entrainment.

25 Heat shock, the third Category 2 issue

1 related to the cooling system, refers to when
2 relatively warm water is released into a colder
3 environment. Aquatic organisms adapted to the cooler
4 water can lose equilibrium, or die, when exposed to
5 warmer water. The team evaluated these three impact
6 areas and our preliminary conclusion is that the
7 FitzPatrick cooling system could have a small impact
8 on the fishery in Lake Ontario. Next slide.

9 Radiological impacts are a Category 1
10 issue. This means the NRC has made a generic
11 determination that the impact of radiological releases
12 from normal nuclear plant operations during the period
13 of extended operation is small.

14 By design, the operation of nuclear power
15 plants is expected to result in small releases of
16 radiological effluents. FitzPatrick is no exception.

17 During our site audit, we looked at
18 selected parts of the radioactive effluent release and
19 radiological environmental monitoring programs, and
20 supporting documentation.

21 We looked at how the gaseous and liquid
22 effluents are controlled, treated, monitored and
23 released, as well as how solid radioactive wastes are
24 handled, packaged and shipped. We looked at how the
25 applicant's radiation protection program maintains

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1 radiological releases in compliance with the
2 regulations for radioactive effluents.

3 We also looked at the applicant's data
4 from on-site and near-site environmental radiological
5 monitoring station locations for airborne releases and
6 direct radiation, as well as monitoring stations
7 beyond the plant site where water, milk, fish, and
8 food products are sampled.

9 Based on our review of the data, we found
10 that the calculated dose to the maximally-exposed
11 member of the public to be well within the NRC's
12 radiation protection limit.

13 The dose of the maximally-exposed person
14 is a conservative calculation which assumes maximum
15 values associated with an individual who is exposed
16 from all radiation sources from the plant.

17 Since releases from the plant are not
18 expected to increase on a year to year basis during
19 the period of extended operation, and since we also
20 found no new and significant information related to
21 this issue, we preliminarily adopted the generic
22 conclusion that the radiological impact on human
23 health and the environment is small. Next slide.

24 There are no aquatic species, federally
25 listed as threatened and/or endangered, that have the

1 potential to occur in the vicinity of FitzPatrick or
2 its transmission lines; however, there are five
3 terrestrial species. So we prepared a detailed
4 biological assessment to analyze the effects of
5 continued operation of FitzPatrick on these listed
6 terrestrial species.

7 The staff's preliminary determination is
8 that the impacts during the period of extended
9 operation, on threatened or endangered species, would
10 be small.

11 There are two classes of accidents
12 evaluated in the Generic EIS, design-basis accidents
13 and severe accidents. Design-basis accidents are
14 those accidents that the plant is designed to
15 withstand without risk to the public. The ability of
16 the plant to withstand these accidents has to be
17 demonstrated before the plant is granted a license.

18 Because the licensee has to demonstrate
19 acceptable plant performance for the design-basis
20 accidents through the life of the plant, the
21 Commission found in the Generic EIS, that the
22 environmental impacts of design-basis accidents is
23 small for all plants.

24 The second category of accidents is severe
25 accidents. Severe accidents are, by definition, more

1 severe than design-basis accidents because they would
2 result in substantial damage to the reactor core.

3 The Commission found, in the Generic EIS,
4 that the risk of a severe accident is small for all
5 plants. Nevertheless, the Commission determined that
6 alternatives to mitigate severe accidents must be
7 considered for all plants that have not done so.
8 These are called SAMAs, Severe Accident Mitigation
9 Alternatives.

10 The SAMA evaluation is a Category 2 issue
11 and thus requires a site-specific analysis.

12 The purpose of the SAMA evaluation is to
13 ensure that plant changes with the potential for
14 changing severe accident safety performance are
15 identified and evaluated. Next slide.

16 The scope of potential plant improvements
17 considered included hardware modifications, procedural
18 changes, training program improvements, and basically
19 a full spectrum of potential changes. The scope
20 includes SAMAs that would prevent core damage as well
21 as SAMAs that would improve containment performance,
22 if a core damage event occurs.

23 The preliminary results of the FitzPatrick
24 SAMA evaluation are summarized on this slide.

25 239 potential SAMA candidate improvements

1 were identified for FitzPatrick. That number was
2 reduced to 63, based on a multi-step screening
3 process. Then a more detailed assessment of the risk
4 reduction potential, and implementation cost, were
5 performed for each of the 63 SAMAs.

6 Six SAMAs were identified as potentially
7 cost-beneficial. None of the potentially cost-
8 beneficial SAMAs, however, are related to the managing
9 of effects of plant aging during the period of
10 extended operation. Accordingly, they are not required
11 to be implemented as part of license renewal.

12
13 Regardless, Entergy is encouraged to consider, and
14 evaluate further, the potentially cost-beneficial
15 SAMAs. In fact, Entergy has indicated that one SAMA
16 has already been implemented, one is scheduled for the
17 end of this year, and the other four have been
18 combined into a single project undergoing an in-house
19 review. Next slide.

20 Cumulative impacts are the impacts of the
21 proposed action, again, in this case license renewal,
22 taken together with other past, present, or reasonably
23 foreseeable future actions, regardless of what agency
24 or person undertakes those actions.

25 The cumulative impacts were evaluated for

1 the period of extended operation, and our preliminary
2 determination is that any cumulative impacts resulting
3 from continued operation of FitzPatrick would be small
4 for all resources.

5 Now as part of the environmental review
6 process, we also evaluated a number of alternatives to
7 license renewal. Specifically, we looked at the
8 impacts of replacing FitzPatrick power, approximately
9 880 megawatts, with power from other sources.

10 Alternatives that the team looked at
11 included a "no-action" alternative, that is, not
12 renewing the license. We also looked at replacing
13 FitzPatrick generation with generation from new power
14 plants, either coal, natural gas, or new nuclear. We
15 considered the impacts and capabilities of providing
16 replacement power with purchased power. We also looked
17 at other technologies such as wood, wind, and solar
18 power. Then we looked at a combination of
19 alternatives, including conservation, to replace that
20 capacity.

21 For each alternative, we looked at the
22 same type of issues that we did when we were
23 evaluating the environmental impacts of license
24 renewal.

25 The team's preliminary conclusion is that

1 the environmental impacts of selected alternatives
2 would reach moderate to large significance in at least
3 some of the categories evaluated. Next slide.

4 During the environmental review, we found
5 no information that was both new and significant.
6 Therefore, we have preliminarily adopted the Generic
7 EIS conclusion that impacts associated with the 69
8 issues will continue to be small.

9 In the FitzPatrick supplemental EIS, we
10 analyzed the remaining 23 Category 2 issues, and
11 determined that the environmental impact resulting
12 from these issues was also small in all categories.

13 During our analysis, we found that the
14 environmental impacts of alternatives, in at least
15 some impact areas, would reach moderate to large
16 levels of significance. Based on these conclusions,
17 the NRC staff's preliminary recommendation is that the
18 environmental impacts of license renewal are not so
19 great, that license renewal would be unreasonable.

20 Listed are some of the important milestone
21 dates for the FitzPatrick environmental review. In
22 June, we published the Draft Supplemental EIS, and we
23 are currently accepting public comments on the draft
24 until September 5th. The Final Supplemental EIS is
25 scheduled to be published in January of next year.

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1 And this slide identifies me as your
2 primary point of contact with the NRC for the
3 environmental review. Mr. Tommy Lee is the contact
4 for any questions related to the safety review.

5 Documents related to the FitzPatrick
6 review may be found at the Penfield Library on the
7 SUNY Oswego campus, or at the Oswego public library,
8 and at the bottom of the slide is an Internet address
9 where you can directly access the FitzPatrick
10 Supplemental EIS. Next slide.

11 There are several ways you can provide
12 your comments on the FitzPatrick draft. You can
13 provide comments today during the comment period. If
14 perhaps you're not ready to provide a comment today,
15 you can send your comments via e-mail to
16 FitzPatrickEIS@nrc.gov. You can also send them via
17 "snail mail" or hand-deliver them to us at
18 headquarters in Maryland.

19 And with that, my presentation is
20 concluded, and I'll hand it over to Rani.

21 MS. FRANOVICH: Thank you, Jessie.

22 Before we get started on the comments,
23 does anybody have a question about any of the
24 information that Jessie just went over? Any
25 questions?

1 Yes, sir. Hold on. Let me come to you
2 and let you ask the question in the microphone. Your
3 name, please.

4 MR. STEVENS: Michael Stevens. What were
5 the five federal threatened or endangered terrestrial
6 species on or near the site? Do we know?

7 MS. FRANOVICH: Jessie, please go to the
8 microphone.

9 MS. MUIR: It was the bald eagle, which
10 has since been delisted, since we published. It was
11 the piping plover, which is a bird. The Indiana bat,
12 the bog turtle, and the fifth one is slipping me. Is
13 it the snake?

14 MS. FRANOVICH: We'll get back to you on
15 the fifth one. We're taking a look at the document
16 right now, so we'll get back to you on that.

17 Any other questions?

18 [No response]

19 MS. FRANOVICH: Okay. Mr. Stevens, I
20 believe you registered to make comments. Would you
21 like to approach the podium, please.

22 Mike Stevens.

23 MR. STEVENS: Good afternoon. I was born
24 and raised just within a few miles of Nine Mile Point.
25 My family and I live less than a mile from the plant,

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1 on the lake, in our home, where we will expect to be
2 retiring in. I came in today just to state that I'm
3 in favor of the license extension. My feelings are
4 based on several facts. The plant operation, as most
5 of you know, is closely monitored, as you can see here
6 today, and regulated.

7 There's FEMA, the NRC, the EPA, etcetera.
8 Redundant safety systems at the plant protect the
9 public and all of our vital equipment. The equipment
10 receives preventative maintenance to ensure
11 reliability in case of any need for it. Even the most
12 simplistic tasks are completed using written procedure
13 to ensure success and accuracy.

14 Drills and the use of equipment simulators
15 ensure training is effective for all workers, and that
16 the workers are prepared for anything.

17 Safe operation and a strong safety culture
18 is always number one at the station. Spent nuclear
19 fuel is stored safely in heavy sealed containers,
20 protecting it from all natural or manmade disasters,
21 unlike most other stations in the U.S.

22 The lack of emissions make operation
23 environmentally friendly, and a positive impact to the
24 local economy and tax base, as we all know.

25 Power consumption is increased to date,

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1 and no new plants have been started, and nuclear power
2 reduces our demand on foreign oil. As you might
3 think, my knowledge of these facts is because I work
4 at J.A.F. I'm not here as an employee today. I'm
5 here as a concerned resident. I'll retire long before
6 the license extension is needed, and will continue to
7 draw my pension, with or without the continued
8 operation of FitzPatrick.

9 I'm making my feelings known for the good
10 of the community and not the interests of the company
11 that I happen to work for.

12 The general public would feel the same way
13 that I do, if they knew what the workers already know,
14 that the plant is safe, the redundant systems protect
15 the health and safety of the public. We, as in
16 residents, should be more concerned of potential
17 emissions such as coal dust, arsenic, methane, carbon
18 dioxide from the proposed coal gassification plant
19 which will be processing 20,000 tons of coal a day, or
20 the damage to our fish population by the latest
21 invader called the round goby, which I've caught a
22 million of in the lake recently. Or the newest virus
23 infection that the fish are infested with, which is
24 called VHS.

25 That's all I had. Thanks for giving me

1 the opportunity to speak.

2 MS. FRANOVICH: Thank you, Mr. Stevens.

3 Next, we have Mr. Ken Schwartz who
4 registered by e-mail. Is Mr. Ken Schwartz here?

5 Okay. I don't see Mr. Schwartz.

6 Is anyone else here, present, who would
7 like to make a comment?

8 Yes, sir. Please approach the podium let
9 us know who you are, and feel free.

10 MR. TOTH: Thank you. Yes. My name's
11 Gary Toth. I'm a life-long resident of Oswego County,
12 and I'm also the business manager of Carpenters Local
13 747, and I came today in support of the license
14 renewal for the FitzPatrick nuclear plant.

15 I have about 425--I checked my
16 registration. I have about 425 members who live right
17 in Oswego County. A lot of them live in the Oswego
18 school district and in Scriba, and I tell you, we have
19 a lotta guys that work at the plant. They're in
20 there, and out, quite a bit. To a man, everyone has
21 gone in that plant, done their job, and come out
22 safely. That plant is operated very safely, very
23 well. I worked at that plant. I worked with divers.
24 I worked in some of the more restricted areas.

25 I didn't help build the plant cause it was

1 a little before my time. But I can attest through our
2 membership, and the people that work there, that's a
3 very well-run plant, a very well-maintained plant, a
4 very safe plant.

5 I live about ten miles east of here,
6 towards Mexico, actually west of here, towards Mexico,
7 and I'm the third generation here. I'm very
8 comfortable with this plant operating for another 20
9 years beyond its license renewal--or beyond its
10 license date. So again, I stand here on behalf of
11 about 420 members and their families, and myself, as
12 a resident, in support of the license renewal. Thank
13 you.

14 MS. FRANOVICH: Thank you.

15 Anyone else?

16 [No response]

17 MS. FRANOVICH: Okay.

18 Well, thank you all for coming and
19 listening to our presentation, sharing with us your
20 comments. The end of the comment period is September
21 the 5th. If you have any comments you wish to share
22 after this meeting, please send them electronically to
23 the address on the slide, it's not this one but it's
24 in the handout, by that date.

25 I want to thank you all for coming again.

1 If you have any suggestions for how we can do our
2 meetings different, things we can do better, things we
3 can improve in, there's a meeting feedback form out
4 here on the table as you approach the room.

5 Please feel free to fill it out and hand
6 it to one of us, or if you prefer, the postage is
7 prepaid, you can fold it up and mail it in, and with
8 that, thank you very much for being here.

9 [Whereupon, at 1:55 p.m., the public
10 meeting was concluded.]
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