

# UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

March 24, 2000

Mr. David A. Lochbaum Union of Concerned Scientists 1616 P Street NW, Suite 310 Washington, DC 20036

SUBJECT:

TRANSCRIPT OF TELEPHONE CONFERENCE CALL CONCERNING INDIAN

POINT 2 10 CFR 2.206 PETITION

Dear Mr. Lochbaum:

On March 16, 2000, a telephone conference was held between you, Mr. Jim Riccio, and representatives of the NRC staff. The purpose of the telephone conference was to provide an opportunity to explain to members of the Petition Review Board the actions requested in the March 14, 2000, petition, their bases, and answer any questions raised by the NRC staff. The telephone conference was transcribed, and a copy of the transcript is enclosed. Both this transcript and the original petition have been forwarded to the public document room. If you have any questions, please contact me at (301) 415-1495.

Sincerely.

for

L. A. Wiens, Senior Project Manager, Section 2 Project Directorate II

Division of Licensing Project Management Office of Nuclear Reactor Regulation

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Docket No. 50-247

Enclosure: March 16, 2000, Telephone Conference Transcript

cc w/encl: See next page

Indian Point Nuclear Generating Station Unit 2

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Mr. David A. Lochbaum Union of Concerned Scientists 1616 P Street NW, Suite 310 Washington, DC 20036

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Sincerely,

/RA original signed by G. Wunder for/

L. A. Wiens, Senior Project Manager, Section 2 Project Directorate II Division of Licensing Project Management Office of Nuclear Reactor Regulation

Docket No. 50-247

Enclosure: March 16, 2000, Telephone Conference Transcript

cc w/encl: See next page

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# ORIGINAL

## OFFICIAL TRANSCRIPT OF PROCEEDINGS

## UNITED STATES OF AMERICA

## NUCLEAR REGULATORY COMMISSION

Title

CONFERENCE CALL ON 2.206

PETITION ON INDIAN POINT

UNIT 2 NUCLEAR POWER PLANT

Case No.:

Work Order No.: ASB-300-1197

LOCATION:

Unknown

DATE.

Thursday, March 16, 2000

PACES. 1 16

1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
3	***
4	CONFERENCE CALL ON 2.206 PETITION ON
, 5	INDIAN POINT UNIT 2 NUCLEAR POWER PLANT
. 6	
7	Thursday, March 16, 2000
8	
9	
10	The above-entitled matter came on for conference
11	call, pursuant to notice, at 8:00 a.m.
12	
13	APPEARANCES:
14	PETITIONER D.A. LOCHBAUM ET. AL
15	PETITION MANAGER LEONARD WIENS, DLPM, NRR
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#### PROCEEDINGS

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2	[8:00 a.m.]
3	SPEAKER: This is a petition to [inaudible].
4	Who's on the line now, please?
5	MR. LOCHBAUM: David Lochbaum, the Union of
6	Concerned Scientists, and Jim Riccio of Public Citizen.
7	SPEAKER: Hi, David. How are you doing this
8	morning?
9	MR. LOCHBAUM: Pretty good.
10	SPEAKER: Okay.
11	[Inaudible.]
12	MS. BLACK: My name is Suzanne Black, and I'm the
13	Deputy Director, Division of Licensing Project Management in
14	NRR, and we're here today to give you an opportunity to
15	explain or provide additional supporting information, if you
L6	choose to, to your petition that we received that was dated
L7	March 14, I believe.
18	SPEAKER: That's correct.
۱9	MS. BLACK: Let me go around the room and
20	introduce who's here.
21	I'm Suzie Black.
22	MR. SUBBARATNAM: I am Ram Subbaratnam, again the
23	coordinator for [inaudible] section.
24	MR. WIENS: Len Wiens, and I'll be the petition
25	manager for this petition.

1	SPEAKER: [Inaudible] with the Materials Branch.
2	MR. BIRKO: Herb Birko, Project Director in NRR.
3	SPEAKER: [Inaudible] project in NRR.
4	SPEAKER: [Inaudible], Project Director, NRR.
5	MR. GOLDBERG: I'm Jack Goldberg from the Office
6	of General Counsel.
7	MS. BLACK: And I believe we have people from the
8	region on the phone.
9	SPEAKER: Glen Meyer and Bill Rowen. We're branch
10	chiefs in Region I.
11	MR. DORFINE: And Larry Dorfine, Branch Chief in
12	Region I.
13	MS. BLACK: Okay. And is the licensee listening
14	in on the line?
15	MR. ALLEN: Yes. This is Don Allen, Con Edison,
16	Indian Point 2.
17	MS. BLACK: Okay. And Mr. Lochbaum, who do you
18	have on the line?
19	SPEAKER: [Inaudible.]
20	MS. BLACK: Okay.
21	Well, good.
22	I think you've both been involved in these
23	telephone calls before, so
24	SPEAKER: Before we get started, could I ask one
25	question?

MS. BLACK: Sure.

SPEAKER: Because this is a meeting or a conference call between NRC headquarters, NRC regional staff, the petitioners, and the licensee --

MS. BLACK: Uh-huh.

SPEAKER: Is this conforming with the guidance in Management Directive 3.5?

MS. BLACK: The 2.206 petition process does not necessarily follow Management Directive 3.5.

We attempt to follow 3.5 to the extent that it's feasible, but because of the timeliness considerations in 2.206, we specifically stated that we don't need to follow 3.5.

SPEAKER: I guess I would disagree with that, because 3.5 allows for emerging issues to be handled on an expedited basis, but there's conditions that have to be met in order for that expedited condition or handling to be done.

SPEAKER: 3.5 will also provide that it does not supersede other specific processes that govern meetings associated with those other specific processes, and Management Directive 8.11 is another process that describes certain types of meetings that occur, and we will clarify this when we revise Management Directive 8.11.

SPEAKER: What timeframe do you have for revising

1	8.11?
2	MS. BLACK: The draft is
3	SPEAKER: The draft will be due on
4	MS. BLACK: By the middle of the summer?
5	SPEAKER: Yes.
6	MS. BLACK: June 30th, I believe, is our due date
7	for providing a revision.
8	SPEAKER: [Inaudible.]
9	SPEAKER: For comment.
10	We're going to put that draft revision out in the
11	Federal Register, also.
12	SPEAKER: So, the goal for license renewal
13	application reviews is 24 months, and the goal for
14	Management Directive 8.11 revision is longer than that?
15	Anyway, that was a side issue. Let's get on to
16	the real issue.
17	MS. BLACK: Fine with me.
18	SPEAKER: [Inaudible.]
19	MS. BLACK: Oh and if you could each identify
20	yourself when you speak so that the transcript will help us
21	out.
22	I know we've kept forgetting to do that, too, but
23	we'll try to make that happen.
24	SPEAKER: No problem.
25	MS. BLACK: Okay.

Which one of you is going to speak?

MR. LOCHBAUM: David Lochbaum from the Union of Concerned Scientists.

MS. BLACK: Okay.

MR. LOCHBAUM: Basically, I think the petition or the requested actions are fairly straightforward. There's only a couple of points we'd like to clarify or add to mature what's in the petition, and also one item we want to stress.

The item we want to stress is the unavailability of information through the ADAMS system in the Public Document Room.

That's greatly hampering our ability to understand what's going [inaudible] and to -- whether the actions [inaudible] are adequate or not, because the last time I looked, there was absolutely no information in the PDR, including some that I know has been issued but has not yet made its way to the Public Document Room, despite the policy that says you'll get it there within three days of the date of the document.

MS. BLACK: Yes, we're aware of that. We've talked to Mr. Cohen, who had the same problems earlier this week, and we're passing that information on to the Office of -- OCIO.

MR. LOCHBAUM: Thank you.

The items that we'd like to clarify or add is the -- based on the public meeting that was held up in the vicinity of the plant on March 14th, on the evening of the petition, clearly the NRC is not clear in its mind whether there were indications that the tube that failed was actually cracked from the flood or not, or whether there were no indications the last time it was looked at in 1997.

MS. BLACK: Could you repeat that? I missed a little bit of that.

MR. LOCHBAUM: It wasn't very coherent. I'm sorry about that.

MS. BLACK: Yeah, and the other problem is you're a little faint on this end, if you could speak up a little bit.

We don't have a phone here that has a volume control on it, or if we do, it's all the way up.

MR. LOCHBAUM: This is David Lochbaum.

The March 14th public meeting that was held in the vicinity of the plant, Brian Sheron of the NRC staff indicated or stated that the NRC wasn't certain whether there were indications, crack indications for the tube that failed at the last inspection in 1997, or whether that tube was looked at and there were absolutely no indications of cracks.

Since we haven't gotten the documentation, we're

not able to proceed with what it is or what's not, but it looks like, no matter how that question comes out, there might be an issue involved.

If there was crack indications that should have required the tube to be plugged and they weren't plugged, then I question the licensee's decision-making process.

If there were no crack indications at all in 1997, then that questions whether the assumption of the duration or interval inspection criteria and stuff like that is not adequate.

So, there is a concern there that we have.

The second issue we'd like to add or clarify to the information in the petition is, if the requested actions in the petition are not granted and the Indian Point 2 is allowed to restart with its existing steam generators, with roughly 10 percent of the tubes plugged, we have reason to believe that the calculations done for the auxiliary feedwater heat transfer removal, following accidents and transients, improperly account for the -- that amount of tubes that are plugged.

We would like to present that information during a public meeting that we asked for and see if the NRC staff agrees or disagrees with that safety issue.

Those are the two issues we'd like to add and the one issue we want to stress.

Since it seems to be still our turn -- this is

David Lochbaum again -- I'd like to return to the issue of

Management Directive 8.11 and Management Directive 3.5.

If -- when -- I guess when Management Directive 8.11 is revised, if it's allowable to completely ignore the guidance in Management Directive 3.5, one thing we would like to see in there is that, if you're going to schedule a meeting with petitioners on the petition, it sure would be nice to talk to the petitioners in advance and make sure that they can -- they're available on the times the petition review board is set up.

Only Mr. Riccio and myself were available for this call.

Mr. Snowoff and Mr. Marriott, who are also petitioners, had previously-scheduled appointments and were unable to attend the petition review board, and it's just fortune that Mr. Riccio and myself were able to attend this call.

MR. GOLDBERG: Well, we have to consider not just this petitioner and not just petitions that are filed by one petitioner as an individual or one organization or several, but we get petitions that are filed by many organizations and many, many individuals, as a practical matter, it's not possible, and time constraints prevent us from trying to coordinate the scheduling of a telephone call with many

people, and so, as a general matter, what this process is 1 2 providing is an opportunity for a representative of the petitioners to make a presentation to the PRB. 3 MR. LOCHBAUM: This is Dave Lochbaum. 5 Who is this that's speaking? MR. GOLDBERG: Jack Goldberg. 7 MR. LOCHBAUM: Thank you. MR. GOLDBERG: And as you know, time is of the 8 9 essence when we're dealing with requests for action or 10 requests to not allow restart when that restart is in the 11 near future, and so, all those things have to be balanced, 12 and we attempted to that in this case, but we can't 13 necessarily accommodate the schedules of all people who 14 signed petitions or all organizations who are identified as petitioners. 15 16 MR. LOCHBAUM: Well, this is Dave Lochbaum again. 17 You also get a number of license amendment 18 requests in a year, in fact more than you do 2.206s, and 19 many of those license amendment requests or licensing actions are fairly urgent, and yet, you don't go out of your 20 21 way to coordinate things with the licensee at the licensee's 22 schedule convenience. 23 I just am asking for the same consideration for 24 members of the public.

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MR. BIRKO: This is Herb Birko.

25

We had an earlier petition that came in a few weeks ago on Salem, and in that case, none of the principle petitioners were available, and we actually postponed the phone call for about two weeks to accommodate them.

That eats into our schedule for getting [inaudible].

We're still required to get an acknowledgement letter out and follow the process within the established timeframe.

So, in that particular case, since none of them were available, we did accommodate the request, and we held off on holding that meeting for about two weeks.

MR. RICCIO: This is Jim Riccio from Public Citizen.

Perhaps if you hadn't turned the letter into a 2.206 petition, we could have used that time to schedule the meeting on this meeting.

I would suggest that NRC figure out whether or not there were tube indications before they allow restart and at least make that information available to the public prior to any decision to allow the plant to restart.

MS. BLACK: Jim, this is Suzie Black, and I understand what our review is going to be in headquarters, and we are going to look at that information and hold a public meeting at the site prior to restart on our review of

their steam generators. 1 2 MR. LOCHBAUM: This is Dave Lochbaum again. That's a good thing. 3 Will the information that the NRC obtains and 5 collects during this time be made publicly available before 6 that public meeting? 7 MS. BLACK: I'll look into that issue. 8 I'm not sure, at this time, exactly what kind of 9 submittals the licensee is going to make and what kind of 10 document we're going to use to document our review, but 11 certainly we will attempt to make it available as soon as we 12 can. 13 The licensee is going to give us a report on their -- I think they call it their operational assessment, and I 14 15 believe that is going to be delivered to the NRC and, 16 therefore, to PDR 10 days prior to any restart meeting or 17 whatever we're going to -- I think we're going to call this 18 the steam generator meeting. 19 MR. LOCHBAUM: Dave Lochbaum again. 20 At the Salem petition review board, there was -the NRC staff stated that NRC inspection report of February 21 28th was in the Public Document Room. 22 23 MS. BLACK: It wasn't an NRC inspection report. It was a licensee's report of their most recent steam 24 25 generator inspection.

MR. LOCHBAUM: That's correct. I mischaracterized 1 2 it. You're right. 3 MS. BLACK: Okay. MR. LOCHBAUM: I checked with the Public Document 4 5 Room yesterday afternoon. 6 It is not in the Public Document Room, or they 7 can't find it, one or the other. 8 In other words, it's not available to the public from the Public Document Room. 9 10 MS. BLACK: Okay. And that's why we offered to 11 send a copy of it to the petitioner. 12 SPEAKER: And we did. 13 MS. BLACK: And we did? Okay. 14 SPEAKER: That's great, but the point being that your ADAMS system is broken, you're not getting documents 15 16 that are of public interest. 17 I don't know if they're of high significance or 18 high-interest documents, as the agency is coining them these days, but the point is the ADAMS system isn't working, the 19 20 document flow to the Public Document Room has been 21 diminished, and basically, it is interfering with the public's opportunity to adequately participate in NRC 22 23 proceedings. MS. BLACK: What we'll do in this case is, when we 24 25 receive a copy of this report from Indian Point, we'll make

sure that you get a copy of it. 1 2 SPEAKER: Thank you. 3 SPEAKER: On the Salem report, that was put into ADAMS, now admittedly later than it should been, and it 4 5 takes three days for it to become public. So, I think, on the 17th, that will be available. 6 7 MS. BLACK: [Inaudible.] SPEAKER: [Inaudible.] 8 9 MS. BLACK: Are you talking about the 2/28 --10 SPEAKER: Salem tube -- or steam generator 11 inspection information. 12 MS. BLACK: Okay. 13 MR. LOCHBAUM: This is Dave Lochbaum. 14 The NRC's guidance on document availability says 15 it will be available in ADAMS three days after the date of 16 the document, three days after --17 MS. BLACK: It's the date the document's received 18 for external documents. 19 MR. LOCHBAUM: The guidance says three days of the 20 date of the document. 21 MS. BLACK: For internal documents or external? 22 It can't be for external, because sometimes we don't even 23 receive them within three days of the date. 24 MR. LOCHBAUM: That's true. It's three days for 25 internal ones.

1	MS. BLACK: Okay.				
2	MR. LOCHBAUM: Sorry.				
3	MS. BLACK: Can I ask some questions now about				
4	your petition?				
5	This is Suzie Black again.				
6	MR. LOCHBAUM: This is Dave Lochbaum.				
7	Sure.				
8	MS. BLACK: Under the first item, I was asked this				
9	before.				
10	Do you believe that the steam generators must be				
11	replaced even if the current steam generators meet all NRC				
12	requirements?				
13	MR. LOCHBAUM: Based on the information we have				
14	this is Dave Lochbaum.				
15	Based on the information we have now, yes, because				
16	they met all the requirements in 1997, apparently, and one				
17	of the tubes broke and caused an emergency at the plant.				
18	MS. BLACK: And the other question I had was on				
19	the KI portion of your petition.				
20	Were you petitioning that the licensee provide KI				
21	or that the communities responsible for emergency planning				
22	provide the KI?				
23	MR. LOCHBAUM: The request was not that specific.				
24	As long as the KI this is Dave Lochbaum.				
25	As long as the KI is provided, whether it's the				

1,	licensee, whether it's the communities, whether it's
2	somebody who won the lottery, it doesn't matter to us.
3	MS. BLACK: Okay.
4	Well, I don't think we have any other questions of
5	you at this time.
6	Do you have anything else you want to add?
7	MR. LOCHBAUM: This is Dave Lochbaum.
8	No.
. 9	MR. RICCIO: Nothing from Jim Riccio.
10	SPEAKER: Thank you.
11	MS. BLACK: Okay.
12	SPEAKER: [Inaudible.] We'll be in touch with you
13	as soon as we've made a decision on this one.
14	SPEAKER: Thank you, sir.
15	MS. BLACK: And we will take into consideration
16	your comments about trying to coordinate better with the
17	petitioners and try to do a better job next time.
18	MR. LOCHBAUM: Thank you.
19	MS. BLACK: Bye.
20	[Break in tape.]
21	SPEAKER: This is the region.
22	So, what's the schedule on the remainder of the
23	morning?
24	[Inaudible conversation.]
25	[Whereupon, the conference call was concluded.]

#### CERTIFICATE

This is to certify that the attached proceedings before the United States Nuclear Regulatory Commission in the matter of:

Name of Proceeding:

CONFERENCE CALL ON

2.206 PETITION ON

INDIAN POINT UNIT 2

NUCLEAR POWER PLANT

Docket Number:

Place of Proceeding:

Unknown

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission transcribed by me from recorded tapes provided by the Nuclear Regulatory Commission, and that the transcript is a true and accurate record of the foregoing proceedings to the best of my belief and ability.

Tamara Shipp

Transcriber

Ann Riley & Associates, Ltd.



### EDO Principal Correspondence Control

FROM:

DUE: 04/18/00

EDO CONTROL: G20000133

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FINAL REPLY:

David A. Lochbaum

Union of Concerned Scientists

TO:

Travers, EDO

FOR SIGNATURE OF :

\*\* GRN

CRC NO:

Collins, NRR

DESC:

2:206 -- INDIAN POINT, UNIT 2

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TAC MA8449

# UNION OF CONCERNED SCIENTISTS

March 14, 2000

Dr. William Travers
Executive Director for Operations
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

SUBJECT: PETITION PURSUANT TO 10 CFR 2.206, INDIAN POINT UNIT 2, DOCKET

NO. 50-247

Dear Dr. Travers:

On behalf of the Nuclear Information & Resource Service, the PACE Law School Energy Project, and Public Citizen's Critical Mass Energy Project, the Union of Concerned Scientists submits this petition pursuant to 10 CFR §2.206 requesting that the NRC issue an order to Consolidated Edison Company of New York preventing the restart of Indian Point 2 until the following conditions are satisfied:

- 1. All four steam generators are replaced.
- 2. The steam generator tube integrity concerns identified in Dr. Joram Hopenfeld's differing professional opinion and in generic safety issue GIS-163, "Multiple steam generator tube leakage," are resolved.
- 3. Potassium iodide (KI) tablets are distributed to residents and businesses within the 10-mile emergency planning zone or stockpiled in the vicinity of the Indian Point 2 facility.

Adequate protection of public health and safety dictates these problems be fully resolved before the plant resumes operation. The petitioners additionally request a public meeting be held in the vicinity of the Indian Point Unit 2 facility as soon as possible. We have information related to these items that we feel can be best provided to the NRC staff during a public meeting. In addition, the almost complete failure of the Agencywide Documents Access and Management System (ADAMS) makes a public meeting absolutely necessary to verify that we have all of the available information on this safety matter.

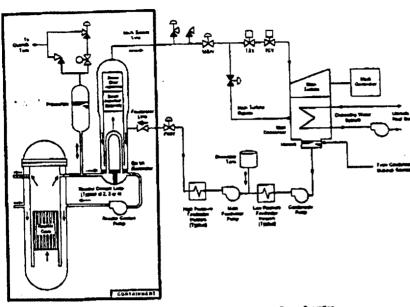
Background

On February 15, 2000, Indian Point 2 (IP2) was operating at nearly full power. IP2 is a four-loop pressurized water reactor designed by Westinghouse. Each of the four loops contains a steam generator and a reactor coolant pump and connecting piping. Each loop circulates hot water at nearly 550°F and 2,200 pounds per square inch (psig) pressure from the reactor vessel through a steam generator. The reactor coolant pump takes the slightly cooler water from the steam generator and sends it back to the reactor vessel.

There are 3,260 metal tubes inside each of the four steam generators at IP2. Hot water from the reactor passes on the inside of the tubes. Heat passes through the walls of the tubes to boil water on the outside of the tubes. The steam produced in this way leaves the steam generator via piping called steam lines. The steam lines transport the steam to the turbine where it is used to generator electricity. The steam leaving the turbine is cooled back into water in a large metal box called a condenser. The water from the condenser is pumped back to the steam generator to make more steam.

Washington Office: 1616 P Street NW Suite 310 • Washington, DC 20036-1495 • 202-332-0900 • FAX: 202-332-0905
Cambridge Headquarters: Two Brattle Square • Cambridge, MA 02238-9105 • 617-547-5552 • FAX: 617-864-9405
California Office: 2397 Shattuck Avenue Suite 203 • Berkeley, CA 94704-1567 • 510-843-1872 • FAX: 510-843-3785
Web: http://www.ucsusa.org

The reactor, the four steam generators, and the four reactor coolant pumps are housed inside the containment building. The turbine and the main condenser are located outside this containment structure.



Normal PWR Hasi Transport Paths During Power Operation

At 7:29pm operators received indications that one or more tubes inside Steam Generator #24 (there are not 24 steam generators – 24 comes from being the fourth steam generator at the second unit at Indian Point) had broken and was allowing roughly 75 gallons per minute to leak from the inside to the outside of the tubes (i.e., from the primary loop to the secondary loop).

By procedure, the operators responded to these alarms and indications by manually shutting down the reactor. They caused the control rods to rapidly insert into the reactor core and stop the nuclear chain reaction. They closed valves for Steam Generator #24 to stop leakage through the broken tube(s).

The remaining three steam generators continued to be used to remove the decay heat produced by the reactor core.

#### Basis for Requested Actions

The petitioners request that the NRC order Indian Point 2 be remain shut down until the following conditions are satisfied:

1. All four steam generators are replaced.

Eight nuclear units in the United States had Westinghouse Model 44 steam generators. Turkey Point 3 replaced the Model 44 SGs in April 1982, Turkey Point 4 in May 1983, Point Beach 1 in March 1984, HB Robinson 2 in October 1984, Indian Point 3 in June 1989, Ginna in June 1996 and Point Beach 2 in 1996. The only remaining US nuclear unit with Westinghouse Model 44 steam generators is Indian Point 2.<sup>1</sup>

Following the most recent refueling outage in 1997, Steam Generator 21 (SG21) at Indian Point 2 had 313 of its 3,260 tubes plugged, SG22 had 405 plugged, SG23 had 301, and SG24 had 306. Thus, each steam generator has about ten percent of its tubes plugged.<sup>2</sup>

Con Ed purchased replacements for the Model 44 steam generators at Indian Point 2. These replacements have been stored at the Indian Point 2 site since 1988.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Nuclear Regulatory Commission, "Circumferential Cracking of Steam Generator Tubes, NUREG-1604, April 1997. [Tables B-5 and B-6]

Stephen E. Quinn, Vice President, Consolidated Edison Company of New York, Inc., to United States Nuclear Regulatory Commission, "Steam Generator Tube Inservice Examination 1997 Refueling Outage," July 29, 1997.
 David Stellfox, Tube Rupture Prompts Look at Inspection & Maintenance Commitments, Inside N.R.C., February 28, 2000.

All of the operating nuclear power plants in the United States originally equipped with Westinghouse Model 44 steam generators have replaced them with different steam generators, except for Indian Point 2. There are replacement steam generators at the Indian Point 2 site. The Model 44 steam generators, which have on average ten percent of their tubes removed from service and many other tubes having crack indications, must be replaced prior to restart.

2. The steam generator tube integrity concerns identified in Dr. Joram Hopenfeld's differing professional opinion and in generic safety issue GIS-163, "Multiple steam generator tube leakage," are resolved.

Dr. Joram Hopenfeld of the NRC staff first documented concerns with steam generator tube integrity on December 23, 1991.4 More than eight years later, his concerns remain unresolved. A protracted debate over nuclear safety issues does not meet any one of the NRC's four stated objectives: (1) maintain safety, (2) increase public confidence, (3) improve regulatory efficiency and effectiveness, and (4) reduce unnecessary regulatory burden. If Dr. Hopenfeld is correct, then safety is not maintained until after actions taken to resolve his concerns are fully implemented. If Dr. Hopenfeld is incorrect, then the unnecessary regulatory burden is not reduced until the issue is settled. Whether Dr. Hopenfeld is right or not, an eight-plus year campaign by the NRC on a single safety issue is not efficient, not effective, and not conducive to building public confidence. Equally important, it may serve as a "chilling effect" for other conscientious NRC staffers preventing them from documenting safety concerns. Therefore, Dr. Hopenfeld's differing professional opinion and the related generic safety issue must be revolved prior to restart.

One of Dr. Hopenfeld's concerns involved multiple steam generator tube ruptures following design bases events. This concern has safety implications because the emergency systems which provide makeup and cooling water to the reactor pressure vessel to prevent core damage may be unable to perform this vital function when many tubes fail. Since Dr. Hopenfeld raised this concern, researchers at the Idaho National Engineering Laboratory (INEL) concluded that the probability of a single tube rupture was equal to the probability of 10 tubes failing concurrently for design bases events such as loss of feedwater, turbine generator trip, loss of offsite power, steam line rupture, and main feedwater line rupture. INEL additionally reported that the probability of having more than 10 tubes fail is within an order of magnitude of a single tube rupture for the loss of feedwater, turbine generator trip, steam line rupture, and main feedwater line rupture events.5 It appears that INEL's study affirms rather than refutes Dr. Hopenfeld's safety concerns, which remain unresolved by NRC.

3. Potassium iodide (KI) tablets are distributed to residents and businesses within the 10-mile emergency planning zone or stockpiled in the vicinity of the Indian Point 2 facility.

The February 15, 2000, event at Indian Point 2 involved the unplanned release of radioactivity to the atmosphere. While it appears that no members of the public received excessive amounts of radiation from this accident, it demonstrates the potential for more serious releases of radioactivity. Potassium iodide (KI) has long been recognized for reducing the harm experienced by humans from airborne radioactivity. By distributing KI tablets to people in the vicinity of the plant along with directions on when to administer the tablets, the health consequences from an accident can be reduced. Alternatively, sufficient KI tablets for the people around the facility could be stockpiled in the

<sup>&</sup>lt;sup>4</sup> James L. Blaha, Assistant for Operations, Nuclear Regulatory Commission, to Elizabeth J. Yeates, Public Document Room, Nuclear Regulatory Commission, "Memorandum from Dr. Joram Hopenfeld," January 6, 2000.

5 P. E. MacDonald, V. N. Shah, L. W. Ward, and P. G. Ellison, Idaho National Engineering Laboratory, "Steam

Generator Tube Failures," NUREG/CR-6365, April 1996.

<sup>&</sup>lt;sup>6</sup> David Stellfox, Tube Rupture Prompts Look at 'Inspection & Maintenance Commitments,' Inside N.R.C., February 28, 2000.

communities for rapid distribution following an accident. To minimize human health consequences from an accident, KI tablets must be provided for the people near the plant.

Basis for Public Meeting

The petitioners seek a public meeting to present concerns related to the three requested items to the NRC staff. For example, the NRC staff may not be aware that the Town of Duxbury, Massachusetts just recently voted to stockpile KI tablets in event of a nuclear accident at the nearby Pilgrim nuclear plant.

On March 9, 2000, one of the petitioners (Lochbaum) performed a simple search on ADAMS for all documents on the Indian Point 2 docket (Number 50-247) dated February 15, 2000 or later. A grand total of five (5) documents were found. None of the documents dealt with the steam generator tube leak event. The NRC News Releases<sup>7</sup> on the event were not even in ADAMS as of March 9, 2000.

In a letter dated November 17, 1999, from Stuart A. Reiter and William D. Travers to distribution, the NRC detailed its "Policy on Timing the Release of Documents to the Public in the ADAMS Environment." For documents generated by the NRC staff to external or internal addresses, the policy applies the same criterion: such documents "shall be released 3 working days after the date of the document."

Returning to the five (5) documents in ADAMS on the Indian Point 2 docket dated February 15, 2000 or later:

Document Date	File Date	Lag Time, Working Davs
February 15, 2000	February 28, 2000	8
February 16, 2000	February 22, 2000	3
February 16, 2000	March 2, 2000	9
February 22, 2000	March 8, 2000	10
February 25, 2000	March 7, 2000	6

The NRC staff only complied with the stated policy for making documents available to the public for one (1) of these five (5) documents, or only twenty percent (20%) of the time. In fact, the actual compliance is less than twenty percent because documents, such as the charter for the Augmented Inspection Team dispatched to Indian Point 2 following the steam generator tube leak, have not yet made it to the system and are already overdue.

The unreliability of ADAMS and the inability of the NRC staff to follow its own policies and procedures imposes an unfair burden on the petitioners to fully understand the condition of the steam generators and response capabilities at Indian Point 2. Consequently, the petitioners request a public meeting with the NRC staff to go over the available documentation on the subject.

Requested Actions

The petitioners request that the NRC order Con Ed to keep Indian Point 2 shut down until the Westinghouse Model 44 steam generators are replaced, until the differing professional opinion of Dr. Joram Hopenfeld and the related generic safety issue are resolved, and until potassium iodide tablets are provided for people around the facility. Alternatively, the NRC staff could modify the license for the Indian Point 2 reactor to limit it to zero power until these three conditions are satisfied.

<sup>&</sup>lt;sup>7</sup> I-00-14, "NRC Monitoring 'Alert' at Indian Point 2," February 16, 2000; I-00-15, "NRC Returns to Normal Level of Oversight Following Exit from 'Alert' at Indian Point 2 Nuclear Power Plant," February 16, 2000; I-00-16, "NRC Sends Augmented Inspection Team to Indian Point 2," February 18, 2000; and I-00-19, "NRC to Meet with Consolidated Edison Tomorrow Night to Discuss IP2 Steam Generator Examination," February 29, 2000.

The petitioners additionally request that a public meeting be conducted in the vicinity of the plant. The agenda for this public meeting must include at least the following items: (1) presentation by petitioners on the three elements of the requested order, and (2) presentation by NRC staff of all publicly available documentation on the steam generator tube rupture event.

Sincerely,

David A. Lochbaum

Union of Concerned Scientists

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