

ILLINOIS POLLUTION CONTROL BOARD

SEPTEMBER 5, 2007

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STATE OF ILLINOIS
Pollution Control Board

IN THE MATTER OF:)
)
 PROCEDURES FOR REPORTING) RO7-20
 RELEASES OF RADIONUCLIDES AT)
 NUCLEAR POWER PLANTS)

TRANSCRIPT OF PROCEEDINGS held in the
 above-entitled cause before Hearing Officer
 MARIE TIPSORD, called by the Illinois Pollution
 Control Board, pursuant to notice, taken before
 Denise A. Andras, CSR, a notary public within and
 for the County of Cook and State of Illinois, at
 the James R. Thompson Center, 100 West Randolph,
 Chicago, Illinois, on the 5th day of December, A.D.,
 2007, commencing at 10:00 a.m.

1 A P P E A R A N C E S:

2

ILLINOIS POLLUTION CONTROL BOARD:

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MS. MARIE TIPSORD, Hearing Officer

4

MR. G. TANNER GIRARD,

MR. NICHOLAS MELAS

5

MS. ANDREA MOORE

MR. THOMAS E. JOHNSON

6

MR. ANANO RAO, Senior Environmental Scientist

MS. ALISA LIU, Environmental Scientist

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MR. M. KYLE ROMINGER

9

1021 North Grand Avenue East

P.O. Box 19276

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Springfield, Illinois 62794-9276

(217) 782-5544

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 Appearing on behalf of the IEPA;

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1 CHAIRMAN TIPSORD: Good morning, my
2 name is Marie Tipsord, and I've been
3 appointed by the Board to serve as hearing
4 officer in this proceeding entitled, In The
5 Matter of Procedures Required By PA94-849 For
6 Reporting Releases of Radionuclides At
7 Nuclear Power Plants. NU 35 Ill.Adm.Code
8 1010. This is docket number RO7-20.

9 To my immediate left is
10 Dr. G. Tanner Girard, the acting chairman of
11 the board who is the lead Board member
12 assigned to this matter. To his immediate
13 left is Board member Nicholas Melas. To my
14 immediate right is Board member Thomas
15 Johnson. To Mr. Johnson's immediate right is
16 Anand Rao, and Alisa Liu from our technical
17 unit.

18 This is the first hearing to be
19 held in this proceeding. The purpose of
20 today's hearing is to hear the testimony
21 pre-filed in this matter. I have received
22 testimony from Rick Cobb with the Illinois
23 Environmental Protection Agency, and Sigmund
24 Karpa with Exelon Corporation. We will begin

1 with the agency's testimony and allow for
2 questions of the agency. After the agency
3 has completed its testimony, we will have
4 Mr. Karpa testify. We will then allow for
5 any questions of Mr. Karpa. Anyone may ask a
6 question. I do ask that you raise your hand,
7 wait for me to acknowledge you. After I have
8 acknowledged you, please state your name and
9 whom you represent before you begin your
10 question. Please speak one at a time. If
11 you are speaking over each other, the court
12 reporter will not be able to get your
13 questions on the record. Please note, any
14 question asked by Board member or staff are
15 intended to build a complete record for the
16 Board's decision and do not express any
17 preconceived notion or bias. I would also
18 note that the acoustics in this room are
19 horrific, so please keep your voice up and
20 project towards the court reporter.

21 Over on the right side of the room
22 are sign-up sheets for the notice of service
23 list. If you wish to be on the service list,
24 you will receive all pleadings and pre-filed

1 testimony in this proceeding. In addition
2 you must serve all of your filing on the
3 persons on the service list. If you wish to
4 be on the notice list, you will receive all
5 Board and Hearing Officer orders and rule
6 makings. If you have any questions about
7 which list you wish to be on, please see me
8 at a break.

9 At this time, Dr. Girard, would
10 you like to state something?

11 DR. GIRARD: Yes, thank you.

12 Good morning. On behalf of the
13 Board I welcome everyone to this hearing to
14 consider the Illinois EPA's proposed
15 standards for detecting and reporting
16 unpermitted releases of radionuclides from
17 nuclear power plants. We look forward to the
18 testimony and questions today that will help
19 us develop a record in this proceeding.
20 Thank you.

21 CHAIRMAN TIPSORD: With that, I think
22 we're ready to begin. Mr. Rominger?

23 MR. ROMINGER: I'm Kyle Rominger, an
24 attorney for the Illinois EPA in this rule

1 making. We brought extra copies of the
2 pre-filed testimony in our initial proposal
3 over on the side of the room there if anybody
4 needs extra copies. With me is Rick Cobb.
5 He is the deputy manager of the Division of
6 Public Water Supply for the Bureau of Water
7 for the agency, and he will be our witness
8 today. We have some other people available
9 if needed, but I think he will be the main
10 person answering questions.

11 The rule making we're here for is
12 based on section 13.6 of the Environmental
13 Protection Act, which was added last year by
14 Public Act 94-949, and that section requires
15 owners and operators of nuclear power plants
16 to report unpermitted releases of
17 radionuclides to ground water surface, water
18 and soil. Those reports are required within
19 24 hours of release and made to the
20 Environmental Protection Agency, as well as
21 the Emergency Management Agency.

22 This section also requires the EPA
23 to post standards for complying with this
24 reporting requirement, which is in our

1 proposal, and then the Board has one year
2 from receipt of that proposal to adopt final
3 rules.

4 I wanted to note that section 13.6
5 also as originally enacted had a provision
6 that allowed self-inspection by nuclear power
7 plants, EPA and IEMA is required to do some
8 inspections. That provision was repealed on
9 August 13th of this year, but our proposal
10 did not include any self-inspection
11 provisions so that repeal will not effect our
12 proposal.

13 HEARING OFFICER TIPSORD: Could you
14 give us the public act number on that,
15 please?

16 MR. ROMINGER: The Public Act is
17 95-66.

18 CHAIRMAN TIPSORD: Thank you.

19 MR. ROMINGER: And we've pre-filed
20 Mr. Cobb's testimony, and I would ask that
21 that be entered as read.

22 CHAIRMAN TIPSORD: We have it. And
23 can we have Mr. Cobb sworn in, please.

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RICHARD P. COBB

having been first duly sworn, was examined and testified as follows:

HEARING OFFICER TIPSORD: If there's no objection, I will enter the pre-filed testimony of Richard P. Cobb of the IEPA as Exhibit No. 1. Seeing none, it is marked as Exhibit No. 1.

And with that, are there any questions for the agency?

First, I have some procedural questions. I know we spoke off the record, Mr. Rominger, but I would like on the record your response. Prior in the Board's -- in my hearing office order setting this matter for hearing, we asked specifically for copies of reports that the Agency listed in its proposal as having relied upon in developing the proposal. I asked that those be provided before the hearing. We don't yet have those. Does the Agency have some idea when those might be presented to the Board?

MR. ROMINGER: I was hoping to get them by the hearing, and I will get that as

1 soon as possible. They are with our FOIA
2 staff, and since they do contain sensitive
3 material, they have to extract that from
4 those materials, since this goes into the
5 public, we want to remove those materials.

6 HEARING OFFICER TIPSORD: Just to
7 clarify, some of those sensitive materials
8 are materials that have to be kept
9 confidential under federal law because of
10 potential --

11 MR. ROMINGER: Either federal or state
12 laws. We redact that information, yes.

13 HEARING OFFICER TIPSORD: Thank you.
14 In addition, the Agency's proposal didn't
15 include some items that are generally
16 required under the Board's procedural rules.
17 Just some minor things, for example, we ask
18 that you provide a copy of the Illinois
19 register notice pages, and an Illinois
20 register version of the rule. We also ask
21 that you provide an economic and budgetary
22 effects analysis form to prepare us to answer
23 questions from the joint committee on
24 administrative rules.

1 Under section 27A of the Act and
2 35 Ill.Adm.code 102.202B, one of the things
3 that's required in rule making is a
4 discussion of applicable factors listed in
5 section 28-7A such as existing physical
6 conditions and character of the area. Some
7 of that information has been provided in
8 testimony, but again, these are questions
9 that will be asked no doubt by the joint
10 committee on administrative rule. So
11 anything you could do to help prepare us for
12 that, will be helpful, along with the
13 environmental justification, that's 202B
14 also. And I think we have a pretty good
15 idea, but you could double check to make sure
16 you've identified all the potential sources.
17 I believe Exelon is the only potential source
18 in Illinois, but if there are others, we
19 would like to know that as well, and as I
20 said, discuss the economic form.

21 MR. ROMINGER: Sure, we'd be happy to
22 do that.

23 HEARING OFFICER TIPSORD: Any
24 additional questions?

1 MS. LIU: Good morning, Mr. Cobb and
2 Mr. Rominger. We have a series of
3 technically related questions, and some of
4 them are rather lengthy, so we'll try to read
5 through them slowly, and if you'd like us to
6 repeat them, feel free to ask at any time.

7 The new subsection 13.6E of the
8 Act requires the Agency to propose rules to
9 the Board prescribing the standards for
10 detecting and reporting unpermitted releases
11 of radionuclides. The proposed par 1010
12 contains subpart A, which is the general
13 provisions and subpart B the reporting
14 provisions. However, there does not appear
15 to be a subpart devoted to detecting. And I
16 was wondering since detecting and reporting
17 are distinct activities, we have some
18 questions related to that. In the statement
19 of reasons, the Agency describes how the
20 0.002 Curies quantity can be easily detected,
21 and the proposed rule includes a section on
22 evaluating releases and defines triggers for
23 those reporting requirements. However,
24 whether or not the proposed language actually

1 addresses the standards for detecting is
2 unclear.

3 The first question would be to
4 please discuss the issue of whether the rule
5 language should contain a distinct subpart or
6 section that addresses detecting releases?
7 And a follow-up question would be, would
8 standards for detecting include methods of
9 detection and frequency of monitoring
10 inspections in addition to those triggers
11 that you already have for the reporting
12 requirements?

13 MR. COBB: In response to the first
14 question about detecting, basically the
15 detecting portion is all rolled into the
16 evaluating releases, and in fact, the
17 quote-unquote detection thresholds are either
18 the quantity or the pCi/L, 200 pCi/L
19 threshold. So both of those are the methods
20 by which detection occurs.

21 The legislation itself focuses on
22 detection of releases within 24 hours. So in
23 terms of establishing a programatic program
24 is sort of the question you alluded to in

1 terms of ongoing monitoring and quarterly
2 monitoring, that is, we believe, beyond the
3 scope of section 13.6. We truly wanted to
4 capture the detection methods to report any
5 releases as soon as possible within that
6 24-hour period. So I believe the concept --
7 although the wording doesn't say detecting, I
8 think it's very clear that detection is built
9 into the evaluation process.

10 As far as the methods, part 6-11
11 of the Board's regulations and part 6-11-101,
12 if you wanted to incorporate an analytical
13 method, that certainly already exists in the
14 Board's regulations.

15 MS. LIU: Which one would that be?

16 MR. COBB: Part 611.101, the
17 analytical detection capability for tritium
18 since that's part of the primary drinking
19 water standards, and of course those
20 standards are also, and analytical methods,
21 are also incorporated by reference in 35
22 Illinois Administrative Code part 620, the
23 Ground Water Quality Standards. So those in
24 fact lay out the analytical procedures, if

1 you will. These are the thresholds using
2 those procedures in the Ground Water Quality
3 Standards that are used to detect and report
4 releases.

5 MS. LIU: I guess in my mind when I
6 think of evaluating a release, it's different
7 than detecting a release. On a time scale
8 initially you would detect a release and then
9 you would evaluate it, so I guess --

10 MR. COBB: Actually, the way we set it
11 up using the mass -- remember detection
12 relies on an analytical laboratory, meaning a
13 collection of a sample and sending something
14 away to an actual laboratory to do that.
15 With using the mass threshold, it's actually
16 more proactive than that. In other words,
17 you can estimate the mass and calculate a
18 concentration in pCi/L on the fly immediately
19 without waiting for a laboratory to do that
20 type of work, and we intentionally want it
21 that way to be preventive in nature. We feel
22 that there's much parallel with this and
23 Section 12A of the Act or the Preventive
24 Notice and Response Provisions of Part 620

1 and/or the costs for it to allow provisions
2 under the new Right to Know Law in the
3 Board's Community Relations Work Plan
4 Regulation. There's a distinction between
5 your normal monitoring say in a landfill or
6 at a -- this is intended to be on-the-spot
7 release.

8 MR. RAO: Can you walk us through how
9 this is going to work; in reality how will
10 Exelon find out if there's a release and how
11 will they go about this process?

12 MR. COBB: Absolutely. They have a
13 process of visually inspecting the components
14 say of a blowdown line or areas in which
15 there have been releases in the past and/or
16 there are detailed detection monitoring
17 systems. You know, that's more of looking at
18 it after it's in the ground water, but
19 there's a visual inspection that's being done
20 for each of the -- in fact, and we're doing
21 quarterly inspections to see if those things
22 are being done. We team up with IEMA,
23 Department of Nuclear Safety Inspectors and
24 our Water Pollution Control Inspectors

1 because the conveyances which are permanent
2 under the state operating permits are what
3 we're inspecting to see if there's any leaks.
4 There's on-site personnel 24 hours a day from
5 IEMA, as well as NRC staff that are on-site.
6 So we believe that, and with the process that
7 we've gone through now since about 2000 --
8 over three years -- 2002 -- almost four
9 years, we believe that that's the process by
10 which we'll be getting that information.

11 In some cases you may visually be
12 able to see if there's a release to the soil
13 or to the surface water. We have a lot of
14 methods in place that are there and then
15 we're inspecting to see if those procedures
16 are actually being followed in these
17 facilities.

18 MR. RAO: On page 17 of your pre-filed
19 testimony, you refer to Exelon's detection
20 monitoring program. You state that Exelon's
21 detection monitoring program, real time
22 sensors and groundwater monitoring wells will
23 serve as backup for detecting tritium. Is
24 this program something that is part of the

1 process that you are describing right now?

2 MR. COBB: Yes. There are actually
3 real time sensors in the vacuum breaker
4 vaults now that detect any moisture within.
5 Those vacuum breakers, as well as there's a
6 complex set of groundwater monitoring as
7 well. So if there are real time sensors in
8 the vacuum breakers themselves, which is
9 where some of the releases came through if
10 you read the background of my testimony,
11 those then relay a signal to a cell phone and
12 that triggers some alarms in which they go
13 out and check that process out. So, yes.
14 And the groundwater monitoring, they have
15 groundwater monitoring wells installed at all
16 of the facilities. The probably most complex
17 monitoring systems are at Dresden and at
18 Braidwood, although there's monitoring that's
19 been established at the other facilities as
20 well.

21 MS. LIU: You refer to it as a backup.
22 Is there a first line of defense that's
23 different?

24 MR. COBB: Absolutely. That pCi/L

1 thing is. To me when it's already in the
2 groundwater -- remember, under Illinois Law
3 of Water Regulations you can't cause,
4 threaten or allow a release, so the detection
5 is based on that early estimate of the Pico
6 Curries, and then taking that and
7 determining, okay, what's the mass and what's
8 the volume of that release and getting an
9 on-the-spot pCi/L concentration, and so then
10 all those other methods in my mind are
11 somewhat backup for that because that method
12 is the most proactive. It is the immediate,
13 on-scene emergency kind of release scenario.

14 MR. RAO: And this method that you
15 talk about, is that a standard method? Would
16 they use some sort of hand-held device to
17 measure?

18 MR. COBB: No, they generally know the
19 concentrations because they have the NRC
20 permit that discharges to the receiving
21 stream, so they know -- and that's the
22 purpose of blowdown line is to -- all the
23 other radioactive compounds are removed via
24 reverse osmosis, but since tritium is H3,

1 which is essentially water, there is no
2 technically feasible treatment technique of
3 removing it, other than releasing it with
4 waste water. So they have a pretty good
5 handle on the concentration that's in those
6 systems and the mass that's in those systems
7 and visually the inspectors are trained to,
8 you know, be pretty accurate in terms of
9 gallons released.

10 MS. MOORE: This is going to sound
11 like a stupid question, but what does it look
12 like?

13 MR. COBB: It looks like water coming
14 out a pipe, but you know that --

15 MS. MOORE: So how do you visually see
16 it if it's water?

17 MR. COBB: Because you know that the
18 reason that water is mixed with waste water,
19 the process is there, it contains tritium,
20 and you know how much tritium it is. So when
21 you see the water, you need to make an
22 estimate of the mass.

23 MS. MOORE: It is not mixing with
24 other water?

1 MR. COBB: Yes, absolutely, waste
2 water.

3 MR. RAO: So any change in
4 concentration that triggers some action by
5 the personnel there in the system?

6 MR. COBB: If there is a release,
7 correct.

8 MR. JOHNSON: Well, I picture the
9 Simpsons, and the bells going off and the
10 whistles going off. Is that not what happens
11 when there is a release?

12 MR. COBB: You know maybe Exelon could
13 talk to that more. I haven't actually been
14 there at one of these sites when that's
15 occurred. But I envision if there's
16 something along those lines, we have that in
17 place now if it's coming from a blowdown line
18 for example. Other things if it's
19 underground piping, it may be more of a --
20 they are losing a volume of water type of
21 thing. You know, more of a mass balance type
22 of a situation.

23 MR. JOHNSON: When you say they have
24 more of these detection devices in use at

1 Dresden and Braidwood, obviously because
2 you've previously had problems at both those
3 facilities. I guess what one of my concerns
4 is, with regard to the detection is, isn't
5 what you are worried about is a release that
6 comes from someplace that you don't
7 anticipate it coming from? So how do you
8 plan and provide detection devices for that?
9 I guess maybe I'm asking -- I ought to be
10 asking you guys.

11 MR. COBB: I think I can ask answer
12 that too, in that we've dealt with every
13 single facility, and we pretty well have a
14 handle on -- you can never plan, but in a way
15 you can too. It's a pretty common practice
16 for waste water treatment plants to have
17 alarms and bells and sensors. So that's part
18 of the normal environmental planning process
19 as best you can. Then you have your
20 underground piping, which would have had
21 leaks at Dresden that has been replaced and
22 Braidwood. Those things have been analyzed
23 as part of the Fleetwide studies. So there
24 are more quality control and action steps in

1 place at all of those places where you might
2 expect under what if scenarios, but basically
3 the blowdown lines were our biggest culprits,
4 not at Dresden, but at Braidwood and Byron.

5 MR. RAO: So in your testimony you
6 indicated that underground piping, blowdown
7 lines and VB vaults were the three primary
8 sources of concern for these releases?

9 MR. COBB: Correct.

10 MR. RAO: So are there any other
11 sources of releases that you are aware of or
12 these are the only three?

13 MR. COBB: Those are, to my knowledge,
14 are the primary areas that we need to be
15 looking at.

16 MR. RAO: And all three are being
17 monitored by this integrated testing?

18 MR. COBB: Correct.

19 MR. RAO: And moisture sensors?

20 MR. COBB: Correct.

21 MR. RAO: Should these requirements
22 for monitoring be in the rules or is it
23 something that Exelon is doing on a voluntary
24 basis?

1 MR. COBB: They are doing it under a
2 voluntary basis, but there are also some
3 legal proceedings, litigation-type
4 proceedings in which these are required.

5 MR. RAO: So do you believe it's the
6 Agency's position that these requirements
7 should not be part of the rules?

8 MR. COBB: Yes.

9 MR. RAO: Can you explain why?

10 MR. COBB: Once again, I think the
11 statute requires the methods of detecting.
12 We know that there's going to be ongoing
13 monitoring at the facilities that already
14 have groundwater monitoring and we know the
15 frequency of monitoring at each of those
16 facilities. It's somewhat easier at some
17 other facilities in that we have six
18 facilities. So in this case, it's not like
19 we have a number of landfills across the
20 state and they all have different designs.
21 We pretty well know the situations at these
22 facilities. So I feel that the monitoring
23 programs that are in place, coupled with the
24 inspection programs that are there that

1 determine if those monitoring programs are
2 being implemented are all that's needed.

3 HEARING OFFICER TIPSORD: I just would
4 like to follow-up on that. I guess I have --
5 I share Mr. Rao's concern with, if Exelon is
6 doing this on a voluntary basis, some of its
7 monitoring on a voluntary basis, and I
8 understand you are inspecting, what -- I
9 mean, if they suddenly stop, and I'm not
10 saying that Exelon would, but a fly-by-night
11 company purchases Exelon and comes in, and
12 they stop, what recourse do we have if it's
13 not in the rules requiring some type of
14 monitoring?

15 MR. COBB: If they have a release that
16 threatens -- once again, this is a release to
17 the surface or the subsurface, that still
18 happens irrespective if they are doing real
19 time sensor monitoring and/or groundwater
20 monitoring, those detection thresholds still
21 apply and more than likely they are not going
22 to be picked up by those -- if they are
23 released outside of those conveyances, they
24 are not going to be picked up by the

1 groundwater detection monitoring system or if
2 they are outside of the vacuum breaker
3 vaults, it's going to be a visual inspection
4 that catches these releases. So it's not
5 going to be a quarterly monitoring program in
6 the groundwater. By the time that happens,
7 the release will have occurred, it will be
8 way beyond 24 hours, depending on the
9 hydrogeology of the site, the water with the
10 tritium in it will have already recharged
11 into the groundwater system and then on down
12 the road that would be detected.

13 So the purpose of this is, any
14 kind of visible release, any kind of mass
15 balance or process, it doesn't rely on your
16 traditional groundwater monitoring system.
17 That's why those are backup. This is
18 primary. So if they stop doing groundwater
19 monitoring, which I don't think is going to
20 happen under the consent decrees that are
21 being negotiated, but if they do, this rule
22 still stands on its own, still takes care of
23 the issue. Those are only backup.

24 MS. LIU: I know you mentioned what

1 you considered the three primary areas of a
2 possible release.

3 MR. COBB: Correct.

4 MS. LIU: In the realm of possibility
5 there are other possible areas I assume. Is
6 it a possibility that one of the IEMA or
7 Agency inspectors could be the detector of a
8 release when they come to do an inspection?

9 MR. COBB: Oh, absolutely. Quarterly
10 monitoring is a relatively frequent process,
11 and you know, we do give someone notice of
12 when we are going to be -- because of the
13 type of facility it is, you just don't waltz
14 into an area like this with Homeland security
15 issues that you've got, but it's still an
16 inspection, books are opened, and we feel
17 we've got a pretty good system in place.
18 Plus the on-site, IEMA's inspectors are
19 on-site 24 hours a day.

20 MS. LIU: Are you done?

21 MR. COBB: Yes.

22 And NRC is also on-site.

23 MS. LIU: Although section 13.6 of the
24 Act does reference those inspections.

1 There's no reference, I think, in the
2 proposed language for the rule. Since it is
3 a possibility that one of those inspections
4 could be where a release is detected, should
5 those inspections be referenced somewhere in
6 the rule under your evaluation of releases or
7 detection procedures?

8 MR. COBB: Once again, I kind of think
9 that is a backup. The burden of proof is on
10 Exelon in the report, and we have backup of
11 assured compliance via the inspection
12 process. So although that could happen, the
13 primary burden is upon Exelon. And we didn't
14 intend to refer to the inspection process and
15 then we are further precluded from that by
16 Public Act 95-66.

17 MR. JOHNSON: How are you precluded
18 by the Act, by the statute that you just
19 referred to?

20 MR. COBB: It pretty much -- we could
21 have established a process that talked about
22 the inspection process and we could have
23 included a self-inspection component to that
24 combined with our process, we're precluded

1 from doing that.

2 HEARING OFFICER TIPSORD: Based on
3 Public Act 95-66?

4 MR. COBB: Correct.

5 MR. JOHNSON: It specifically says you
6 can't do that?

7 HEARING OFFICER TIPSORD: Do you have
8 a copy of Public Act 95-66?

9 MR. ROMINGER: Yes, I do.

10 MR. COBB: That's my understanding,
11 not being an attorney, but that's my
12 understanding. However, we didn't intend to
13 include anything on those. We wanted to
14 continue our ongoing inspection process.

15 MR. JOHNSON: It's a provision
16 requires that stricken, but it doesn't say
17 specifically that you can't. It requires
18 self-inspection.

19 HEARING OFFICER TIPSORD: Yeah, the
20 way I read this Public Act, this is Public
21 Act 95-66 and for purposes of the record, I'm
22 going to admit this as Exhibit 2 if there's
23 no objection. Seeing none, it will be marked
24 as Exhibit 2. It strikes from subsection E

1 of Section 13.6, that rules adopted under
2 this subsection may also include standards
3 for self-inspection by the owner or operator
4 of a nuclear power plant in lieu of the
5 inspections required under subsection D of
6 this section. And subsection D is the Agency
7 and IEMA's inspection. It would seem to me
8 what the legislature did here was say that
9 you can't self-police in lieu of the Agency
10 policing.

11 MR. COBB: I would agree with that.

12 HEARING OFFICER TIPSORD: So I don't
13 know that it precludes the Agency from, the
14 agency including their inspection in
15 outlining their inspections. So I think what
16 you said was it precluded you from doing
17 several things.

18 MS. MOORE: Requiring
19 self-inspections.

20 HEARING OFFICER TIPSORD: Not only
21 requiring self-inspections but sort of
22 limiting your, the Agency's ability to do
23 inspections.

24 MR. COBB: What I was really trying to

1 describe is if one were to describe our
2 process and rules, then ideally before this
3 amendment, you would have described the two
4 things together. You would have had the
5 Agency process and this process. We feel the
6 inspection process is something that's
7 already in place because we permit the waste
8 water conveyances under 35 Ill. Admn Code 309,
9 so we already have authority to inspect these
10 waste water conveyances, and we're just now
11 teaming up with IEMA to do the dual
12 inspection. So we feel that we've already
13 got sufficient authority in the act and the
14 rules. I'm not sure what else we would say
15 about doing the inspection process.

16 Obviously, the thresholds that are being
17 proposed can be enforced, if they become
18 Board regulations, can be enforced by anyone
19 off the street including our own inspectors.

20 MS. LIU: Exelon had requested that
21 you had add a clarifying sentence to one of
22 the definitions. The one for the unpermitted
23 release of a radionuclide. It kind of goes
24 like this, "An unpermitted release of a

1 radionuclide does not include the discharge
2 of a radionuclide from a point source
3 identified in the NPDES permit and authorized
4 by the NRC operating license."

5 I was wondering if concentrations
6 of radionuclides in a blowdown are greater
7 than the concentrations allowed in the NPDES
8 permit, but that radionuclide is allowed by
9 the NRC, is it considered an unpermitted
10 release?

11 MR. COBB: The blowdown line at the
12 end point of the blowdown line is where the
13 NRC limits supply to the receiving stream.
14 Remember that's mixed with waste water to
15 dilute the concentration of tritium to meet
16 the NRC limits, as well as those waste water
17 constituents have their own state NPDES
18 requirements, whether that be TDS or
19 suspended solids, whatever it might be in the
20 waste water, and those are reported via the
21 discharge monitoring reports under NPDES. So
22 that's what happens at the end of a pipe and
23 that's what we're referring to. Now back
24 away from that in that conveyance, the

1 conveyance is not -- the conveyance is
2 permitted by Section 39 of the Act and the
3 construction and operating permit comes under
4 part 309, and of course Section 39 would
5 require compliance with groundwater quality
6 standards and Section 12A of the Act. So
7 that's what we're talking about in terms of
8 somewhere along that conveyance where it's
9 not permitted or designed via the NPDES to
10 leak. It's by design, you know, going out
11 the end to meet the NRC and the accompanying
12 NPDES standard. So you have to separate the
13 two together when it's at the end of the
14 pipe.

15 MS. LIU: There's no specific NPDES
16 permit for the blowdown, per se, after it's
17 been combined?

18 MR. COBB: For the state constituents.
19 For the tritium it's NRC only. We have no
20 jurisdiction over the receiving stream.
21 That's why the legislation refers to any
22 unpermitted release that's not preempted by
23 the federal regulations. That's why
24 specifically we carved out this definition

1 the way we did because we don't want to get
2 into an area of preemption. And what I tried
3 to describe there is, anything other than the
4 NRC regulations, we're going back to the
5 conveyance that is permitted under state
6 authority in compliance with Section 39 and
7 Part 39 of the Act and part 309 of the rules.

8 MS. LIU: Thank you for elaborating on
9 that clarification.

10 MR. COBB: You are more than welcome.

11 MR. RAO: Mr. Cobb, in the statement
12 of release and also in your testimony you
13 mention about tritium leaks that result in
14 groundwater contamination and how it impacted
15 a residential well.

16 MR. COBB: Yes.

17 MR. RAO: And just to define the
18 environmental benefits of this proposed rule
19 for the record, will you please describe the
20 environmental and human health impacts of
21 tritium releases.

22 MR. COBB: Well, primarily what we
23 were looking at in all of these cases was
24 protection of the beneficial use of the

1 groundwater resource, which was the original
2 Section 12A of the Act, you can't cause,
3 threaten or allow a release. Even in the
4 original Board Groundwater Quality Standards,
5 1971, section 302.208 those were in fact the
6 groundwater standards. It's always been
7 designed that way. The Board opinion is
8 pretty clear that to protect the groundwater
9 beneficial uses, you can't cause, threaten or
10 allow a release to that of a contaminant that
11 is not removed by ordinary treatment
12 techniques that might be used by a private
13 water well owner. A private well is an owner
14 occupied single family dwelling. So that in
15 fact is the lowest common denominator, and
16 that language I pulled directly from the 1971
17 Board opinion. I may not be quoting it
18 exactly, but I remember that pretty well.

19 MR. RAO: Pretty close. I didn't take
20 a look at the groundwater standard. Do we
21 have a standard for tritium under Part 620?

22 MR. COBB: Keep in mind the word
23 "standards." If you go to Part 620 -- in
24 fact, let me pull it out just so I'm more

1 exact on my answer here. The answer is yes.

2 MR. RAO: Yes, we do.

3 MR. COBB: But adding to that, if we
4 go to subpart D of the Board's Groundwater
5 Quality Standards, the term standards, and
6 read the "Applicability" section of Section
7 620.401, "Ground waters must meet the
8 standards appropriate to the ground water's
9 class as specified in this subpart and the
10 nondegradation provisions of subpart C." So
11 they work the term standards, includes the
12 nondegradation provisions as well as the
13 health based standard for tritium, which is
14 20,000 pico curries per liter. But the
15 nondegradation provisions are based on my
16 previous testimony of not allowing or
17 preventing a degradation of a beneficial use
18 up to that health based standard.

19 MR. RAO: Thank you. Although your
20 experience has shown that only tritium has
21 been found in groundwater around these
22 nuclear generating stations. Will you also
23 please elaborate on any other types of
24 radionuclides for which tritium may function

1 as an indicator, if it does?

2 MR. COBB: I don't believe any of the
3 other radionuclides are going to function as
4 an indicator. Fortunately when we're -- once
5 again as I mentioned previously in my
6 testimony, the other types of radionuclides,
7 an example of the blowdown lines and the
8 cooling water, are removed via reverse
9 osmosis. As you know that membrane
10 technology can remove almost a hundred
11 percent of those constituents, but it will
12 not remove tritium. And that is the reason
13 for the blowdown line, to mix with the
14 tritium to meet the NRC limits in the
15 receiving stream.

16 MR. RAO: Thank you.

17 In proposed section 1010.200 it
18 states that, "Evaluation cannot take into
19 account remedial actions taken in response to
20 the release." What type of remedial actions
21 do you typically see for these types of
22 releases?

23 MR. COBB: I'll speak of Braidwood.
24 They are all somewhat different depending on

1 the site's hydrogeology and the concentration
2 that we're dealing with. In fact, maybe I'll
3 refer to attachment two in my testimony, and
4 I have this attachment up here (indicating).
5 This release was from vacuum breaker 2 and
6 vacuum breaker 3. What's being done here is
7 since this is actually a window into the top
8 of the water table here, there's actually an
9 extraction well that lowers the water table
10 surface and is pulling this plumb back. So
11 that's a pump and treat. And once again,
12 it's mixed with waste water and goes out to
13 the legal limits into the river.

14 HEARING OFFICER TIPSORD: Excuse me,
15 Mr. Cobb. For purposes of the record I would
16 like to point out that what Mr. Cobb is
17 pointing to is attachment 2 in his testimony,
18 and when he is speaking of "here" in the
19 transcript, it's referring to the pond on the
20 left-hand side of the attachment 2.

21 MR. COBB: I apologize. I should have
22 been a little more descriptive. Sorry, court
23 reporter.

24 So that's what is being done

1 there. These -- and that was because
2 primarily in this situation we did have
3 potential private wells or residences that if
4 you model this plumb out without capturing
5 it, you could see degradation effects. Not
6 health effects, but degradation of beneficial
7 uses.

8 These other plumes however you can
9 see they are rather limited in scope, and
10 this is a forest preserve, dedicated nature
11 preserve, so really natural attenuation is
12 what's being applied there. You don't want
13 to get in and tramp around on the sedge
14 meadows and that sort of thing, and there
15 aren't receptors out there that are being
16 threatened.

17 HEARING OFFICER TIPSORD: Excuse me,
18 Mr. Cobb. That's moving east on the map?

19 MR. COBB: Yes, moving east on the
20 map, I'm referring to the plumb that's at
21 vacuum breaker 4 and vacuum breaker 7, and to
22 the north of that is the Will County Forest
23 Preserve and there is a dedicated nature
24 preserve that's due north of vacuum breaker 4

1 and vacuum breaker 7. So at some point we'll
2 evaluate this and go once again using the
3 Board's Groundwater Quality Standards
4 regulation as our reference point for
5 groundwater management zone in terms of where
6 do we think we've reached a point where we
7 can't achieve any more removal.

8 MR. RAO: Thank you.

9 MS. LIU: I have a series of questions
10 relating to the forms that are mentioned for
11 the electronic reports. Proposed sections
12 1010.202B and 1010.204A list the minimum
13 information that would be required. The
14 first question I had was, will the forms
15 contain room for additional information
16 beyond those minimum requirements?

17 HEARING OFFICER TIPSORD: Excuse me,
18 if I may. First of all, have you developed
19 the forms?

20 MR. COBB: No. And to be honest, I
21 haven't -- I haven't thought ahead enough to
22 get into the development of the forms. So
23 beyond the minimum at this time, we haven't
24 had those discussions yet with IEMA. We've

1 had practical discussions of what are we
2 doing, we're using these right now in terms
3 of release reporting and that sort of thing.
4 But in terms of the form and the electronic
5 process, more than likely we'll have to get
6 involved with CMS and IT people, and so I
7 haven't given a lot of thought beyond the
8 minimum requirements for the form.

9 MR. RAO: Is there a timeline that you
10 have in mind as to when you will be
11 developing the forms? Will that be during
12 this rule making process?

13 MR. COBB: More than likely we will
14 probably begin during the rule making
15 process. We've got kind of these initial
16 steps of the hearings in place to kind of see
17 where things are going. It might be
18 worthwhile to see the first notice possibly
19 to help educate us on what the Board might be
20 thinking.

21 MR. RAO: We were wondering if we
22 could see a draft of the form if possible?

23 MR. COBB: I don't even have a draft
24 envisioned in my head yet.

1 HEARING OFFICER TIPSORD: I will tell
2 you that's also a typical J-CARR question.
3 Whenever forms are referenced, they want to
4 see a copy of themselves. So it might be
5 helpful if we could have one. If not before
6 we go to first notice, during first notice
7 period.

8 MS. LIU: Exelon might want the
9 opportunity comment on the form as well of
10 course.

11 MR. COBB: Absolutely.

12 MS. LIU: The proposed rule has some
13 telephone numbers for reporting, but there
14 are no addresses listed for where the
15 electronics report would be sent. How will
16 the regulated community know where or how to
17 submit those reports?

18 MR. COBB: Yes, we do have the address
19 for the follow-up. That may be a good point.
20 We'll take a look at that.

21 MR. RAO: The proposed section
22 1010.202C and 1010.204C, would require the
23 Agency to post the reports on its website.
24 This is not a requirement under Section 30.6

1 of the Act. Would you please comment on why
2 the Agency is requiring this public posting
3 of the reports?

4 MR. COBB: Well, I think with all of
5 our experiences with the Right to Know Law,
6 we think that's a good idea in parallel with
7 that, because in fact if there is a release
8 that causes, threatens or allows an
9 exceedence of the standards, which could be
10 the case, then that would also be required to
11 be posted on the Agency website.

12 MR. RAO: And does the Agency post on
13 the website detection of any contamination
14 related to other sites also or is it just
15 with these nuclear generating power stations
16 release?

17 MR. COBB: No, we post all of the
18 facilities under the Right to Know website
19 that we have done notice on under those
20 requirements. So every either site center --
21 I use the term site center -- generated
22 notice or any well centric generated notice
23 is published on the Agency's Right to Know
24 website.

1 MR. RAO: So this fits in kind of
2 along with a notification?

3 MR. COBB: Yes.

4 MS. LIU: The proposed section
5 1010.204A(2) would require release reporting
6 that requires a plan view of the nuclear
7 power facility, as well as a geologic cross
8 section, since the Agency is planning to post
9 the reports on a website, has Exelon
10 indicated whether providing such information
11 to the general public, including the world
12 wide community would compromise the security
13 of its facilities?

14 MR. COBB: From experience many of the
15 exhibits, Braidwood are already on Exelon's
16 website for the public in terms of their
17 public repository, and most of the, all of
18 the security sensitive types of information
19 have already been redacted. So what you are
20 seeing, based on that kind of model, I would
21 think that they would not be concerned if the
22 same procedure is utilized. We would
23 coordinate with them on that.

24 MS. LIU: Thank you.

1 MR. RAO: I think that's all we have
2 for Mr. Cobb. Thank you very much.

3 HEARING OFFICER TIPSORD: Thank you
4 very much, Mr. Cobb.

5 MR. COBB: You are welcome.

6 HEARING OFFICER TIPSORD: And that
7 takes us to Exelon and Mr. Karpa.

8 MR. BAILAWSKI: My name is Alan
9 Bailawski. I'm a lawyer with the law firm
10 Sidley & Austin, and I'm here today with
11 Mr. Sigmund Karpa, who is the director of
12 environmental programs and regulatory
13 policies for Exelon Nuclear, and he is here
14 today to answer questions related to the
15 subject filed earlier in this matter or last
16 month.

17 ZIGMUND KARPA

18 having been first duly sworn, was examined and
19 testified as follows:

20 HEARING OFFICER TIPSORD: If there's
21 no objection, I will mark Mr. Karpa's
22 testimony as Exhibit No. 3. Seeing none,
23 it's Exhibit No. 3.

24 And with that, are there any

1 questions for Mr. Karpa?

2 I think we have a couple.

3 MS. LIU: Good morning, Mr. Karpa. On
4 page five of your pre-filed testimony, you
5 refer to the proposed section 1010.104,
6 indicating that the proposed rules would not
7 prevent reporting that is not required under
8 Section 13.6 of the Act. And you state,
9 quote, "As circumstances warrant, Exelon
10 anticipates that it would use this provision
11 and voluntarily report releases that are not
12 governed by these rules." Could you please
13 explain if Exelon plans to use this provision
14 as a precautionary measure to err on the side
15 of over-reporting or is there another reason?

16 MR. KARPA: No, absolutely. We are
17 committed to a hundred percent compliance.
18 Because of that and because of the time frame
19 established in the proposed regulations, the
20 24-hour reporting period, in the event that
21 we have a release where we cannot quantify it
22 for any reason, we are going to report that
23 in the 24-hour notification process and
24 clarify this with the report.

1 MR. RAO: Mr. Karpa, I think we raised
2 this issue with Mr. Cobb, we just wanted to
3 hear Exelon's side, and this relates to
4 posting information on the website. Does
5 Exelon have any security concerns about
6 posting reports that include plan views and
7 geologic cross sections on the website?

8 MR. KARPA: From the geological cross
9 section perspective, no. However, from a
10 plant view perspective, there might be areas
11 of the plants that are confidential. In
12 those circumstances we would submit the
13 reports with information on there indicating
14 it is sensitive information either by NRC
15 requirements or US computer requirements. We
16 have done so in the past when we submitted
17 our hydrogeologic investigation report for
18 each of the sites. We followed the same
19 exact procedure policy.

20 MR. RAO: Thank you. That's all we
21 have.

22 HEARING OFFICER TIPSORD: Any other
23 questions?

24 MR. JOHNSON: Just briefly, just out

1 of curiosity, in the statement of reasons the
2 Agency had indicated that there was a
3 paragraph that I referred to as a liability
4 clause. I assume that you had initially
5 wanted it included in the rule, but
6 subsequent your pre-filed testimony indicates
7 that Exelon has backed off that being
8 included. Is there a particular reason that
9 you don't care about the inclusion of that?
10 If you don't know what paragraph I'm
11 referring to, "Reporting a release of
12 radionuclide pursuant to this part shall not
13 be determinative of whether the release is
14 unauthored or unlawful under other laws or
15 regulations including licenses, permits or
16 other forms of government authorization."

17 MR. KARPA: Yes, the reason we
18 retracted that was based on Section, I
19 believe it's 104 of the proposed regulation,
20 where we have the ability to report
21 voluntarily under the statute.

22 MR. RAO: I have one more question.
23 This relates to the economic reasonableness
24 of this rule. Agency in its statement of

1 reasons stated that the proposed rule -- let
2 me read this -- "Illinois EPA believes that
3 the cost of providing this information
4 required by the rule is reasonable." Would
5 you agree with that statement, and also
6 provide any testimony about what are the
7 costs going to be by implementing the
8 requirements of this rule?

9 MR. KARPA: This is a multi-part
10 answer obviously. The first part is the
11 reasonableness of the rule. Based on the
12 events that occurred and the fact that Exelon
13 wants to be open to the general public, we've
14 recognized that we need to identify these
15 events when they occur and report them to
16 both the regulatory agency as well as to our
17 stakeholders as appropriate. As part of that
18 process we are going to assume some costs
19 associated with it. Realistically, nothing
20 that we're doing outside our monitoring
21 programs, self-imposed groundwater or
22 industry imposed groundwater monitoring
23 programs, would result in additional costs at
24 this point. We conduct inspections of our

1 operations every shift. We conduct
2 inspections of our operations daily. We have
3 alarm systems that are under and detection
4 systems that are under preventive maintenance
5 programs, so we inspect those regularly. The
6 only other costs will be assisting or
7 providing information to IEMA and IEPA when
8 they conduct their quarterly inspections. So
9 the cost as currently prescribed would be
10 reasonable under these regulations.

11 MR. RAO: Thank you for the testimony.

12 CHAIRMAN TIPSORD: Anything further?
13 Could we go off the record for just a few
14 minutes.

15 (Brief recess taken.)

16 HEARING OFFICER TIPSORD: Back on the
17 record. Having concluded the testimony
18 pre-filed today, we have rescheduled the
19 second hearing in this matter to October 10th
20 at 1:00 p.m. in Springfield. I will put out
21 a hearing officer order listing the place for
22 the hearing on October 10th in Springfield.
23 Pre-filing for that hearing will be October
24 2nd. Any testimony should be pre-filed by

1 that date. The mailbox rule will not apply.

2 I thank you all for your testimony
3 today. I think you've given us all a lot to
4 think about. Thank you very much. Have a
5 good day. We're adjourned.

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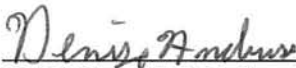
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1 STATE OF ILLINOIS)
) SS.
2 COUNTY OF C O O K)
3

4 I, DENISE ANDRAS, being a Certified
5 Shorthand Reporter doing business in the City of Des
6 Plaines, Illinois, County of Cook, certify that I
7 reported in shorthand the proceedings had at the
8 foregoing hearing of the above-entitled cause. And
9 I certify that the foregoing is a true and correct
10 transcript of all my shorthand notes so taken as
11 aforesaid and contains all the proceedings had at
12 the said meeting of the above-entitled cause.

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DENISE ANDRAS, CSR
CSR NO. 084-003437

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