ORIGINAL

## OFFICIAL TRANSCRIPT PROCEEDINGS BEFORE

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

DKT/CASE NO. 50-440-0L & 50-441-0L

TITLE CLEVELAND ILLUMINATING COMPANY
(Perry Units 1 and 2)

PLACE Washington, D.C.

DATE November 15, 1982

PAGES 760 - 778

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
3	BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
4	x
5	In the Matter of: : Docket Nos.
6	CLEVELAND ILLUMINATING COMPANY : 50-440-0L
7	(Perry Units 1 and 2)
	장이 얼마 내가 있다면 보이 말을 하는데 되었다면 있다면 모든데 얼마나 되었다.
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9	In the Offices of
10	Alderson Reporting Company 400 First Street, N.W.
	Washington, D.C.
11	Monday, November 15,
12	1982
13	The telephone conference in the above-entitled
14	matter convened, pursuant to notice, at 10:05 a.m.
15	BEFORE:
	JUDGE PETER BLOCH, Chairman
16	Atomic Safety and Licensing Board
17	JUDGE FREDERICK SHON, Member Atomic Safety and Licensing Board
18	
19	JUDGE JERRY KLINE, Member Atomic Safety and Licensing Board
20	APPEARANCES:
21	On behalf of the Applicant, Cleveland
22	Illuminating Company:
	JAY SILBERG, Esq.
23	On behalf of Intervenor, Ohio Citizens for
24	Responsible Energy:
25	SUSAN HIATT, Esq.

1 APPEARANCES: (Continued) On behalf of Intervenor, Sunflower Alliance, Inc., 4 et al. DAN WILT, Esq. On behalf of the Nuclear Regulatory Commission: GEORGE JOHNSON, Esq. 

## 1 PROCEEDINGS

- 2 CHAIRMAN BLOCH: This is a proceeding involving an
- 3 application for an operating license by the Cleveland
- 4 Illuminating Company for Perry Units 1 and 2, Docket Nos.
- 5 50-441-OL, and 50-440-OL. With me this morning are Mr.
- & Jerry Kline, and Mr. Frederick Shon, both members of the
- 7 Licensing Board for this case.
- 8 The purpose of this hearing this morning is to
- g discuss the interpretation of ALAB-675 concerning the
- 10 hydrogen contention that was admitted into this proceeding,
- 11 and in particular to discuss the November 4 letter from Ms.
- 12 Susan Hiatt to James M. Cutcheon of the staff of the Nuclear
- 13 Regulatory Commission.
- 14 Will the parties please identify themselves for
- 15 the record. The Applicant?
- 16 MR. SILBERG: This is Jay Silberg, for the
- 17 Applicant.
- 18 CHAIRMAN BLOCH: The representative for Ohio
- 19 Citizens for Responsible Energy?
- MS. HIATT: Susan Hiatt for OCRE.
- 21 CHAIRMAN BLOCH: The representative for Sunflower
- 22 Alliance, Inc., et al.
- 23 MR. WILT: Dan Wilt for Sunflower Alliance.
- 24 CHAIRMAN BLOCH: The staff of the Nuclear
- 25 Regulatory Commission.

- t MR. JOHNSON: This is George Johnson for the
- 2 NRC staff.
- 3 CHAIRMAN BLOCH: May I ask, Mr. Silberg, are
- 4 you prepared to comment on the November 4 letter?
- MR. SILBERG: Yes, but I would think that
- 6 since the immediate argument is between Ms. Hiatt and
- 7 Mr. Johnson that that is the appropriate place to
- 8 start.
- 9 CHAIRMAN BLOCH: I would have asked staff
- 10 first, except that I noted that Mr. Johnson is not the
- 11 regulatory attorney for staff.
- Mr. Johnson, are you prepared to comment?
- 13 MR. JOHNSON: Yes, I am, sir.
- 14 CHAIRMAN BLOCH: Please proceed. I would hope
- 15 that you could hold your comments to five minutes or, at
- 16 the absolute maximum, 10 minutes.
- 17 MR. JOHNSON: I will try to be brief.
- 18 Our interpretation of the ALAB-675 decision is
- 19 that the Appeal Board said that, although it was willing
- 20 to find that the Licensing Board did in fact apply the
- 21 TMI-Restart criteria in CRI-80-16 with regard to the
- 22 admissibility of a hydrogen control contention, it did
- 23 not, we believe, find that it had been correctly
- 24 applied. I think it is the staff's position that the
- 25 Appeal Board reserved its views on that question.

- 1 It is the staff's view that the Licensing
- 2 Board incorrectly applied the TMI-Restart criteria. So
- 3 that with regard to the comments in the November 4
- 4 letter by Ms. Hiatt, we believe that the Appeal Board
- 5 did not accept the Licensing Board's ruling. That is
- 8 suggested, not stated outright, but suggested in the
- 7 second paragraph of her letter to Mr. Cutcheon.
- 8 However, presuming that the Licensing Board
- 9 maintains that Issue 8 is admissible, the staff still
- 10 believes that a specific LOCA scenario involving
- 11 hydrogen generation, combustion, containment breach, and
- 12 off-site doses in excess of Part 100 values must be
- 13 shown to be credible in order to litigate the hydrogen
- 14 control issue raised Issue 8.
- 15 CHAIRMAN BLOCH: The specific language that we
- 16 see as being relevant appears on pages 17 and 18 of the
- 17 Appeal Board's decision, and I am not sure that it goes
- 18 quite as broadly as you say. It doesn't specifically at
- 19 that point, for example, mention Part 100.
- 20 Are you familiar with the language I am
- 21 talking about?
- 22 hR. JOHNSON: I have been using the issuances,
- 23 but I have the Opinion, just let me turn to the page.
- 24 CHAIRMAN BLOCH: Off-the-record.
- 25 (Discussion was held off the record.)

- 1 CHAIRMAN BLOCH: Back on the record.
- 2 During the off-the-record discussion, the
- 3 staff tried to clarify which published opinion we should
- 4 be referring to. We failed to reach any agreement on
- 5 that.
- 6 The Board would like now to read the passage
- 7 that it is concerned about. The passage stages on the
- 8 Opinion, page 17 and following: "The given hydrogen
- 9 generation mechanism thus has obvious relevance to the
- 10 efficacy of a hydrogen control system, in order to
- 11 litigate meaningfully the adequacy of such a system, a
- 12 particular accident or accidents should be specified.
- 13 For the hydrogen control contention admitted, and
- 14 restated by the Licensing Board here, must therefore be
- 15 construed in the context in which it was raised, i.e.,
- 16 Sunflower's motion to resubmit Contention 7. It is
- 17 clear from Sunflower's motion and contention that it
- 18 remains concerned with a hydrogen explosion of the
- 19 magnitude and type which occurred at Three Mile Island
- 20 Unit 2. While Sunflower assets that 'other accident
- 21 sequences, e.g., ATWS, can also lead to fuel clad
- 22 melting and subsequent hydrogen generation, 'it
- 23 recognizes, albeit reluctantly, that it must be bound by
- 24 TMI-1 Restart and a one-LOCA scenario."
- 25 That is the key passage that we are concerned

- 1 about. It suggests that you need to have a scenario in
- 2 order to determine whether hydrogen release can be
- 3 controlled. It also suggests rather strongly that the
- 4 scenario must be a LOCA scenario.
- Of course, this is a passage from an Appeal
- 6 Board decision in which directed certification was
- 7 denied, so we are talking entirely about dictum, but we
- 8 are talking about dictum from the people who are going
- 9 to review our decision, so that there is some weight
- 10 here.
- 11 Mr. Johnson, could you continue?
- 12 MR. JOHNSON: Yes, that was the passage that I
- 13 was speaking of. I was just referring to the footnote
- 14 on that same page.
- 15 The staff's position is that we read those
- 16 passage in ALAB-675 to require litigation of the
- 17 credibility of the specific accident scenario, despite
- 18 its non-inclusion in the language of Issue No. 8. As a
- 19 result, we disagree with OCRE that the parties are under
- 20 no obligation to demonstrate the existence of a credible
- 21 accident scenario.
- 22 CHAIRMAN BLOCH: Could you explain further,
- 23 though, why that is relevant in the context of a
- 24 discovery request for an admitted contention?
- MR. JOHNSON: All right. In the passages you

- 1 just read, in footnote 13, the Appeal Board states that
- 2 the rate and quantity of hydrogen generation is a
- 3 significant element of any hydrogen control contention,
- 4 since the adequacy of hydrogen control measures would
- 5 depend on the rate and the quantity of hydrogen
- 8 generated.
- 7 Therefore, we believe that in the context of
- 8 discovery, especially with regard to discovery against
- 9 staff, that in order to show that the discovery is
- 10 necessary to a proper decision in the proceeding, that
- 11 can only be done by relating the interrogatories or the
- 12 discovery to a particular accident scenario, and we
- 13 don't have one.
- 14 CHAIRMAN BLOCH: I take it that the attempt
- 15 was to ask for a scenario, and you say that you don't
- 16 know one.
- 17 MR. JOHNSON: We believe that the issue can
- 18 only be litigated in the context of a postulated
- 19 specific accident scenario.
- 20 CHAIRMAN BLOCH: And that it is not proper in
- 21 the course of discovery to ask the staff what that
- 22 scenario might be.
- 23 MR. JOHNSON: I believe that it is our
- 24 position that the intervenor has an obligation to come
- 25 forward and state a specific accident scenario.

- 1 CHAIRMAN BLOCH: For discovery purposes?
- 2 MR. JOHNSON: For purposes of litigating the
- 3 contention.
- 4 CHAIRMAN BLOCH: That would be at the summary
- 6 disposition stage or at the evidentiary hearing. But it
- 6 is kind of strange that you require a showing of proof
- 7 as a condition for discovery, isn't it?
- 8 MR. JOHNSON: It is a question of relevance in
- 9 our mind.
- 10 CHAIRMAN BLOCH: Let me ask you this, if we
- 11 were to ask the following two questions of staff, I
- 12 would like to know if the staff might be willing to
- 13 answer. The first question is: "If there were a worst
- 14 case small break LOCA, and operator error defeated all
- 15 make-up water and heat removal systems leading to core
- 16 uncovery and to oxidation of 80 percent of the zirconium
- 17 cladding, would the hydrogen suppression system be
- 18 adequate? That is question one. Question two: How
- 19 likely is that?
- MR. JOHNSON: Could you restate that?
- 21 CHAIRMAN BLOCH: Let's make that off the
- 22 record, since it is all put on the record.
- 23 (Off the record.)
- 24 CHAIRMAN BLOCH: Back on the record.
- 25 Could you respond?

- 1 MR. JOHNSON: I don't believe I can respond to
- 2 that question. I would have to consult the staff.
- 3 CHAIRMAN BLOCH: You would have to decide
- 4 whether or not it would be feasible to answer that
- 5 question, or what is your answer?
- 6 MR. JOHNSON: I don't have an answer.
- 7 CHAIRMAN BLOCH: Okay.
- 8 Have you completed your discussion of the
- 9 ALAB?
- 10 MR. JOHNSON: Yes, I have.
- 11 CHAIRMAN BLOCH: Mr. Silberg, before you
- 12 begin, there is a loose-end which I think we should
- 13 clean up. I suspect that it is already cleaned up in
- 14 the discovery process. But we have been asked to
- 15 clarify for the record what hydrogen control system
- 16 Applicant is using. Would you do that for us now?
- MR. SILBERG: The only document on the record
- 18 in the LN-1 which I can cite to is a letter which was
- 19 referred to in the Appeal Board Order, which said that
- 20 we will have a distributed ignition system. We have not
- 21 yet filed with the staff, to my knowledge at least,
- 22 design criteria for the reservation concerning that
- 23 system.
- 24 CHAIRMAN BLOCH: Now will you please comment
- 25 on the ALAB, and also on the question that the Board is

- 1 suggesting that it might ask.
- MR. SILBERG: All right.
- 3 First, I think that it is clear that we are
- 4 fealing only with LOCA, that is pursuant to the
- 5 Commission's Order in the TMI-Restart, CLI-80-16, where
- 6 they said under Part 100, this is the only way we can
- 7 litigate hydrogen control beyond 10 CFR 50.44. Under
- 8 Part 100, hydrogen control measures beyond those
- 9 required by 50.44 would be required if it is determined
- 10 that there is a credible loss of coolant accident
- 11 scenario. Then it goes on with the rest of the text.
- 12 They were only dealing with LOCA.
- 13 The staff has said in their letter of October
- 14 29 that -- I will read it: "The NRC staff has not
- 15 identified an accident scenario for PWRs that is
- 16 equivalent to the TMI-2 accident."
- 17 Our answers to interrogatories that were filed
- 18 on October 29, this is Applicant's answer to OCRE's
- 19 fifth set of interrogatories, answered the question
- 20 which OCRE had posed, which is what do we consider to be
- 21 the equivalent of a TMI-2 accident.
- 22 CHAIRMAN BLOCH: Off the record for a moment.
- 23 (Discussion off-the-record.)
- 24 CHAIRMAN BLOCH: Back on the record.
- 25 Mr. Silberg.

- 1 MR. SILBERG: In our answer, we stated that we
- 2 did not believe that there is a credible accident
- 3 scenario for Perry which is equivalent to a TMI-2, and
- 4 we went into some detail explaining what the TMI-2
- 5 accident was, nine pages of response as to why that is
- 6 not a suitable equivalent for Perry.
- 7 I understand from OCRE's letter that they are
- 8 planning to submit, I believe by today, their answers to
- 9 our interrogatories which supposedly will include their
- 10 views on the TMI-2 type accident scenario. The
- 11 responses that are in to date would indicate that there
- 12 is no equivalent scenario.
- 13 My judgment is that if we try to answer your
- 14 question, the current hydrogen control system,
- 15 recombiners, would not be sufficient to control the type
- 16 of oxidation postulated in your first question.
- 17 However, I think we would say, in answer to the second
- 18 question, that that scenario was highly improbable at a
- 19 minimum. Whether we could further quantify that, I
- 20 would doubt, but our position would certainly be that
- 21 postulating the operator defeating all make-up water
- 22 systems and all the heat removal systems would be highly
- 23 incredible.
- 24 CHAIRMAN BLOCH: I guess that the problem is
- 25 that you would want to compare that to the a priori

- 1 knowledge of whether or not TMI-2 might itself have
- 2 existed. I think probably in the view of everyone at
- 3 that time was that that accident also was highly
- 4 incredible, wasn't it?
- 5 MR. SILBERG: I guess that depends on your
- 6 definition. It was at least within the realm of
- 7 accident analyzed in WASH-1400. However, I think the
- 8 postulated similar accident today, in light of what has
- 9 been learned, in light of the changes in design and
- 10 procedures, certainly would be highly incredible.
- 11 CHAIRMAN BLOCH: It sounds to me like it
- 12 wouldn't be that difficult for the Applicant, at least,
- 13 to answer those questions. It would help the Board to
- 14 know where --
- 15 MR. SILBERG: I believe we have already
- 16 answered that.
- 17 CHAIRMAN BLOCH: That particular scenario? In
- 18 other words, you have stated that you could not control
- 19 the amount of release involved in an 80 percent
- 20 oxidation of the zirconium clad?
- 21 MR. SILBERG: No, I don't think we say that,
- 22 but I do think we say, in trying to compare the TMI-2
- 23 scenario with Perry, I think we show narratively, at
- 24 least, why this kind of a situation is incredible.
- 25 CHAIRMAN BLOCH: I think it would be helpful

- 1 for us to have an answer to the first question. If we
- 2 were to agree with your reasons for thinking that it is
- 3 incredible, what would the situation on hydrogen control
- 4 be.
- 5 MR. SILBERG: I don't think we can answer that
- 6 at the present time because the design for the
- 7 distributed ignition system is not complete. I think we
- 8 would stipulate, if we are talking about any relatively
- 9 rapid generation of hydrogen, that the recombiners would
- 10 not be adequate. They were not designed with that kind
- 11 of an accident in mind.
- 12 CHAIRMAN BLOCH: Okay.
- 13 MR. SILBERG: But I don't think that we could
- 14 answer at the present time at least --
- 15 CHAIRMAN BLOCH: You said, we could stipulate
- 16 that. Would you consider your present statement on the
- 17 record to be that stipulation, or do you want to
- 18 consider putting it in writing?
- 19 MR. SILBERG: I would certainly want to
- 20 consult with my witnesses, but I have never heard anyone
- 21 state that the recombiners could stand 80 percent fire
- 22 oxidation. I will be to confirm that.
- 23 CHAIRMAN BLOCH: Have you completed your
- 24 discussion.
- 25 MR. SILBERG: I also have a question in that

- 1 there is on the street a proposed rule, and it is my
- 2 recollection that the 80 percent number is greater than
- 3 what is postulated in the proposed rule. Of course, it
- 4 is a proposed rule, and not a final rule, we may be
- 5 getting into an area where we are on a different
- & wavelength than the Commission is.
- 7 CHAIRMAN BLOCH: We would be pleased to have
- 8 you comment on the lesser requirements that you believe
- 9 are included in the proposed rule.
- 10 Have you completed your argument, Mr.
- 11 Silberg?
- MR. SILBERG: Yes.
- 13 CHAIRMAN BLOCH: We have a lead intervenor,
- 14 which is OCRE. So the procedure should be that OCRE
- 15 will comment, and Mr. Wilt will comment only if he has
- 16 something additional that has not been attended to.
- 17 Ms. Hiatt.
- 18 MS. HIATT: I would first state that I think
- 19 the proposed rule on hydrogen control I think postulates
- 20 75 percent metal water reaction. I wanted to clear that
- 21 up first.
- 22 MR. SILBERG: That is my recollection.
- 23 MS. HIATT: The problem that arises here is
- 24 that OCRE had sent discovery requests to staff, and
- 25 staff on October 29 informed OCRE that they will not

- 1 voluntarily answer any of them. They believe that they
- 2 are supposedly not related to Issee 8. Then, of course,
- 3 it gets back to the TMI-2 type accident scenario. The
- 4 problem appears to be what is the credible TMI-2
- 5 equivalent accident scenario for Perry.
- f I would note that in CLI-81-15, the Maguire
- 7 Decision, the subject views of Commissioners Gilinsky
- 8 and Bradford state that 10 CFR Part 100, under which
- 9 this contention will be litigated, being an accident
- 10 involving core melt and fission product release as being
- 11 credible.
- 12 They also note that Part 100 was written in
- 13 1962, before there was a general awareness of the
- 14 hydrogen generation problem, and that if this same part
- 15 were being written today there would probably also be
- 16 inclusion of hydrogen generation.
- 17 Since 10 CFR Part 100 considers an accident
- 18 having core melt and fission product release as
- 19 credible, it must also follow that an accident having a
- 20 great quantity of hydrogen associated with it would also
- 21 be credible.
- I think the other part is, looking at some of
- 23 the equivalencies to the TMI-2 accident may be narrow.
- 24 I think that applicant has done that as well as the
- 25 staff, although the staff refuses to even answer in an

- 1 acceptable the interrogatories directed to it as to what
- 2 the staff considers to be the TMI-2 type accident.
- 3 I think that at the very least they should
- 4 state that in writing under oath and affirmation that
- 5 they think there is no credible accident.
- 6 CHAIRMAN BLOCH: May I ask the staff whether
- 7 they have, in fact, stated in answers to the
- 8 interrogatories their belief that there is no credible
- 9 accident.
- 10 MR. JOHNSON: Other than in the letter from
- 11 Mr. Cutcheon to Ms. Hiatt, I don't believe the staff has
- 12 answered this question. It is the staff's position that
- 13 it will not answer these interrogatories that are
- 14 involved here voluntarily at this time.
- 15 CHAIRMAN BLOCH: I note, Ms. Hiatt, because of
- 16 the change in the staff's position on what it will do
- 17 voluntarily and what it will not, you are going to have
- 18 to file a motion to compel to get a ruling from the
- 19 Board Do you have a time schedule in which you can
- on file such a motion along with good cause for why it is
- 21 being filed somewhat late?
- MS. HIATT: I don't know that a motion to
- 23 compel is what you would call it. I guess it is filing
- 24 with the presiding officer and trying to show that they
- 25 are relevant.

- 1 CHAIRMAN BLOCH: I accept your correction. It
- 2 is, in fact, the procedure that Sunflower has just
- 3 followed with some of its interrogatories.
- 4 MS. HIATT: I would say, perhaps, November
- 5 30th might be an appropriate time, the reason for delay
- 3 being that it was not until October 29 when I was even
- 7 informed that the staff would not be answering these
- 3 interrogatories at all.
- 9 The interrogatories, by the way, were
- 10 submitted on September 13, and it is today November 15
- 11 and we are just having this call trying to clarify the
- 12 problem here. It will take some time for OCRE to
- 13 demonstrate why the answers to the interrogatories
- 14 should be filed by the staff under the regulatory
- 15 procedure.
- 16 CHAIRMAN BLOCH: Have you finished your
- 17 presentation?
- 18 MS. HIATT: Yes.
- 19 CHAIRMAN BLOCH: Mr. Wilt, have you any
- 20 additional comments not covered by OCRE?
- 21 MR. WILT: No, Your Honor.
- 22 CHAIRMAN BLOCH: Would the staff like to
- 23 comment on the schedule for filing the motion?
- MR. JOHNSON: The deadline of the 30th that
- 25 Ms. Hiatt has suggested seems appropriate.

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CHAIRMAN BLOCH: Mr. Silberg, would you
1
2 comment on that?
           MR. SILBERG: I don't have any comments on the
4 schedule, no, sir.
     CHAIRMAN BLOCH: Then that schedule is
5
6 approved.
    The Board is prepared to continue. Are there
8 any other necessary matters to be discussed this
9 morning?
           There being none, the conference is
10
11 adjourned. I want to thank the parties for their
12 participation.
13 (Whereupon, at 10:30 a.m., the conference was
14 adjourned.)
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## NUCLEAR REGULATORY COMMISSION

This is to certify that the attached proceedings before the NUCLEAR REGULATORY COMMISSION

in the matter of: CLEVELAND ILLUMINATING COMPANY (Perry Units 1 and 2)

Date of Proceeding: November 15, 1982

Docket Number: 50-440-OL & 50-441-OL

Flace of Proceeding: Washington, D.C.

were held as herein appears, and that this is the original transcript thereof for the file of the Commission.

Patricia A. Minson

Official Reporter (Typed)

Official Reporter (Signature)