# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In The Matter of )		
COMMONWEALTH EDISON COMPANY )	Docket Nos. 50-454 50-455	
(Byron Nuclear Power Station, ) Units 1 & 2)		

# APPLICANT'S REPLY TO JOINT INTERVENORS' PARTIAL PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW ON CONTENTION 1A

Commonwealth Edison Company ("Applicant") files this Reply to Joint Intervenors' Partial Froposed Findings of Fact and Conclusions of Law on Contention 1A.

# TRAINING, TESTING AND CERTIFICATION OF JOHN HUGHES

Joint Intervenors' proposed findings 4-45 attempt, by relying on the testimony of former Hatfield QC inspector John Hughes, to characterize Hatfield's certification procedures at the time of Mr. dughes' employment as ineffective and inadequate to ensure that QC inspectors were properly qualified. For the reasons set forth below, and as shown fully in Applicant's own proposed findings of fact and conclusions of law on this contention, the record in this proceeding does not support such a characterization. To the contrary, Hatfield's program for the training and certification of its QC inspectors, both currently and at the time of Mr. Hughes' employment by Hatfield, has been thorough and reasonably calculated to produce qualified inspectors.

The record does not support Intervenors' proposition, as stated in Intervenors' Proposed Finding 7, that John Hughes failed one of his original certification examinations and was given an identical test to take approximately 30 minutes later. In fact, the test that Mr. Hughes gave to the NRC staff as the one he purportedly had failed has a handwritten date of October 8, 1982 on it. It is undisputed that Mr. Hughes did not pass this test until four days later, on October 12, 1982. (Applicant's Proposed Finding 770). Moreover, the Board has already ruled that there is no safety significance to Mr. Hughes' assertion that he retook one of his certification examinations shortly after he failed it. (Memorandum and Order Ruling on Intervenors' Motion to Admit Testimony of John Hughes at 11, dated June 21, 1983.)

Intervenors' Proposed Finding 10 is misleading. Mr. Hughes never testified that he actually observed such testing practices with respect to other inspectors. He testified simply that he was oble to overhear the supervisor and other trainees discussing failed tests. (Applicant's Proposed Finding 772). Moreover, Mr. Koca testified that it was contrary to Hatfield procedures for inspector-trainees to possess corrected original tests during retesting. (Applicants Proposed Finding 768). Mr. Koca further testified that he had no knowledge that any Hatfield trainees had corrected tests available to them during retesting. (Applicants' Pro posed Finding 773).

-2-

Contrary to the assertions contained in Intervenors' Proposed Finding 11, Mr. Hughes' certification examinations have been produced by the Applicant. They are attached to the prepared testimony of Allen Koca as Exhibits H, I, J, K, L and M. (Koca, Applicant's Prepared Testimony, Exhibits H-M, ff. Tr. 7418).

- ...

Intervenors' Proposed Finding 15 is offered without record support. Instead, Intervenors cite additional Proposed Findings, which themselves find only indirect support in the record. The facts extablished by the record are as follows: Mr. Hughes' certification records show that he received 64 hours of on-the-job training in Hatfield Procedure 9A. Of these, 48 hours were verified by the NRC Staff. Mr. Hughes was certified only to Procedure 9A, cable pan hanger installation. His 48 verified hours of on-the-job training in this procedure exceeded the minimum requirements. (Applicant's Proposed Finding 754).

Mr. Hayes for the Staff concluded that the documents he reviewed, which indicated that Mr. Hughes received the requisite amount of training, were valid, based on the fact that many of them had been initialed by Mr. Hughes. In addition, Mr. Hayes interviewed inspectors who personally accompanied Mr. Hughes during his training. (Applicant's Proposed Finding 763).

Intervenors' Proposed Finding 19 incorrectly states that the only "objective" evidence of Mr. Hughes' previous work experience is a single telephone memorandum verifying Mr. Hughes' previous employment by Nuclear Energy Services (NES). In fact, Exhibit B to Mr. Koca's prepared testimony is a certification from NES that John Hughes was certified by NES as a Level II quality control technician. This document lists Mr. Hughes' prior QC experience with three other companies. The document indicates that Mr. Mughes possessed at least two years, nine months experience as a level I quality control inspector prior to his employment by NES. (Applicant's Proposed Finding 748.) In addition, Hatfield contacted NES by telephone to verify Mr. Hughes' prior employment by NES. (Koca, Applicant's Prepared Testimony at 5, Ex. C, ff. Tr. 7418.) The NRC Staff considers this to have been adequate verification by Hatfield of Mr. Hughes' previous employment. (Applicant's Proposed Finding 749.)

Contrary to the assertions contained in Intervenors' Proposed Finding 21, there is nothing unclear about Hatfield's policy concerning high school diplomas or equivalency diplomas for each of its inspectors. The record in this case establishes quite plainly that, while Hatfield's inspector certification requirements do not formally require a high school diploma or an equivalency diploma, as a matter policy Hatfield does require a diploma for each inspector. (Applicant's Proposed Finding 750.) Intervenors' semantic battle to the contrary can add nothing to the Board's understanding of the record.

Intervenors' Proposed Finding 23 misstates Mr. Koca's testimony. The relevant portion of the record establishes that Mr. Hughes met all minimum requirements contained in paragraph

-4--

5.5.1 of Hatfield Procedure 17. (Koca, Applicants Prepared Testimony at 7437-38, Ex. A, ff. Tr. 7418.) Mr. Hughes was eligible for certification since he met the minimum requirement, contained in paragraph 5.5.1.1, of one year's satisfactory performance as a level I inspector. (Koca, Tr. 744C.) Hatfield also desires, as a matter of policy, that an inspector also have obtained a high school diploma or an equivalency diploma (Koca, Tr. 7440.), and the record shows that Mr. Hughes obtained a GED from the Rockford, Illinois regional office of education on October 29, 1982. (Applicant's Proposed Finding 751).

Intervenors' Proposed Finding 24 fails to provide complete information. While Mr. Koca did admit that Mr. Hughes could not have had at least one year of experience with NES, he stated further that the certification document from NES shows that Mr. Hughes' experience as a level I inspector exceeded one year with other companies. (Koca, Tr. 7453.)

Intervenors' Proposed Finding 40 inaccurately characterizes Mr. Koca's demeanor as one of shock and surprise when he was asked why he would date and initial a test that he knew would ultimately be thrown away. Mr. Koca's response was entitely reasonable; he was not "grasping" for an answer. Mr. Koca responded as follows:

> Because the score is on there. And many times discussions with the QA/QC manager take place. An inspector may want to discuss it with the boss or bring the test into the boss to discuss why he had failed the test.

(Koca, Tr. 7497.)

-5-

Intervenors' Proposed Findings 42-44 imply that because recent improvements have been made in Hatfield testing procedures, it must be true that Hatfield's prior procedures were inadequate to ensure qualified inspectors. Intervenors go still further, and charge that Hatfield's testing procedures did affect the quality of certified inspectors at Byron. This simply is not the case. First, there is absolutely no evidence in the record to support such an inference, and Intervenors do not even pretend to rely upon record evidence. Second, John Hughes himself testified that he believed that he was qualified to perform the quality control inspections he in fact performed for Hatfield. (Applicant's Proposed Finding 765.) Third, Mr. Hayes testified for the NRC Staff that in his opinion no unqualified inspectors are working for Hatfield at this time. (Applicant's Proposed Finding 811.) Finally, the preliminary results of the expanded reinspection program, which program was conceived by the Applicant and approved by the NRC Staff as a means for identifying any ungualified inspectors, indicate that only one Hatfield inspector is likely to fail to achieve an acceptable quality level with respect to his first three months of inspections. And even for this inspector, his next three months appear likely to meet the appropriate acceptability criteria. (Applicant's Proposed Finding 808.)

It is therefore clear that the procedures used by Hatfield in training, testing and certifying John Hughes were adequate to ensure that Mr. Hughes was properly qualified. The proposed findings submitted by Intervenors do not really even

-6-

dispute this fact. Instead, Intervenors concentrate their attack upon the credibility of Mr. Koca's testimony, notwithstanding that it was supported in many instances by the NRC Staff, and upon the minor inconsistencies and problems with Hatfield procedures which Applicant has already recognized and taken action to remedy. Inasmuch as Mr. Hughes' certification implies anything as to the qualification and/or the certification of other Hatfield inspectors, it is that all Hatfield inspectors have been given appropriate training and testing. Finally, the expanded reinspection program is specifically aimed at determining whether any inspectors, those e ployed by Hatfield or by any other Byron contractor, are unqualified to perform their inspection functions. As shown below, and also in the body of Applicant's Proposed Findings on this issue, the reinspection program is adequate to ensure that inspectors are properly qualified.

# THE RECERTIFICATION PROGRAM

Intervenors' Proposed Findings 47-77 attempt to discredit the testimony of Michael Stanish relating to the recertification program, and wherever conceivable to denounce the Applicant's corporate attitude toward safety and quality. As shown below the result is a selective presentation of the record containing many inaccuracies and distortions.

Contrary to Intervenors' Proposed Finding 47, Mr. Stanish's prepared testimony did not exceed the scope of the Board's July 7, 1983 Order. It is simply a fact that the

-7-

recertification program applies to all contractors. Therefore, in his prepared testimony Mr. Stanish described the recertification program as it applies generally to all contractors, including Hatfield. His general testimony was solely for the purpose of placing more specific Hatfield testimony in context. It was not meant to place before the Board specific evidence pertaining to contractors other than Hatfield. Intervenors offered no objection to Mr. Stanish's testimony when it was offered. (Tr. 7548..49.)

Intervenors' Proposed Finding 49 has nothing to do with Hatfield and is plainly outside the scope of the reopened record on the QA/QC issue. As such, it is not a proper basis for findings by the Board.

Intervenors' Proposed Finding 50 is very imprecise. Mr. Stanish did testify, as Intervenors point out, that all contractor certification files have been reviewed at least twice, once by the contractor and once by Applicant. (Stanish, Tr. 7561.) Mr. Stanish further testified, and here Intervenors begin to misstate the record, that Hatfield's review of its own certification files was completed in about September 1982. (Stanish, Tr. 7562.) Mr. Stanish testified finally that the initial review by Applicant of the certification records for all contractors on-site was completed in the spring of 1983. (Stanish, Tr. 7572.)

The assertion by Intervenors in their Proposed Findings 51-53 that Applicant has failed to exercise effective oversight over its contractors is not supported by the record.

-- 8--

Indeed, the very example cited by Intervenors shows that Applicant <u>has</u> ercised effective oversight. In October 1982, Applicant began a review of 100% of the contractor certification files. Unsatisfied with the format of the documentation it was reviewing, Applicant curtailed the review until actions to correct the documentation deficiencies were implemented. (Stanish, Tr. 7640-41.) Contrary to Intervenors' assertions, this is an example of effective oversight. It also shows that Applicant was unwilling simply to go through the motions of the review process. The record supports a finding by the Board that Applicant's attitude toward the 100% certification review was one of conscientiousness and thoroughness.

Intervenors' Proposed Finding 54 is misleading. John Hughes' file was not reviewed by Applicant as part of its review of contractor inspector certification packages because Mr. Hughes was no longer employed as an inspector at the time Hatfield conducted its certification review. (Stanish, Tr. 7572.) More significant is the fact, ignored by Intervenors, that a sampling of all Hatfield inspectors, whether or not currently employed in that capacity, is encompassed within the reinspection program. (Applicant's Proposed Findings 796, 797, 806.)

Intervenors' Proposed Finding 56 unjustifiably characterizes Mr. Stanish as having exhibited a "striking lack of knowledge" concerning Hatfield's recertification program. For example, it is misleading to assert, as do Intervenors, that Mr. Stanish did not know the total number of contractors in-

-9-

volved in the recertification program. In fact, Mr. Stanish stated that there are seven to ten contractors involved. More importantly, this particular example Las nothing to do with Hatfield's own recertification program. Nor does Intervenors' next assertion, which is that Mr. Stanish could not give a precise numerical response to the question: "How many contractors were there who were required to do further work?" (Tr. 7564.)

Intervenors' Proposed Finding 60 misstates the record in several respects. First, there is nothing in the record to support Intervenors' allegation that Applicant begins with an assumption that an inspector was qualified, even if not properly certified. The transcript reference cited by Intervenors involves an attempt by Mr. Stanish to distinguish between qualification and certification, terms he believed Intervenors' attorney was confusing. (Stanish, Tr. 7648.) Second, it is true that Mr. Stanish refused to say that there were unqualified inspectors. Indeed, such a determination should not be made until after completion of the reinspection program, for this is the very purpose of that program. Mr. Stanish stated specifically that it was not his position that every inspector was properly gualified. (Stanish, Tr. 7648.)

Intervenors' description of what the reinspection program has so far shown is inaccurate. Mr. Teutken's testimony does not say that the program has uncovered two unqualified inspectors. In fact, Mr. Teutken's testimony points out that even the single inspector whose first three months of work

-10-

apparently will fail to achieve an acceptable quality level will pass the second three months, thereby negating any implication that he was unqualified. (Applicant's Proposed Finding 808.)

Finally, Region III has never testified that there were unqualified inspectors working for Hatfield. Intervenors' general citation to additional proposed findings is misleading. In fact, Mr. Forney refused to state unequivocally that unqualified inspectors were ever employed by Hatfield. Mr. Forney stated: "We are still awaiting the results of the reinspection program." (Forney, Tr. 7842.)

Intervenors' Proposed Findings 61-63 confuse the record. The point is that the reinspection program is designed to determine whether particular inspectors were qualified. Thus it is critical that the work actually performed by a particular inspector be reinspected. Reinspecting a randomly selected 10% of the bolts would not achieve this purpose. Intervenors are wrong to state that only one inspector was involved in bolting inspections; Mr. Teutken's testimony states that one inspector who performed bolting inspections was randomly selected to be a part of the group of Hatfield inspectors whose work is being reinspected. (Teutken, Applicant's Prepared Testimony at 8, ff. Tr. 7760.) His testimony does not say how many inspectors actually performed bolting inspections.

Intervenors' Proposed Finding 65 is similarly inaccurate. To reiterate: only one inspector is expected to "fail" the first three months of inspections. No inspectors

-11-

are projected to fail the second three months. (Applicant's Proposed Finding 808.)

It is not correct to imply, as do Intervenors in their Proposed Finding 66, that there is any evidence at all in the record establishing, or even suggesting, fraudulent practices of contractors in regard to certification programs. In fact, Mr. Stanish testified with respect to Hatfield that in all his experience with that contractor he has found no indications of any fraudulant practices. (Stanish, Tr. 7739.)

Contrary to the assertions in Intervenors' Proposed Finding 68, the only criticism by Region III of Applicant's audit of the reinspection program concerned the timing of the audit. The Region III Staff, in I & E Report 83-16, stated that it would have been prudent for Applicant to have conducted the audit earlier. (Applicant's Proposed Finding 812.)

Intervenors' Proposed Finding 72 incorrectly states that Hatfield failed to perform an evaluation it had committed to. Mr. Stanish testified specifically that Hatfield had performed the evaluation; what Hatfield failed to do was document the evaluation. (Stanish, Tr. 7708.)

That there have been problems and inconsistencies with implementation of Hatfield's certification program, and the certification programs of other contractors, has never been denied by Applicant. Instead, Applicant has focused its testimony upon the corrective measures it has implemented or has insisted be implemented by its contractors. There is absolutely nothing in the record to support a finding, as suggested by

-12-

Intervenors' Proposed Finding 77, that Applicant has a "cavalier attitude" toward quality assurance at Byron. The record shows clearly that the very opposite is the case. Applicant has initiated far reaching and comprehensive programs dealing with inspector certification, reinspections, overinspections, and audits, all in order to ensure safety and quality.

### THE BYRON REINSPECTION PROGRAM

Intervenors' Proposed Findings 78-90 constitute an attack upon the Byron reinspection program. As shown below, however, a major portion of the "fact," proposed by Intervenors are inaccurate.

Intervenors' Proposed Finding 79 incorrectly interchanges the terms quality assurance and quality control. The important distinction between these terms has earlier been described by the Applicant. (See Applicant's Proposed Findings 473-75.) Mr. Teutken's functions involve only quality control; he testified that he has no responsibilities regarding quality assurance. (Teutken, Tr. 7767.)

Intervenors' Proposed Finding 80 is misleading. The fact is that Hatfield's record keeping system simply does not contemplate a reinspection program of the type and magnitude now being conducted. Inspections are, and have been, reported and filed by component, not by inspector. (Teutken, Tr. 7757.) Because of the difficult nature of the reinspection program, the NRC Staff has expressed concern that inspectors may not take the time and effort to sift through all documentation to

-13-

make certain they are actually reinspecting all the work performed by particular inspectors. (Teutken, Tr. 7758.) Applicant recognized the reinspection program would be a difficult one, even when it originally proposed the program. (Teutken, Tr. 7757-58.) Mr. Teutken testified that he met with the lead welding inspector for Hatfield to make certain that the reinspection program was being conducted rigorously and forthrightly. (Teutken, Tr. 7759.)

Intervenors' Proposed Finding 85 wrongly implies that not all areas inspected by Hatfield will be reinspected. In fact, Mr. Teutken testified that every area, or attribute, originally inspected by Hatfield has been reinspected as part of the reinspection program. These areas include equipment setting, equipment modifications, conduit and conduit hangers, cable pans and cable pan hangers, bolting, welding, and cable terminations. (Teutken, Applicant's Prepared Testimony at 8, ff. Tr. 7760.) Any expansion of the reinspection would be limited to the area or areas in which an acceptable quality level had not been achieved. (Id. at 6.)

Intervenors' Proposed Finding 86 is not correct. As pointed out previously, no Hatfield inspectors have been found unqualified. In fact, the most recent information available indicates that only one Hatfield inspector will fail to achieve an acceptable quality level with respect to his first three months of inspections. He is projected to achieve an acceptable quality level with respect to his second three months of inspections. (Teutken, Applicant's Prepared Testimony at 9,

-14-

ff. Tr. 7760.) Moreover, if it is necessary to reinspect an inspector's second three months of inspections, and that inspector fails to achieve an acceptable quality level with respect to those inspections, <u>all</u> of that particular inspector's work is then reinspected. (Id.; Teutker, Tr. 7787.).

Intervenors' Proposed Finding 89 incorrectly states that Intervenors objected to the modification of Mr. Teutken's testimony. They did not so object. (Tr. 7789.)

Intervenors' Proposed Finding 90 is simply unwarranted. First, the Board already has accepted Mr. Teutken's modified testimony. (Tr. 7789-90.) Of more importance, however, is the fact that this testimony has been updated to comport with the most recent available information concerning the results of the reinspection program, information which was not available to Mr. Tuetken when he prepared his pre-filed testimony. (Teutken, Tr. 7787-88.) Given the undisputed importance of such information, it makes no sense to ignore it as Intervenors have done.

### NRC REGION III PANEL TESTIMONY

In rvenors' Proposed Findings 91-147 purport to describe the testimony of the Region III panel concerning the issues in the reopened QA/QC record. As shown below, in many cases Intervenors have mischaracterized or distorted the panel testimony.

Intervenors' Proposed Finding 105 is inaccurate. The reinspection program encompasses all inspectors at By.on from

-15-

the beginning of the project until September, 1982. (Applicant's Proposed Finding 797.) The date Applicant committed to ANSI N45.2.6 has nothing to do with the scope of the reinspection program.

Intervenors' Proposed Finding 108 misstates the record. Mr. Forney never testified that mere reliance on contification documents is meaningless. What he said is that he does not consider a resume submitted by an inspector-trainee as verification of prior work history. (Forney, Tr. 7839.) With respect to other documents, such as high school diplomas, Mr. Forney never implied that reliance on such documents was meaningless.

To the extent Intervenors' Proposed Finding 109 asserts that Hatfield has in fact employed unqualified inspectors, it is contrary to the weight of the evidence in this proceeding. First, Mr. Forney testified explicitly that he could not say for certain whether Hatfield had employed unqualified inspectors. He stated further: "We are still awaiting the results of the reinspection program." (Forney, Tr. 7842.)

Intervenors' Proposed Finding 111 incorrectly states that unqualified inspectors were in fact working at Hatfield. Despite Mr. Forney's recollection, cited by Intervenors, that unqualified inspectors have been certified by Hatfield, the great weight of the evidence in this record does not support such a finding. As noted above, Mr. Forney testified elsewhere in the record that he could not state with certainty that Hatfield had employed unqualified inspectors. (Forney, Tr.

-16-

7842.) Such a conclusion, he stated, must await the results of the reinspection program. (Forney, Tr. 7842.) Indeed, the most recent information available concerning the results of the reinspection program indicates that no unqualified inspectors were employed by Hatfield. (Applicant's Proposed Finding 808.)

Intervenors' Proposed Finding 114 refuses to recognize that the question of certifying quality control inspectors has been an evolving issue over the past decade. (Forney, Tr. 7969.) In fact, Applicant was not even asked by the NRC Staff to explicitly commit to Regulatory Guide 1.58 (which endorsed the ANSI standard) until some time in 1981. (Forney, Tr. 7969-70.) It is Applicant's position that at all times during Byron construction its certification programs, and those of its contractors, were appropriate and met the intent of the ANSI standard in effect at any particular time. (Stanish, Tr. 7552-53.)

Intervenors' Proposed Finding 127 is not accurate. It is not true that neither Applicant nor Hatfield checked the background of the Hatfield quality assurance manager. The record establishes that in fact his background had been reviewed and verified. He had for a number of years managed different companies in the Rockford, Illinois area. (Forney, Tr. 7919-20.) The problem, as Mr. Forney pointed out was that in the opinion of the NRC Staff the manager's background was not wholly satisfactory, since only about 20% of his time had been spent performing strictly quality assurance-type functions. Mr. Forney stated: "It was an interpretation of an application

-17-

of time." (Forney, Tr. 7919.) Mr. Forney further testified that such a determination on his part required a very in-depth review. (Forney, Tr. 7920.)

Intervenors' Proposed Finding 132 falsely states that allegations regarding "destruction" of discrepancy reports have been substantiated. In fact, the only thing that has been substantiated is that Hatfield was at some point using a looseleaf log rather than a hardbound log. (Forney, Tr. 7894.) Use of a looseleaf log is not prohibited by any Commission regulation. (Forney, Tr. 7894-95.)

It is not the case, as asserted in Intervenors' Freposed Finding 143, that eight Hatfield inspection reports have "inexplicabl;" vanished from Hatfield's files. As discussed in the NRC Staff's prepared testimony, certain inspection records, some of which included Mr. Hughes' participation, were lost or destroyed as a result of reinspection/rework operations. (Applicant's Proposed Finding 754.)

### CONCLUSION

In view of the foregoing analysis, Commonwealth Edison Company respectfully requests that Intervenors' proposed findings and conclusions on this contention not be adopted by the Board.

-18-

The foregoing document, "Applicant's Reply to Joint Interveners' Partial Proposed Findings of Fact and Conclusions of Law on Contention 1A" is respectfully submitted by the undersigned attorneys for Commonwealth Edison Company.

. & Duke Becker

sl

ISHAM, LINCOLN & BEALE Three First National Plaza Chicago, Illinois €0602 (312) 558-7500

Dated: October 14, 1983

# UNITED STATES OF AMERICA NUCLEAR REGULATORY COMM SSION

#### BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of COMMONWEALTH EDISON COMPANY Docket Nos. 50-454 OL (Byron Nuclear Power Station, Units 1 & 2)

CERTIFICATE OF SERVICE

The undersigned, one of the attorneys for Commonwealth Edison Company, certifies that he filed the original and two copies of the attached "APPLICANT'S REPLY TO JOINT INTERVENORS' PARTIAL PROPOSED FINDINGS OF FACT AND CONCLU-SIONS OF LAW ON CONTENTION 1A" with the Secretary of the Nuclear Regulatory Commission and served copies on the persons and at the addresses shown on the attached service list. Service on the Secretary and all parties was made by deposit in the U.S. Mail, first-class postage prepaid, this 14th day of October, 1983.

nse

50-455 OL

the attorneys for One of Commonwealth Edison Company

ISHAM, LINCOLN & BEALE Three First National Plaza Chicago, Illinois 60602 (312) 558-7500

# SERVICE LIST

COMMONWEALTH EDISON COMPANY -- Byron Station Docket Nos. 50-454 and 50-455

Mr. Ivan W. Smith Administrative Judge and Chairman Atomic Safety and Licensing Board U.S. Nuclear Regulatory Commission Washington, D.C. 20555 Dr. Richard F. Cole

6

Atomic Safety and Licensing Ms. Diane Chavez Board Panel U.S. Nuclear Regulatory Commission

Washington, D.C. 20555

Atomic Safety and Licensing Board Panel Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Chief Hearing Counsel Office of the Executive Legal Director U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Dr. A. Dixon Callihan Dr. A. Dixon Callihan Douglass W. C Union Carbide Corporation Jane Whicher P.O. Box Y Oak Ridge, Tennessee 37830

Mr. Steven C. Goldberg Ms. Mitzi A. Young Office of the Executive Legal Director U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Appeal Board Panel U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Secretary Attn: Chief, Docketing and Service Section U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Ms. Betty Johnson 1907 Stratford Lane Rockford, Illinois 61107

SAFE 326 North Avon Street Rockford, Illinois 61103

Dr. Bruce von Zellen Department of Biological Sciences Northern Illinois University DeKalb, Illinois 60115

Joseph Gallo, Esq. Isham, Lincoln & Beale Suite 840 1120 Connecticut Ave., N.W. Washington, D.C. 20036

Douglass W. Cassel, Jr. DPI Suite 1300 109 N. Dearborn Chicago, Illinois 60602

Ms. Patricia Morrison 5568 Thunderidge Drive Rockford, Illinois 61107

Mr. David Thomas 77 South Wacker Atomic Safety and Licensing Chicago, Illinois 60621