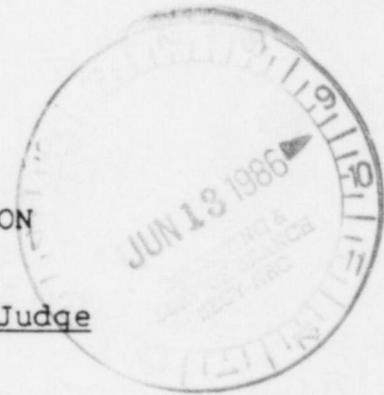


UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION



Before the Administrative Law Judge

In the Matter of )  
 )  
GENERAL PUBLIC UTILITIES NUCLEAR ) Docket No. 50-289  
 )  
(Three Mile Island Nuclear Station, )  
Unit No. 1) )

TESTIMONY OF  
CHARLES HUSTED

My name is Charles Husted. Since June 1984, I have been employed at Three Mile Island (TMI) Unit 1 as an Engineering Assistant, Senior III in the Nuclear Assurance Division of GPU Nuclear Corporation (GPUN). I am assigned to the Nuclear Safety Assessment Department as a Special Projects Assistant. My work involves verifying that the TMI Unit 1 replica simulator accurately simulates actual plant responses and writing simulator drill guides.

I was hired by Metropolitan Edison Company to serve as an Auxiliary "A" Operator - Nuclear in February 1974. In June 1978, I passed the NRC Reactor Operator (RO) written and oral examinations. I obtained my initial RO license in that same month. I

joined the Training Department as an Administrator, Nuclear Technical Training in July 1978. I instructed auxiliary nuclear operators in all areas of nuclear plant operation.

In 1980 my duties were enlarged to include instruction from time to time of license reactor operators. In June 1980, I passed the NRC Senior Reactor Operator (SRO) examinations, and I received an SRO license in early July. In September 1980, I was promoted to full-time instructor in Licensed Operator Training. I held this position at the time of the April 1981 NRC examinations.

In March 1983, I was promoted to Supervisor, Non-licensed Operator Training. In June 1984, I was transferred to my present position.

In this testimony I will deal with (a) whether I solicited help from Mr. Janes on an NRC examination, (b) my attitude toward the hearing on cheating, forthrightness and cooperation with NRC, and (c) my attitude, integrity, and performance as a TMI employee.

1. The April 24, 1981 SRO Examination

I took the Reactor Operator "B" examination on Thursday, April 23, 1981 and the Senior Reactor Operator "B" examination on the following day, April 24. I took both examinations in the designated smoking room. When I took the SRO examination on April 24, Mr. David Janes was the only other examinee taking the SRO examination in the same room. I believe that Mr. Wilson, an NRC employee, was also in the room from time to time.

I do not recall any pre-exam conversation with Mr. Janes; I may have said "hello" to him prior to the start of the SRO exam. We sat at different tables and did not face each other. I did not ask Mr. Janes for help on the examination. I did not ask him any question about the examination. In fact, I did not speak to Mr. Janes once the SRO exam had begun, and he did not speak to me.

I believe that I did speak aloud during the examination. A section of the examination dealt with thermodynamics, heat transfer and fluid flow. I believe this was the first time that the NRC had included this subject in such an exam. In my role as an instructor,



I had been the Training Department representative responsible for developing lesson plans for thermodynamics and heat transfer classes and instructing the operators in thermodynamic theory and application. In preparing the lesson plans I had to determine what a licensed operator should know about thermodynamic principles. I had elected to design the classes on thermodynamics around the Rankine thermodynamic cycle, which is a practical, or real, process. The question in the thermodynamic section of the April 24 SRO exam, however, dealt with the Carnot cycle, a theoretical thermodynamic process.

When I came to the Carnot cycle question on the examination, I realized immediately that I had not prepared the operators to answer the question. When I realized this, I was upset. I believe I said aloud words to the effect "What the hell is this?" I did not direct my remark to anyone or mention the substance of the question that lead to my exclamation. I decided that I needed some time to regain my concentration, and so I left the examination room and went to the bathroom.



2. Attitude, Forthrightness and Cooperation

(a) The first NRC interview

On July 29, 1981 I was interviewed by NRC investigators from the Office of Inspection and Enforcement (OIE). Paul Christman, a Company employee, accompanied me. I did not know at the time of the interview that O and W were under suspicion, and I did not yet know that the mechanism by which the cheating had taken place involved the passing of exam papers.

I was apprehensive before the interview. I had never been involved in such an interview before, and I did not know what to expect. I had talked with a TMI Unit 2 shift foreman sometime before the interview. He had been questioned by NRC investigators after the TMI Unit 2 accident. He had left me with the impression that NRC interviewers asked excessively broad questions, sometimes asked "trick" questions and often distorted the answers they received. This added to my sense of anxiety, and to my sense of caution, as I approached the interview.

In terms of what was said during the interview, I have read the account of the interview contained on

page 39 of Report of Investigation -- Three Mile Island Nuclear Generating Station, Unit 1/Investigation Of Alleged Cheating On Operator Licensing Examinations, August 11, 1981. I shall refer to it here as the August OIE Report. I have also read the account of the same interview contained in the Report prepared by Mr. Christman. I shall refer to it in this testimony as the Christman Report.

Some of the questions that were asked during the interview, and my answers to them, are not reflected in the August OIE Report, and other questions and answers are, I believe, inaccurately recorded.

The August OIE Report, despite the fact that the interview lasted about half an hour, contains only four paragraphs. The Christman Report contains three pages.

The second paragraph of the August OIE Report does not make it clear that, in response to a request from the investigators, I discussed and drew a diagram of the arrangement of the examination testing areas and facilities. The last sentence of the second paragraph states that I "advised that two examinees sat at each table on opposite ends." That could be misleading,

because it does not make it clear that I was describing the seating arrangements for the April 23, 1981 RO examination.

The first two sentences of the fourth paragraph also fail accurately to reflect what I remember of the interview. Those sentences state:

DD was queried concerning the possibility of reference material being covertly brought into the classroom by examinees. However, for unknown reasons, he declined to respond to this question or explain his reluctance to discuss this issue.

I recall being asked about examinees bringing reference materials into the classrooms. As I recall it, I did not answer this question at first. I remember believing that the question was too broad; it was not limited to authorized or unauthorized reference material, and it was not limited to any particular examination. I was reluctant to give a blanket answer that might be thought to cover every examination I had participated in since joining the Company. The Christman Report indicates that when one of the interviewers then asked me if anyone brought reference material into "either examination," I responded that I could answer only for



myself and that I had not brought unauthorized reference materials "to the examinations." The Christman Report accurately reflects my recollection of my answer. The August OIE Report does not record this answer at all.

The Christman Report also indicates that I was asked whether I had "any knowledge of cheating" and that I responded "No." The August OIE Report does not mention this question and answer at all.

According to the fourth paragraph of the August OIE Report:

[DD] was also asked whether any rumors or comments regarding instances of cheating on the exams had come to his attention. He acknowledged that he had heard rumors to this effect which he labeled as "unconfirmed hearsay." However, DD refused to reveal any specifics of the rumors he had heard or to identify the individuals (if named) who were allegedly implicated. Upon further attempted questioning, DD declared he could not recall anything concerning what he had heard.

I am certain that I was asked whether I had heard any rumors about cheating on examinations. I also recall that I was displeased with the question and declined to answer it at first. I cannot recall why I did so. The

Christman Report records the first question about rumors or gossip as referring to "the April examinations," and the August OIE Report records the question as referring to "the exams." Assuming that either of these is an accurate statement of the actual question, I may have misunderstood the question and thought it referred to "examinations" generally. If that was the case -- I do not remember today whether it was -- then, as in the case of the question about reference materials, I may have considered it to be too broad. On the other hand, the question as first framed by the interviewers may in fact have been stated more broadly than is shown in either Report.

In any event, the Christman Report indicates that the question was repeated and that I said I could not recall having heard any rumors or gossip in regard to cheating on the April examinations.

The August OIE Report, on the other hand, attributes to me an entirely different answer from the one recorded by the Christman Report. The August OIE Report states that I did acknowledge hearing rumors -- exactly the opposite answer from the one recorded by

Mr. Christman -- and that I labeled these rumors as "unconfirmed hearsay." I do not recall hearing or using the words "unconfirmed hearsay;" I am sure that I would not have originated the use of those words during the interview. I am confident that the Christman Report more accurately reflects my answer to the question about rumors than does the August OIE Report. I say this because I had not heard any rumors or gossip about cheating on the April examinations, and I believe that I did not recall until after the July 29, 1981 interview the "passing papers" comment, discussed below. I therefore cannot think of any reason why I would have given the answer attributed to me in the August OIE Report.

I have one other recollection about the July 29, 1981 interview that may be significant. I seem to recall that when I was asked one of the questions that I did not wish to answer, I asked the interviewers whether I could decline, and, as I recall, I was told that if they wanted more information on the subject they would interview me again later. I note, however, that neither the Christman Report nor the August OIE Report makes any mention of such a question and answer.



I recall feeling pretty good about the interview after it was over, particularly in light of the apprehension with which I approached it. I was surprised when I read the Special Master's finding that I had refused to cooperate with the NRC investigation and his inference from that finding that I lacked credibility.

(b) The discovery of cheating

Shortly after my July 29, 1981 interview, I learned that O and W had admitted cheating on the exam. This disclosure began a period of great stress for me. I was shocked by the news. I had difficulty believing it. My own reaction at the time to the Company's resulting treatment of O and W was that it was unduly harsh. As a result of the cheating there was resentment among the operators towards the Training Department, some of it bordering on hostility. There was a general feeling among them that O and W had to cheat because Training did not adequately prepare them for the examinations.

Also, Harold Denton of NRC held a meeting at Three Mile Island after the cheating episode in which he announced that everyone who had taken the April 1981

examinations would have to take another set, this time in October 1981. This announcement produced great resentment and the lowest morale I have ever seen at TMI. I felt at the time that this requirement amounted to an accusation by NRC that all of us had cheated on the April examinations.

In addition to the emotional stress that followed the cheating episode, we in the Training Department had a great deal of work to do. We had to continue with our replacement training program for new operators, our requalification program for those personnel who already had licenses and our program for helping RO's advance to the level of SRO. We also had to devise a special training program for the forthcoming October NRC examinations, and, in addition, I had to prepare to take the NRC examination. Another result of the cheating episode was that the Training Department adopted a new procedure for the administration of exams, a procedure designed to insure that cheating would not occur in the future. This new procedure imposed significantly greater exam writing and review requirements on us.

There can be no doubt that my overall attitude and morale in the months following the cheating episode were below par. I said in written comments I prepared for my 1981 annual evaluation that

It is becoming increasingly difficult to maintain a positive working attitude which is leading to reduced production and increased reduction in motivation.

Still, I believe that I carried out my work in a professional and conscientious way.

(c) The "passing papers" remark

I do not recall precisely when I learned that O and W had cheated by passing papers between them.

I may have learned it when I learned that O and W had cheated, or I may have learned it when I saw the August OIE Report. I believe that at the time I learned of the mechanism by which O and W had cheated or shortly thereafter, I remembered a comment I had overheard earlier. The comment I had overheard involved the words "passing papers." My reading of the August OIE Report may have caused me to remember the remark. There are several references in the August OIE Report interviews to "switching exam papers" and "passing answer sheets," and, of course, there are the descriptions by O and W of how they had cheated.



I described the comment to an NRC investigator in my second NRC interview, which occurred on September 18, 1981. I was interviewed on that date by Richard Matakas. During the interview, I told Mr. Matakas that I remembered overhearing a part of a conversation between two or more individuals sometime after the April 1981 examinations. I could not remember precisely when I had heard the remark, but I tried to convey to Mr. Matakas that it was within the general time frame of the April examinations. The only part of the conversation that I remembered overhearing was the phrase "passing papers."

I did not know whether the individuals I had overheard were referring to passing papers in an NRC exam or whether they were referring to an exam at all. I tried to make it clear to Mr. Matakas that the connection between the "passing papers" comment and the NRC exam was one I had made on my own and not overheard.

I have seen and reviewed a copy of page 16 of Report of Investigation -- Three Mile Island Nuclear Generating Station, Unit 1/Investigation of Alleged Improprieties on Operator Licensing Examinations,

October 11, 1981, which is a summary of my interview with Mr. Matakas. I shall refer to it here as the October OIE Report. I believe it is not entirely accurate. The third paragraph of the summary says:

DD was asked to clarify what he meant by "unconfirmed hearsay" in his previous statement. He stated that he did hear one comment made during the time period of the NRC RO/SRO exams where someone (he did not recall who) said they saw someone (the unidentified person did not say who) passing papers in the exam.

As I have mentioned, I do not believe I indicated that the "passing papers" comment made any mention about an "exam."

In addition, I do not recall Mr. Matakas asking me what I meant by the words "unconfirmed hearsay." I do not recall hearing or using the words "unconfirmed hearsay" during that interview, but in fairness I must say that I cannot remember the interview very well at this time.

It is possible that Mr. Matakas drew his own conclusion that the information I volunteered on "passing papers" was the "unconfirmed hearsay" alluded to on page 39 of the August OIE Report. I have reviewed a

copy of the handwritten notes taken by Mr. Matakas during the interview. The notation "This is 'unconfirmed hearsay' statement (See Report) p. 39" is written in the left-hand margin of his notes. It appears to be an answer or conclusion, not a question. The precise question is not set out in the notes.

Also, the fact that the notation is in the margin may indicate that it was written at some point after the "passing papers" answer was given. If that is true, then it may not accurately reflect exactly what was said during the interview.

I do not recall whether Mr. Matakas showed me a copy of page 39 from the August OIE Report when he questioned me. It is possible that he did not ask me precisely the question he meant to. It is also possible, however, that Mr. Matakas did ask me if I considered the "passing papers" comment to be "the unconfirmed hearsay" alluded to on page 39 and that I simply misunderstood the question when I said it was. It is also possible that I understood the question and gave an incorrect answer; when I was first asked the same question at the hearing, I answered it incorrectly and had to correct my answer later on.



Whatever the case, I am confident that I did not recall the "passing papers" comment until I had learned of the mechanism by which O and W had helped each other.

The October OIE Report is accurate, I believe, with respect to where I overheard the "passing papers" remark. It states that I "heard the comment in the area near the coffee pot and men's room in the trailer that was located between the two classrooms." A more accurate description of where I heard it would be in the area of the water cooler, which is between the coffee pot and the men's room. I believe I came out of my office to go to the bathroom. I had to pass the water cooler. There were two or more individuals standing in the area of the water cooler. As I passed by them, I overheard the words "passing papers." I cannot recall the names of the people engaged in that conversation, nor could I recall their names in September of 1981. I simply was not paying attention to them. I do not know why the two words "passing papers" stuck in my mind.

I believe I was fully cooperative with Mr. Matakas during my September 18, 1981 interview. The questions,

as I recall, were specific, and I answered them to the best of my ability.

Before leaving the "passing papers" remark, I should comment on Mr. Newton's pre-filed testimony in this proceeding. I was asked during the hearing before the Special Master, at page 26,933 of the transcript, whether I had discussed the "passing papers" comment with Company management prior to my September 18, 1981 interview. I said that I did not believe I had. My answer and Mr. Newton's testimony are inconsistent. Mr. Newton believes that between my first and second NRC interviews, we discussed my July 29, 1981 interview, and that the conversation was probably prompted by his review of page 39 of the August OIE Report and his curiosity about the statement that I had refused to answer certain questions. Mr. Newton believes I told him that the NRC interviewers had asked me during the first interview whether I had heard "any rumors about passing papers." Mr. Newton also believes I discussed with him during our conversation my recollection of the "passing papers" comment.

When I testified in December 1981, I did not remember having such a discussion with Mr. Newton between my first and second interviews, and I do not recall it now. I recall talking with Mr. Newton about the Special Master's Report after it was issued in April 1982, and we may have discussed the "passing papers" comment at that time.

In terms of the content of the conversation described in Mr. Newton's testimony, his recollection to the effect that the NRC question, as I described it, referred to "rumors about passing papers" is an important one, because if the question had been put to me that way during the July 29, 1981 interview, it is likely that I would have remembered the "passing papers" comment at that time. I am reasonably confident, however, that Mr. Newton does not remember this portion of our conversation accurately. My own recollection is that NRC did not frame the question in terms of "passing papers," and on this score, the Christman Report, the August OIE Report and I are all in agreement.

Finally, while I do not recall talking with Sam Newton prior to my second interview about the "passing



"papers" comment I had overheard, the possibility that we did so is not inconsistent with my belief about when I recalled the comment. If, as Mr. Newton recalls, the conversation occurred after he had reviewed the August OIE Report, then it must have occurred after August 11, when that Report was published. I believe that with the publication of that Report, I would certainly have known the mechanism by which O and W had helped each other and remembered the "passing papers" comment. So, while I do not remember this conversation, it is possible that if we talked before the second interview, I discussed the "passing papers" comment with him.

One final comment on this subject. Shortly before filing this testimony I learned about Mr. Wilson's notes of our October 5, 1981 conversation. While I do not remember the content of our conversation today, I recall having it. I believe Mr. Wilson's notes tend to confirm that the "passing papers" comment I heard did not mention an "exam," that I do not remember who was at the water fountain, that I heard only the two words "passing papers," that I was asked by Mr. Matakas during the second interview whether anyone had told me any

rumors and I answered "no," and that I did not discuss the "passing papers" comment with anyone at the Company before October 5, 1981.

(d) The October 1981 deposition

I was deposed in connection with the cheating hearing on the evening of October 23, 1981 by TMIA. I remember clearly that I was annoyed at the outset of the deposition. The deposition was scheduled to occur at about 7:00 p.m. in the evening, as I recall. I arrived on time and was required to wait for almost two hours before the deposition began. I gave a number of "cute" answers during the course of the deposition. I came to regret my conduct even before the Special Master's Report was issued, because I was admonished by counsel for the Company for the way I had conducted myself during the deposition. In fact, my conduct was held up to other Company employees as an example of how one should not conduct oneself during testimony. This evaluation of my conduct at the deposition took place, as I recall it, prior to the hearing before the Special Master. I made up my mind, based on this experience, that I would not conduct myself during the hearing as I had during the deposition.

(e) The hearing before the Special Master

I have described the physical and emotional stress I was under during the months immediately following the disclosure of the cheating episode. I have also said that I had been admonished not to conduct myself during the hearing as I had during the October 1981 deposition. As a result of these factors, and the fact that I had never testified in an NRC proceeding before, I was apprehensive about my forthcoming appearance before the Special Master. Shortly before my appearance, however, my anxiety changed to outright fear. I learned about a week before my scheduled appearance about Mr. Ward's testimony before the Special Master. Mr. Ward, of course, testified that Mr. Janes had told him during an interview that I had solicited help on an April 24 SRO examination question. The allegation that I had solicited help was false. But I had suddenly been transformed from one of many witnesses in the proceeding to one who was in serious jeopardy.

I knew there was a great deal of publicity surrounding the hearing. I was concerned that my children would hear unpleasant rumors about their father, and I



was concerned about the effect of the accusation on my reputation among my fellow workers and friends. I was in a terrible state of mind when I testified. Counsel for the Company, perhaps because of constraints imposed by the Special Master's sequestration order, spent very little time with me before my testimony. While there is some indication in my testimony that I had reviewed the Christman Report and the OIE Reports, I am confident that I had not reviewed and compared them carefully. As I approached the hearing, my dominant concern was Mr. Ward's testimony. It really had not occurred to me that I might be questioned at any length about the NRC interviews. As I said above, I had come through those interviews without any serious concern about my conduct.

When I took the stand, I was asked by Mr. Adler about the OIE Reports at the outset. With one qualification, I immediately conceded the accuracy of both, and that was a serious error. In addition, I testified at page 26,928 that the "passing papers" comment was what was referred to in the August OIE Report as "unconfirmed hearsay." Shortly thereafter during my

appearance, I corrected this testimony. Beginning on page 26,930 of the transcript of the Special Master hearing, I tried to make it clear that I recalled the "passing papers" comment after the first interview and before the second. I should point out that on line 6 of page 26,930 of the transcript, I believe the word "During" should have been "Between." With the word "During" in the sentence, the sentence does not make sense in context. The question asked at lines 2 through 4 of page 26,931 tends to confirm that the word "During" in line 6 on page 26,930 should have been "Between."

I remember clearly the frame of mind I was in during this questioning. I was startled that so much was being made of the two interviews and the "passing papers" comment. I could feel myself becoming hopelessly rattled. I had an urgent desire to get the testimony behind me and to get out of the hearing room. I sweated profusely throughout my appearance. I recall looking toward counsel for the Company from time to time in the hopes that he could provide me with some assistance.

One answer that I gave during the testimony will always stick in my mind. The "stupid, I think" answer at Tr. 26,928 was a serious mistake. I regretted it the moment the words were out of my mouth. Given this remark, and my inconsistent testimony about the "passing papers" comment, I have no reason to doubt that I appeared flippant and to consider the questions in a less than serious manner.

The ironic thing about those characterizations, however, is that I could not have been more serious about the entire proceeding. I meant no disrespect toward the hearing process. I tried to testify truthfully to the best of my ability. But I became very confused during Mr. Adler's questioning. I felt throughout my appearance as if I were in direct, personal jeopardy. I can do no more than say that I was scared to death, and I believe that fact best explains the unfortunate impression I conveyed.

### 3. Job Performance, Attitude and Integrity

The testimony of Messrs. Brown, Newton and Long in this proceeding will address my performance of my responsibilities with Metropolitan Edison Company and



GPUN. I shall rely on them to describe my day-to-day job performance and the way in which I went about my work.

I do want to emphasize these things. I regret that I have done anything to raise concerns about my attitude toward reactor safety, toward the regulatory process, toward the TMI training process or toward examination requirements in particular. I am, above all, conscientious about my work assignments. I take it very seriously. I have always recognized and appreciated that a person in position to operate the controls of a nuclear reactor, or to teach those people who do, holds a position of public trust. I have never knowingly done or said anything in the control room, the classroom or in my other conduct at work that would indicate a disregard for nuclear safety. I do not believe I have ever given any student in any classroom or other setting any reason to believe that I did not respect, or that he should not respect, the NRC's regulatory process or NRC or Company training and examination requirements. In the discharge of my training responsibilities over the years, I have made every

effort to impart a sense of seriousness and responsibility to the people in my classes. And this was true in the aftermath of the cheating episode, when my personal attitude and enthusiasm were at their lowest, just as it was before the cheating episode and after the effects of the cheating had run their course.

As to my integrity, I know of nothing that has happened in the years I have been associated with Metropolitan Edison Company and GPUN that would in any way reflect adversely on my honesty.