

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

July 11, 1983

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman



In the Matter of

CAROLINA POWER AND LIGHT CO. et al.
(Shearon Harris Nuclear Power Plant,
Units 1 and 2)

Dockets 50-400 OL
50-401 OL

ASLBP No. 82-L68-01
OL

Motion to Compel Discovery
re Eddleman 29 and 37 B
(and note re 75 and 83/84)

This motion to compel is filed within 10 days of the breakdown of negotiations with Applicants over the issues discussed herein, as noted on the accompanying certificate of negotiations. General Interrogatories 8 and 9 are objected to by Applicants, but we have agreed that they will be governed by the decision in another motion which will follow (unless negotiations succeed), re Eddleman 64f and 67 and general interrogatories thereon. Therefore, these objections are not discussed further here. The agreements are set out in the accompanying certificate of negotiations, re Eddleman 75, 83/84, 29 abd 37B. As noted in that certificate, Interrogatory G-8 re Eddleman 75 and 80 and 83/84 is objected to, and Applicants counsel and I have agreed that for Eddleman 75 and 83/84 that dispute will be governed by the decision on the above-referenced motion to compel also.

General Discussion

10 CFR 2.740(b) provides that parties may obtain discovery regarding any matter not privileged which is relevant to the subject matter of the proceeding, including not just the claim(s) or defenses of the party seeking

discovery but also those of any other party. Applicants state (June 17, 1983 Response to Eddleman General Interrogatories and Interrogatories on contentions 29 and 37B, hereinafter "response") at pp 1-2, that their provision of answers "should not be deemed an admission of relevancy with regard to the information provided by Applicants or that sought by Intervenor."

Yet virtually all of Applicants' objections are to relevancy. Considering that all information which could lead to the discovery of admissible evidence is considered relevant (and thus must be supplied in response to interrogatories), I think Applicants' position is illogical. First, as discussed below for each specific objection, the information sought is relevant or could lead to admissible evidence. Second, if Applicants are claiming (as they do) that providing an answer is NOT an admission of relevancy, then objections as to irrelevancy do not appear to be sensible, particularly if Applicants possess the requested information.

The first objection (other than to the General Interrogatories as discussed p.1 supra) is at page 20 of the Applicants' response, to interrogatory 29-1(g), which seeks the "model number, type, manufacturer and cost of each radioiodine monitor, detector, sampler, or device for detection ... which Applicants plan or expect to install, or have installed, at Harris" and the location and purpose of each.

Applicants only object to providing the cost; they state that the information concerning the in-plant devices is "not available in the form requested." Surely Applicants must know the maker, model number, type, location and use of the radioiodine monitors in the plant. They should be compelled to answer the question. If they don't know the answer, or part of it, that surely is

relevant. Since Applicants reference the FSAR, they should provide the answer to these questions (which are not answered but also not objected to) to the extent they are not answered in the FSAR at Chapters 11 and 12 (their reference). Applicants are not willing to provide this information as I understand it.

With respect to cost, Applicants object that cost of the devices is irrelevant to the accuracy, functioning or ability of the devices to perform their allotted tasks. I disagree for two reasons. First, more costly devices may be better able to perform these tasks, may function more reliably, may be more accurate, and may have other abilities (e.g. to detect radioiodines accurately under humid conditions), than the monitors Applicants have installed. There certainly are better detectors that cost more. Higher quality and capabilities in radiation monitoring equipment often cost more.

Second, by knowing the cost of the items Applicants chose, I can compare those costs with the cost of other available detectors, monitors and samplers which do have better or more extensive capabilities, and determine whether more costly equipment would be able to improve radioiodine release estimation, Appendix I compliance, radioiodine release control, timely warning of radioiodine releases and other relevant matters to this contention.

Applicants do not object that they do not know the cost of the equipment they installed. I believe the cost data is able to lead to admissible evidence as described above, and therefore Applicants should be made to provide this data, which they have or should have. Radioiodine monitoring equipment is obviously important to safety and thus all such equipment should be well documented as to manufacturer, QA/QC, purchase, date of receipt, installation, maintenance etc. What is sought is part of this information which Applicants clearly should have. If they don't have it, as noted above, that's also relevant, since they should.

Applicants' position that "cost of monitors can't lead to any information relevant to the contention" should be rejected.

The next objection (response at 23-24) is to providing answers to the last 3 parts (ii, iii, iv) of interrogatory 29-1(j), which asks (in all cases, the request is for information known to Applicants) for (ii) whether monitoring at other nuclear plants for radioiodines is continuous, at what points it is continuous for other PWRs, (iii) the accuracy and testing for accuracy of any detectors, samplers, monitors or other radioiodine detection devices at other plants, and (iv) what parts of questions (i), (ii) and (iii) in this interrogatory Applicants do not know the answers to.

Applicants stand on their stated objections in the response (pp 23-24). Basically, they say the practices of other plants are irrelevant to Harris.

However, these practices may well be correlated with the amounts of radioiodine released at other plants. Certainly if other plants have continuous radioiodine monitors and Harris does not, the reasons why Harris does not are relevant. Whether Harris has better, worse, or the same monitors for radioiodines as do other plants is surely relevant to Harris' ability to control radioiodine releases, at least as compared to those other plants' ability. The locations monitored at other plants may be different than for Harris -- if more are monitored at other plants, that is relevant. The accuracy and testing of radioiodine monitoring devices in use at other plants is surely relevant: it tells how accurate the devices are in practice, whether other plants are using more accurate devices than Harris is (or will), and how other plants test their radioiodine detection devices.

In all these areas, comparison of the practices of other plants to Harris can shed light on the adequacy of the radioiodine detection set-up, devices and systems at Harris. Please note that I am not asking Applicants to research this question, but only to tell me what they know already about this. Applicants state that providing information does not mean they admit it is relevant, so they might as well provide it under their logic.

But they should^{also} be compelled to provide the information they know about radioiodine monitoring devices, testing and accuracy at other nuclear plants (as asked in 29-1(j)(ii-iv) and what they don't know (which gives an indication of how they went about setting up their system, e.g. if they don't know the best practices at other plants, what's working well and what isn't, that's surely relevant to the adequacy of what they are planning to do re radio-iodines at Harris), because the information is relevant.

The next objection is to answering 29-4(o) (p.56 of response) which asks for information regarding Robinson 2 (Applicants' only PWR operating). Applicants object that Robinson 2 is of a dissimilar plant design to Harris and they did not use Robinson 2 data in calculating releases or Appendix I compliance at Harris. Applicants' counsel stood on these objections in negotiations.

I find the objection of different plant design surprising in view of Applicants' claims that Harris would have a capacity factor about like Robinson's ~~early~~ one (70%) because the designs are similar. Harris and Robinson are 3-loop Westinghouse PWRs and Applicants state no design differences that render the questions about technical specifications, leak rates, failed fuel fractions, and so on irrelevant.

The specifications for the Robinson plant are relevant to two important areas re contention 29: first, any violations of them or inadequacies in them (especially as found by comparison with radioiodine release data which Applicants are providing), is relevant to whether Applicants will actually carry out proper control of radioiodines at the next PWR they operate (Harris). If they have failed to do so at their other PWR (Robinson), that is surely important. If they have insisted on weaker tech specs at Robinson, that is important to the issue of their compliance at Harris.

Second, the Robinson plant has had problems (e.g. steam generator leaks, primary coolant pump seal failures) which could lead to high radioiodine releases. Such problems could occur at Harris (e.g. the joint contention on steam generator problems was stipulated to -- steam generator leaks could release radioiodines into secondary coolant and thence to atmosphere, e.g. through steam dump valves). If the Robinson specifications were not (or were) sufficient to control radioiodine releases during such events, or if the radioiodine releases therefrom were not specifically monitored, that is relevant to the adequacy of specifications of leak rates, testing, etc. for a similar PWR, Harris.

The next objection (response at 63) is to providing information re radioiodine trans, filters and removal systems, as to (iii) component manufacturers, (iv) component dimensions, (xiii) design life, (xiv) replacement schedules, and (xv and xvi) personnel exposures. Applicants' counsel stood on these objections, not further specified, in negotiations. I have attempted to explain why these items are relevant in negotiations, and committed to detailing the reasons in this motion to compel.

The identity of the manufacture~~rs~~ is relevant as to the quality, QA/QC, reliability and design of the equipment. Clearly if this equipment is being used to control and clean up radioiodines, who made it is relevant. The source, QA/QC and design information on such equipment which is important to safety of the public is information Applicants should have. If any make_r has QA/QC problems, or if their equipment in general has design problems, reliability problems, etc, that surely is relevant to the ability of their equipment at Harris to function adequately.

The component dimensions are relevant because fit-up, sealing, expansion-contraction and embrittlement problems are affected by the dimensions. I have detailed these concerns more in my responses to Applicants' interrogatories; generally I am concerned about radioiodines escaping from the cleanup system through joints around fittings, detectors, filters, connections, etc., or through sealers in ducting or fittings in piping or other transfer systems. I cannot evaluate the adequacy of such systems without knowing the dimensions of the equipment involved, which is particularly critical for expansion-contraction problems,

embrittlement of sealers, and sealer fit. Obviously ways in which radioiodines can escape the normal cleanup system are relevant to the question of whether the Harris plant can limit their release adequately. The dimension information, like the identity of component makers, is needed to assess the adequacy of the Harris plant's radioiodine control system.

The design life of components is very relevant. CP&L has had problems at Brunswick due to failure to chlorinate the RHR system's heat exchangers on schedule, due to failure to calibrate instruments frequently enough, and so on. It is reasonable to

want to know how often parts of the radioiodine control system at Harris need to be replaced, including monitors and filters, because of CP&L's past failures at operating plants to take needed actions on schedule. The shorter the component lives and the more frequent replacement required, the more critical this issue becomes. I need the design lives to evaluate this aspect of radioiodine control. Design life for equipment exposed to radiation is obviously affected by radiation exposure^{and other factors, e.g. oxygen} also, levels and the design lives need to be compared with the radiation to which the equipment might be exposed. Deterioration of cables and sealers composed of materials like those used in CP&L's Harris radioiodine control system sealers, gaskets and cables to monitors has been described -- see e.g. NUREG/CR-2157, NUREG-CR-2877 etc. Obviously such considerations are relevant to design life of the components and systems used to control radioiodines at Harris-- they are a "life shortening effect" of such systems. Design life data will reveal whether these problems (material embrittlement due to radiation and other factors, e.g. lack of oxygen) are being properly taken into account in the Harris radioiodine control systems or not.

Replacement schedules are relevant for the same reasons design lives are: when equipment wears out or cannot work, it must be replaced to keep the radioiodine removal/control system working. Proper replacement schedules will take into account design lives, testing of equipment, etc. Without knowing the replacement schedules, I can't tell if they are adequate to keep the radioiodine removal/control system at Harris working well enough to hold exposures within the Appendix I limits, especially if an accident were to occur, putting stress on the radio-iodine removal/control system's capabilities.

The radiation exposure levels are relevant because if equipment replacement schedules are not carefully set, equipment may have to be replaced with the plant "hot" radioactively, resulting in higher exposures. The higher exposures might then lead to deferral of needed repairs, and replacements of equipment or components, in the radioiodine control systems. Unless the radiation exposure levels anticipated are known, I cannot evaluate how this factor will affect the reliability and capability of the radioiodine removal/control systems at Harris. If Applicants have not estimated radiation exposure to those replacing such components of the radioiodine system at Harris, that is also relevant, since this lack of knowledge means there is an important factor (when can you replace components that wear out or don't work) insufficiently analyzed to assure operability of the radioiodine control/removal systems will be maintained so that failures will not occur in it that allow additional unplanned releases of radioiodines (beyond normal releases), which could violate the Appendix I limits.

For the above reasons the information requested in interrogatory 29-6 which Applicants object to providing is relevant. They should be compelled to provide this information.

Applicants object to answering 2908(d) through (g) re effects of Harris plant fires on materials in the radioiodine control/removal system. I have agreed to ask more questions on these issues and try to explain their relevance further to Applicants. I do not hereby waive any right to file a motion to compel if they object again to such questions after having had the relevance

spelled out. Applicants and I agreed to this course for these questions to possibly save time and effort for all concerned.

Concerning Eddleman 37-B, Applicants first object (response at 68) to 37B-1(d) and (c) which ask what information they possess which indicates that various groups including NRC, its models, BEIR-III, or Applicants and their models underestimate radiation exposure to humans, animals, food crops, air or water within 50 miles of the Harris plant, or underestimate incidence of any disease due to exposure to radioactive material or radiation.

Applicants claim the interrogatory is overly broad. They also claim I can research it as well as they, but I cannot, without access to their files, find what information they possess about this set of issues. Applicants stand on their objection as stated, in negotiations.

I believe this question is quite specific -- it asks about 6 groups (all relevant, i.e. they estimate radiation exposure to the public and its effects), and 6 possible kinds of error/underestimation of radiation exposures and effects that each may be making. It then asks what information Applicants have to indicate that each such group is making each of the underestimates. That's highly specific. It's extensive, but specific. If the answer is "we don't know" or "none", I'd accept that (assuming that's a true answer). But the information in Applicants' possession (which is what these questions ask for) is clearly relevant. The contention is about underestimation of radiation health effects. Underestimation of radiation delivered obviously leads to an underestimation of health effects. Health effects from a given amount of radiation exposure (including exposure to radioactive material), if underestimated, also lead to incorrect estimates of the health effects of radiation released from the Harris plant. I find it hard to think of information more relevant to my claim than information which specifically suggests or says such underestimates occur.

Applicants may be suggesting they cannot check all their information to find out the answer to this question. If so, they could have said so more clearly. I do not believe they have said that answering is unduly burdensome, but if it is, I would accept access to their information to do research myself, provided they can indicate what information they possess contains the requested information.

For the above reasons, the information sought in interrogatories ~~22~~ 37-B-1(d) and (c) is relevant and Applicants should be made to answer those interrogatories. If Applicants can show it is too burdensome to answer, they should be compelled to provide me access to their information so I can ascertain what information they possess which is responsive to these questions.

The objection to 37-B-2 is not complete; Applicants amend it to say irrelevant to the issue of health effects, not of radioiodine releases (that's a typo). I am not asking for studies by lawyers for Applicants, but for 2 things: any studies ^{by Applicants} made (before or after receipt of such documents by Applicants) of the documents I identified as supporting my contention 37 B (and information about those studies and their results, who made them etc); and any studies made for them by anyone else of same, before or after they were received by Applicants.

It is certainly relevant to know whether Applicants have studied the documents on which I rely in formulating and in defending my contention. I need to know the content/results of such studies because I cannot afford extensive assistance by experts (due to the high cost of same) and have no volunteer experts willing or able to put in large amounts of time on these issues.

I am not seeking attorney work-product; but as to expert studies, I believe the above is a showing that it is impractical for me to obtain the equivalent of the information sought by other means, and thus, under the federal rules of evidence, the studies Applicants or others have made (which Applicants know of or possess) should be made available to me since the information is relevant and I have a substantial need to know the results of such studies in order to defend my position on this contention. Applicants may, for example, have made studies which indicate that the contention or some part of it is correct, but under their objection, such information, vital to defending my contention, would not be discoverable. I certainly need information as to analyses of the documented basis of my contention (and documented basis of defenses of it) more since I do not have extensive expert time available to me to produce the equivalent of such analyses. What expert time I can get is clearly best spent on evaluating the analyses Applicants have or rely on or know of. This is the information sought in this interrogatory.

As to the timing of receipt of such documents (a lesser issue), it is relevant to know which of them they possessed before I provided them, but if they provide the information as to their analyses of such documents and when it is made, that information is of much less importance. Therefore, if discovery is compelled on parts (ii) thru (v) of this interrogatory, part (i) need not be answered; but if the other parts are not answered, I need to know what info the Applicants had, and when, that is relevant to this contention. That is relevant to the question of how much and how well they have considered the issues raised in 37-B.

Response at 70.

Applicants object partly to 37-B(3). They stood on the objections as made in negotiations. They have not answered 37-B(3)(c) and (d) at all, nor objected to them. They have not answered as to diseases which can be contributed to or made more severe by radiation or radioactive materials.

I have no problem with their not providing a list, provided their answer explains the information asked. I believe this does say that radiation causes only cancer and genetic diseases, but low-level radiation/radioactive material exposure causes no prompt (non-stochastic) effects.

I believe the other specifics asked, 37-B-3(c),(d),(a)(what's considered in the ER), and (e)(ii) through (e)(vi) should be answered. If I understand Applicants' position correctly, it should be easy to answer these, about one sentence each, and often the word "none" or "none but those identified above" will suffice. I see no reason to ask straightforwardly relevant questions twice to get answers, especially when it is possible that the second response would be "already asked and answered". Applicants' consideration of health effects of radiation, and their position on what those health effects are, are clearly relevant to my contention that they and NRC staff have underestimated such effects, and do not include all diseases caused/contributed to/made more severe by radiation. Applicants should be compelled to answer the above relevant parts which they have not answered, nor objected to. No lists are needed where descriptions can be made. It certainly isn't too much to ask answers to these few questions of an outfit with their staff and resources. Over 90 attorneys are listed on their D.C. counsel's masthead.

Applicants object to 37-B-3(g) and (h). To the extent they call for a list, but Applicants could provide a succinct descriptive answer, I find their objection reasonable. However, they do not agree to provide such an answer, but stand on their objections as stated in response, pp 72-73.

Applicants object that if a disease or genetic defect cannot be caused by radiation, it is outside the scope of the contention. This is a mistake: it is relevant to contention 37-B which diseases or genetic defects can or cannot be caused by radiation. The question of which can be is what 37-B is about in substantial part. I contend there are more besides cancers as diseases. I contend there are many genetically linked diseases and problems radiation causes. What I ask here is which, if any, Applicants think cannot be caused by radiation. The definition of which diseases can, or cannot, be so caused is very relevant to 37-B. Applicants could have answered more succinctly, I think, by saying "None but those described above in answer to 37-B-3(e)" for diseases, and "We don't know any" for genetic diseases, if I understand their position correctly. I do not suggest that these must be the answers, only that short answers are possible. I do not insist on a list where a descriptive answer is possible, but I do think I am entitled to an answer. Applicants should be compelled to provide a descriptive answer in lieu of a list, as I did for them concerning a list of organisms affected (re Eddleman 83/84).

There is another reason for getting an answer to these parts: 37-B-3(k) (response at 73) asks why Applicants think each such disease or genetic defect "listed or defined" in response to parts (g) ^{or} (h) above cannot be caused by radiation. This is clearly relevant -- 37 B asserts many other diseases are caused

or contributed to by radiation, besides cancer. Applicants' ^{contributed} position on which diseases can be so caused or ~~contributed~~ to is clearly relevant to the contention. The basis of such position, as inquired about in 37-B-3(k), is very relevant. It is why they disagree with a major part of the contention. Assuming they do disagree, the reasons why are surely relevant. If they agree instead, that is also relevant.

Therefore, the answer to 37-B-3(k) is relevant; it depends on a list or definition in response to (g) and (h) preceding it, so a definitional answer to those questions is also required. For these reasons 37-B-3(k) should be answered; responses to (g) and (h) should also be made, since they lead to the relevant information requested in 37-B-3(k). I respectfully ask that Applicants be compelled to answer (k) and also (g) and (h) therefore, to provide relevant information I need about their position re my contention.

Applicants stood on their stated objection to 37-B-3(k) in negotiations (response at 73) that (g) and (h) are irrelevant so (k) is also. If that's true, then the contention must not exist, since it is substantially about what diseases are caused or contributed to by radiation. For the reasons stated above, Applicants are wrong and discovery should be compelled on 37-B-3 (g), (h) and (k).

The above are all the objections known to me in the response; all were negotiated with Applicants' attorney Bauser on 7-1-83 and we agreed further negotiations would not be productive. I therefore ask the Board to compel discovery as requested above, and order that documents identified in response to discovery so compelled also be made available to me.

W. L. Edelman

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

July 11, 1983

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of

CAROLINA POWER AND LIGHT CO. et al.
(Shearon Harris Nuclear Power Plant,
Units 1 and 2)

Dockets 50-400 OL
50-401 OL

ASLBP No. 82-L68-01
OL


Notice of Negotiations re Staff responses to Eddleman Interrogatories

This is to give notice that on June 28, 1983, NRC Staff counsel Charles Barth and I began discussion and negotiation re the Staff's responses to my interrogatories of May 6, 1983. Staff counsel and I are seeking to resolve objections and requests for information by informal discovery, and anticipate continuing this process.

Staff counsel advised me that he does not object to filing this notice, which tolls the time for any possible motion to compel re these Staff responses, or filing a motion to compel, outside the times required by the rules, so long as such filings are made within a reasonable time.

We have agreed to continuing discussion, negotiation and informal discovery in order to resolve all outstanding issues re these interrogatories and responses if possible.

This 11th day of July, 1983


Wells Eddleman

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

July 11, 1983

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of

CAROLINA POWER AND LIGHT CO. et al.
(Shearon Harris Nuclear Power Plant,
Units 1 and 2)

Dockets 50-400 OL
50-401 OL

ASLBP No. 82-468-01
OL

CERTIFICATE OF NEGOTIATIONS

Wells Eddleman hereby certifies that, subject to the availability of counsel for Applicants and of myself, we have negotiated as follows:

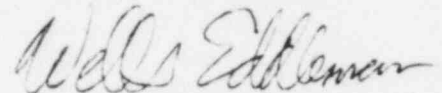
On June 13, 1983, I negotiated with Hill Carrow re Eddleman 75 and 83/84. He agreed to supplement certain responses and to consider whether others needed to be supplemented. We agreed that negotiations were not over until I reviewed those responses and discussed them with him, which was done on July 7. All differences are resolved except General Interrogatory 8, which we agreed could be decided according to whatever decision is rendered on G8 and G9 in a motion to compel following completion of other negotiations with Applicants' counsel John O'Neill.

On July 1, 1983, I negotiated with Applicants counsel Deborah Bauser re Eddleman 29 and 37 B. I agreed to rewrite interrogatory 29-1(d) in my next set of questions. Otherwise, we reached impasses, with Applicants generally standing on their objections as written. All objections raised by Applicants were discussed specifically, but counsel and I agreed that further negotiations on all these matters would not be productive. We also agreed that the issue of interrogatories G8 and G9 re these contentions 29 and 37B can be resolved according to the decision in the motion to compel referred to above, which will follow the completion of negotiations thereon with counsel O'Neill.

Applicants clarified the meaning of the response to 29-4(e) to be "None anticipated, for the reasons given in the answer", followed by the answer on page 52 of the response.

Applicants declined to list the information asked in 29-6(b) (page 56 of response) but will accept another interrogatory on it and decide whether to answer it. Applicants have not stated the information which these documents contain (per 29-6(a) which asks to state which info they contain), and may object to answering that if asked again.

July 11, 1983


Wells Eddleman

(3)

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the matter of CAROLINA POWER & LIGHT CO. Et al.)
Shearon Harris Nuclear Power Plant, Units 1 and 2)

Dockets 50-400
and 50-401 O.L.

CERTIFICATE OF SERVICE

I hereby certify that copies of Certificate of Negotiations, & of Motion to Compel Discovery, re Eddleman 75,83/84, 29+37B, and of Notice of Negotiations re Staff responses to Eddleman interrogatories HAVE been served this 11th day of JULY 1983, by deposit in

the US Mail, first-class postage prepaid, upon all parties whose names are listed below, except those whose names are marked with an asterisk, for whom service was accomplished by _____

Judges James Kelley, Glenn Bright and James Carpenter (1 copy each)
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