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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

July 2, 1983
(under extension
of time)

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

ASLEP No. 82-L68-01
OL

Wells Eddleman's Response to 1983 Updated DCRDR
Including Revised and New Contentions

On June 1, 1983, Applicants sent me their May 1983 DCRDR update (1983 update) which consists of about 13 pages of text, 2 pages of revisions to the 17 pages of text of their old DCRDR which change (without explanation) the number of discrepancies identified, and an appendix of resumes of the review team personnel for CP&L's DCRDR. Based on the added information (or lack of any added information) in this update, I file the following additional and amended contentions (in some cases, only the basis is amended), and note which contentions should stand from the DCRDR contentions to which Applicants responded 1-25-83 ("DCRDR Response").

This is being filed under an extension of time to 2 July from June 30, agreed to by Applicants' attorneys Baxter and Flynn, staff counsel Barth, and approved by Judges Bright and Carpenter in Judge Kelley's absence (I understand he's out of the country).

New Contentions

132 E CP&L is wrong in stating that its DCRDR update meet, the requirements of sections 5.2a and 5.2b of NUREG-0737 Rev. 1. Without such compliance, the adequacy of control room design and procedures is in doubt and the public health and safety are thereby endangered.

Rev. 1

BASIS: NUREG-0737 section 5.2(a) requires a description of how items 1, 2, and 3 thereof will be complied with, but the update does not address these items in any way. CP&L admitted in its 1-25-83 response (DCRDR response) at 3 that the old DCRDR did not address these requirements. The new one doesn't either, in its mere 13 pages of statements.

Section 5.2(b) of NUREG-0737 Rev. 1 requires a schedule (there is none in the update on the DCRDR) and to justify why discrepancies with safety significance were uncorrected or only partly corrected. In the update, CP&L admits that 2 such discrepancies were only partly corrected but gives no reasons why and doesn't even tell what they were. In addition, the DCRDR update says CP&L management reviewed 24 other discrepancies and decided they were not significant for safety, but the discrepancies are not listed, the criteria for evaluation (if any) are not given, and no demonstration is given that these discrepancies (and each of them) is not safety-significant. (See Update Table 3-1 at item 3.lb). There are also 4 discrepancies "found not applicable by peer review" -- again no justification for such action is given.

Moreover, the DCRDR update is full of information that requirements haven't been met yet. At section 2.0 it says the HERSs "will be used during final design evaluation, construction and procurement." *Emphasis added*

at page 2-2 it says "Exsex Corp and CP&L believe that when the Westinghouse Owners Group task analysis and generic guidelines become available and SHNPP Emergency Operation Procedures (EOPs) are written, a verification and validation will reveal few, if any, human factors concerns re the main control board."

At page 2-4 it says the EOPs "will be" task analyzed and that info will be fed back into the EOPs and control room design review. At the bottom of the page it refers to "areas which could not be evaluated during the DCRDP" (the old DCRDP).

In sum, this is an ongoing process, not a completed one, so CP&L hasn't established that its control room design and procedures meet the requirements of NUREG-0737 Rev. 1 as noted above.

CP&L's promises and beliefs are not trustworthy because CP&L in the past has failed to meet deadlines and failed to meet commitments, e.g. in establishing a QA/QC program at Brunswick, in installing alarms on water-tight doors at Brunswick (crucial to keeping the ECCS pumps from being flooded, or the RH_R made inoperable -- Tr. of 1979 remand hearings in this docket, see esp Dr. Leeds' examination of J.A. Jones of CP&L), in defective construction and design of the augmented offgas system at Brunswick, in failing to test the Brunswick containments (\$600,000 fine, see Staff letter to Board 3/83), in failing to chlorinate the RHR at Brunswick, and so on. At Harris, CP&L's QA/QC program is a commitment not to have defective equipment installed. Yet 95% of a sample of 400 pipe hangers reinspected after the NRC inspector found defects in pipe hangers OK'd by CP&L Harris QA/QC turned out to be defective. This record shows that CP&L cannot be trusted to meet commitments in design, operation, or ~~con~~struction. The best way to make sure they keep their DCRDP commitments, then, is to have a contention that they haven't done so, so that only by proving they have done so can they get a license.

132 F CP&L's Harris 1 and 2 control rooms do not comply with all requirements of NUREG-0737, Rev. 1. Without assured compliance with these requirements, CP&L's ability to protect the public from the danger of serious nuclear accidents or inadvertent radiation releases is in doubt.

BASIS: Applicants admit they're not in compliance with Rev. 1, 1-25-83 response at 6. The May 1983 DCPDR update does not even address numerous specific requirements of Revision 1; in addition to the SPDS requirements (contention 132 B, see below), they utterly fail to comply with the following requirements: 5.1(b)(iii) (*0737 Rev. 1, p. 10) for a comparison of the display and control room requirements with a control room inventory to identify missing displays and controls. No mention of this is in the original DCRDR, see at 1,2 and 5. No mention of this is in the 13 pages of update text from 1983.

Section 5.1d (N*0737 Rev. 1 at 11) requires verification that each design improvement will provide the necessary correction without creating any "unacceptable" human engineering discrepancies because of significant contribution to increased risk, unreviewed safety questions, or situations in which a temporary conditions in which a reduction of safety could occur. Coordination with the SPDS is noted as something that should be done.

Neither the old DCPDR nor the update even mention SPDS, and no coordination is shown in any of them, between the SPDS and the overall control room design effort. Unreviewed safety questions and temporary conditions are not addressed in the DCPDR or the update, and neither gives criteria for finding that discrepancies created by changes (HFDs created) are "acceptable".

There is no verification of compliance with 5.1d and no procedure of schedule for it in CP&L's DCRDR. 5.1 of NUREG-0737 Rev 1 is a list of "Requirements" (ibid, top of p.10). *This continues on p.5 (after inserted pg 3A →)*

(#132 F is on page 4)

132 G & construction emergency operating
The design_A of the Harris control room and procedures
using HERSs is incomplete and has not been evaluated or approved.
It has not been shown to meet the requirements of NUREG-0737 Rev. 1
with respect to human factors. Without compliance with these
requirements, the public health and safety is endangered in the
event of an accident at Harris because human factors may worsen
or cause an accident.

BASIS. Applicants DCRDR update admits that this process is
not complete. Their Human Engineering Requirements Specifications
"are being used" but their use has not been completed or evaluated.
CP&L's promise alone is not enough to assure that they will be
properly used -- look at CP&L's record of not keeping promises --
failure to implement QA/QC at Brunswick, failure to get the Brunswick
watertight doors alarmed, release of low-level radwaste to scrap
yards and landfills at Brunswick, Harris pipe hangers approved
even though 2/3 of them were later found defective when all were
re-inspected (95% of the first 400 rechecked were defective).
NUREG-0737, Rev. 1, p.1 says its provisions are requirements.
Until CP&L has shown that it actually HAS complied with these
requirements, not just on paper and in promises, but in actual
design and construction of the control room and in actual procedures,
we are not assured that these requirements are met.

Section 5.2 of NUREG-0737 requires (item b) that the DCRDR provide a "summary justification" for leaving HED's with safety significance uncorrected or partially corrected. No such is in the DCRDR or the update (see at Table 3.1, item 3.4 the only justification is basically CP&L "reviewed them" case by case. That's not a justification. That's not an explanation. CP&L simply has failed to comply with this requirement.

It has not justified its decisions on the HEDs. Applicants also fail to meet requirements of N-0737 R.1 7.1 -- the update shows the Harris EOPs are still not written. CP&L's promises, as shown re 132 E, can't be trusted.

OLD CONTENTIONS

132 B(reference, Applicants' response of 1-25-83, pages 4 and 5) is simply given additional basis in that the DCRDR update, like the DCRDR, doesn't even mention SPDS. Not only does this violate the NUREG-0737 Rev.1, item 5.1d requirement to coordinate the DCRDR with the SPDS, it appears to provide a basis for saying that Applicants have no plan for an SPDS at Harris, nor any schedule to put one in place x there, for either unit's control room. Applicants admit, 1-25-83 at 4, that the DCRDR fails to provide for an SPDS; it says this is premature because there's no proof they won't after reviewing NUREG-0737 Rev. 1. But after review of that, and a further delay from April 15 to June 1 for response, they again make no mention of the SPDS in the control room design review update. Since they are required to coordinate the DCRDR with the SPDS (-0737, requirement 5.1d), no mention of an SPDS implies there isn't one. The contention states that the design of the control room (not the "DCRDR") does not comply with NUREG-0737 Rev. 1, see at item 3.4 and item 4. Item 3.4 is among the things required to comply with items 5.1a and b. Applicants have not shown that they even have a plan for an SPDS for Harris.

132 C I: The update does give the qualifications of the DCRDR team, but it fails to establish that they are "appropriate interdisciplinary qualifications" or to give any criteria for such a determination.

132 D C II: Applicants adm't, 1-25-83 at 6, that they have not met these requirements. The 1983 DCRDR update mostly fails to address these requirements. The update virtually duplicates in its section 2 the language quoted in 132 C II (1), fails to make any comparisons to inventory, says nothing new about audible alarm systems, information recording and recall capability (132 C II item (3)), fails to provide the HFRSs (claims they will be/are being used), fails to show how HFDs were corrected, and fails to verify that each change provides the necessary correction. The problems with layout (also part of 132 C II (3)) are not addressed at all in the update. But the update does say that the control room floor and cable trays have already been set up according to the old DCRDR, pp2-2 and 2-3. Thus, this problem has been "cast in concrete" by CP&L and given added basis.

Please note that this contention addresses the control room design itself, as well as the review thereof. Applicants seem to miss or overlook this point consistently in their responses. The cover letter of NUREG-0737 Rev. 1 says that its requirements replace those of NUREG-0737 (bottom of p.1). By saying that staffing levels are not strict requirements, it implies the other requirements are strict. CP&L's failure to comply or set a schedule to comply with such requirements is thus a more serious failure.

132 D as originally written is eliminated by E.F. Utley's cover letter to the 1983 DCRDR update, 6/1/83 at 2.

However, this letter gives basis for a revised 132D as follows:

132 D II: The Harris 2 control room has not been built in compliance with the requirements of NUREG-0737, Rev. 1, and applicable updates thereto, ^{or of} NUREG-0700. **It has no emergency procedures.** Failure to assure safe control room design and procedures for Unit 2 means that the public health and safety is not adequately protected. To assure compliance with the above, Unit 2's control room must be evaluated not only as it is built, but after it is completed -- to take care of remaining noncompliances or problems identified pursuant to NUREG-0737 Rev. 1 section 5.1 a,b,c, and d; and to assure an operable SPDS per sections 3.4 and 4 thereof.

BASIS: The basis of the contentions above (including original basis of the old ones filed 1-8-83) shows that Harris 1 fails to meet these requirements and others, and has no SPDS yet. ~~xx~~ Utley's letter of 6-1-83 says unit 2 will be essentially the same as Unit 1 as far as control room design and construction. Thus the failures with respect to Unit 1 apply to Unit 2. CP&L can only show otherwise by building the unit 2 control room and conducting coordinated review of its design with the SPDS, providing an SPDS, and completing emergency procedures for Unit 2 that comply with NUREG-0737 Rev. 1.

Old contentions 142 and 144, I will let stand as written.

For contention 143, the DCRDR update provides no additional info. However, Applicants point out that I haven't addressed the 5 factors for late-filed contentions for this one. (1-25-83 at 9. Contrary to Applicants' statement, the requirements listed in the contention's

referenced parts of NUREG-0737 Rev. 1 are quite specific. Failure to comply with a lot of requirements is a good contention; I have no objection to separating it for the EOP, EOPs, TSC and OSC, i.e. to make it 4 parts addressing respectively the EOP, EOPs, TSC and OSC.

THE FIVE FACTORS OF 10 CFR 2.714 for Eddleman 143:

Contention 143 is timely because failure to comply with the requirements of NUREG-0737 rev. 1 could not possibly be alleged before that document existed. Applicants admit its basis is true, in that the facilities haven't been built and NRC has not assessed compliance therewith.

It won't broaden the issues because the control room (EOPs) and the adequacy of support for the emergency plan have always been issues in this proceeding. It won't delay anything because discovery on safety contentions doesn't start until early 1984.

I know of no other parties pursuing this issue. So far as I am presently aware, no one else responded to the site emergency plan; no other intervenor raised the issues of Eddleman 143 with respect to NUREG-0737, Revision 1.

There are essentially no other means whereby my interest will be protected. Staff review may or may not deal with the items I am concerned with. CP&L may nor may not fulfill its obligations; if it doesn't, I have no recourse.

There can't be a sound record on this issue if there is no record. The setting up of appropriate emergency facilities is obviously important to protecting the public health and safety. I am able to analyze, critique and cross-examine on the issues of Eddleman 143, and may be able to get expert assistance or witnesses.

Contention 143 is addressed further in my 1-26-83 answer to Applicants, at 5-6. This additional information/definition may be of use.

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NUCLEAR REGULATORY COMMISSION

July 2, 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)

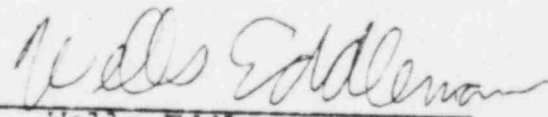
Dockets 50-400 OL
50-401 OL

ASLBP No. 82-168-01
OL

CERTIFICATE OF SERVICE

I hereby certify that copies of Wells Eddleman's General Interrogatories and Interrogatories to Applicants on Eddleman 75, 80, 83/84, 64f, and 67 (Third Set), and of Wells Eddleman's Response to 1983 Updated DCRDR, have been served on the attached service list, first-class US mail, postage prepaid, under an extension of time agreed to by Applicants' counsel Baxter and Flynn, Staff counsel Barth, and approved by Judges Bright and Carpenter in Judge Kelley's absence; the same would otherwise have been due June 30.

This 2d day of July, 1983


Wells Eddleman

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 50401 O.L.

CERTIFICATE OF SERVICE

I hereby certify that copies of Wells Eddleman's General Interrog's
and Interrogatories to Applicants re Eddleman 75, 80, 83/84, 64f & 67
and of W.E Response to 1983 Undated DCRDR
HAVE been served this 2 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 _____

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