

June 5, 1982

UNITED STATES OF AMERICA
 NUCLEAR REGULATORY COMMISSION

Before the ATOMIC SAFETY AND LICENSING BOARD

AMENDMENTS TO CONTENTIONS and ADDITIONAL CONTENTIONS
 of Wells Eddleman

82-04

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I hereby file the following additional contentions and
 amendments to contentions based on information which was first
 available to me 6/2/82 or later at the LPDR (Olivia Raney Library,
 Raleigh NC):

Contention 136: CP&L and NCEMPA have failed thus far to
 comply with section 7(d) of the Endangered Species Act (and
 NRC has also failed to comply with said section 7(d)) which
 provides that the Federal Agency and/or the permit or license
 applicant(s) shall not make any irreversible or irretrievable
 commitment of resources during the consultation period, which,
 in effect, would deny the formulation or implementation of
 reasonable alternatives regarding their actions on any listed
 Endangered or Threatened species, e.g. the Bald Eagle and
 the Red-cockaded woodpecker, in that site clearing, lake clearing,
 plant construction and other irreversible activities destroying
 habitat for said endangered species and threatening their
 ability to use the SHNPP site (e.g., eagles are disturbed by
 noise and by human activity near their nesting areas, but
 do prefer nests near water such as the creek CP&L has dammed
 for the Harris plant), have proceeded without taking necessary
 measures to prevent irreversible commitment of resources
 (e.g. clearing, construction) which preclude reasonable alter-
 natives such as relocating the plant site or lake, or setting
 aside habitat for eagles and woodpeckers that would be un-

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disturbed during construction of SHNPP (including taking appropriate measures to prevent noise from reaching such undisturbed areas in amounts that may reasonably be expected to disturb ~~xxxxx~~ bald eagles and red-cockaded woodpeckers or lead them to abandon nests in said undisturbed area or prevent them from choosing nesting sites in said area).

Contention 137: Applicants' site emergency plan is inadequate because it does not exist, does not provide means to guarantee that the public and emergency response authorities and personnel will be promptly notified of any conditions at SHNPP which may adversely affect the public health and safety (including accidental radiological releases and degraded or inoperable safety-related systems), does not provide adequate radiation monitoring capability on-site and off-site (outside the exclusion area) particularly pressurized ionization detectors or equivalent means to detect levels of individual radionuclides in real time, does not provide sufficient personnel sufficiently well-trained to carry out such radiation monitoring on and off-site and to inform emergency response personnel and the public accurately and rapidly enough to assure the public health and safety in accident conditions, and does not provide management or funding sufficient to ensure that the above requisite capabilities will be continuously maintained throughout the operating life of the Harris plants.

Contention 138: The electrical drawings for SHNPP are not available at the LPDR for inspection and do not provide sufficient information to accurately analyze the circuitry to determine its response under the applicable ranges of normal and accident conditions said circuitry may face.

Said electrical drawings fail to provide sufficient information on the capabilities and electronic characteristics of all components and wiring and connecting materials to provide a comprehensive failure modes and effects analysis of the entire plant electrical system, particularly the emergency power system (including diesel generators, power buses, control logic for the diesel generators and for correction of and interruption of safety-related loads from the regular and emergency buses, DC power from batteries and or other sources, and all components and connections and switches and relays therefor) and the logic of the integrated control system and the integrity of its power supply, to be able to reasonably assure that SHNPP can be placed in and held in a safe shutdown condition following an accident with or without loss of offsite power, particularly one in which the transformer yard or power lines leading to SHNPP were to be sabotaged or destroyed by human or natural forces (e.g. ~~rain~~ tornado, high winds, hurricane, hail, earthquake, bombs, cutting bolts or other components of the power lines to weaken same, using explosives or precision guided munitions (PGMs) against transformers, power lines, power line towers and other supports, buses or other means of electricity supply) and in any other accident involving loss of offsite power.

The following amendment is added to contention 3 on the basis of NUREG-0834, which was not found by me in the LPDR on or before 14 May 1982, but which I did notice in the reference librarian (L. Hickman)'s stack of material on SHNPP that had been used by someone and was waiting to

be re-filed, where it was first noted by me on 6-2-82. I was at the LPDR and went through this stack at least twice before that date but after 14 May 1982 and NUREG-0834 was not in the stack (or in the special documents folder) either time.

The amendments below add more specifics to the named contentions.
Amendment to contention 3: NUREG-0834 (NRC Licensee

Assessments) shows that CP&L's Brunswick operations continued to have "a combination of characteristics having negative or undesirable qualities; displaying less than desirable performance.

A facility is characterized as being below average if there exists evidence of significant administrative, managerial or material problems in several activity areas; substantive construction or operational events (when compared to others); significant items of noncompliance (when compared to others); evidence of repeated items of noncompliance; or several regulatory issues and management contact involving the licensee's performance. The licensee may have had difficulty in its ability to meet requirements important to nuclear safety. A substantial fraction of the significant activity areas reviewed may be characterized as below average. "(NUREG 0834 p.2)

"Simply stated, a below average facility displays negative characteristics or undesirable qualities that are not typical of a majority of facilities." (p.3)

CP&L's Brunswick operation was rated below average for the period 4/1/79 through 3/31/80 (Table 1, "Below Average Facilities"). This is the year right after the conclusion of NRC's remand hearings on CP&L's management capability (Feb, Mar 1979 at Raleigh NC) where CP&L and NRC Staff testified that CP&L had basically solved the staffing, management, and repair and safety problems that had plagued Brunswick in 1976-78. This NRC assessment shows that CP&L's representations at that hearing were at least questionable and probably not in good faith and not accurate. It shows NRC Staff continues to be of two minds about CP&L's competence (NRC I&P inspectors

surveyed for the 1979 remand hearing mostly had "no opinion" on whether CP&L was competent to operate Shearon Harris or construct it. But the Staff witnesses in 1979 were mostly from the 5 or 6 I&E personnel who said they felt CP&L was competent. See NRC Staff exhibits & testimony in that hearing, esp. the inspectors' & other staff opinions of CP&L competence, and the testimony of NRC Staff witnesses Long, Dance, Cantrell, Miner (son) and Murphy.) This SALP review in NUREG-0834 is the latest NRC evaluation of CP&L, and of their operating facilities, the one designed and built for CP&L as a turnkey plant (Robinson #2) is "average" rated, while the plant CP&L was more involved in designing and building (Brunswick) is "below average" rated.

Although the Harris construction program is rated "average", NRC's comments re Brunswick reveal weaknesses in operations and repeated failures in quality control and quality assurance. Quoting NUREG-0834 at page A-7:

"The Brunswick facility displayed evidence of weaknesses in the areas of radiation control, contamination control, and environmental protection.

"The inadequate management control over radiation exposure and contamination resulted in unmonitored and uncontrolled release or airborne radioactive material. Management control weaknesses ~~also~~ also resulted in the improper release of licensed material to a sanitary landfill and a local salvage dealer. Brunswick management control weaknesses were characterized by numerous noncompliances concerning the quality assurance program (some of which were repetitive), problems in supervisory overview and the conduct of committee activities, and instances of activities conducted without procedures. The IL performance appraisal team found significant weaknesses in areas involving management overview, training, and corrective actions."

(emphasis added). Repeated noncompliances, management control weaknesses, supervisory overview weaknesses, activities conducted without procedures, and significant weaknesses in management overview, and in corrective actions, were all found by F.S. Cantrell and other NRC personnel inspecting Brunswick 1976-78, as brought out in the 1979 remand hearings.

The point is that Brunswick continues to be badly managed, even after unusual ^{remand} ~~remand~~ NPC hearings and extra enforcement actions and numerous meetings with CP&L management as described in the 1979 remand hearings record. Since CP&L is evidently unable to straighten out their Brunswick operation, there is no assurance whatever that CP&L will have the resources or personnel or management ability to safely operate Harris. Many of CP&L's management personnel at Harris had their main non-Harris nuclear electric facility experience at Brunswick. (See listing of vitas of these people at FSAR 13.1.3, etc) If they were the best people at Brunswick, why didn't CP&L keep them there to fix the overwhelming problems? And if they weren't among Brunswick's best personnel, how can they really be well qualified to operate and construct ~~xxx~~ Harris any better? Either way you look at this history, CP&L management competence is quite suspect. One must also consider that Harris will be added to CP&L's responsibilities when Brunswick is not yet straightened out and has no prospect ^{this} of so being (as noted elsewhere in ^{this} contention 3) since CP&L continues to delay fixing major problems such as the torus, fire protection, and earthquake-resistance of Brunswick, spreading such work into the mid-1980s. Robinson 2 will also be having steam generators replaced in or about 1985, when Harris is scheduled to start up, putting additional strain on CP&L management capability. In sum, the record of NUREG-0834 shows that CP&L continues to be of very questionable competence, or incompetent, to construct and safely operate Harris.

Assessment of
The Systematic [^]Licensee Performance is continuing, so more data may appear. I would ask the Board to enjoin CP&L from attempting to prevent evidence of CP&L errors, failures

and incompetence in nuclear construction and operations from coming to the attention of NRC's SALP reviewers.

I do not believe this amendment filed now will work any prejudice to CP&L or NPC staff in replying since both are in possession of NUREG-0834 and it states that the results were discussed with CP&L before the report was issued (p. ii).

The following contention (new) is based on Frank Mingaglia's 5-21-82 letter to J.A. Jones requesting additional info on Harris specifically at section 311.7 (I first obtained this document 6-28-82 when I was allowed to open the LPDR's incoming mail from NRC to see if anything had been received).

Contention 139: Applicants' and NRC Staff's review of the transient population engaged in recreational activities at the B. Everett Jordan Dam & Reservoir and associated wildlife management and other recreational areas is inadequate because: (1) only population within 5 miles of SHNPP is considered; (2) the evacuation plan for Harris is not adequate to remove this peak transient population in time (at the average SHNPP site wind speed of over 7 miles per hour, only about 1 hour and 25 minutes is available to evacuate everyone within 10 miles of SHNPP in the event of a release. CP&L's record of unmonitored releases at Brunswick, and their generally slack management of nuclear plants as detailed in contention 3 (information therein incorporated here by reference) show that persons engaged in recreation near the plant are ~~xx~~ at risk due to such releases and due to inadequate evacuation planning, personnel and equipment (e.g. warning systems, education of the recreating population as to what the sirens

mean, etc) (3) the recreating population within 20 miles of SHNPP should be taken into account because the severe ~~xxxxxx~~ accidents possible at Harris (e.g. Class IX accident by means e.g. of station power failure followed by failure of emergency power, resulting in failure to SCRAM and ^{/or} inability to deliver~~x~~ cooling water and borated water to the reactor, resulting in a meltdown and release to atmosphere through valves and other penetrations of containment not closed due to power failure and/or due to spurious electrical signals when power is failing and control logic is exposed to currents and voltages not normally experienced and whose effects have not been analyzed to show that they cannot cause the control logic of SHNPP to generate spurious control signals that would leave containment penetrations open or cause other safety systems (than containment isolation) to fail to function in the event of a power failure as described above) have their effects reach well beyond ten miles of the plant (SHNPP).

#140. Applicants', FIMA's, the State of NC's, and local emergency response plans are inadequate because they do not take account of and provide for the prompt and safe removal of recreating populations as described in contention 139 (incorporated herein by reference) under conditions of nuclear accidents including Class IX accidents ~~xxxx~~.

Contention #78 on loss of control power is hereby amended as follows based on Miraglia's 5-21-82 letter to Jones and the attached data request: Add the following to contention 78

"The design and analysis of backup power systems, both diesel generator, other AC, and DC at Harris are inadequate and

and inadequately tested inadequately analyzed for failure modes and effects thereof, for reliability under accident conditions and other conditions such as earthquake (design basis or greater), tornado, hurricane or severe storms, or a loss of offsite electrical power however caused (e.g. wind breaks a power line in the corridor where CP&L's power supply lines to Harris run ~~to~~ parallel and the whipping broken line shorts out the others; e.g. sabotage with explosives at the bases of the towers, or using precision guided munitions, toppling the towers either way and shorting out, breaking, or otherwise causing the breakers on those lines to open) ^{to assure the health and safety of the public and the safe operation & shutdown capability of SHNPP.} Requests 430.12 through 430.64 and 430.88

through 430.102 and 430.109 and 430.110 through 430.112, 430.113(1)(2)(3)(4) and (5), 430.114 (e.g. failure induced by spurious signal) and 430.115 through 430.119 of the NRC data request in Miraglia's above-referenced 5/21/82 letter are incorporated herein by reference as if fully set out here, the contention being that by failing to provide all of the requested information and/or any of it, by failing to provide adequate analysis including failure modes and effects analysis, by failing to provide adequate testing of components, by failing to adequately design and test circuitry, logic, and sources of electrical power or by failure to adequately and correctly justify departures from IEEE standards (e.g. IEEE-279, IEEE-450) and NRC requirements, CP&L has failed to assure that safety related equipment will have adequate power supply, correct control signals, and assured proper operation in the event of a loss of control power or offsite power to SH_NPP due to any cause including those listed above, and thus fails to adequately protect

the public health and safety."

This above amendment in its entirety is also made to contention 134 on page 239 of my contentions supplement of 5/14/82, as an addition thereto.

Contention #112 (p.222 of contentions supplement) is amended as follows:

Applicants' analysis of steam generator failure is inadequate for both single and multiple tube failures which can be reasonably expected to result from such wear and tear as well as corrosion. Section 450.4 of Frank Miraglia's 5-21-82 data request from CP&L is incorporated hereing by reference as an example of the inadequate analysis so far. ^{as in that request}
The same data [^] should also be provided assuming multiple tube failures simultaneous (due to water hammer or steam hammer or ^a tube whipping [^] or it breaks at a weakened point, ^{breaking on 2.5} etc.) or over a period of some hours or days,.

A comprehensive analysis of such failures has not yet been conducted nor has the ability of SHNPP, as now designed and being built, been established to shut down safely and prevent release of radioactivity to atmosphere or prevent meltdown in the event of multiple steam tube failures.

Contentions #'s 29 and 30 are hereby amended to include the following: Release of radioiodines from a fuel handling accident in which filters do not function or containment penetrations fail to close has been inadequately considered. Such a release poses a great danger to the public health and safety.

Contention #3 is hereby amended to add the following:

"Setpoint drift as described in NRC data request L30.108 of 5.21.82 to CP&L has been a continuing problem at Brunswick and has required much attention to calibrate and correct instruments and to make procedures adequate to prevent serious impairment of safety-related equipment, and safetyx functions. CP&L has failed to take timely and adequate measures to prevent flooding of equipment or submergence thereof at Brunswick also (see 1979 remand hearing, re watertight door alarms, Tr. _____) and there is no assurance that CP&L will perform any better in this matter at Harris.

I believe the above are simply amendments and new contentions on the basis of information not previously available to me. But should the Board consider any of the above contentions or amendments as late contentions, I say that (1) the above information was not available to me as defined in my contentions supplement, on or before 5-14-82, and such unavailability is good cause for filing now; (2) with the exception of the NUREG-0834 information which other petitioners have referred to, no other petitioners are representing my interest in the above contentions and amendments; I do not believe NRC Staff is able to do so either, as detailed in my contention #106; (3) full resolution of the issues described in the above amendments and contentions is necessary to develop a sound record in this proceeding. The matters involved are very important to the public health and safety, and to CP&L's competence to design, build and operate SHNPP. (4) I do not believe my interests are adequately represented by other parties

with respect to the other contentions and amendments above except to #3, and even there I am not sure that CP&L's failures with respect to setpoint drift and submergence of safety equipment and other equipment are adequately represented by other parties. It does not appear to me that the other parties are actively pursuing these issues or that NPC staff will not allow CP&L to escape by delay and inadequate analysis and thus avoid really dealing with the above issues. (5) In view of the large number of contentions heretofore filed by me and others, the addition of the above does very little to broaden the scope of the proceedings, and where it might, important issues are involved, e.g. public health and safety, and CP&L's competence to run a nuclear plant. In view of the 6-3-82 conference call, I do not believe that filing these amendments and contentions now will delay the proceedings at all, since Applicants and Staff will still have two or three weeks to respond to these amendments and further contentions before the rescheduled special prehearing conference, on which I have not yet received the Board's order, but believe will now occur no earlier than late June 1982. I reserve the right to argue further under 10 CFR 2.714 re admissibility of the above amendments and contentions.

Wells Fiddleman
Wells Fiddleman

5 June 1982

CERTIFICATE OF SERVICE

I hereby certify that the foregoing 6/5/82 Amendments to Contentions and Additional Contentions of Wells Eddleman²⁰ have been served by first class mailing postage prepaid this date to the following: *WEA*

Secretary
Attn Docketing and Service
Dockets 50-400/401 O.L.
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*Dear
CP&L: Please clarify
which of these
should be served
for Applicants. WE*

This 5th day of June 1982

Wells Eddleman

Wells Eddleman