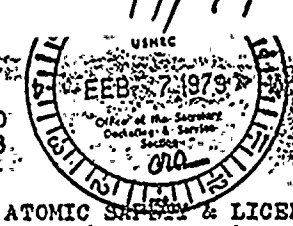
1/4/79 Rec. Tac. Br.



4 January 1979

Dockets # 50-400
through 50-403

Deposited in mail box 7 Jan 79 1030 pm NE

To the ATOMIC SAFETY & LICENSING BOARD

Further amendments and clarification of PETITIONS TO INTERVENE by the KUDZU ALLIANCE, a voluntary nonprofit organization with numerous members residing within 20 miles of the proposed Shearon Harris Nuclear Power Plant site, and WELLS EDDLEMAN, a citizen residing within 30 miles of the site and owning 92 shares of Carolina Power & Light common stock: We ~~x~~ wish to outline our previous arguments for our admission as intervenors in clearer fashion, clarify some points, and make additional arguments. NE

We further respectfully request that if the ASLB has time, or any other ASLB panel may lawfully be appointed to hear our petitions, that we together or separately be granted a hearing on our petitions to intervene, at any convenient date as set by the panel that will hear our petitions. Because many Kudzu Alliance (hereinafter,"Kudzu") members are employed or in school full time, it would be most convenient if such a hearing (if granted) were held in Durham, Raleigh, Chapel Hill, Research Triangle Park or some other location near the plant site, preferably at night or on a weekend, on the Kudzu petition to intervene. Wells Eddleman has no preference as to a local or Washington DC hearing site for himself. Kudzu is willing to send representatives to a hearing in Washington DC also. This request is not meant to delay the hearings maddated by the NRC concerning CP & L's safe management capability, (and past suppression of evidence relevent thereto), but simply to facilitate our making our ~~xxx~~ points and to allow the membership of Kudzu to be heard directly as to their interests, expertise, and willingness to assist in developing a sound record, among other things.

This copy made 1-30-79 by Wells Eddleman for John Cho of the NRC staff, per his request same date by phone. NE

We also request an extension of time to address the issues of section 2.714 (d) of 10 CRFR 2 because we have been unable as yet to locate a copy of the Atomic Energy Act. We propose to forward our comments concerning our rights under that Act to the ASLB as soon as possible, and in no case later than 31 January 1979. We will do our best to meet any earlier deadline specified to us. There may also be additional information on Kudzu Alliance and Wells Eddleman's property, financial and other interest (2.714 (d) (2)) in the proceeding both with respect to C P & L's management and financial capability, and concerning the possible effect of any order (or lack of action) by the ASLB affecting our (or an of us') interests, that we may wish to file as amendments to our petition along with comments re the Atomic Energy Act. We ask similar leave to file such comments then.

Concerning our "property, financial or other" interest in the proceeding (both CP & L's management capability hearing and the general case of the Harris plant, dockets 50-400 through 403), we first note with interest that these recently revised regulations (43 Federal Register page 17798, dated September 1, 1978) explicitly list property and financial interests, but apparently consider health, life, safety, concern for the genetic health of generations yet unborn, and many other issues as simply "other". This does not speak well of the rulemakers' concern for people, but does affirm their concerns for money and property. We may later petition the NRC for proposed revision of the rules it has made on this point.

Wells Eddleman as an individual and other members of the Kudzu Alliance are now possessed of life, health, reasonable safety from nuclear contamination since most operating nuclear plants are over 150 miles from us and the Barnwell reprocessing plant is not yet operating, civil liberties as yet uncompromised by the Secretary of Energy's draconian powers to employ the military to guard nuclear installations and obtain intelligence on anyone who could pose a "threat" to such nuclear

plants (as the DOE Secretary's authority has been reported in an article I read), and many other "assets" which are not financial or property (unless a person is said to own his or her body and its health, etc.). We cannot assess our genetic makeup, but we hear respected scientists such as Linus Pauling saying that most radiation-caused genetic damage is recessive, that is, it will not show up for generations after the damage has been done. Since radioactive emissions from nuclear power plants can get inside our reproductive organs to damage our genes from very close range for a long time (many years in the case of many isotopes), we feel future generations, and we as their parents, have quite an interest in genetic safety also. We are aware that many other things, such as industrial chemicals and excessive heat, can damage genes. We note that some of these industrial chemicals are resolutely defended by their producers as harmless for years after it has been scientifically demonstrated that great danger exists. A similar bias appears to exists in the arguments of the nuclear industry and the power companies about nuclear emissions from power plants and the fission products contained in operating plants and nuclear waste. They keep saying it's safe, or that it hasn't been proved unsafe. We think this is due to their "property and financial" (and other?) interests more than any dedication to scientific truth they may have. Even if nuclear radiation isn't safe, the nuclear and power industry is quick to argue that other risks are greater. Well, is it a good reason to step in front of a speeding car, because the risk would be greater if you stepped in front of a speeding train? Kudzu Alliance and Wells Eddleman do not believe that damage to people's health, lives, and their children's health and lives are excused because greater damage is being done by someone else. What if a murderer pleaded in self-defense that "others have killed 30 or 40 people, and I only killed one." Does that excuse murder? We find the concept of a "statistical death" very

disturbing. It seems that "subtracting 70 years from the total population's life span" is acceptable, but killing outright is not. We wonder how much difference that fine distinction makes to a victim or radioactivity-induced cancer? There is an argument we have heard, that the 55 mph speed limit is no good, because it takes more time for the whole population to drive at 55 wherever it goes, than the remaining lives of the accident victims who would be killed at a 65 limit (versus 55) total. Yet they would be dead, while the others are merely "on the road". Given a choice, I would certainly choose a road delay over death. I know no one who would choose differently. Yet we are told "statistical deaths" are acceptable as a price for "needed" electric power. The power companies are fond of the false picture of "freezing in the dark" if nuclear construction is stopped. (In fact, more people freeze in the dark due to having installed electric heat and then getting into an ice storm; and people have literally frozen to death because their power was cut off when they could not immediately pay very high electric bills in winter.) Yet who, given the choice of death or better insulation on one's house or water heater, would not choose the insulation? Gofman has shown ("Gross Energy Available from Light Water Reactors" CNR Box 11207, San Francisco CA 94101) that if the power companies' projections of energy growth are correct, the maximum share of total US energy available from LWR nuclear power in the year 2000 is about 4%, the same percentage now used for heating water in people's homes. Better insulation on home and industrial water heaters could doubtless eliminate most of this "need" since current poorly insulated water heaters waste most of the energy supplied to them. And of course many other insulation and conservation options are availbble to the public. They also lead to lower power bills.

We submit that construction of nuclear power plants imposes an unnecessary risk to our lives, health, safety and our children's lives.

There can be no more vital considerations than these for living persons, at least not to us in our opinions.

We believe the relation of our health, life, safety and genetic interests to CP & L's safe management capability and to the Harris plant construction is obvious: We are residents near the plant. According to the 1974 EIS, winds blow in all directions from the plant, at an average speed of over 7 miles per hour (over 11 km per hour). About 1/9 of the time, conditions are calm, says the EIS. Many of those calm days are days of temperature inversions, when plant emissions, routine or accidental, would stay closer to the ground than normally. Thus, if the plant is built, we residing near the plant would be among the first potential victims of radioactive material released from it routinely and accidentally; we would also be among the first potential victims of a nuclear disaster (4 plants makes it 4 times as likely for us, too! The figures are usually given in accidents per reactor per year). An inadequate emergency response plan (NRC's staff filing for the CP &L safe management hearing states that HB Robinson's plan is still inadequate) for Harris could also victimize many of us. In sum, just by being near the plant, we get its radioactive and other effects whether we like them or not, if the plant is built; moreover, only CP & L's "safe management capability" and the NRC's regulatory power stand between us and many problems. We note that excessive radiation releases averaged 2 per reactor per year (or close to it) through 1974. Also 2 near-misses in reactors (Brown's Ferry and the Hanford N-reactor could have been meltdowns except for luck and operator skill at Brown's ferry (not design or the NRC or the TVA); and the second shutdown system on the N-reactor (samarium balls) that operated when all the ECCS was KO'd by a simple short circuit, so we understand. (We omit the Fermi breeder partial meltdown and FBR melt accident here.) What we are really noting is that "accidents CAN happen" and they do. These

accidents threaten our lives, health and safety. The roles of the AEC, FRDA, DOE etc in suppressing information about accident and radiation dangers make us wonder how honest the NRC and CP & L have been about these matters. If they make mistakes, the damage is done to us first. The Romans had a different idea about their engineering projects. When the saaffolding was taken down from a Roman Arch, we are told the Roman engineer who designed it had to stand underneath. If the arch fell, he would be the first victim. Roman arches are known for their durability. Kudzu Alliance and Wells Eddleman have no wish to harm or see any engineer harmed. But we think it would be reasonable to require NRC staff, CP &L executives, and nuclear plant designers to live at the plant site boundaries of nuclear power plants. Many affirm their willingness to do so, but we know of none who actually do. (We do not suggest this as a rule. We simply point out that we are among the first potential victims of errors made by others who may be much farther out of harm's way.)

So we think our health and safety etc. interest in the Harris Plant and CP & L 's safe management capability is very clear. We also have financial, property and other interests affected. For one thing, if information about nuclear dangers is still being suppressed, and we find (legally) and disseminate such information, we may still be in danger from proponents of nuclear power, both in our civil rights, which may be violated by surveillance etc., and for harm to our health and possibly even ~~kinnx~~ lives. We have no evidence as of now that such danger exists to us, but it could develop at any time our legal activities were seen as sufficient threat to the enormous financial and property interest of the nuclear and power industry. We do not seek or invite any such attacks; our policy is nonviolence and we reasonably expect nonviolence in return; even if we are attacked, most of us expect to adhere to nonviolence (though I cannot compromise the legal right of self-defense).

We note that surveillance of nuclear opponents has occurred legally and illegally in Georgia, California, South Carolina, and other places. Nuclear opponents have been threatened with violence, e.g. by the Ku Klux Klan in New Hampshire. It could be argued that we could remove such possible danger by simply acquiescing in nuclear power; but only at the cost of free exercise of our rights of free speech, association, a free press, petitioning for redress of grievances, privacy, free movement within the USA, etc. We do not believe anyone should be required to sacrifice her or his rights due to threats or possible threats. Again, we emphasize that we have no evidence of such threats to present at this time, and are not accusing anyone of anything in North Carolina. We certainly hope that no one will waste public or corporate funds on illegal surveillance, or make any illegal ~~xxxxx~~ threats to anyone. We certainly have no intention of violating others' rights or of any violent action or threat of violence whatsoever.

One last note on civil liberties etc.: We are not certain, that killing someone by radioactive means is not a violation of the Civil Rights Act. That a license was issued for such killing may or may not be a defense. We do know that radioactivity is very difficult to detect, without sophisticated instruments, and that it can kill and leave no evidence of its role that can as yet be detected. We do believe there is a civil right to life, which may be violated by unsafe management of nuclear power plants.

With respect to our financial, property and other interests: Many Kudzu members are ratepayers of CP & L and thus have a direct financial interest in the costs of the plant, ~~e~~SPEcially under Construction Work In Progress (CWIP) which is now legal in NC. We have heard from a source in CP & L's financial department who does not wish to be named, that the cost estimate for the plant is $6 to $8 billion now, versus

4.2 billion estimated in 1976. We therefore are interested in having the cost-benefit analysis reopened, and updated annually or more often, to ascertain if the costs can still reasonably be expected to be less than the benefits at present value, given the numerous problems PWRs are developing with denting, pipe cracks, steam generator corrosion, radioactivity in pipes, and possible lower radiation exposure standards for nuclear workers, as well as other problems. We submit that our financial interests as ratepayers will be ill served if a plant is built that cannot repay to us, the consumers, more in value than we have put into it, and suggest a cost-benefit analysis to consumers also be performed. We note that CP &L is said, in the NRC staff filing (which Wells Eddleman has read, but not memorized) to not do more than it is required to do. Thus we would be interested in seeing if CP &L is willing to perform such an analysis voluntarily. We also ask whether CP & L will disclose its current cost estimates for the Harris plant, and how we can be reasonably sure these estimates are accurate and not biased due to CP & L's financial interests.

Rate payers will also be ill served if a $4.2 billion (or 6 or 8 or whatever billion) powerplant is built, put into their rate base, and then not fully used. Since nuclear power has very highcapital costs, the plant must run baseload (all the time it can operate) to keep its electricity costs competitive (see GAO EMD 78-76 on nuclear, coal and alternative source costs in the Pacific Northwest, 1978-1995). Needed or not, the plant would be in the rate base and customers would have to pay CP & L full profits on it. Moreover, if the plant failed to hold its assumed capacity factor over its full lifetime, the cost of its electricity could be much higher than paredicted. We ask that, if a sensitivity analysis to capacity factor and plant lifetime has not already been prepared as part of the cost-benefit analysis (none is reference in the 1974 EIS to our knowledge) that the NRC staff consider preparing such an analysis, and CP &L consider doing likewise and

publish their results.

Another obvious interest of Wells Eddleman and other Kudzu members is ownership of shares of CP & L common stock. The value of these shares depends on sound management, especially when a company worth less than $1 billion (and in debt) proposed to spend more than $4 billion on a single facility. The risks are high if the facility is not virtually assured of complete success. For example, the NC public utilities commission has a rule mandating that if nuclear plant CF falls below 65%, costs of replacement power fuel should not be charged to consumers if management caused the capacity to be below 65%. A plant that wasn't needed would have a real risk of such problems. It might even be excluded from the rate base. Then stockholders would have to pay for a plant that earned them nothing. A plant badly operated might generate billions in claims for deaths, injuries and property damage; it might also depress property values near it, and these damages could also be the subject of lawsuits against CP & L. North Carolinna law may not limit damages as the Price-Anderson Act does; or the additional damages might have to be paid by taxpayers -- that is, by stockholders, Kudzu members and Wells Eddleman among others. There is also the risk the plant may have to be abandoned before completion due to new necessary regulations on employee health, public health, safety, or financing. (Look at Seabrook to see that repeal of CWIP can also make it hard to finish a costly nuclear plant.) Then the cost of construction completed would either be borne by stockholders (as a great loss!) or by ratepayers, as a possibly illegal charge for a plant not providing them any power, should the Utilities Commission allow the plant to stay in the rate base.

Moreover, escalating uranium costs, uranium mining hazards, uncertain supply of ofreign uranium, and CP & L's lack of assured uranium supplies for the Harris plant (to our current knowledge as of May 1978), may also make the Harris plant economically dubious or dangerous.

These uncertainties about fuel constitute a further danger of financial burdens to ratepayers and stockholders, or both perhaps/

We note that if we had only to show that it is reasonably likely that these problems would materialize, we would have a stronger case. But it appears that utilities need only prove it is reasonably likely that problems will be solved by the time the plant is operating, and they get approval. We feel this procedure exposes ratepayers and shareholders to unknown risks, since for example, the HB Robinson emergency response (evacuation) plan is still not ready as of November 1978 according to NRC staff (over 4 years since such plans should have been made and approved). Who knows what promises (such as finding a safe way to dispose of nuclear wastes, holding costs down, etc) can actually be kept in 1984 or 1985 (or later) if the Harris nuclear plants are built? The government and nuclear industry's record on such promises is about as good as the typical politicians', which is to say, good enough to get the job, but not good enough to keep most of the promises. For example, radiological monitoring is identified in Long & Dance's prefiled testimony as a weakness at HB Robinson, in 1978. It is also identified in 1975 on pages 1 and 2 of the NRC staff exhibit 1, for six separate problems. Over 3 years, a clearly health & safety-related program remains weak, but this is evidently "acceptable"? Pardon us, we don't know whether we are supposed to talk about this stuff in the staff filings unless we are admitted as intervenors. We do know both staff and CP & L have the right to respond to what we say here. Our main point is that there are no penalties and checks being used to make sure that the promises that problems will be solved, are kept, or at least it certainly doesn't look that way. Indeed, it looks like the NRC "solves" problems like the HPCI trips at Brunswick, by just eliminating the requirement that the

system work right, if CP & L can't get it to work right.

We note further that safe management does not just mean management that complies on time with all NRC rules given to them. It implies a management that aims for safety. CP & L has won numerous safety awards for injuries and accidents (i.e. for not having so many as other utilities). We hope they can win radiation safety awards too, but we'd like to see better evidence than the working people 60 hours a week for years on end that Floyd Cantrell alleges, and than blowing up their offgas system due to numerous errors. If CP & L was as dedicated to inspection and safety as they are to making excuses for that explosion and their unlocked doors at Brunswick, I for one would be more at ease with their operations. HoWEver, as a classroom teacher, CP & L's brilliance at making excuses seems to me to be more in line with the type of person who goofs off, confident that if something goes wrong or s/he gets caught in the wrong, a good excuse will solve things.

Kudzu Alliance members and Wells Eddleman also own property in the region around the Harris plant site, both real and personal property, including land, businesses, equipment, homes, personal property, etc. Land values have in places decreased near nuclear plants, especially where nuclear wastes are transported to and from the plants. This could readily affect some Kudzu members' property since they are very close to the plant, in one case on the boundary I believe. All our property could be affected in an accident, as would the value of our CP & L stock. We believe this is another very real interest we have in the safe management of the plant if it is built, and in the entire issue of whether and how it is built.

Wells Eddleman and Kudzu Alliance wish to be careful to say that we have other interests not mentioned here which the plant may affect, but we don't wish to try to list them all here or make this letter too

long.

As to how the ASLB's ruling could affect our interests, we believe that since the plant directly affects so many of our interests, and since the board (says Charles Barth) has the authority to make any ruling within its power consistent with the facts in the hearing, and since CP & L's safe management capability and financial capability directly affect how ~~[illegible]~~ (and if) the plant may be built and operated, we think the effect is obvious. If the ASLB does nothing, and leaves things exactly as they are after this hearing, then our interests are impinged upon by the power plant exactly as they were before. So that affects our interests by leaving the plants effect on them in force. If the board were to condition the construction permit on certain actions by CP &L by a certain time, e.g. training its personnel so that it was clear that plenty of qualified people would be available to operate the Harris plant, or cleaning up certain problems at Brunswick and/or Robinson, or tightening up its internal rules, etc. etc., that affects our interest by affording them a promise of some additional protection soon. If the board were to rule CP & L can take an even freer hand in its actions, and can omit some quality assurance of safety proecdures now used and still have "adequate" management for the health & safety of the public, that affects our interests by putting more responsbbility to ~~[illegible]~~ protect our interests on CP & L and less on the NRC. We are not suggesting rulings to the board at this time, but just showing how a range of possible rulings, or no ruling, would have an effect on our interests. Our financial interest is very large because each person served by CP &L will have to pay $1400 to build the plant at the 1976 estimate, and perhaps more, and certainly more to have the plant operate and pay CP & L a fair profit. If the plant is delayed or stopped now, at 3% complete, the loss on it

would be "only" $126 million (3% or 4.2 billion dollars). That is $42 per person served by CP & L. If, as seems likely based on CP & L figures, the plant would raise power rates 60% or more if completed, the present value of power savings at ~~xxxxxxxx~~ residential rates (about 3000 Kwh per consumer per year, at about 3½ c/kwh) would be much greater than that $42, even assuming the ratepayers had to take all the loss. But if construction continues and the plant is not needed when it comes on line, the loss to consumers will be very large, as could the loss to stockholders be, if they have to pay for it. Moreover, if for any reason the plants do not serve their useful lifetime as assumed, costs could be very high. It is important to make our best efforts and sensitivity analyses to understand the consequences of such possibilities and probabilities now, before construction has gone so far that financial interests begin to outweigh the public interest, consumers' costs, health, safety etc. We believe the NRC's decisions on the North Anna plant, built on a fault with the aid of lies by Virginia Electric & Power Co (according to reports) and with complicity in these lies by NRC staff, illustrates the dangers. With $400 million invested, the weight of this money was considered greater than the dangers of completing the plant, which is now operating (so we understand) with the aid of many modifications to the plant and many variances to engineering and safety requirements.

We particularly feel our interests are compromised if we are not allowed to intervene because the issue is really suppression of evidence. If evidence had not been suppressed, this hearing upcoming would never have been ordered. If we cannot ask questions, call witnesses and cross-examine, we cannot be at all assured that much more evidence is not still being suppressed. We have no proof now that ~~ix~~ it is, but no assurance whatever that it is not. Only by direct and cross-examination can we probe the truthfulness and completeness of the record in this case.

We note in passing that both CP & L and NRC staff have apparently filed responses to our petition and amendments late under the NRC's own rules. Wells Eddleman desires that the full arguments of both be heard, and thus does not object to this. Kudzu Alliance has not taken a position on this issue, and reserves the right to raise it later, particularly if and when a hearing is granted on Kudzu's petition to intervene.

We also note that we cannot find anything in Charles Barth's first response (dated 6 November 1978 but received on 17 November, referring to a letter of "November 16, 1978" -- no doubt a typo) about the NRC's rules or how to become an intervenor. Indeed we received nothing until Wells Eddleman phoned the office of Rep. Ike Andrews, 6 December 1978. Andrews' office obtained a copy of 10 CFR 2 and sent it to Eddleman. It arrived about 18 December 1978. Charles Barth also sent a copy of 10 CFR 2, pursuant to a phone conversation of 13 December 1978 I believe. This arrived about 20 December. We did not intend to ask the ASLB's assitance in this matter; we merely desired to note that we still had received nothing from the NRC staff on its rules, and to renew our request to them to supply such information. It has been helpful to us, and we are endeavoring to comply with every part of it that we can understand.

Another factual matter concerns the awareness of Kudzu Alliance members of the last deadline for intervention in the Harris proceedings. At the general meeting of 3 January 1979 I asked the 31 members present (28 being members before that date) if any knew or had read of the last date for intervention. None had. Only 10 had ever heard of the Federal Register, according to their statements and a show of hands. None read it on a regular basis. We submit that ordinary persons, including

most of the founding members of the Kudzu Alliance, could not have intended to circumuvent any NRC rules, begcause they do not know those rules and never did. We are advised by a Kudzu member that it is presumed in law that everybody reads the Federal Register (or should); we simply point out that in fact, even concerned citizens such as Kudzu Alliance members do not read it and in many cases are not even aware that it exists, or that NRC notices for hearings are in it.

We do not know if any other publicity than the Federal Register notice was given 23 June 1977 for potential intervenors. We do know that numerous Kudzu Alliance members now cannot recall ever hearing of such a notice; and many of them were very concerned with nuclear power in 1977 also. We believe that it is unfair to presume that people can catch every legal notice put past them, and would ask that both the earlier intervention attempt by John Speights, now a Kudzu member, any other intervention attempts from 1967 to 1977 by persons now Kudzu members, and the fact that Kudzu Alliance was formed after the July 1977 deadline without knowledge of that deadline xmx and with no intent to circumevent NRC procedures, bexx considered as good cause for having our petition to intervene considered at this time. We also note that it takes time for an organization to establish itself and create a structure that enables it to take on responsibilities such as intervention. If CP & L can get delays in implemnting its QA program, then Kudzu's need to get established and organized should also be considered good cause for filing to intervene at this time.

Wells Eddleman is perplexed by the idea that he should simply avoid nuclear power plants when he moves. I have here the best job I have ever had, as a conservation manager, teacher and watchperson. Nevertheless, had I known a nuclear plant was nearby under construction, I might have reconsidred my decision to move here, or made the decision

to accept some risk by staying in the area. But I did not have a chance to make that choice. In effect, I am being told I have no right to move near a proposed nuclear power plant unless I am willing to sit idly by and watch it go up. Considering the number of nuclear plants that have been proposed, I would have greatly restricted choice of living xxx sites. I certainly didn't move here to spend my time arguing against nuclear power plants. If I'D known one was this close to me, even though my present job is very attractive to me, the best I've x ever had, I might not have taken it. But since I was already here with all my equipment and a good job when I first heard where the plant was and when it was going to be built, I think I should have the right to intervene. If I'd moved here a few years earlier, while construction was suspended, I'd have had a chance to say, "No, I'd rather not run from this nuclear plant. I don't think it's safe or a good economic deal or good for jobs or good for me, and I'd like to say why and get witnesses and cross-examine the power company's witnesses."

I realize that the question of whether new residents in an area should be allowed to intervene is a tricky one. People who would move to a place just to fight a nuclear plant are not rare anymore. But I didn't do that. I moved here without knowledge of the plants being this close to me, and without intent to do anything about it (since I didn't know about it). Compare the situation of a person who unwittingly moves next to [redacted] a leak-prone gas pipeline. There is no requirement to tell property buyers a gas pipeline is near. The gas company people probably won't advertise that their line is leaky, or put out maps of its location. Yet our new property owner is in danger from this gas pipeline, and has every right to petition for improved safety etc. I am going to get effects from that nuclear

plant if its built. Yet by CP & L's attorneys' response, they propose to tie my legal hands, and say in effect, "Nuclear power: Love it or leave it," I happen to like my job and my location here extremely well. I do not wish to have to leave this area, but I almost certainly will if the Harris nuclear plant begins operational testing. (The uncertainty is, I'm not 100% sure that nuclear plants cannot be made safe, that waste cannot be transported and stored safely etc. Were these issues resolved to my satisfaction, I might stay -- or I might leave just to be safe, because I could be wrong.) I am very disturbed now by much evidence, including that for rising cancer rates in regions of nuclear facilities, evidence that various radioactive materials pose greater health risks than previously thought, etc. I will endeavor to protect myself and others from these risks, using nonviolent means only, but if I cannot I can move away. Many people may not have that option, so I hope the Kudzu Alliance is admitted as an intervenor, as even if I were, I could lose my legal status if I moved away due to my assessment of the dangers. (Catch 22, nuclear version: You have to be in danger to do anything about the danger. If you take yourself away to escape the danger, you lose your right to do anything about it. Is nuclear power safe? You bet your life. Catch 22 again.) At any rate I am no lawyer and couldn't hire one at current rates. (One Kudzu member told me of a legal bill over $10,000 in one year, which that member paid in trying to stop the Harris plant.) I hope the ASLB will excuse my legal ineptness. I work on this petition for a lot less than $10,000 a year (and some may feel that my work is worth its price, or less!). I am complying with everything in the rules I have received that I can understand or get trustworthy advice from Kudzu members about.

I have a further personal interest in these proceedings because I do energy consulting work. Energy consulting work is most needed

where energy is being wasted and can be saved cheaply. In my experience these conditions prevail in much of the immediate area around Raleigh, Durham and Chapel Hill, New Hill, etc. If consumers in this area are forced to spend large amounts of money on nuclear power plants via CWIP and rate increases, they will have less money available to invest in energy conserving equipment and systems, and thus have less business to give me. Ironically, as the price of electricity rises, there will be greater advantages to energy efficiency and conservation, but less money available to do it. I believe I can show how the entire expected annual output of one of the Harris units (900 MWe) could be saved by an investment of less than $100 million in insulation (about $1 billion less than the cost of the Harris unit). The insulation will have a useful lifetime comparable to the plant (30 to 50 years) have minimal operating and repair costs, and continue to save energy without additional effort by its owners. My fees are either by the hour worked (variable to the size of the organization I'm working for and the potential energy savings), or a small percentage of the cost of energy saved over several years. Thus I could expect income from the insulation projects, but only, if the capital to install this ~~knuks~~ insulation is available. The more power bills go up, the less capital people will have to invest in insulation. My CP & L dividends, however, should not suffer, since they are a fair rate of return on an existing investment whether more nuclear plants are built or not. Bill Lee, President of Duke Power, has told me that not building new powerplants would help Duke stockholders by reducing the need to sell new stock (which dilutes the previous stockholders' equity). I imagine a similar advantage might occur for CP & L shareholders like myself. So out of personal financial interest, it makes sense for me to oppose nuclear power because it is so ~~capkxital~~ capital intensive that it reduces the money available to do my job- energy

conservation and efficiency. I believe the issue of whether nuclear power is the BEST available use of the huge amounts of capital involved needs serious consideration, both by the NRC, the Congress, and people and state utilities commissions. Many authorities agree with William Simon that we may face a capital formation crisis in the USA soon. Under such conditions we should make the best investments with our available capital. I believe the best return on capital in energy is from conservation, insulation and efficiency measures at this time. Numerous studies support that belief. I do not know whether this issue is within NRC jurisdiction, but I do hope prudent and sound management will address it. Considering the opinion of Shearon Harris (himself) at the last CP & L stockholder's meeting, I do not believe CP & L management had yet taken energy conservation seriously. The experience of West Germany among others shows that much higher efficiency energy use is available to us in the USA. Harris seemed to deny this, citing higher agricultural and transportation energy use in the USA than in Germany. Virtually none of such use is electrical however. It would make energy sense to have more electric mass transit, but I cannot see electric tractors being economically competitive anytime soon. Electric rates still make electricity our most expensive form of energy. For this reason I believe the future holds much slower growth rates in electric demand, and reductions in central power system demand in many cases. I think it is time for CP & L and others to face the possibility that longterm demand growth may be much smaller, and to perform sensitivity analyses for costs and benefits of new powerplants under varying assumptions including very low demand growth. Under such conditions the long construction times of all large powerplants are very problematical -- interest charges eat up projected benefits before the vallant is finished. Smaller plants may be an answer, but small nuclear plants are distinctly uneconomical to build today.

I hope these concerns can be raised somewhere, if not before the NRC. Many Kudzu members share my concerns about best use of resources and proper plant size cited on pages 18 and 19, as well as conservation, on which Kudzu members presented testimoney last fall (1978) before the NC Public Utilities Commission.

Onbehalf of myself and the Kudzu Alliance I want to note that I have read the entire text of the NRC staff filing for the upcoming hearings, and have now completely read Exhibits 1 and 3 and skimmed Exhibit 2, which is all the LERs (Licensee Event Reports, i.e. things that went wrong) and plan to finish reading all of Exhibit 2 this week. (The fact that Exhibit 2, the troubles at CP & L nuclear plants, is so thick, is of interest to me. I would like to investigate in some depth what is "accentable" and "unacceptable" performance by a nuclear licensee.) At any rate, I've read all this stuff, by myself, which CP & L had to ask an extension of time to respond to. Kudzu Alliance has several other members (indeed, a whole research comittee and others) who can also read testimony and reports capably, raising questions and drawing inferences and making compabisons. We think this shows we do have something to offer in developing a sound record, because we understand CCNC's lawyers could not or did not have time to read all the information filed by the staff of the NRC. (At lawyers' rates, we wouldn't blame CCNC for not wanting all that stuff read -- I spent about 12 hours on it so far.) We think it is important for some intervenor to check and question everything that is asserted, if that is humanyy possible, so that questions can be raised in the record as the topics come up, and not later. It is clearly easier for 3 intervenors to cover this demanding job than it is for one to. We also think our reading and research (Kudzu research people each concentrate on a different area) can be useful resources in our

intervention which will help develop a more sound record.

Concerning the issue of whether other intervenors can represent our interests adequately, David Martin, president of CCNC, does not believe CCNC has adequately represented our interests, he tells me. If they have not in the past, can we expect they will do so in the future? We know of no planned changes in CCNC's efforts, though we continue to support them. We also wish to make further efforts of our own.

We understand CCNC is preparing to appeal on the need for power issue now that the NC Utilities Commission has published lower demand forecasts,(still far above actual increases 1973-78). We wish them luck, and if granted intervenor status may wish to join in that appeal as intervenors; we would certainly wish to represent ourselves or have ourselves independently represented at any future hearings on need for power. We believe CP & L's sending in data showing lower demand after the construction permit was issued, plus the capricious denial of the CCNC's first appeal (since new evidence favors intervenors, they have no right to cross-examine it, so they cannot have more hearings, I believe is how the ruling went -- Catch 23), already shows a dangerous disregard for pertinent facts on the NRC's part -- dangerous to our pocketbooks and our potential safety and health and life etc. At any rate we view the NC Utilities Commission report as a step closer to realism in their power demand projections, and their requiring CP & L to show cause why construction of the Harris units should not be delayed is very reasonable. CP & L has now, according to news reports, indefinitely deferred its two proposed South River nuclear units. Considering the overcapacity CP & L now has (and the difference between the generating capacity in their annual report 1977

and the Utilities Commission report is curious ... 2 sets of books?), we assume that it is further reasonable to ask why Harris 3 and 4 should not be indefinitely deferred at this time. We would seek to evaluate the accuracy and honesty of power projections as part of the questions of financially responsible management, and as part of the question of possible continued suppression of information. If demand projections continue to drop toward reality, the "need" for all the Harris units will soon be in grave doubt.

Concerning the NRC staff filings, there are issues in there of managements repeated failure to correct or improve problem situations in equipment, QA/QC, emergency response plans, radiation safety and monitoring, etc. etc. which we would like to raise at a hearing. The large number of LERs and ~~xxxxxxxxx~~ infractions/deficiencies etc. do not show a downtrend of significance by our statistics. We think at some points the data is misread or perhaps misrepresented by the staff. We further note that CP & L personnel policy is in question due to Cantrell's and other testimony. There are other issues raised by the staff filings which we may wish to comment on later, or raise when and if we must prepare a list of contentions.

We have now discussed twice with NRC staff the possibilities of limited intervention. Kudzu Alliance and Wells Eddleman continue to doubt that limited appearances afford us anything more than a chance to make a speech. We cannot, for example, call as witnesses persons who have resigned from CP & L and others who continue to work there; we cannot cross-examine testimony filed by the staff and CP & L's responses. We desire to do these things if possible, and feel that they would assist in establishing a more sound record.

We also understand that the expertise and direct knowledge of all speakers before the ASLB are taken into account in evaluating

that testimony, and since few of us are exotic experts or directly saw what is wrong with nuclear power, we think our time and the ASLB's would better be devoted to those expert and directly knowledgeable witnesses which we could call were we intervenors. We do not propose to expend this sort of effort just to make limited, and probably unconsidered, statements outside the testimony of the upcoming hearings or any others. We still feel only intervention offers us any real chance to make any useful contribution, and we are not into being useless.

We understand from NRC staff that the competence of contractors hasx not been raised in a previous proceeding. We think Daniel International and Research-Cottrell's records (e.g. Callaway MO plant William Smart case for Daniel, and W.Va. tower collapse for Research-Cottrell) warrantx inquiry at some point, preferably before they build too much if they have likelihood of building things improperly. Otherwise extensive, expensive repairs or scrapping costly construction might be necessitated later. We note with interest that NRC staff did not mention Callaway among Daniel's projects where they discussed Daniel. Whether this was omission, accident or suppression, we do not know. We would like to find out. We believe this is a serious issue for kxix the lives and safety of construction workers as well as the health and safety and financial interest of the public in a safely built plant, and the enormous financial interest of CP & L and its shareholders in a safely built, operable plant without defects that could force a long shutdown for repairs, or render the plant inoperable. Thorough review now is the best way to resolve these questions of contractor reliability and CP & L's management capability in hiring such contractors.

We (Kudzu Alliance and Wells Fddleman) believe that further new evidence comes to light that affects these and other issues, and reserve

the right to raise and/or comment on such issues as they may arise. Safe management includes provision for unknown contingencies insofar as this is possible and reasonable. We think it should be required.

Signed on behalf of myself and the Kudzu Alliance, to which I last reported 3 January 1979.

Wells Eddleman

Wells Eddleman

Begun 4 JAN Mailed 8 Jan
Completed 7 JAN Wells Eddleman

LIST OF ISSUES RAISED PREVIOUSLY

1. Need for power (new evidence 12-28-78, ~~nakxynx~~ mentioned herein, NC PUC)
2. Improper design, verification, construction & maintenance
3. Setting trip setpoints outside approved operating ranges
4. Failure to perform safety analyses and planning for maintenance
5. Inadequate verification of pipe cracks, exceptions to requirements for same
6. Employment of unqualified and underqualified personnel
7. Financial risks to CP & L shareholders; to consumers via CWIP and rate increases; misrepresentation of power needs for financial reasons
8. Fitness, responsibility (or lack of it) by contractors~~xxxx~~ Daniel Intl. and Research -Cottrell
9. Lifetime of operation of plant; payback period & cost-benefit; new factors that may reduce operating lifetime & require expensive repairs & shutdowns
10. Environmental protection, including safe disposal of nuclear wastes
11. Limitation of topics to be discussed requires us to guess what will go wrong; incomplete & dishonest presentations to NRC & its boards.
12. Work history and financial holdings of witnesses, staff etc; financial and curriculum vita (resume) disclosure requested
13. Possible additional topics
14. Need to preserve our right to raise additional issues.
15. NRC staff not responding to request (3) of 16 October 1978 for rules & procedure information for intervenors
16. Good cause for "late" filing -- Kudzu didn't exist; Eddleman wasn't in area (elaborated above: neither knew of deadline; no intent to circumvent rules or deadline in formation of Kudzu; etc.)
17. Asking for more required notice of hearings & new opportunities for intervention with wide publicity.
18. Inaccessibility of federal register.
19. Service of copies -- we cannot afford
20. Info on Kudzu and Eddleman, authorization to represent Kudzu, etc.
21. Lack of information about requirements for our petition/ask leave to amend.
22. Kudzu member John Speights tried to intervene in 1971
23. Sound management and ASLB ruling relevant to Eddleman & Kudzu interests, life, safety, financial, property etc.
24. Nuclear waste disposal costs
25. Excessive radiation emissions allowed by 1974 EIS & by NRC staff
26. New exposure standards for nuclear workers may shut down nuclear industry

Issues raised previously, continued:

27. CCNC unable to represent our interests; Kudzu formed to do more than CCNC was doing.
28. Burden of proof is on NRC staff or CP & L to show our interests "will be protected" not may be protected, by others.
29. NRC staff and CP & L's commitment if any to protect Eddleman and/or Kudzu is suspect -- they would have to acknowledge errors, less likely to do that than we are to point them out.
30. We desire to represent ourselves to protect our interests directly.
31. There are other reasons to represent ourselves (more later).
32. Record developed without our participation was unsound.
33. Possible continued suppression of evidence.
34. 3 intervenors can backstop each other -- catch things one might not
35. 3 intervenors can share the work, concentrate on own expertise areas.
36. Technical knowledge needed to detect technical errors. Eddleman & Kudzu have such knowledge.
37. Knowledge of management in practical business experience & theoretical course work and applied course work of Kudzu members (incl. Eddleman on last 2 points).
38. Investigative experience helpful in developing sound record. Eddleman has some.
39. Continuing research by Kudzu & Eddleman
40. Required only to "assist" in developing a sound record, not do it alone.
41. Possibility other intervenors will collapse of be taken over, leaving no one to represent us/ Case of Wanke Environment
42. CCNC's attorney cannot give us the help we need.
43. We have a right to represent ourselves.
44. We will follow all rules we know and are told.
45. We have no desire to delay proceedings; want them speeded up if possible
46. Contradiction between "not broadening issues" and"developing a sound record" our desire is to develop the issues.
47. If we raise new issues that have not been raised before, that is an argument FOR our admission ans intervenors, not against.
48. Do not know if we have delayed proceedings at all; doubt we could add much to current delays.
49. Do not wish to insult anyone or raise things improperly, just to preserve our right to raise additional issues as new info becomes available.
50. There may be things we have raised that I have missed in this summary, though I tried to get them all into this list. We reserve the right to refer to previous petitions and amendments.
51. Further suppression of infox, by NRC current chairperson, re dynamic suppression systems.
52. Hard to state concerns without making a list of things that could be termed contentions. Will make this list when/if legally allowed to.
53. Work history & financial holdings beyond NRC's authority? (Contradicted by staff filing-- inspectors & their families etc may not own nuclear or power company stock, bonds etc.) Holdings relevant to testimony, so is there salary comes from or has come from.
54. Ask leave to further amend our petition to comply fully with legal requirements
55. Ask that petition be judged on the facts, not on our legal ineptness.
56. Do not wish to inconvenience board (ASLB) but we have to pay ourselves for anyone working on this, unlike NRC (paid by taxpayers) and CP & L (paid, we think, by ratepayers).

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of	)	
	)	
CAROLINA POWER AND LIGHT COMPANY	)	Docket No.(s) 50-400
	)	50-401
(Shearon Harris Nuclear Power	)	50-402
Plant, Units 1, 2, 3, and 4)	)	50-403
	)	
	)	
	)	

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document(s) upon each person designated on the official service list compiled by the Office of the Secretary of the Commission in this proceeding in accordance with the requirements of Section 2.712 of 10 CFR Part 2 - Rules of Practice, of the Nuclear Regulatory Commission's Rules and Regulations.

Dated at Washington, D.C. this
7th day of Feb 1979.

Peggy T. Bauzig
Office of the Secretary of the Commission

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	)	50-401
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	)	

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