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FROM: Carolina Power & Light Co Raleigh, NC J A Jones		DATE OF DOC 12-19-75	DATE REC'D 12-29-75	LTR XXXX	TWX	RPT	OTHER
TO: Mr Rusche		ORIG one signed	CC	OTHER	SENT NRC PDR <u>XX</u> SENT LOCAL PDR <u>XX</u>		
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DESCRIPTION:

Ltr Ltr trans the following:

DO NOT REMOVE
ACKNOWLEDGED

ENCLOSURES:

Comments of proposed environmental tech specs concerning items discussed at the 7-10-75 meeting with NRC staff.....

(1 cy ; encl rec'd)

PLANT NAME: Robinson #2

FOR ACTION/INFORMATION 1-2-76 ehf

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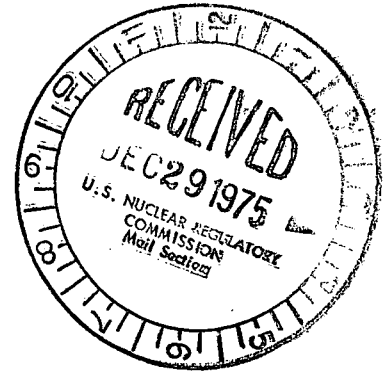
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Carolina Power & Light Company

December 19, 1975



Mr. Benard C. Rusche, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

REGULATORY DOCKET FILE COPY

RE: DOCKET NO. 50-261
H. B. ROBINSON STEAM ELECTRIC PLANT UNIT NO. 2

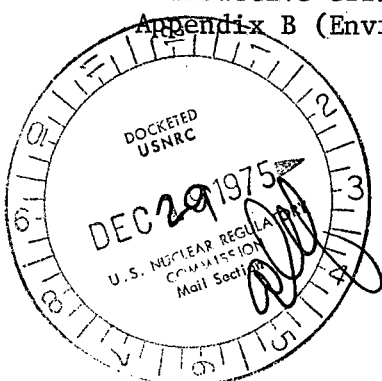
Dear Mr. Rusche:

The Company has been informed by the NRC Environmental Projects staff that they intend to issue Environmental Technical Specifications (ETS) for our H. B. Robinson Unit No. 2 prior to the initial Atomic Safety and Licensing Board decision in the pending 10CFR50 Appendix D proceedings. The Company does not believe that issuance of the ETS prior to the initial decision of the Board would be consistent with the letter and intent of NRC authorities and responsibilities because many of the issues under consideration before the Board could substantially effect the ETS and because the NRC Legal staff has asked the Board to impose relevant environmental conditions in the operating license. While we would otherwise have substantial comments to make concerning the technical content of the Environmental Technical Specifications proposed by your staff, we do not believe it would be appropriate at this time to comment on those specifications which cover matters under consideration before the Board.

Although radiological questions were asked by the Board, the Board decision is not expected to affect the radiological portion of the Environmental Technical Specifications. For this reason, we believe that it would be useful to comment on the proposed radiological specifications and to reach agreement on them, if possible, so that they can be issued shortly after the Board publishes its initial decision in the existing proceeding.

The recently adopted Commission regulations for Appendix I of 10CFR50 require submittal of a proposed compliance program for radioactive effluents by June, 1976. We expect to be required to conform to this schedule. In the interim, we believe that the existing Appendix A radioactive effluent technical specifications should be transferred to

Appendix B (Environmental Technical Specifications) without change. In



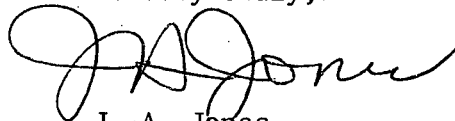
14305

December 19, 1975

the event that the staff nevertheless intends to issue an additional set of interim radiological specifications, we are providing as Attachment A to this letter our comments on the staff's proposed radioactive effluent limitations.

Most of our comments in Attachment A have been discussed previously with your staff, particularly during the July 10, 1975, meeting held in Rockville, Maryland. At that meeting CP&L representatives understood that resolution between CP&L and NRC had been achieved on those specifications. Since resolution is important to continued operation of Unit No. 2, we are concerned that the words contained in the staff's recent draft do not reflect our understanding of the agreement reached. We would welcome the opportunity to discuss in detail any of the attached comments with which the staff does not agree.

Yours very truly,

A handwritten signature in dark ink, appearing to read "J. A. Jones", written over a horizontal line.

J. A. Jones

Executive Vice President
Engineering, Construction & Operation

JAJ/mf
Attachment

ATTACHMENT A

Item b on Page v states the Company laboratory procedures are to be approved by the NRC. We do not believe that NRC approval should be required for changes to laboratory procedures. This is inconsistent with the requirements of the NRC on other nuclear plants and is also inconsistent with the NRC requirements for revision to internal plant procedures in the Appendix A Technical Specifications. This includes all CP&L plants, where modification to plant procedures are allowed after proper internal review and approval by the Plant and Company Nuclear Safety Committees and the plant manager. We believe that procedures in the Environmental Technical Specifications should be treated in this aspect in accordance with other plants licensed by the NRC.

Specification 2.4, Radioactive Releases, contains a number of limitations on release and monitoring requirements which require modification. As a general comment, we would request that all references such as "all reactors on the site," "each reactor at the site," and "per reactor," etc. be removed since there is only one reactor at the site and these references are inappropriate. With regard to Appendix I specifications, please note again our request that a brief interim Appendix I ETS would not serve a very useful purpose since it would be of such a short duration prior to the adoption of final Appendix I Environmental Technical Specifications.

Specification 2.4.2.a requires estimates of sampling and analytical errors. The reporting of error measurements should be in accordance with Regulatory Guide 1.21 which states that counting statistics should be included in the records of measurements and that detailed statistical evaluations of error are not suggested since it is very difficult to assign error terms for each parameter affecting the final measurement.

Specification 2.4.2(c) requiring two tank volumes be recirculated will be difficult to comply with at H. B. Robinson Unit No. 2. Recirculation time is presently approximately four hours.

In Specification 2.4.3, "Specifications for Gaseous Waste Effluents," it should be clearly understood that the statement, "with half-lives greater than eight days" also refers to radioiodines as well as particulates. A better approach would be to replace the word radioiodines with iodine-131. The NRC agreed this was the proper designation during discussions on the Brunswick Steam Electric Plant ETS. In addition, Specification 2.4.3 requires that the values of K, L, M, and N be determined each time that isotopic analysis is required. A literal interpretation would mean that these values may have to be recalculated several times per day. Some provision should be made for the determination of these values on a typical isotopic analysis on a monthly or quarterly frequency.

The instantaneous release of noble gases is such that total body doses are limited. In addition, skin and air gamma doses are concurrently limited and we can find no apparent bases for the combined skin and air gamma dose limit. Also, all noble gas release limits other than the instantaneous limit just mentioned are based on air doses from gamma and beta radiation. We believe it would be more appropriate to use limits which reflect total body and skin doses rather than air doses.

The iodine release limits in Specifications 2.4.3.a(2), 2.4.3.b(3) and (4), and 2.4.3.c(2) were changed by telephone by your staff on August 20, 1975, to values, which in our opinion, are incorrect. We believe these values should be reviewed since they would not allow the plant to continue operating if they are adopted. We believe that an apparent error occurred in the numerical constants by which the bracketed values are multiplied.

Specification 2.4.3.e requires that the maximum activity in any one waste gas storage tank be 8,000 curies. This requirement will be extremely difficult to comply with at the H. B. Robinson plant, and we believe it should be modified. The end result of this requirement will mean that gas decay tanks will be required to be released to the environment prior to receiving the designed 45-day decay time. This means the NRC is requiring that we discharge more radioactive materials to the environment than would be discharged under our present Technical Specifications with a resulting incremental higher dose to persons living off site. Also, the basis for the 8,000 curie limit seems very inappropriate. The NRC has calculated this value based on an off site dose of 0.5 rad to the skin and states that this is consistent with Commission guidelines. We believe that this, in fact, is inconsistent with Commission regulations in that they are using a dose limit lower than that required by 10CFR20 as an accident limit. The FSAR evaluation of this accident included 55,000 curies in the gas storage tank.

Our comment concerning Specification 2.4.2.a applies also to the Specification 2.4.4.a requirement for estimates of sampling and analytical error. In Specification 2.4.4.b, please remove the phrase "except from the turbine building ventilation exhaust." Since this is an open turbine building and has no exhaust, an appropriate phrase should be developed. In the bases of Specification 2.4.4, please remove all references to draft Regulatory Guide 1.1.A.A. It is inappropriate to include references to a draft Regulatory Guide especially in view of the continuing changes in the drafts without notice as already discussed under general comments. On Page 2-23, fifth line from the bottom, please remove the phrase "or others" since it is unclear to whom "or others" applies.

Listed below are a number of comments which should be incorporated in Tables 2.4-1, 2.4-2, 2.4-3, and 2.4-4:

1. Table 2.4-1 - (Footnote f of Table 2.4-1 should be written to say 4×10^{-5} $\mu\text{Ci/ml.}$) A footnote should be added under Principal Gamma Emitters in A. This footnote should read:

When operational or other limitations preclude specific gamma radionuclide analysis of each batch, gross radioactivity measurements shall be made to estimate the quantity and concentrations of radioactive material released in the batch, and a weekly sample from proportional aliquots from each batch released during the week shall be analyzed for principal gamma emitting radionuclides.

Under Item B, Primary Coolant, the sampling frequency of biweekly should be changed to weekly.

2. Table 2.4-2 - Footnote "d" requires that the sampling flow rate should automatically vary with the flow of the effluent stream. This type of sampling equipment is presently not available and this requirement should be removed from the ETS.
3. Table 2.4-3 - The service water discharge pipe should be removed from the list of release points. Footnote "a" should be changed to describe the H. B. Robinson detergent waste system, rather than the reference to most PWRs. Footnote "b" should be removed from the table since it is inappropriate for the Robinson Plant.
4. Table 2.4-4 - The turbine gland seal condenser should be removed from the list of process streams. The following phrase should be added to footnote "a": "All points are monitored at the plant vent."

The meteorological specification of Specification 2.5 replaces a meteorological specification which had been developed in meetings with NRC meteorologists and included in the ETS for the Company's Brunswick Steam Electric Plant. It is unclear why this specification has been discarded so abruptly by the NRC and has been replaced by a specification which creates concern in several areas. Our specific comments are indicated below:

1. The objective of meteorological monitoring is to measure those parameters routinely used in dose calculations and not to document general meteorological conditions at the site. Such an objective would require the monitoring of solar radiation, precipitation, visibility, percent cloud cover and many other parameters not utilized in dose calculations.
2. A quality assurance program is required for many technical specification parameters. It is unclear why the meteorological specification must include a statement on quality assurance. We think this statement on quality assurance should be deleted from the specification since quality assurance is adequately covered in other documents.
3. Levels for placement of instrumentation should be changed to read approximately 10 meters and approximately 20 meters.

4. The requirement that summaries of all data be made available to the NRC upon request requires that these data be maintained for the life of the plant. Section 5 of the ETS outlines reporting requirements for reporting meteorological data to the NRC. The reporting required in Section 5 should be adequate.
5. Outage time of instruments should be reported to the NRC, Office of Enforcement and Inspection, as outlined in Section 5 of the ETS, rather than to the Division of Technical Review.
6. The requirement that any modification to the on-site meteorological program or any alterations to the area in the vicinity of the tower be subject to prior written approval of the NRC is totally unacceptable. The Company reserves the right to either add or delete meteorological sensors not required by Regulatory Guide 1.21 to the monitoring program without obtaining approval from the NRC. This is particularly important to us since many of the meteorological parameters measured at the Robinson plant are for studies of lake efficiency and are not related to atmospheric diffusion from the nuclear unit.

A number of specific comments concerning Specification 3.2, Radiological Surveillance, are listed below. We would appreciate your consideration of these changes, most of which have been discussed verbally with members of your staff.

1. Specification 3.2.9, Milk Sampling, contains a requirement for grass sampling and analysis for I-131 to a sensitivity of 0.05 pCi/gm (wet), and Item 3.2.11, Food Crops, requires that green leafy vegetables be sampled and analyzed for I-131 to a sensitivity of 0.05 pCi/gm (wet). We have reviewed the HASL 300 Procedures Manual, the Procedures Manual for the Southwestern Radiological Health Laboratory and other sources of established analytical procedures. We can find no procedure for performing either of the above analyses. Unless the NRC can direct us to an acceptable procedure for completing the above analysis, we have no alternative but to take exception to those requirements being placed in the ETS.
2. Specification 3.2.11 contains the requirement that peaches be included in the food crop sample. This should be deleted since it was originally included in the preoperational program and has been adequately documented. Leafy vegetables provide a more meaningful food crop sample.
3. Table 3.2-1 should be revised to agree with the attached table.
4. Item II of Table 3.2-2 should be changed from six to seven locations. Item V of Table 3.2-2 should be changed from six to ten locations. In Item VI of Table 3.2-2, the words "shore-line sediment semiannually" should be deleted. Sr-90 should

be added to the analyses to be performed. Item XIV should be added to Table 3.2-2. This item should be titled "Shoreline Sediment," with one location, semiannual frequency and analysis by gamma spectrometry.

5. Table 3.2-6 - The number and location of the milk control station should be changed to 40 and intersection of SR 1625 and 16-352.

Table 3.2-1

ENVIRONMENTAL RADIATION SURVEILLANCE

<u>Sample Station</u>	<u>Location</u>	<u>Sample Types</u>	<u>Sampling Frequency</u>	<u>Remarks</u>
01	S. property line - Entrance Rd. & Visitor Center Road	(1) TLD	(1) Quarterly	
02	S. property line near Visitor Center	(1) Air (2) Soil	(1) Weekly (2) Every 3 years	7 days (continuous)
03	East shore of lake at boat launch	(1) Shoreline sediment	(1) Semiannual	
04	S. property line - CP&L Pole #5	(1) TLD	(1) Quarterly	
05	Plant intake	(1) Surface water (2) Bottom sediment	(1) Weekly (2) Semiannual	
06	At Robinson Unit 1	(1) TLD	(1) Quarterly	
07	At Robinson Unit 1	(1) TLD	(1) Quarterly	
08	Discharge canal outfall	(1) Surface water (2) Bottom sediments (3) Aquatic vegetation	(1) Weekly (2) Semiannual (3) Quarterly	
09	Microwave tower	(1) TLD (2) Air (3) Soil	(1) Quarterly (2) Weekly (3) Every 3 years	7 days (continuous)
10	Picnic area	(1) TLD	(1) Quarterly	
11	Black Creek and Road 1623	(1) Surface water (2) TLD (3) Ground water (80') (4) Ground water (120')	(1) Weekly (2) Quarterly (3) Quarterly (4) Quarterly	
12	Intersection of Roads 1623 and 1639	(1) TLD	(1) Quarterly	

Table 3.2-1 (continued)

<u>Sample Station</u>	<u>Location</u>	<u>Sample Types</u>	<u>Sampling Frequency</u>	<u>Remarks</u>
13	W. Property line near const. road	(1) TLD	(1) Quarterly	
14	Intersection of Rd. S-1623 and Rt. 151	(1) TLD	(1) Quarterly	
15	Pine Ridge Baptist Church and Rt. 151	(1) TLD	(1) Quarterly	
16	Rt. 151 - one-half mile N. of 1623	(1) TLD	(1) Quarterly	
17	East shore of lake across from plant intake	(1) TLD (2) Air (3) Soil	(1) Quarterly (2) Weekly (3) Every 3 years	7 days (continuous)
18	East shore of lake (N. of 17)	(1) TLD	(1) Quarterly	
19	East shore of lake (N. of 18)	(1) TLD	(1) Quarterly	
20	East shore of lake (N. of 19)	(1) TLD	(1) Quarterly	
21	Bridge at N. end of impoundment	(1) Surface water (2) Bottom sediment (3) Aquatic vegetation (4) Ground water	(1) Weekly (2) Semiannual (3) Quarterly (4) Quarterly	
22	Hartsville	(1) Air (2) TLD (3) Soil (4) Ground water	(1) Weekly (2) Quarterly (3) Every 3 years (4) Quarterly	7 days (continuous)
23	Unit 1 well near site entrance	(1) Ground water	(1) Quarterly	
24	Well at west side of Unit 2	(1) Ground water	(1) Quarterly	
25	State Rt. 23, S. of State Rt. 53	(1) Milk	(1) Weekly or monthly	
26	State Rt. 39, 0.5 Mi. N. of State Rt. 21	(1) Milk	(1) Weekly or monthly	

Table 3.2-1 (continued)

<u>Sample Station</u>	<u>Location</u>	<u>Sample Types</u>	<u>Sampling Frequency</u>	<u>Remarks</u>
27	Black Creek at US-1 upstream of Robinson Impoundment	(1) Surface water (2) Bottom sediment (3) Aquatic vegetation	(1) Weekly (2) Semiannual (3) Quarterly	
28	Intersection of Transmission Lines and S.C. 151	(1) TLD	(1) Quarterly	
29	Intersection of S. C. 200 and S. C. 151	(1) TLD	(1) Quarterly	
30	Intersection S. C. 200 and S. C. 53	(1) TLD	(1) Quarterly	
31	Kelly Town	(1) TLD	(1) Quarterly	
32	Prestwood Lake	(1) Surface water (2) Bottom sediment (3) Aquatic vegetation	(1) Weekly (2) Semiannual (3) Quarterly	
33	Ditch behind Visitor Center	(1) Surface water (2) Bottom sediment (3) Aquatic vegetation	(1) Weekly (2) Semiannual (3) Quarterly	
34	End of construction road west of plant	(1) Air (2) Soil	(1) Weekly (2) Every 3 years	7 days (continuous)
35	Dam (west end)	(1) Air (2) Soil	(1) Weekly (2) Every 3 years	7 days (continuous)
36	Florence	(1) Air (2) Soil	(1) Weekly (2) Every 3 years	7 days (continuous)
37	Not used			
38	Site varies	(1) Fish a. Free swimmers b. Bottom feeders	(1) Quarterly	

Table 3.2-1 (continued)

<u>Sample Station</u>	<u>Location</u>	<u>Sample Types</u>	<u>Sampling Frequency</u>
39	End of S.R. 3126 off S. C. 341	(1) Milk	(1) Monthly
40	Intersection of S.R. 1625 and 16-352	(1) Milk	(1) Monthly
41	Site varies	(1) Feed crops	(1) Twice, during growing season
42	Site varies	(1) Feed crops	(1) Twice, during growing season
43	Site varies	(1) Tobacco	(1) Once during growing season and once after "cutting."
44	Site varies	(1) Food crops	(1) Twice during growing season
45	Site varies	(1) Food crops	(1) Twice during growing season
46	Site varies	(1) Meat & eggs	(1) Semiannual
47	Site varies	(1) Meat & eggs	(1) Semiannual

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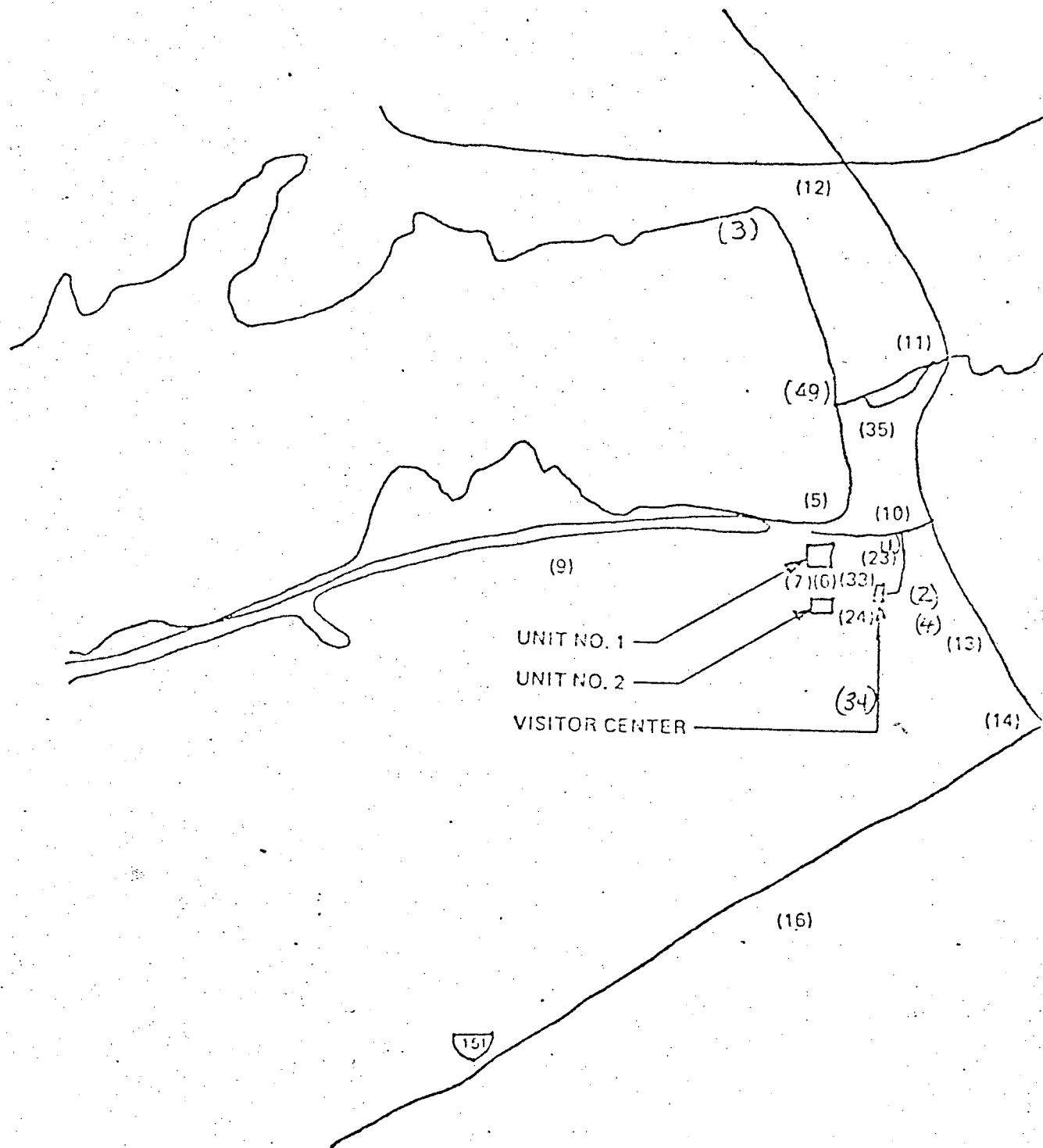


Figure 3.2-1A

H. B. ROBINSON UNIT NO. 2
ENVIRONMENTAL RADIOLOGICAL SAMPLING POINTS

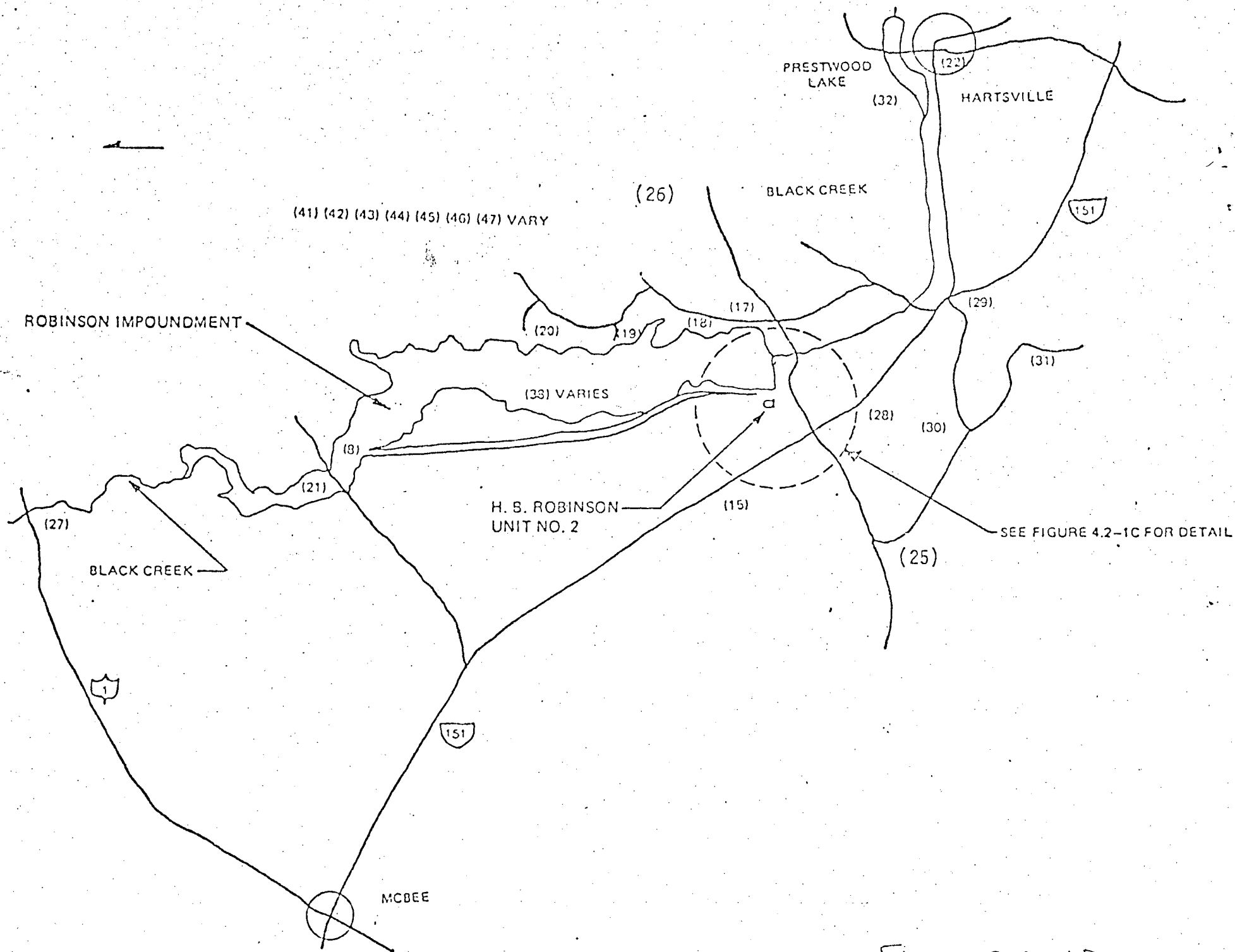


Figure 3.2-1B
H. B. ROBINSON UNIT NO. 2

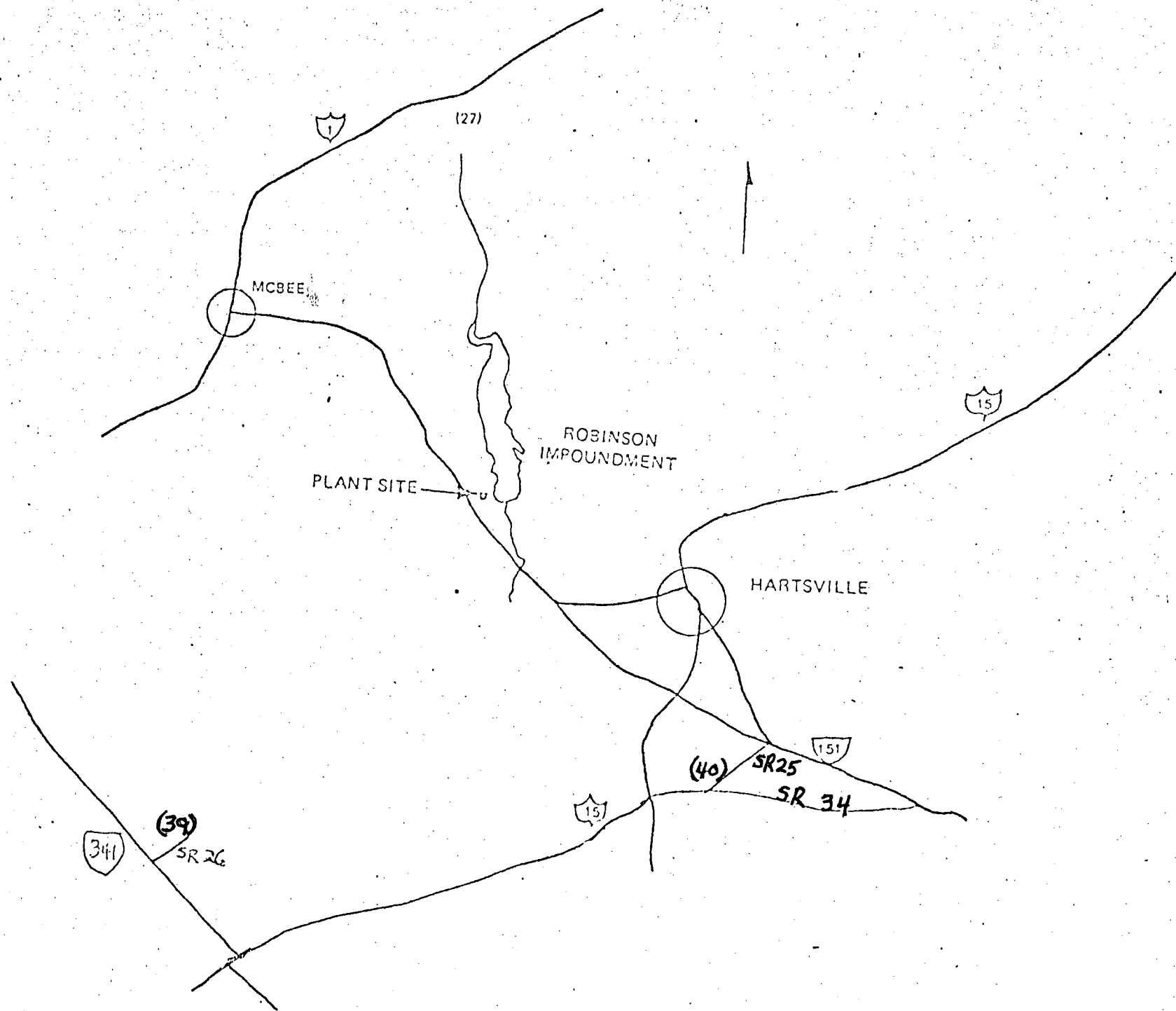


Figure 3.2-1C

Station 36 is located in Florence.

H. B. ROBINSON UNIT NO. 2
ENVIRONMENTAL RADIOLOGICAL SAMPLING POINT