

DUKE POWER COMPANY

P.O. BOX 33189
CHARLOTTE, N.C. 28242

HAL B. TUCKER
VICE PRESIDENT
NUCLEAR PRODUCTION

TELEPHONE
(704) 373-4531

June 1, 1983

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief
Licensing Branch No. 4

Re: Catawba Nuclear Station
Docket Nos. 50-413 and 50-414

Dear Mr. Denton:

Section 9.5.4.2 of the Catawba Safety Evaluation Report discusses License Condition 18, Internal Corrosion Protection for the Fuel Oil Storage Tanks. It was the Staff's conclusion that internal corrosion protection for the Catawba fuel oil storage tanks is not being provided. Therefore, the Staff has proposed to condition the license to require that internal corrosion protection be applied to the fuel oil storage tanks by or during the first refueling period.

This license condition would require that the eight fuel oil storage tanks be drained, cleaned and coated. It is Duke Power Company's position that this requirement would not enhance safety and could be detrimental to plant safety. The Staff has based this License Condition on Section 7.5 of ANSI N195 which states, "Protection against internal and external corrosion shall be provided." On March 24, 1982, Washington Public Power Supply requested an interpretation of this phrase by F. A. Dougherty, Chairman ANS 59.51. By a unanimous vote of the committee, an internal corrosion allowance was deemed to meet the requirements of Section 7.5. Copies of this correspondence are attached.

The Catawba fuel oil storage tanks are fabricated from 3/8 inch nominal thickness carbon steel which includes a 1/32 inch corrosion allowance. These tanks were initially filled with fuel during March 1980. Internal corrosion of the fuel oil storage tanks will be minimized by, 1) maintaining the tanks essentially full in accordance with the Technical Specifications, 2) removing accumulated water through a flush mounted connection on the bottom of each unit, and 3) draining, cleaning and inspecting the tanks at 10 year intervals. Any accumulated sediment in the tank is prevented from entering the supply lines to the day tank by the outlet connection which is raised 6 inches above the bottom of the tank.

It is therefore concluded that the internal corrosion protection for Catawba's fuel oil storage tanks is in conformance with ANSI N195 and that an internal coating applied to the fuel oil storage tank now that they have been filled with fuel oil for over three years is not necessary, would be of questionable reliability,

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E PDR

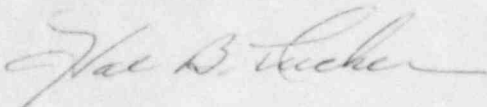
Boo!
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Mr. Harold R. Denton, Director
June 1, 1983
Page 2

and would pose a greater threat to the supply of fuel oil to the diesels since there is no assurance that an internal coating would not peel off in sufficiently large pieces that could block the outlet connection.

It is therefore requested that License Condition 18 be deleted.

Very truly yours,



Hal B. Tucker

ROS/php
Attachment

cc: Mr. James P. O'Reilly, Regional Administrator
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, NW, Suite 2900
Atlanta, Georgia 30303

Mr. P. K. Van Doorn
NRC Resident Inspector
Catawba Nuclear Station

Mr. Robert Guild, Esq.
Attorney-at-Law
P.O. Box 12097
Charleston, South Carolina 29412

Palmetto Alliance
2135½ Devine Street
Columbia, South Carolina 29205

Mr. Jesse L. Riley
Carolina Environmental Study Group
854 Henley Place
Charlotte, North Carolina 28207

Mr. Henry A. Presler, Chairman
Charlotte-Mecklenburg Environmental Coalition
943 Henley Place
Charlotte, North Carolina 28207



AMERICAN NUCLEAR SOCIETY
STANDARDS COMMITTEE

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MAR 25 1982

WR. PMD

Headquarters:
155 North Kensington Avenue
LaGrange Park, Illinois 60525 USA
Telephone 312/352-4611
Telecopy 312/352-0699
Telex 254635

March 22, 1982

Mr. Frank A. Dougherty
Chairman, ANS-59.51
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Dear Mr. Dougherty:

Confirming your recent telephone conversation with Marilyn Weber I am enclosing copy of page 8 from the American Nuclear Society Standards Committee Procedures Manual. This procedure is to be followed when preparing the interpretation request of Terry Mead from Washington Public Power on ANS-59.51.

If you have any questions or require any additional assistance, please do not hesitate to contact us.

Sincerely,

Mrs. Kathy Picha
Secretary, ANS Standards

kp
encl.

4.2 On occasion, the state of the technology may be such that final development of a proposed standard would benefit from wider input by trial use of its criteria. It is then appropriate to issue the proposed standard in draft form for Trial Use and Comment, for a period not to exceed 12 months. This procedure requires the approval of the responsible subcommittee.

4.3 A proposed standard prepared for declaration as an ANS Standard proceeds through the following approval steps after completion of the steps given in Section 2:

- a. The consensus body chairman submits the proposed standard to the Chairman of the ANS Standards Committee with a statement giving the background of the standard.
- b. The Steering Committee votes by letter ballot or by vote at a regularly constituted meeting on the adequacy of the development of technical approval based on the background statement. A two-thirds affirmative vote of the Steering Committee membership shall be necessary for approval.
- c. The Chairman of the Standards Committee reports the approval of the standard to the ANS President and recommends that he declare the standard an ANS Standard.
- d. The standard is then published as an ANS Standard.

5. Preparation of Case Interpretations of ANS Standards

Interpretations of an ANS Standard shall be conducted according to the following procedure:

- a. The request is forwarded to the Chairman of the Standards Committee, who refers it through the consensus body chairman to the appropriate subcommittee for interpretation.
- b. The subcommittee determines whether the existing standard is applicable. If so, the subcommittee chairman formulates a reply containing the appropriate interpretation and submits it for ballot and comment of the subcommittee. After attempting to reconcile comments and negative ballots, the subcommittee chairman submits a recommendation to the Chairman of the Standards Committee through the consensus body chairman.
- c. The interpretation is transmitted to the requester by the Chairman of the Standards Committee and is published in *Nuclear News*.

ANS as Secretariat of American National Standards Committees

Chairmen of American National Standards Committees for which ANS is the Secretariat are ANS members and are appointed to their respective positions for three years by the President upon recommendation of the Chairman of the Standards Committee. The chairmen of these American National Standards Committees administer the committees in accordance with the procedures of ANS and the American National Standards Institute.

ANS Representation on Other Standards Committees

The need for ANS representation on standards committees of other organizations is determined by the Steering Committee. If such a need is identified, the chairman of the Standards Committee, with appropriate consultation, appoints a representative.

ED Cowan 927M
RM Nelson 906D
CA Powers 927M
WRP-2 Files 917Y
JLW/File/lb

THIS LETTER SATISFIES COMMITMENT NO. _____
THIS LETTER (DOES) (DOES NOT) ESTABLISH A NEW COMMITMENT
WPPSS CORRESPONDENCE NO. 52-52-36

March 24, 1982
602-82-340

Responds to: N/A
Response required by: N/A

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, CA 94104

Subject: ANSI-N195-1976/ANS 59.51

NRC Regulatory Guide 1.137 recognizes ANSI-N195-1976/ANS 59.51 as providing a method acceptable to the NRC staff for complying with the pertinent requirements of General Design Criterion 17 of Appendix A to 10CFR Part 50.

This letter requests the interpretation of a phrase in section 7.5 of ANSI-N195-1976. This phrase states: "protection against external and internal corrosion shall be provided". The portion in question is internal corrosion protection.

An NRC reviewer has interpreted this phrase as an internal tank coating. The Supply System and other utilities interpret this as an internal corrosion allowance.

The requirement for an internal tank coating on a fuel oil tank is unprecedented in our industry.

Please provide us a letter stating the intent of the committee who prepared the standard with respect to this phrase in ANSI-N195-1976/ANS 59.51. Please send this correspondence to:

Terry L. Meade
WASHINGTON PUBLIC POWER SUPPLY SYSTEM
3000 George Washington Way
P. O. Box 968, MD 927M
Richland, WA 99352

Thank you for your cooperation.

Terry L. Meade
T. L. Meade
Electrical Engineer

pb

AUTHOR:	TL Meade <i>T.L. Meade</i>	FOR SIGNATURE OF:	TL Meade <i>T.L. Meade</i>
SECTION			
FOR APPROVAL OF			
APPROVED			

EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104
(415) 544-8000

April 7, 1982
EDS/WP-82-006

Washington Public Power Supply System
Post Office Box 968
3000 George Washington Way
Richland, Washington 99352

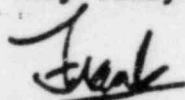
ATTENTION: Mr. Terry L. Meade
Mail Drop 927M

SUBJECT: American Nuclear Society (ANS-59.51)
ANSI N195 - 1976
Fuel Oil Systems

Dear Terry:

Enclosed is a copy of the proposed response to your March 24, 1982 letter which I am submitting to the working group for acceptance as a formal response. I will keep you informed of the results.

Very truly yours,



F. A. Dougherty
Chairman
ANS 59.51

FAD/rab
Enclosures ~

REQUEST FOR INTERPRETATION

WORKING GROUP: ANS 59.51

STANDARD: ANS N195 - 1976/ANS 59.51

INTERPRETATION REQUEST: See attached letter, dated 3/24/82
 (G02-82-340)

Discussion of Request

Section 7.5 of the Standard states: "Protection against internal and external corrosion shall be provided." The basic question is whether the working group intended that a lining be required for the tanks in the system. To respond to this question, we must look at our intent in establishing the requirement. The purpose of the Standard is defined in Section 2 and is to assure that an adequate fuel oil supply to the diesel is maintained and that sufficient fuel exists under all conditions. This has two components:

- The fuel reserve must be large enough and sufficiently reliable to meet the fuel requirements during an emergency.
- The supply system must be designed so that fuel can be delivered to the engine from the stored fuel.

The protection against internal and external corrosion is based on the above concerns. External corrosion to a buried tank could affect the integrity of the tank and thus place the fuel oil supply in jeopardy. Thus, the working group required protection against external corrosion.

The basis for requiring protection against the effects of internal corrosion is two fold. Firstly, there must be assurance of adequate system integrity for the same reasons as for protection against external corrosion. Secondly, the corrosion products must not affect engine performance. This requirement is stated in Section 7.2 of the Standard. That is, the materials must be compatible to the extent that engine operation is not impaired by the materials used.

Question

Is the use of a corrosion allowance an adequate means of meeting the requirements of Section 7.5 of ANSI N195 - 1976/ANS 59.51 regarding internal corrosion protection?

Response

Yes, provided that the allowance is large enough to assure integrity of the component and conformance with applicable design criteria at the end of the plant's design life and provided that corrosion products do not impair diesel engine operation.

EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104
(415) 544-8000

May 4, 1982

Washington Public Power Supply System
P.O. Box 968, MD 927M
3000 George Washington Way
Richland, Washington 99352

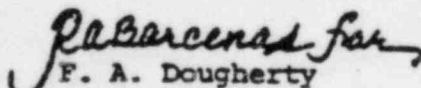
ATTENTION: Mr. T. L. Meade
Electrical Engineer

SUBJECT: ANSI-N195-1976/ANS 59.51

Dear Mr. Meade:

Per today's conversation, I am enclosing five (5) ballots in response to your need for interpretation of ANSI-N195-1976. One final ballot should be arriving in a few days. Upon receipt of this ballot, I will contact you with additional information.

Very truly yours,


F. A. Dougherty
Chairman
ANS 59.51

FAD/rab
Enclosures

REQUEST FOR INTERPRETATION

April 7, 1982

Page Two

BALLOT

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WRL PLD



Response approved.



Response approved with comments:

Comments _____



Response not approved for the following reasons:

Mail ballots to:

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Telephone: (415) 544-8018

Ballots due:

April 20, 1982

St. Blyzard 4/20/82
Cooper Energy Services

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APR 19 1982

WRL FMD

BALLOT

RMS

P. Carr



Response approved.



Response approved with comments:

Comments _____



Response not approved for the following reasons:

Mail ballots to:

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Telephone: (415) 544-8018

Ballots due:

April 20, 1982

REQUEST FOR INTERPRETATION

April 7, 1982

Page Two

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APR 19 1982

WFL PMD

BALLOT



Response approved.



Response approved with comments:

Comments _____



Response not approved for the following reasons:

Mail ballots to:

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Telephone: (415) 544-8018

Ballots due:

April 20, 1982

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April 7, 1982

Page Two

BALLOT

Response approved.



Response approved with comments:

Comments Linings in fuel tanks historically are short lived
with the lining material plugging downstream filters.
corrosive media is water purchased with the fuel, and
from condensation. The very best protection against it
is frequent (daily) draining off of the water and per-
forming of bottom sludge from the tank. Downstream
filters should be monitored for pressure drop during
periodic testing. An internal corrosion allowance is the
fore satisfactory. M. H. Towrey



Response not approved for the following reasons:

Mail ballots to:

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Telephone: (415) 544-8018

Ballots due:

April 20, 1982

April 7, 1982

Page Two

BALLOT

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APR 23 1982

WR. FMD

☐

Response approved.

☒

Response approved with comments:

Comments A specific corrosion allowance may not be necessary based on the material specified. My understanding of why the corrosion section was included was to ensure the designer considered the internal corrosion question, yet it could be possible that a "zero" corrosion allowance is satisfactory.

Raymond C. Rossi

4/15/82

☐

Response not approved for the following reasons:

Mail ballots to:

Mr. F. A. Dougherty
EDS Nuclear Inc.
220 Montgomery Street
San Francisco, California 94104

Telephone: (415) 544-8018

Ballots due:

April 20, 1982



WASHINGTON PUBLIC POWER SUPPLY SYSTEM

RECORD OF TELEPHONE CONVERSATION

DATE May 4, 1982	TIME 11:00	TO BE CONFIRMED <input type="checkbox"/> YES <input type="checkbox"/> NO
FROM Terry L. Meade NAME	Technical Staff - WNP-2 COMPANY OR DEPARTMENT	
TO F.A. Dougherty NAME	EDS Nuclear - California COMPANY OR DEPARTMENT	
SUBJECT(S) DISCUSSED Request for interpretation results and procedure to official response.		

REMARKS:

Last ballot has been received by Mr. Dougherty. It is now unanimous, internal corrosion allowance meets the requirements of section 7.5 of ANSI N195/ANS 59.51. Future action: A letter will be written by F.A. Dougherty to Ed Smith, Chairman of ANS 3, which will include all correspondence and recommend ANS 3 review and approve the response. NUPPSCO, Nuclear Power Plants Standards Committee will then ballot on it. John Cooper of Nebraska Public Power District is the chairman. When they approve it, it will be published in Nuclear News and become effectively the same thing as an ASME Section 3 code case (official request for interpretation), same as explicit statement in the standard.

This is basically duplicating an official approval cycle of a new standard.

Mr. Dougherty approved the use of this conversation record with the NRC.

Mr. F.A. Dougherty, EDS Nuclear Inc.

220 Montgomery St. San Fran. Cal. 94104 415-544-8018