

# INDIANA & MICHIGAN POWER COMPANY

*central file*

P. O. BOX 18  
BOWLING GREEN STATION  
NEW YORK, N. Y. 10004

October 15, 1979  
AEP:NRC:00277

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2  
Docket Nos. 50-315 and 50-316  
License Nos. DPR-58 and DPR-74  
Additional Information in Response to IE Bulletin 79-01

Mr. J. G. Keppler, Regional Director  
U.S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region III  
799 Roosevelt Road  
Glen Ellyn, Illinois 60137

Dear Mr. Keppler:

This letter and its attachments supply the information requested in Mr. R. F. Heishman's letter dated September 19, 1979 which we received on September 26, 1979. This information was requested in connection with the NRC Staff review of our submittal AEP:NRC:00153 dated June 28, 1979 in response to IE Bulletin 79-01. In a telephone conversation with Mr. J. I. Castresana of our staff on October 9, 1979, a member of your staff agreed to an extension until October 19, 1979 for the submittal of this response.

## RESPONSE TO ITEM NO. 1

The information requested in Item No. 1 is supplied in tabular form as Attachment B. The first column of the Attachment B table lists the item number as given in Attachment A, which itself is a revision to Attachment A of the AEP:NRC:00153 submittal. Attachment A was revised to:

- Assign, to the equipment described, item numbers for the purpose of cross-indexing Attachments A and B;
- Supply the information requested in Item 5 of the enclosure to Mr. Heishman's letter;
- Delete equipment items 23 and 46 because Foxboro instruments in containment are no longer required for either Engineered Safety Features actuation or long-term monitoring;
- Modify the specified radiation dose for equipment items 24 and 51 to be consistent with the time requirement of FSAR Table 7.5-2;

*AOTI*  
*2*  
OCT 17 1979

7910250 420 p 60

- Modify the specified radiation dose for equipment item 32 to be consistent with that for item 3;
- Correct the misspelling of a supplier's name in equipment items 57 and 58;
- Modify information given for equipment items 57 and 58 to make it consistent with statements in the referenced test report;
- Correct a typographical error in the specified radiation dose for equipment item 59;
- Modify the specified radiation dose for equipment items 60 and 62 to correspond with the more conservative calculation reported in Reference 30. The dose originally listed was from an earlier report which gave a calculated dose for one month only.

These changes are essentially merely editorial in nature or made to preserve consistency with previously submitted information. Our conclusion remains valid that all the equipment listed in Attachments A and B is adequately qualified to perform its safety-related functions.

#### RESPONSE TO ITEM NO. 2

The methodology used to verify that the equipment items described in our response are, in fact, installed in the Donald C. Cook Nuclear Plant and are the same as the items for which qualification data exists, is based on a comprehensive equipment identification and control program that was and is used throughout the engineering, design, procurement, installation and checkout of the plant.

This program provides for the assignment of a unique identification number (plant equipment number) to each item during the design phase. This identification is shown on design drawings, procurement documents, the items themselves when shipped from the vendor, receipt inspection documents, material issue records, installation inspection records and checkout and test records.

Qualification documentation is checked to verify that the qualification does meet requirements set forth in the engineering specifications for the item, and that the qualification is applicable to the item furnished.

Verification that the item called out in design drawings was, in fact, installed is obtained by two independent sets of inspections. The first are the QC inspections conducted during the installation phase to verify conformance to design documents. The second are the inspections conducted prior to and during the checkout and test phase again to verify conformance to design documents and equipment operability.

The list of items contained in our response was developed utilizing verified design documents and installation inspection records.

During the preparation of responses to earlier NRC requests, we have performed additional in-plant inspections on certain items to verify their existence and the acceptability of qualification documentation. In each case, no non-conformances were found.

#### RESPONSE TO ITEM NO. 3

The limit switches which provide position indication of the air-operated safety-related valves inside containment are not needed to activate any Engineered Safety Features or for long-term post-accident monitoring. For this reason, these limit switches are not considered part of the safeguards systems and have not been subjected to environmental testing. The limit switches for the air-operated containment isolation valves inside the containment are Namco Controls Models D2400 and SL4. Neither of these models was identified in IE Bulletins 78-04 or 79-01. The Plant equipment numbers for these valves are VCR-11, 21, 101, 102, 103, 104, 105, 106 and 107.

Limit switches for safety-related motor-operated valves inside the containment are part of the valve operators and are qualified under the same test reports as the motors and valve operators themselves. No separate model or equipment numbers are assigned to these limit switches. The test reports were identified in the AEP:NRC:00153 submittal.

#### RESPONSE TO ITEM NO. 4

We have responded to IE Bulletin 79-01A in our submittal AEP:NRC:00153A dated September 7, 1979.

#### RESPONSE TO ITEM NO. 5

Attachment A to this letter is a revision to Attachment A to the AEP:NRC:00153 submittal. This revision includes the replacement of the phrase "long term" in each case with a specific post-accident time period during which the equipment described is assumed to be needed for operation with respect to its safety-related function. The time period information shown does not necessarily reflect the accident scenario timing but was specified according to the additional consideration that cables, terminations, splices and similar components should not be the limiting devices in the operation of safety-related circuits.

Very truly yours,



F. N. Bien  
Vice President

FNB:em  
attachments

cc: (attached)

Mr. J. G. Keppler, Director

-4-

AEP:NRC:00277

cc: Norman C. Moseley - NRC  
R. C. Callen  
G. Charnoff  
D. V. Shaller - Bridgman  
R. S. Hunter  
R. W. Jurgensen

DONALD C. COOK NUCLEAR PLANT

UNITS NO. 1 & 2

ATTACHMENT A

AEP:NRC:00277

PLANT NAME: Donald C. Cook Nuclear Plant Unit 1

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
1	High Voltage	1 Year				Separate	3	
	Electrical Penetrations		Temp. (°F)	260	346 °F			
			Press. (psia)	35.5	122			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	100			
			Chem.	2000 ppmB	1.2% boric acid 2000 ppmB			
2	Electrical	1 Year				Separate		
	Penetrations		Temp. (°F)	260	340		1,3	
			Press. (psia)	35.5	116			
			Rel. Hum.	100	100%			
			Radiation (Mrad)	60	100			
			Chem.	2000 ppmB	2000 ppmB			
3	Power Cable -	1 Year				Simul.	5	
	Anaconda Wire		Temp. (°F)	260	340			
	and Cable		Press. (psia)	35.5	119.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	200			
			Chem.	2000 ppmB	3000 ppmB ph 9.5			
4	Power Cable -	1 Year				Simul.	6	
	Okonite Corp.		Temp. (°F)	260	346			
			Press. (psia)	35.5	127.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	200			
			Chem.	2000 ppmB	2000 ppmB ph 9-11			

This list is a compilation of items by component.  
Do not list the same type of component more than once.  
Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

SHEET 1 OF 19

ATTACHMENT A

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
5	Power Cable - Kerite Co.	6 months	Temp. (°F)	260	325	Seq.	7	16 month exposure to accident environment
			Press. (psia)	35.5	96.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad/h)	120 <sup>1</sup>	120			
			Chem.	2000ppmB	2000 ppmB ph 9.5			
6	Control Cable - Continental Wire and Cable Co.	1 Year	Temp. (°F)	260	315	Seq.	8	
			Press. (psia)	35.5	121.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad/h)	150	150			
			Chem.	2000 ppmB	2500 ppmB ph 9-10			
7	Control Cable - General Electric Co.	1 Year	Temp. (°F)	260	315	Seq.	8	
			Press. (psia)	35.5	121.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad/h)	150	150			
			Chem.	2000ppmB	2500 ppmB ph 9-10			
8	Instrument Cable - Raychem Corp.	1 Year	Temp. (°F)	260	357	Simul	9	
			Press. (psia)	35.5	81.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad/h)	150	200			
			Chem.	2000ppmB	3000 ppmB ph 9.5-11			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
13	Power Cable Terminations	1 Year				Seq.	13	
	stranded Kanton		Temp. (°F)	260	340			
	spliced to stranded		Press. (psia)	35.5	118			
	Hypalon		Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	150			
			Chem.	not req'd	2500 ppm ph 9.5			
14	Power Cable Terminations	1 Year				Seq.	13	
	at motors and		Temp. (°F)	260	340			
	Hydrogen Recombiner		Press. (psia)	35.5	118			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppmB	2500 ppm ph 9.5			
15	Control Cable	1 Year				Seq.	13	
	Terminations -		Temp. (°F)	260	340			
	Solid Kapton Spliced		Press. (psia)	35.5	118			
	to Stranded Kapton		Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	60			
			Chem.	not req'd	2500 ppmB ph 9.5			
16	Control Cable	1 Year				Separate	14.8	
	Terminations -		Temp. (°F)	260	345			
	Stranded Kapton		Press. (psia)	35.5	84.7			
	spliced to solid		Rel. Hum.	100%	100%			
	XL polyethylene		Radiation (Mrad)	60	150			
			Chem.	not req'd	2500 ppmB ph 10.5			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.





ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
17	Control Cable	1 Year				Separate	15, 8	
	Terminations -		Temp. (°F)	260	340			
	Stranded Kapton spliced		Press. (psia)	35.5	120			
	to stranded EPR		Rel. Hum.	100%	100%			
	Hypalon		Radiation (Mrad)	60	150			
			Chem.	not rec'd	2500 ppmB ph 2-10			
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation (Mrad)					
			Chem.					
18	Control Cable	1 Year				Separate	14, 8	
	Terminations -		Temp. (°F)	260	345			
	at terminal boxes		Press. (psia)	35.5	84.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppmB	2500 ppmB ph 2-10.5			
19	Instrument Cable	1 Year				Separate	14, 9, 8, 10, 11, 12	
	Terminations -		Temp. (°F)	260	345			
	Barton Instrument		Press. (psia)	35.5	84.7			
	Connections		Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppmB	2500 ppmB ph 2-10.5			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
20	Instrument Cable	1 year				Separate	14, 9, 8, 10, 11, 12	
	Terminations -		Temp. (°F)	260	345			
	RTD Connections		Press. (psia)	35.5	84.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppmB	2500 ppmB			
21	Instrument Cable	1 Year				Seg.	13	
	Terminations -		Temp. (°F)	260	340			
	<u>at Electrical Penetrations</u>		Press. (psia)	35.5	113			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	150			
			Chem.	not req'd	2500 ppmB			
22	Instrument Cable	1 Year				Separate	8, 9, 10, 11, 12, 14, 18	
	Terminations -		Temp. (°F)	260	340			19
	spliced to Electrical		Press. (psia)	35.5	84.7			
	Penetrations		Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	150			
			Chem.	2000 ppmB	2500 ppmB			
23	(Deleted)	(Deleted)		(Deleted)		(Deleted)		
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation (Mrad)					
			Chem.					

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

SHEET 6 OF 19

ATTACHMENT A

PLANT NAME: Donald C. Cook Nuclear Plant Unit 1.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
24	Hydrogen Recombiners	3 Months				Separate	20	
			Temp. (°F)	250	310			
			Press. (psia)	29.1	77			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	85	200			
			Chem.	not req'd	2500 ppmB ph 12			
25	Fan Motors	1 Year				Seq.	21	
			Temp. (°F)	250	320			
			Press. (psia)	29.1	89.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	200			
			Chem.	not req'd	2500 ppmB ph 2.5			
26	Limitorque Valve	28 sec				Simul.	22	
	Operator Motors -		Temp. (°F)	260	330			
	SMB-00 and motor		Press. (psia)	35.5	104.7			
	control cable termina-		Rel. Hum.	100%	100%			
	tions		Radiation	----	----			
			Chem.	2000 ppmB	2500 ppmB ph 2.57			
27	Limitorque Valve	10 min				Seq.	24	
	Operator Motors -		Temp. (°F)	250	250			
	SMB-000 and motor		Press. (psia)	29.1	39.7			
	control cable termina-		Rel. Hum.	100%	100%			
	tions		Radiation (Mrad)	3.9	204			
			Chem.	not req'd	not req'd			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ, SIMUL, ONGOING, or OTHER for entries into this space.

SHEET 7 OF 19

ATTACHMENT A

PLANT NAME: Donald C. Cook Nuclear Plant Unit 1

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
28	Limitorque Valve	1 day				See.	16	
	Operator Motors -		Temp. (°F)	260	315			
	SMB-1 and motor control		Press. (psia)	35.5	84.7			
	cable terminations		Rel. Hum.	100%	100%			
			Radiation (mrad)	26	204			
			Chem.	2000 ppm B	IEEE 382-272			
29	Limitorque Valve	1 day				Separate	22 23	
	Operator Motors -		Temp. (°F)	260	310			
	SMB-1, SMB-2 and motor		Press. (psia)	35.5	119.7			
	control cable termina-		Rel. Hum.	100%	100%			
	tions		Radiation (mrad)	26	204			
			Chem.	2000 ppmB	2600 ppm B			
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation					
			Chem.					
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation					
			Chem.					

This list is a compilation of items by component.  
Do not list the same type of component more than once.  
Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

SHEET 8 OF 19

ATTACHMENT A

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
30	High Voltage Electrical	1 Year				Separate	3	
	Penetrations		Temp. (°F)	328.2	346.			
			Press. (psia)	29.1	122			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	100			
			Chem.	2000 ppm B	1.2% boric acid 2098 ppm B			
31	Electrical Penetrations	1 Year				Separate	1,3	
			Temp. (°F)	328.2	340			
			Press. (psia)	29.1	116			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	100			
			Chem.	2000 ppm B	2098 ppm B			
32	Power Cable -	1 Year				Simul.	5	
	Anaconda Wire and Cable		Temp. (°F)	328.2	340			
			Press. (psia)	29.1	119.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	200			
			Chem.	2000 ppm B	3000 ppm B pH 9.5			
33	Power Cable -	6 Months				Seq.	7	'6 month
	Kerite Co.		Temp. (°F)	328.2	325			exposure in
			Press. (psia)	29.1	96.7			accident
			Rel. Hum.	100%	100%			environment
			Radiation(Mrad)	120	120			
			Chem.	2000 ppm B	2500 ppm B pH 9.5			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
34	Power Cable - Essex International	1 year	Temp. (°F)	328.2	346	Simul.	25	
			Press. (psia)	29.1	127.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	200			
			Chem.	2000 ppm B	3000 ppm B pH 9-11			
35	Control Cable - Continental Wire and Cable Company	1 year	Temp. (°F)	328.2	345	Seq.	8	
			Press. (psia)	29.1	121.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	150			
			Chem.	2000 ppm B	2500 ppm B pH 9-10			
36	Instrument Cable - Raychem Corp.	1 year	Temp. (°F)	328.2	357	Simul.	9	
			Press. (psia)	29.1	84.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	200			
			Chem.	2000 ppm B	3000 ppm B pH 9.5-11			
37	Instrument Cable - Samuel Moore & Co.	1 year	Temp. (°F)	328.2	340	Separate	10,11	
			Press. (psia)	29.1	119.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	200			
			Chem.	2000 ppm B	3000 ppm B pH 9-11			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.





PLANT NAME: Donald C. Cook Nuclear Plant Unit 2.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
38	Instrument Cable -	1 year				Seq.	12	
	Cerro Wire and Cable Co.		Temp. (°F)	328.2	346			
			Press. (psia)	29.1	127.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	200			
			Chem.	2000 ppm B	3000 ppm B pH 9-11			
39	Power Cable Terminations -	1 year				Seq.	13	
	Solid Kapton Spliced to		Temp. (°F)	328.2	340			
	Stranded Kapton		Press. (psia)	29.1	118			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	60			
			Chem.	Not Req'd	2500 ppm B pH 9.5			
40	Power Cable Terminations -	1 year				Seq.	13	
	Stranded Kapton Spliced to,		Temp. (°F)	328.2	340			
	Stranded Hypalon		Press. (psia)	29.1	118			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	60	150			
			Chem.	Not Req'd	2500 ppm B pH 9.5			
41	Power Cable Terminations -	1 year				Seq.	13	
	At Motors and Hydrogen		Temp. (°F)	250	340			
	Recombiner		Press. (psia)	29.1	118			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppm B	2500 ppm B pH 9.5			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL, ONGOING, or OTHER for entries into this space.

SHEET 11 OF 19

ATTACHMENT A

PLANT NAME: Donald C. Cook Nuclear Plant Unit 2..

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
42	Control Cable Terminations- Solid Kapton Spliced to Stranded Kapton	1 Year	Temp. (°F)	328.2	340	Seq.	13	
			Press. (psia)	29.1	118			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	60			
			Chem.	Not Req'd	2500 ppm B pH 9.5			
43	Control Cable Terminations- Stranded Kapton Spliced to Solid XLpolyethylene	1 Year	Temp. (°F)	328.2	345	Separate	14,8	
			Press. (psia)	29.1	84.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	150			
			Chem.	Not Req'd	2500 ppm B pH 9-10			
44	Control Cable Terminations- Stranded Kapton Spliced to Stranded EPR - Hypalon	1 Year	Temp. (°F)	328.2	340	Separate	15,8	
			Press. (psia)	29.1	120			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	150			
			Chem.	Not Req'd	2500 ppm B pH 9-10			
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation(Mrad)					
			Chem.					

This list is a compilation of items by component.  
Do not list the same type of component more than once.  
Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL, ONGOING, or OTHER for entries into this space.

SHEET 12 OF 19

ATTACHMENT A

PLANT NAME: Donald C. Cook Nuclear Plant Unit 2.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
45	Control Cable Terminations- At Terminal Boxes	1 Year				Separate	14, 8	
			Temp. (°F)	328.2	345			
			Press. (psia)	29.1	84.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppm B	pH 9-10.5 2500 ppm B			
46	(Deleted)	(deleted)	(Deleted)			(Deleted)		
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation (Mrad)					
			Chem.					
47	Instrument Cable Terminations - Barton Instrument Connections	1 Year				Separate	8, 9, 10, 11, 12, 14	
			Temp. (°F)	328.2	345			
			Press. (psia)	29.1	84.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppm B	pH 9-10.5 2500 ppm B			
48	Instrument Cable Terminations - RTD Connections	1 Year				Separate	8, 9, 10, 11, 12, 14	
			Temp. (°F)	328.2	345			
			Press. (psia)	29.1	84.7			
			Rel. Hum.	100%	100%			
			Radiation (Mrad)	150	150			
			Chem.	2000 ppm B	pH 9-10.5 2500 ppm B			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

SHEET 13 OF 19

ATTACHMENT A

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
49	Instrument Cable	1 Year				Seq.	13	
	Terminations -		Temp. (°F)	328.2	340			
	At Electrical Penetrations		Press. (psia)	29.1	118			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	150			
			Chem.	Not Req'd	2500 ppm B pH 9.5			
50	Instrument Cable	1 Year				Separate	8,9,10	11,12,14,15
	Terminations -		Temp. (°F) --	328.2	340			
	Splices to Electrical		Press. (psia)	29.1	84.7			
	Penetrations		Rel. Hum.	100%	100%			
			Radiation(Mrad)	60	150			
			Chem.	2000 ppm B	2500 ppm B pH 9-10			
51	Hydrogen Recombiners	3 Months				Separate	20	
			Temp. (°F)	250	310			
			Press. (psia)	29.1	77			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	85	200			
			Chem.	Not Req'd	2500 ppm B pH 10			
52	Fan Motors	1 Year				Seq.	21	
			Temp. (°F)	250	320			
			Press. (psia)	29.1	89.7			
			Rel. Hum.	100%	100%			
			Radiation(Mrad)	150	200			
			Chem.	Not Req'd	2500 ppm B pH 9.5			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
53	Limitorque	28 sec.				Simul.	22	
	Valve Operator Motors -		Temp. (°F)	328.2	330			
	SMB-00 and motor control		Press. (psia)	29.1	104.7			
	cable terminations		Rel. Hum.	100%	100%			
			Radiation	---	----			
			Chem.	2000 ppm B	2600 ppm B pH 7.67			
54	Limitorque	10 min.				Seq.	24	
	Valve Operator Motors -		Temp. (°F)	250	250			
	SMB-000 and motor control		Press. (psia)	29.1	39.7			
	cable terminations		Rel. Hum.	100%	100%			
			Radiation(Mrad)	3.9	204			
			Chem.	Not Req'd	Not Req'd			
55	Limitorque	1 day				Seq.	16	
	Valve Operator Motors -		Temp. (°F)	250	315			
	SMB-1 and motor control		Press. (psia)	29.1	84.7			
	cable terminations		Rel. Hum.	100%	100%			
			Radiation(Mrad)	26	204			
			Chem.	2000 ppm B	IEEE 382 - 1972			
56	Limitorque	1 day				Separate	23, 22	
	Valve Operator Motors -		Temp. (°F)	328.2	340			
	SMB-1, SMB-2 and motor		Press. (psia)	29.1	119.7			
	control cable terminations		Rel. Hum.	100%	100%			
			Radiation(Mrad)	26	204			
			Chem.	2000 ppm B	2622 ppm B			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
57	Resistance Temperature	30 Sec.	LOCA	Short term				
	Detectors - Rosemount Inc.		Temp. (°F)	250/160	320/220	SEQ.	28	
	Models 176 KF & 176 KS		Press. (psia)	29.1/14.4	89.7/17.2			
	H. E. Sostman & Co.		Rel. Hum.	100%	100%			
	Models 11834B & 11901B		Radiation (Mrad)	.07	100			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH			
58	Resistance Temperature		MSLB	Unit 1/Unit 2				
	Detectors - Rosemount Inc.	30 sec /	Temp. (°F)	260/328.2	330	SEQ.	28	
	Models 176 KF & 176 KS	2 Weeks	Press. (psia)	35.5/29.1	≥ 89.7			
	H. E. Sostman & Co.		Rel. Hum.	100%	100%			
	Models 11834B & 11901B		Radiation (Mrad)	.04 / < .6	100			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH			
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation					
			Chem.					
			Temp. (°F)					
			Press. (psia)					
			Rel. Hum.					
			Radiation					
			Chem.					

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

ITEM	EQUIPMENT DESCRIPTION	TIME REQ'D.	ENVIRONMENT (LOCATION)			QUAL. METHOD*	DOC. REF.**	REMARKS
			PARAMETER	SPEC.	QUAL.			
59	ITT Barton Pressure and	Short	LOCA					
	Differential Pressure	Term	Temp. (°F)	250	320/250	SEQ/SEP	30	
	Transmitters	( 1 sec)	Press. (psia)	29.1	89.7/14.4			
	Models 763 & 764		Rel. Hum.	100%	100%/0%			
			Radiation (Mrad)	.07	50/2.5 per hour			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH	/0		
60	ITT Barton Pressure and		LOCA					
	Differential Pressure		Temp. (°F)	160	320	SEQ.	30	
	Transmitters	4 months	Press. (psia)	14.4	89.7			
	Models 763 & 764		Rel. Hum.	100%	100%			
			Radiation (Mrads)	40	50			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH			
61	ITT Barton Pressure and	Short	MSLB Unit 1 /Unit 2					
	Differential Pressure	Term	Temp. (°F)	260/328.2	360	SEQ.	30	
	Transmitters	( 1 sec)	Press. (psia)	35.5/29.1	89.7			
	Models 763 & 764		Rel. Hum.	100%/100%	100%			
			Radiation (Mrads)	.04/.04	50			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH			
62	ITT Barton Pressure and		MSLB Unit 1/Unit 2					
	Differential Pressure		Temp. (°F)	260/328.2	360	SEQ.	30	
	Transmitters	4 months	Press. (psia)	35.5/29.1	89.7			
	Models 763 & 764		Rel. Hum.	100%/100%	100%			
			Radiation (Mrad)	<.6/<.6	50			
			Chem.	1.14% boric acid .15% NaOH (nom)	1.14 % boric acid .17% NaOH			

This list is a compilation of items by component.

Do not list the same type of component more than once.

Use limiting environment where more than one applies.

\* Use ANAL, TEST, SEQ., SIMUL., ONGOING, or OTHER for entries into this space.

Document References Cited In Attachment A

1. Conax Corp. Test Report IPS-234
2. Conax Corp. Test Report IPS-62.
3. Conax Corp. Test Report IPS-137.
4. Conax Corp. Analysis Report IPS-324.
5. FIRL Test Report F-C3341.
6. FIRL Test Report F-C3694.
7. Kerite Co. Test Report 75IPCEA-27-P.
8. Conax Corp. Test Report IPS-348.
9. FIRL Test Report F-C4033-1.
10. FIRL Test Report F-C3683.
11. Isomedix Corp. Test Report of May, 1976.
12. Cerro Wire and Cable Test Report of May, 1976.
13. Westinghouse-Canada Test Report CWAPD-332.
14. FIRL Test Report F-C4033-3.
15. Westinghouse-Canada Test Report CWAPD-326.
16. Limitorque Corp. Test Lab. Project #600456.
17. Conax Corp. Test Report IPS-326.
18. Conax Corp. Test Report IPS-327.
19. Conax Corp. Test Report IPS-329.
20. Westinghouse Corp. Test Report WCAP-7709-L, Suppl. 2.
21. Westinghouse Corp. Test Report WCAP-7829.
22. Limitorque Corp. Test Report #600198.
23. Limitorque Corp. Test Report #600376A.
24. Limitorque Corp. Test Report #600461.
25. Isomedix Corp. Test Report of Nov. 1975.
26. Foxboro Test Report TE-1013.
27. Westinghouse Electric Corp. Communication NS-PLC-5023 dated 4/26/78 from T. M. Anderson - Westinghouse to E. G. Case - NRC.
28. Westinghouse Electric Corp. Test Report WCAP-9157
29. Automatic Switch Co. Report AQS 21678/TR
30. Westinghouse Electric Corp. Communication NS-TMA-1950.



GENERAL NOTES:

1. In situations where a qualification pressure was not explicitly stated and it was known that the test environment was steam, the saturation pressure of steam at the given test temperature was used.
2. All chemical concentrations noted as % are weight %.

DONALD C. COOK NUCLEAR PLANT

UNITS NO. 1 & 2

ATTACHMENT B

AEP:NRC:00277

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
1	CONTAINMENT ISOLATION	ELECTRICAL HIGH VOLTAGE (4 kV) CONTAINMENT PENE- TRATION	1-1P6, 1-1P7, 1-2P5, 1-2P6, 1-3P7, 1-3P8, 1-4P7, 1-4P8	CONAX CORPORATION	EP-1
2	ALL	ELECTRICAL LOW VOLTAGE (600 V AND BELOW) CONTAINMENT PENETRATION	1-1P1, 1-1P2, 1-1P3, 1-1P4, 1-2P2, 1-2P3, 1-4P2 1-2P4, 1-2P7, 1-2P8 1-3P1, 1-3P2, 1-3P3, 1-3P6, 1-4P3, 1-4P4, 1-4P5, 1-4P6, 1-4I5, 1-4I7, 1-4I8, 1-4C2, 1-4C3, 1-4C1, 1-4I6, 1-1C4, 1-1C1, 1-1C3, 1-1I5, 1-1I8, 1-1I7, 1-1I6, 1-2I8, 1-2I5, 1-2I6, 1-2C4, 1-2C3, 1-2C1, 1-2I7, 1-3I8, 1-3I6, 1-3I7, 1-3C1, 1-3C2, 1-3C4, 1-3I5	CONAX CORPORATION	EP-2 through EP-13
3	ALL	POWER CABLE	# 347	ANACONDA	3TC #2 AWG CU
4	ALL	POWER CABLE	# 399	OKONITE	1/C #2 AWG CU
5	ALL	POWER CABLE	# 3116	KERITE	3TC #10 AWG CU
6	ALL	CONTROL CABLE	# 3092	CONTINENTAL	4/C # 19/12 AWG STRAINED CU

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
6	ALL	CONTROL CABLE	#3093	CONTINENTAL	7/C #19/12 AWG STRANDED CU
6	ALL	CONTROL CABLE	#3119	CONTINENTAL	2/C #12 AWG SOLID CU
6	ALL	CONTROL CABLE	#3120	CONTINENTAL	4/C #12 AWG SOLID CU
6	ALL	CONTROL CABLE	#3121	CONTINENTAL	7/C #12 AWG SOLID CU
6	ALL	CONTROL CABLE	#3122	CONTINENTAL	12/C #12 AWG SOLID CU
6	ALL	CONTROL CABLE	#3123	CONTINENTAL	15/C #12 AWG SOLID CU
6	ALL	CONTROL CABLE	#3124	CONTINENTAL	4/C #7/18 AWG
6	ALL	CONTROL CABLE	#3125	CONTINENTAL	7/C #7/18 AWG STRANDED CU
7	ALL	CONTROL CABLE	#3119	GENERAL ELECTRIC	2/C #12 AWG SOLID CU

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
7	ALL	CONTROL CABLE	# 3120	GENERAL ELECTRIC	4/C # 12 AWG SOLID CU
7	ALL	CONTROL CABLE	# 3121	GENERAL ELECTRIC	7/C # 12 AWG SOLID CU
7	ALL	CONTROL CABLE	# 3122	GENERAL ELECTRIC	12/C # 12 AWG SOLID CU
7	ALL	CONTROL CABLE	# 3123	GENERAL ELECTRIC	15/C # 12 AWG SOLID CU
8	ALL	INSTRUMENT CABLE	# 3073	RAYCHEM	RG-11/U TRIAXIAL YELLOW
8	ALL	INSTRUMENT CABLE	# 3074	RAYCHEM	RG-11/U TRIAXIAL WHITE
8	ALL	INSTRUMENT CABLE	# 3076	RAYCHEM	RG-11/U TRIAXIAL BLACK
8	ALL	INSTRUMENT CABLE	# 3111	RAYCHEM	RG-11/U TRIAXIAL ORANGE
8	ALL	INSTRUMENT CABLE	# 3112	RAYCHEM	RG-11/U TRIAXIAL BLUE

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
9	ALL	INSTRUMENT CABLE	# 3075	BOSTON INSULATED WIRE CO.	# 16 AWG TSP
9	ALL	INSTRUMENT CABLE	# 3076	BOSTON INSULATED WIRE CO.	RG-11/U TRIXIAL
10	ALL	INSTRUMENT CABLE	# 3075	SAMUEL MOORE & CO.	#16 AWG TSP
10	ALL	INSTRUMENT CABLE	# 3077	SAMUEL MOORE & CO.	#16 AWG TSQ
11 <del>11</del>	ALL	INSTRUMENT CABLE	# 3077	CERRO WIRE & CABLE CO.	#16 AWG TSQ
12	ALL	POWER CABLE TERMINATIONS	N/A	N/A	SOLID KAPTON SPliced TO STRANDED KAPTON
13	ALL	POWER CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO STRANDED HYPALON
14	ALL	POWER CABLE TERMINATIONS AT VALVE MOTORS & HYDROGEN RECOMBINERS	N/A	N/A	N/A
15	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	SOLID KAPTON SPliced TO STRANDED KAPTON

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
16	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO SOLID XL POLYETHYLENE
17	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO STRANDED EPR HYPALON
18	ALL	CONTROL CABLE TERMINATIONS AT TERMINAL BOXES	N/A	N/A	N/A
19	ALL	INSTRUMENT CABLE TERMINATIONS AT BARTON INSTRUMENTS	N/A	N/A	N/A
20	ALL	INSTRUMENT CABLE TERMINATIONS AT RTD'S	N/A	N/A	N/A
21	ALL	INSTRUMENT CABLE TERMINATIONS AT ELECTRICAL PENETRATIONS	N/A	N/A	N/A
22	ALL	INSTRUMENT CABLE SPlices TO ELECTRICAL PENETRATIONS	N/A	N/A	N/A

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
23	(Deleted)	(Deleted)	(Deleted)	(Deleted)	(Deleted)

\*See attached list for key



Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
24	HYDROGEN RE- COMBINERS	REDUCE HYDROGEN CONCENTRATION	1-HR1, 1-HR2	WESTINGHOUSE	
25	CONTAINMENT AIR RECIRCULATION FAN MOTORS	REDUCE HYDROGEN CONCENTRATION AND RECIRCULATE CONTAIN- MENT AIR	1-CEQ1, 1-CEQ2		PHY2050-1 PHY2050-2
26	BORON INJECTION	MOTOR OPERATED VALVE	IMO-51	LIMITORQUE	SMB-00
26	BORON INJECTION	MOTOR OPERATED VALVE	IMO-52	LIMITORQUE	SMB-00
26	BORON INJECTION	MOTOR OPERATED VALVE	IMO-53	LIMITORQUE	SMB-00
26	BORON INJECTION	MOTOR OPERATED VALVE	IMO-54	LIMITORQUE	SMB-00
26	CONTAINMENT ISOLATION	MOTOR OPERATED VALVE	QCM-250	LIMITORQUE	SMB-00
27	CONTAINMENT HYDROGEN CON- TROL AND AIR RECIRCULATION	MOTOR OPERATED SUCTION DAMPER	VMO-101	LIMITORQUE	SMB-000
27	CONTAINMENT HYDROGEN CON- TROL AND AIR RECIRCULATION	MOTOR OPERATED SUCTION DAMPER	VMP-102	LIMITORQUE	SMB-000

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
28	SI	MOTOR OPERATED VALVE	IMO-315	LIMITORQUE	SMB-1
28	SI	MOTOR OPERATED VALVE	IMO-316	LIMITORQUE	SMB-1
28	SI	MOTOR OPERATED VALVE	IMO-325	LIMITORQUE	SMB-1
28	SI	MOTOR OPERATED VALVE	IMO-326	LIMITORQUE	SMB-1
29	RHR	MOTOR OPERATED VALVE	IMO-128	LIMITORQUE	SMB-1
29	CONTAINMENT ISOLATION	MOTOR OPERATED VALVE	ICM-129	LIMITORQUE	SMB-1
29	CONTAINMENT ISOLATION	MOTOR OPERATED VALVE	ICM-111	LIMITORQUE	SMB-2
29	RHR AND CONTAIN- MENT ISOLATION	MOTOR OPERATED VALVE	ICM-305	LIMITORQUE	SMB-2
29	RHR AND CONTAIN- MENT ISOLATION	MOTOR OPERATED VALVE	ICM-306	LIMITORQUE	SMB-2

\*See attached list for key



Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
30	CONTAINMENT ISOLATION	ELECTRICAL HIGH VOLTAGE (4kV) CONTAINMENT PENETRATIONS	2-1P6, 2-1P7, 2-2P5, 2-2P6, 2-3P7, 2-3P8, 2-4P7, 2-4P8	CONAX CORPORATION	EP-1
31	ALL	ELECTRICAL LOW VOL- TAGE (600V AND BELOW ) CONTAINMENT PENETRATIONS	2-1P1, 2-1P2, 2-1P3, 2-1P4, 2-2P2, 2-2P3, 2-2P4, 2-2P7, 2-2P8, 2-3P1, 2-3P2, 2-3P3, 2-3P6, 2-4P2, 2-4P3, 2-4P4, 2-4P5, 2-4P6, 2-4C1, 2-4C2, 2-4C3, 2-1C1, 2-1C3, 2-1C4, 2-4I5, 2-4I6, 2-4I7, 2-4I8, 2-1I5, 2-1I6, 2-1I8, 2-3I8, 2-3I7, 2-3I6, 2-3I5, 2-2I8, 2-2I7, 2-2I6, 2-2I5, 2-3C4, 2-3C2, 2-3C1, 2-2C4, 2-2C3, 2-2C1, 2-1I7	CONAX CORPORATION	EP-2 through EP-13
32	ALL	POWER CABLE	#347	ANACONDA	3TC #2 AWG CU
33	ALL	POWER CABLE	#3116	KERITE	3TC #10 AWG CU
34	ALL	POWER CABLE	#3116	ESSEX	3 TC #10 AWG CU

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
35	ALL	CONTROL CABLE	# 3092	CONTINENTAL	4/C #19/12 AWG STRANDED CU
35	ALL	CONTROL CABLE	# 3093	CONTINENTAL	7/C #19/12 AWG STRANDED CU
35	ALL	CONTROL CABLE	# 3119	CONTINENTAL	2/C #12 AWG SOLID CU
35	ALL	CONTROL CABLE	# 3120	CONTINENTAL	4/C #12 AWG SOLID CU
35	ALL	CONTROL CABLE	# 3121	CONTINENTAL	7/C #12 AWG SOLID CU
35	ALL	CONTROL CABLE	# 3122	CONTINENTAL	12/C #12 AWG SOLID CU
35	ALL	CONTROL CABLE	# 3123	CONTINENTAL	15/C #12 AWG SOLID CU
35	ALL	CONTROL CABLE	# 3124	CONTINENTAL	4/C #7/18 AWG STRANDED CU
35	ALL	CONTROL CABLE	# 3125	CONTINENTAL	7/C #7/18 AWG STRANDED CU
36	ALL	INSTRUMENT CABLE	# 3073	RAYCHEM	RG-11/U TRIAXIAL YELLOW
36	ALL	INSTRUMENT CABLE	# 3074	RAYCHEM	RG-11/U TRIAXIAL WHITE
36	ALL	INSTRUMENT CABLE	# 3076	RAYCHEM	RG-11/U TRIAXIAL BLACK

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
36	ALL	INSTRUMENT CABLE	# 3111	RAYCHEM	RG-11/U TRIAXIAL ORANGE
36	ALL	INSTRUMENT CABLE	# 3112	RAYCHEM	RG-11/U TRIAXIAL BLUE
37	ALL	INSTRUMENT CABLE	# 3075	SAMUEL MOORE & CO.	#16 AWG TSP
37	ALL	INSTRUMENT CABLE	# 3077	SAMUEL MOORE & CO.	#16 AWG TSQ
38	ALL	INSTRUMENT CABLE	# 3077	CERRO WIRE & CABLE CO.	#16 AWG TSQ
39	ALL	POWER CABLE TERMINATIONS	N/A	N/A	SOLID KAPTON SPLICED TO STRANDED KAPTON

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
40	ALL	POWER CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO STRANDED HYPALON
41	ALL	POWER CABLE TERMINATIONS AT VALVE MOTORS AND HYDROGEN RECOMBINERS	N/A	N/A	N/A
42	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	SOLID KAPTON SPliced TO STRANDED KAPTON
43	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO SOLID XL POLYETHYLENE
44	ALL	CONTROL CABLE TERMINATIONS	N/A	N/A	STRANDED KAPTON SPliced TO STRANDED EPR-HYPALON
45	ALL	CONTROL CABLE TERMINATIONS AT TERMINAL BOXES	N/A	N/A	N/A
46	(Deleted)	(Deleted)	(Deleted)	(Deleted)	(Deleted)
47	ALL	INSTRUMENT CABLE TERMINATIONS AT BARTON INSTRUMENTS	N/A	N/A	N/A

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
48	ALL	INSTRUMENT CABLE TERMINATIONS AT RTD's	N/A	N/A	N/A
49	ALL	INSTRUMENT CABLE TERMINATIONS AT ELECTRICAL PENETRATIONS	N/A	N/A	N/A
50	ALL	INSTRUMENT CABLE SPLICES TO ELECTRI- CAL PENETRATIONS	N/A	N/A	N/A
51	HYDROGEN RE- COMBINERS	REDUCE HYDROGEN CONCENTRATION	2-HR1, 2-HR2	WESTINGHOUSE	PHY2050-1
52	CONTAINMENT AIR RECIRCULATION FAN MOTORS	REDUCE HYDROGEN CONCENTRATION AND RECIRCULATE CON- TAINMENT AIR	2-CEQ1	WESTINGHOUSE	PHY2050-1
52	CONTAINMENT AIR RECIRCULATION FAN MOTORS	REDUCE HYDROGEN CONCENTRATION AND RECIRCULATE CON- TAINMENT AIR	2-CEQ2	WESTINGHOUSE	PHY2050-2

\*See attached list for key



Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
53	BORON INJECTION	MOTOR OPERATED VALVE	IMO-51	LIMITORQUE	SMB-00
53	BORON INJECTION	MOTOR OPERATED VALVE	IMO-52	LIMITORQUE	SMB-00
53	BORON INJECTION	MOTOR OPERATED VALVE	IMO-53	LIMITORQUE	SMB-00
53	BORON INJECTION	MOTOR OPERATED VALVE	IMO-54	LIMITORQUE	SMB-00
53	CONTAINMENT ISO- LATION	MOTOR OPERATED VALVE	QCM-250	LIMITORQUE	SMB-00
54	CONTAINMENT HYDROGEN CONTROL AND AIR RECIR- CULATION	MOTOR OPERATED SUCTION DAMPER	VMO-101	LIMITORQUE	SMB-000
54	CONTAINMENT HYDROGEN CONTROL AND AIR RECIR - CULATION	MOTOR OPERATED SUCTION DAMPER	VMO-102	LIMITORQUE	SMB-000

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
55	SI	MOTOR OPERATED VALVE	IMO-315	LIMITORQUE	SMB-1
55	SI	MOTOR OPERATED VALVE	IMO-316	LIMITORQUE	SMB-1
55	SI	MOTOR OPERATED VALVE	IMO-325	LIMITORQUE	SMB-1
55	SI	MOTOR OPERATED VALVE	IMO-326	LIMITORQUE	SMB-1
56	RHR	MOTOR OPERATED VALVE	IMO-128	LIMITORQUE	SMB-1
56	CONTAINMENT ISOLATION	MOTOR OPERATED VALVE	ICM-129	LIMITORQUE	SMB-1
56	CONTAINMENT ISOLATION	MOTOR OPERATED VALVE	ICM-111	LIMITORQUE	SMB-2
56	RHR AND CONTAIN- MENT ISOLATION	MOTOR OPERATED VALVE	ICM-305	LIMITORQUE	SMB-2
56	RHR AND CONTAIN- MENT ISOLATION	MOTOR OPERATED VALVE	ICM-306	LIMITORQUE	SMB-2

\*See attached list for key

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
57 & 58	REACTOR COOLANT	NARROW RANGE RESISTANCE TEMPERATURE DETECTORS	NTP-110,**111, 120,** 121, 130,**131, 140,** 141, 210,** 211, 220,** 221, 230,** 231, 240,** 241	ROSEMOUNT INC. AND H.E. SOSTMAN & CO.	176 KF 118 34 B
57 & 58	REACTOR COOLANT	WIDE RANGE TEM- PERATURE DETECTORS	NTR-110, 120, 130, 140, 210, 220, 230, 240	ROSEMOUNT INC. AND H. E. SOSTMAN & CO.	176 KS 11901 B
59	REACTOR COOLANT	PRESSURIZER PRESSURE TRANS- MITTERS	NPP-151, 152, 153, NPS - 153	ITT BARTON	763
59	STEAM GENERATOR	STEAM GENERATOR NARROW RANGE LEVEL TRANSMITTERS	BLP-110, 111, 112, 120, 121, 122, 130, 131, 132, 140, 141, 142	ITT BARTON	764
60	REACTOR COOLANT	WIDE RANGE PRESSURE TRANS- MITTERS	NPS-121, 122	ITT BARTON	763
60	REACTOR COOLANT	PRESSURIZER LEVEL TRANSMITTERS	NLP-151, 152, 153	ITT BARTON	764

\*See attached list for key

\*\* In-place spares which perform no function.

Donald C. Cook Nuclear Plant

AEP:NRC:00153 Submittal Item No.	System(s)*	Component Function	Plant Equipment No.	Manufacturer	Model or Type
60	STEAM GENERATOR	STEAM GENERATOR NARROW RANGE LEVEL TRANSMITTERS	BLP-110, 111, 112, 120, 121, 122, 130, 131, 132, 140, 141, 142	ITT BARTON	764
61	REACTOR COOLANT	PRESSURIZER PRESSURE TRANS- MITTERS	NPP-151, 152, 153 NPS-153	ITT BARTON	763
61	REACTOR COOLANT	NARROW RANGE LEVEL TRANSMITTERS	BLP-110, 111, 112, 120, 121, 122, 130, 131, 132, 140, 141, 142	ITT BARTON	764
61	MAIN STEAM	MAIN STEAM FLOW CONTROLLERS	MFC-110, 111, 120, 121, 130, 131, 140, 141	ITT BARTON	764
62	REACTOR COOLANT	WIDE RANGE PRESSURE TRANS- MITTERS	NPS-121, 122	ITT BARTON	763
62	REACTOR COOLANT	PRESSURIZER LEVEL TRANSMITTERS	NLP-151, 152, 153	ITT BARTON	764
62	STEAM GENERATOR	STEAM GENERATOR NARROW RANGE LEVEL TRANSMITTERS	BLP-110, 111, 112, 120, 121, 122, 130, 131, 132, 140, 141, 142	ITT BARTON	764

\*See attached list for key

KEY TO APPENDIX B NOMENCLATURE  
UNDER THE SYSTEM(S) HEADING

ALL

The rationale for saying "All" under the system heading column is as follows:

1. Containment Electrical Penetrations serve all electrical equipment inside the containment.
2. Cable and cable terminations of different manufacturers and types listed have been used to serve the various safety related equipment inside the reactor containment, subject to the cables and the cable terminations being qualified for operation in a post-accident containment environment.

SI

Intermediate and low head safety injection

RHR

Residual heat removal, used as low head safety injection