ORGANIZATION: CORPORATE CONSULTING & DEVELOPMENT COMPANY, LTD
RESEARCH TRIANGLE PARK, NORTH CAROLINA

REPORT NO.: 99900511/85-02	INSPECTION DATE(S): 12/9-13/85	INSPECTION ON-SITE HOURS: 105

CORRESPONDENCE ADDRESS: Corporate Consulting
& Development Company, Ltd.
ATTN: Dr. J. R. Yow
President
P. O. Box 12728
Research Triangle Park, NC 27709
ORGANIZATIONAL CONTACT: Mr. Carson Blanton, Jr., QA Manager
TELEPHONE NUMBER: (919) 362-8800

PRINCIPAL PRODUCT: Engineering, consulting, and testing services.

NUCLEAR INDUSTRY ACTIVITY: Corporate Consulting and Development Company, Ltd. (CCL) provides engineering consulting and testing services to the nuclear industry for seismic analysis, testing, and nuclear environmental qualifications of equipment.

ASSIGNED INSPECTOR: Randolph N. Moist — 2-13-86
R. N. Moist, Equipment Qualification Inspection Section (EQIS) — Date

OTHER INSPECTOR(S): R. Lasky, EQIS
J. Grossman, Sandia National Laboratories

APPROVED BY: Uedis Potapovs — 2-18-86
U. Potapovs, Chief, EQIB, Vendor Program Branch — Date

INSPECTION BASES AND SCOPE:

A. BASES: Appendix B to 10 CFR Part 50 and 10 CFR Part 21.

B. SCOPE: This inspection consisted of: (1) a technical evaluation of equipment qualification (EQ) test activities for safety-related equipment, (2) witnessing of inprocess EQ testing, and (3) verfication of implementation of the quality assurance (QA) program.

PLANT SITE APPLICABILITY: James A. Fitzpatrick (50-333), Cooper (50-298), Calvert Cliffs 1 & 2 (50-317 and 50-318), Callaway (50-483).

A. Violations

None.

B. Nonconformances

None.

C. Unresolved Items

None.

D. Other Findings and Comments

1. Observation of a Loss of Coolant Accident (LOCA) test for Job Number (JN) 1953:

General Public Utilities Nuclear Corporation contracted with CCL to conduct EQ test (thermal aging, radiation and LOCA) of eight single conductor and eight multiconductor Rockbestos Firezone R cable specimens. The cable specimens are being qualified for use in the Oyster Creek and Three Mile Island Nuclear Generating Stations.

The NRC inspectors and Sandia consultant (NRC inspection team) reviewed data from all previous functional tests. Post radiation Insulation Resistance (IR) readings taken with a megohmmeter showed five single conductor cable specimens of less than 200,000 ohms and three single conductor cable specimens of zero ohms. CCL documented the results on a Record of Anomaly. CCLs customer requested that the eight single conductor cable specimens be included in the LOCA test, however it was stipulated that no electrical potential or current shall be applied and only electrical resistance between conductor and ground will be measured.

One attempt of performing the LOCA test was conducted on December 7, 1985 prior to the NRC inspection. However, due to steam leaking at the cable penetration, the pressure could not be maintained and the test was discontinued. Prior to the second attempt of the LOCA test the NRC inspection team reviewed Test Procedure (TP) 1953-4, revision 2, dated December 6, 1985, to verify that; (a) the TP was approved and reviewed by CCL, (b) test instrumentation was adequately described, (c) environmental

conditions were established and described (pressure and temperature profiles), (d) all prerequisites for the given test had been met and (e) the simulation test using dummy masses was completed.

The NRC inspection team reviewed the set-up to verify that; (a) instrumentation was calibrated, (b) accuracies of instrumentation were consistent with the requirements of the TP, (c) CCL Quality Assurance test monitor reviewed test set-up and signed off the test log and (d) functional tests were performed prior to the test. The NRC inspection team observed the initial ramp on December 9, 1985. The ramp time for temperature was specified to be on a best effort basis. During the test all multi conductor cable specimens were continuously energized at 600 vac and carried 5 amps ac. The NRC inspection team observed that pressure could not be maintained in the test chamber due to steam leaking at the cable penetration. CCLs customer requested that the test be continued through the three hour high temperature plateau and then terminated. The pre LOCA IR readings for three of the conductors of specimen no. 1953-012 were zero ohms and low readings were observed for several other specimens. IR readings taken twenty minutes prior to the end of the three hour high temperature plateau improved.

Prior to the third attempt of the LOCA test the NRC inspection team reviewed the set-up to verify that; (a) specimens were located in the chamber as specified in TP (single conductor cables were not included in this test) and (b) thermocouples and pressure transducers were located in chamber as specified in the TP.

The NRC inspection team observed the initial ramp on December 11, 1985 and made periodic checks during the remainder of the inspection. Cable specimen 1953-012 was isolated from the circuit during this ramp since pre-LOCA IR readings were low. Since the testing was not completed, the final test report and test results will be reviewed during a future inspection.

2. Observation of an accident simulation test for JN 1927.07

Patel Engineers (Patel) contracted with CCL to conduct an accident simulation test of four 8 point Buchanan 0241 terminal blocks (two pre-1970, two new) and four Raychem WCSF-N cable splices (1" overlap). The environmental qualification of the

terminal blocks was for Nebraska Public Power District's Cooper Nuclear Power Plant and the cable splices for New York Power Authority's James A. Fitzpatrick Nuclear Power Plant. The terminals and splices were tested under identical temperature and pressure profiles simultaneously in the same chamber.

Accident test requirements for the terminal blocks were defined in paragraph 3.7 of Patel Final Qualification Plan PEI-TR-860100-01 Rev. B dated November 18, 1985. Test requirements for the splices were defined in paragraph 3.4 of Patel Test Procedure PEI-TR-82-4-203 dated September 30, 1985.

The NRC inspection team reviewed the Qualification Plan & Test Procedure to verify that (a) environmental conditions were established (temperature and pressure profiles were identical) and (b) test acceptance criteria was established. Prior to the start of the test the NRC inspection team reviewed the test set-up to verify that instrumentation was calibrated.

The NRC inspection team observed the initial ramp on December 10, 1985. Steam leaks at the penetration were observed. The steam condensed directly on unsealed terminal connections outside the test chamber. The terminal connections were used to connect cabling between the test specimens and test instrumentation. CCL's customer requested that the test be terminated and that the unsealed terminal connections be coated with Patel Engineers' Conformal Coating (PECC) prior to retest. The NRC inspection team observed the inital ramp (second attempt) on December 10, 1985 and made periodic checks during the inspection. Early in the test the fuse on the new uncoated 600 vac terminal block circuit shorted out. On the second day of the test the 250 vdc power supply failed. The two terminal blocks were subsequently reenergized using 125 vdc. The old uncoated 125 vdc terminal blocks repeatedly had fuse failures with erratic leakage current readings. On the third day one Raychem splice powered at 600 vac failed causing the protective fuse to fail and was subsequently disconnected from the circuit. Leakage current measurements were for information purposes only. The final test report and test results will be reviewed by the NRC inspection team during a future inspection.

3. Technical Evaluation

The NRC inspection team performed a technical evaluation and review of previous testing conducted on two test programs for

qualification of safety related electrical equipment. The following table summarizes the test programs examined including equipment type, type of test, plant and documents reviewed.

Test Program	Equipment Type	Test	Plant	Documents Reviewed
1927.05-01	anti-wicking splices	accident simulation	Callaway	Patel Qualification plan, purchase order, Patel test procedure, test report
1927.05-02	electrical connectors	accident simulation	Generic	Patel test procedure, purchase order, test report

The NRC inspection team reviewed the EQ process prescribed in each test plan/procedure and reviewed test results. Each test plan/procedure and related engineering documents were examined for the following:

a) Adequate test instrumentation and their accuracies were described and used to meet the requirements of IEEE-STD-323/1974.

b) Equipment interfaces were addressed.

c) Test acceptance criteria were established as described in the test specification or in the design engineering documents, such as calculations and engineering letters to meet the requirements of IEEE-STD-323/1974.

d) Same equipment was used for all phases of testing and represented a standard production item.

e) Enviromental conditions were established and described (e.g., pressure and temperature profiles).

f) Test results were adequately reduced and evaluated against established acceptance criteria described in customer test specifications or purchase orders.

g) All prerequisites for the given tests as outlined in the test specification had been met.

h) Test equipment included a description of all materials, parts, and subcomponents.

i) Notice of Anomaly Records were properly documented.

j) Appropriate margins were applied.

With respect to (f), no acceptance criterion was established in Patel test procedures PEI-TR-841203-03 and PEI-TR-841203-04 for functional testing during the accident simulation. However, post accident functional tests did specify acceptance criteria in the two Patel test procedures, but discussions with CCL personnel indicated that post accident functionals were not required to be performed by CCL. Therefore the NRC inspection team was unable to evaluate the test results against established acceptance criteria. The NRC inspection team will evaluate the post accident functional test results during a future inspection at Patel Engineers.

INSPECTOR MOIST

SCOPE INSPECTION

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 85 - 02

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	PRO	PEI-TR-82-4-203	—	30SEP85	TEST PROCEDURE FOR RAYCHEM WCSF-N CABLE SPLICES (1" OVERLAP) USED IN THE JAMES A. FITZPATRICK NUCLEAR POWER PLANT.
2	PRO	PEI-TR-860100-01	B	18NOV85	TEST PROCEDURE FOR EQ OF BUCHANAN TERMINAL BLOCKS FOR NEBRASKA PUBLIC POWER DISTRICTS FOR USE IN COOPER NUCLEAR POWER PLANT.
3	PO	0002112	—	10-30-85	PURCHASE ORDER TO ISOMEDIX INC. FOR RADIATION SERVICES
4	PO	PC02925	—	19SEP85	P.O. BETWEEN GPU AND CCL FOR ENVIRONMENTAL TESTING OF FIREZONE R & BIW CABLES.
5	SPEC	SP 9000-51-0003	0	1-29-85	TECHNICAL SPECIFICATION FOR OYSTER CREEK NGS AND THREE MILE ISLAND NGS.
6	PRO	1953-1-1	2	12-6-85	TEST PROCEDURE FOR INSULATION RESISTANCE TESTING & DATA SHEETS
7	PRO	1953-1-2	1	11-18-85	TEST PROCEDURE FOR VOLTAGE WITHSTAND TEST
8	PRO	1953-2	-	10-16-85	TEST PROCEDURE FOR THERMAL AGING AND DATA SHEETS
9	PRO	1953-3	1	10-30-85	TEST PROCEDURE FOR RADIATION TEST

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
P.O. - PURCHASE ORDER
INM - INTERNAL MEMO

LTR - LETTER
RPT - REPORT

PERSONS CONTACTED

Company CCL

Dates 12-9-85

Docket/Report No. 99900511/85-02

Inspector MOIST, Randy

X Pre-Inspection Conference ____ Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR.	MANAGER, QA	CCL
DUNA HATMAKER	MGR. TEST OPERATIONS	CCL
RICHARD LASKY	EQ & TEST ENGINEER	NRC
JIM GROSSMAN	NRC CONSULTANT (ENGINEER)	SANDIA NATIONAL LABS

PERSONS CONTACTED

Company CCL

Dates 12/9-13/86

Docket/Report No. 99900511/85-02

Inspector RANDY MOIST

___ Pre-Inspection Conference X Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
RICHARD LASKY	EQ & TEST ENGINFER	USNRC
J. GROSSMAN	ENGINEER (NRC CONSULTANT)	SANDIA NATIONAL LABS.
CARSON BLANTON JR.	QA MANAGER	CCL
ROLAND YOW	PRES.	CCL
DUNA E. HATMAKER	SUPERVISOR	CCL

PERSONS CONTACTED

Company Corporate Consulting & Development Co

Dates 12/9-13/85

Docket/Report No. 99900511-85-02

Inspector Moist/Lasky

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR	MANAGER, QA	CCL
DON HATMAKER	MGR TEST OPERATIONS	CCL
JOHNNY JENKINS	GRP / DIVISION DIRECTOR	PATEL ENGINEERS
ROBERT MINADEO	PROJECT ENGINEER	PATEL ENGINEERS
PETE RUTTER	TEST TECHNICIAN	CCL
STEVEN JOBE	EQ PROJECT COORDINATOR	Nebraska Public Power District
J. Roland Yow	President	CCL
GARY HUGHES	VICE President operations	CCL
ALAN MINER	Senior Engineer	CCL
OSCAR Biddy	TEST TECHNICIAN	CCL

PERSONS CONTACTED

Company CORPORATE CONSULTING & Development Co. LTD. Dates 12/9-13/86

Docket/Report No. 99900511/85-02 Inspector GROSSMAN

Page 1 of ___

___ Pre-Inspection Conference ___ Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR.	MANAGER QA	CCL
DON HATMAKER	MGR. TEST OPERATIONS	CCL
JOHNNY JENKINS	GRP/DIVISION DIRECTOR	PATEL ENGINEERS
ROBERT MINADEO	PROJECT ENGINEER	PATEL ENGINEERS
PETE RUTTER	TEST TECHNICIAN	CCL
STEVEN JOBE	EQ PROJECT ENGINEER	NEBRASKA
ROLAND YOW	PRESIDENT	CCL
GARY HUGHES	V. P	CCL
OSCAR BIDDY	TEST TECHNICIAN	CCL

INSPECTOR J Grossman

SCOPE

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 83 - 02

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	SPEC	SP 9000-51-0003	0	7/20/83	TECHNICAL SPECIFICATION FOR OYSTER CREEK NGS AND THREE MILE ISLAND NGS.
2	PRO	1953-1-1	2	12/6/83	TEST PROCEDURE FOR INSULATION RESISTANCE TESTING & DATASHEETS
3	PRO	1953-1-2	1	11/6/83	TEST PROCEDURE FOR VOLTAGE WITHSTAND TEST
4	PRO	1953-2		11/14/83	TEST PROCEDURE FOR THERMAL AGING AND DATA SHEETS
5	PRO	1953-3	1	10/30/83	TEST PROCEDURE FOR RADIATION TEST.
6.	PRO	1953-4	2	12/6/83	TEST PROCEDURE FOR DESIGN BASIS ACCIDENT (DBA) SIMULATION ROCKBESTOS CABLES
7	PRO	PEI-JE 82-4-203		9/30/83	TEST PROCEDURE FOR RAYCHEM WCSF-N CABLE SPLICES (1" OVERLAP) USED IN THE JAMES A FITZPATRICK NUCLEAR POWER PLANT
8	PRO.	PEI-TR 860100-01	B	11/18/83	TEST PROCEDURE FOR EQ OF BUCHANAN TERMINAL BLOCKS FOR NEBRASKA PUBLIC POWER DISTRICTS FOR USE IN COOPER NUCLEAR POWER PLANT

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
[illegible]

LTR - LETTER

INSPECTOR J GRASSMAN

SCOPE

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 65 - 02

PAGE 2 OF 2

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
9	PRO	PEI-TR-641203-03	3	3/12/85	TEST PROCEDURE FOR PATEL ELECTRICAL CONNECTOR FOR USE IN VARIOUS NUCLEAR POWER PLANTS
10	PRO	PEI-TR 641203-04	4	3/20/85	TEST PROCEDURE FOR PATEL ANTI-WICKING SPLICE FOR USE IN VARIOUS NUCLEAR POWER PLANTS
11	RPT	1927.05-01		9/27/85	CERTIFICATION TEST REPORT FOR TWO WICK SEAL DESIGNS
12	RPT	1927.05-02		9/27/85	CERTIFICATION TEST REPORT FOR ELECTRICAL CONNECTORS
13	QP	PEI-TR 853000-01	B	6/14/85	FINAL QUALIFICATION PLAN FOR PATEL ANTI-WICKING SPLICE FOR USE IN CALLAWAY PLANT

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
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RPT - REPORT
QP - QUAL PLAN
___ - ___
___ - ___

INSPECTOR MOIST

SCOPE Inspection

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 85 - 02

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
10	PRO	1953-4	2	12-6-85	TEST PROCEDURE for DESIGN BASIS ACCIDENT (DBA) Simulation ROCKBESTOS CABLES.
11	PRO	PEI-TR-841203-03	-3	3-12-85	TEST Procedure for PATEL Electrical Connector for use IN VARIOUS Nuclear Power Plants.
12	PRO	PEI-TR-841203-04	-4	3-20-85	TEST PROCEDURE FOR PATEL ANTI-WICKING Splice for USE IN VARIOUS NUCLEAR POWER Plants
13	RPT	1927.05-01	-	27SEP85	CERTIFICATION TEST REPORT FOR TWO WICK SEAL designs
14	RPT	1927.05-02	-	27SEP85	CERTIFICATION TEST REPORT FOR electrical connectors
15	QP	PEI-TR-853000-01	B	14NOV85	FINAL QUALIFICATION Plan FOR PATEL ANTI-WICKING SPLICE FOR USE IN CALLAWAY Plant.

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INM - INTERNAL MEMO

LTR - LETTER
RPT - REPORT
QP - Qualification Plan
___ - _____
___ - _____
___ - _____
___ - _____

INSPECTOR Lacky

SCOPE Inspection

DOCUMENTS EXAMINED

DOCKET NO. 50-325/324

REPORT NO. 85 - 02

PAGE 1 OF ____

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	RPT	A-686-85	Original	14 Aug 85	Nuclear Environmental Qualification Report of Terminal Blocks, Limit Switches, control switches, indicating lights, and Solenoid Valves for Brunswick Steam Electric Plant, units 1 and 2, Carolina Power & Light

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
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P.O. - PURCHASE ORDER
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LTR - LETTER
RPT - REPORT

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 25, 1986

Docket No. 99900511/85-02

Corporate Consulting
& Developing Company, Ltd.
ATTN: Dr. J. R. Yow
President
P. O. Box 12728
Research Triangle Park, NC 27709

Gentlemen:

This refers to the inspection conducted by Mr. R. N. Moist of this office on December 9-13, 1985, of your facility at Research Triangle Park, NC, and to the discussions of our findings with you and members of your staff at the conclusion of the inspection.

The purpose of this inspection was to perform a technical evaluation of your equipment qualification test activities for safety-related equipment and to witness equipment qualification testing being performed for General Public Utilities Nuclear Corporation and Patel Engineers. Areas examined during the inspection and our findings are discussed in the enclosed report. Within these areas, the inspection consisted of an examination of procedures and representative records, interviews with personnel, and observations by the inspector.

While the inspection did not identify any violations of applicable requirements, several reviews could not be completed because additional test activities or evaluations were scheduled to be performed by your staff and by others. These reviews will be continued during a future inspection.

In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room.

Should you have any questions concerning this inspection, we will be pleased to discuss them with you.

dupe of 8603140090

Sincerely,

Gary G. Zech, Chief
Vendor Program Branch
Division of Quality Assurance, Vendor,
and Technical Training Center Programs
Office of Inspection and Enforcement

Enclosures:
1. Appendix A-Inspection Report 99900511/85-02
2. Appendix B-Inspection Data Sheets (5 pages)

ORGANIZATION: CORPORATE CONSULTING & DEVELOPMENT COMPANY, LTD
RESEARCH TRIANGLE PARK, NORTH CAROLINA

REPORT NO.: 99900511/85-02	INSPECTION DATE(S): 12/9-13/85	INSPECTION ON-SITE HOURS: 105

CORRESPONDENCE ADDRESS: Corporate Consulting
& Development Company, Ltd.
ATTN: Dr. J. R. Yow
President
P. O. Box 12728
Research Triangle Park, NC 27709
ORGANIZATIONAL CONTACT: Mr. Carson Blanton, Jr., QA Manager
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ASSIGNED INSPECTOR: Randolph N. Moist — 2-13-86
R. N. Moist, Equipment Qualification Inspection Section (EQIS) — Date

OTHER INSPECTOR(S): R. Lasky, EQIS
J. Grossman, Sandia National Laboratories

APPROVED BY: Uldis Potapovs — 2-13-86
U. Potapovs, Chief, EQIB, Vendor Program Branch — Date

INSPECTION BASES AND SCOPE:

A. BASES: Appendix B to 10 CFR Part 50 and 10 CFR Part 21.

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dupe ok
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ORGANIZATION: CORPORATE CONSULTING & DEVELOPMENT COMPANY, LTD
RESEARCH TRIANGLE PARK, NORTH CAROLINA

REPORT NO.: 99900511/85-02	INSPECTION RESULTS:	PAGE 2 of 6

A. Violations

None.

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None.

C. Unresolved Items

None.

D. Other Findings and Comments

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j) Appropriate margins were applied.

With respect to (f), no acceptance criterion was established in Patel test procedures PEI-TR-841203-03 and PEI-TR-841203-04 for functional testing during the accident simulation. However, post accident functional tests did specify acceptance criteria in the two Patel test procedures, but discussions with CCL personnel indicated that post accident functionals were not required to be performed by CCL. Therefore the NRC inspection team was unable to evaluate the test results against established acceptance criteria. The NRC inspection team will evaluate the post accident functional test results during a future inspection at Patel Engineers.

INSPECTOR MOIST

SCOPE INSPECTION

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 85 - 02

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	PRO	PEI-TR-82-4-203	—	30SEP85	TEST PROCEDURE FOR RAYCHEM WCSF-N CABLE SPLICES (1" OVERLAP) USED IN THE JAMES A. FITZPATRICK Nuclear Power Plant.
2	PRO	PEI-TR-860100-01	B	18NOV85	TEST PROCEDURE FOR EQ OF BUCHANAN TERMINAL BLOCKS FOR NEBRASKA PUBLIC POWER DISTRICTS FOR USE IN COOPER NUCLEAR POWER PLANT.
3	PO	0002112	—	10-30-85	PURCHASE ORDER to Isomedix Inc. for Radiation Services
4	PO	PC02925	-	19SEP85	P.O. between GPU and CCL FOR ENVIRONMENTAL TESTING OF FIREZONE R & BIW CABLES.
5	SPEC	SP 9000-SI-0003	0	1-29-85	TECHNICAL SPECIFICATION FOR OYSTER CREEK NGS and three MILE Island NGS.
6	PRO	1953-1-1	2	12-6-85	TEST Procedure for Insulation resistance testing & DATA sheets
7	PRO	1953-1-2	1	11-18-85	TEST Procedure for VOLTAGE withstand TEST
8	PRO	1953-2	-	10-16-85	TEST Procedure for thermal AGING and DATA sheets
9	PRO	1953-3	1	10-30-85	TEST Procedure for RADIATION TEST

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
P.O. - PURCHASE ORDER
INM - INTERNAL MEMO

LTR - LETTER
RPT - REPORT

INSPECTOR MOIST

SCOPE Inspection

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 85 - 02

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
10	PRO	1953-4	2	12-6-85	TEST PROCEDURE for DESIGN BASIS ACCIDENT (DBA) Simulation ROCKBESTOS CABLES.
11	PRO	PEI-TR-841203-03	-3	3-12-85	TEST Procedure for PATEL ELECTRICAL CONNECTOR for USE IN VARIOUS NUCLEAR Power Plants.
12	PRO	PEI-TR-841203-04	-4	3-20-85	TEST PROCEDURE FOR PATEL ANTI-WICKING Splice for USE IN VARIOUS NUCLEAR POWER Plants.
13	RPT	1927.05-01	-	27SEP85	CERTIFICATION TEST REPORT FOR TWO WICK SEAL designs
14	RPT	1927.05-02	-	27SEP85	CERTIFICATION TEST REPORT FOR electrical connectors
15	QP	PEI-TR-853000-01	B	14JUN85	FINAL QUALIFICATION Plan FOR PATEL ANTI-WICKING SPLICE FOR USE IN CALLAWAY Plant.

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
P.O. - PURCHASE ORDER
INM - INTERNAL MEMO

LTR - LETTER
RPT - REPORT
QP - Qualification Plan
___ - _____
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___ - _____
___ - _____

INSPECTOR J Grossman

SCOPE

DOCUMENTS EXAMINED

DOCKET NO. 99900311
REPORT NO. 83 - 02
PAGE 1 OF 2

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	SPEC	SP 1000-51-0003	0	7/28/83	TECHNICAL SPECIFICATION FOR OYSTER CREEK NGS AND THREE MILE ISLAND NGS.
2	PRO	1953-1-1	2	12/6/83	TEST PROCEDURE FOR INSULATION RESISTANCE TESTING & DATA SHEETS
3	PRO	1953-1-2	1	11/8/83	TEST PROCEDURE FOR VOLTAGE WITHSTAND TEST
4	PRO	1953-2	—	11/14/83	TEST PROCEDURE FOR THERMAL AGING AND DATA SHEETS
5	PRO	1953-3	1	10/30/83	TEST PROCEDURE FOR RADIATION TEST.
6.	PRO	1953-4	2	12/6/83	TEST PROCEDURE FOR DESIGN BASIS ACCIDENT (DBA) SIMULATION ROCKBESTOS CABLES
7	PRO	PEI-JE 82-4-203	—	9/30/83	TEST PROCEDURE FOR RAYCHEM WCSF-N CABLE SPLICES (OVERLAY) USED IN THE JAMES A FITZPATRICK NUCLEAR POWER PLANT
C	PRO.	PEI-TR 860100-01	B	11/16/83	TEST PROCEDURE FOR EQ OF BUCHANAN TERMINAL BLOCKS FOR NEBRASKA PUBLIC POWER DISTRICTS FOR USE IN COOPER NUCLEAR POWER PLANT

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
SUR - SURVEILLANCE REPORT

LTR - LETTER

INSPECTOR J GRASSO

SCOPE

DOCUMENTS EXAMINED

DOCKET NO. 99900511

REPORT NO. 65 - 02

PAGE 2 OF 2

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV	DATE	TITLE / SUBJECT
9	PRO	PEI-TR-641203-03	3	3/12/85	TEST PROCEDURE FOR PATEL ELECTRICAL CONNECTOR FOR USE IN VARIOUS NUCLEAR POWER PLANTS
10	PRO	PEI-TR 641203-04	4	3/20/85	TEST PROCEDURE FOR PATEL ANTI-WICKING SPLICE FOR USE IN VARIOUS NUCLEAR POWER PLANTS
11	RPT	1927.05-01		9/27/85	CERTIFICATION TEST REPORT FOR TWO WICK SEAL DESIGNS
12	RPT	1927.05-02		9/27/85	CERTIFICATION TEST REPORT FOR ELECTRICAL CONNECTORS
13	QP	PEI-TR 853000-01	B	6/14/85	FINAL QUALIFICATION PLAN FOR PATEL ANTI-WICKING SPLICE FOR USE IN CALLAWAY PLANT

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT

LTR - LETTER
RPT - REPORT
QP - QUAL PLAN

INSPECTOR Lasky

SCOPE Inspection

DOCUMENTS EXAMINED

DOCKET NO. 50-325, 324

REPORT NO. 85 - 02

PAGE 1 OF

ITEM NO.	TYPE OF DOCUMENT	DOCUMENT NO.	REV.	DATE	TITLE / SUBJECT
1	RPT	A-666-85	Original	14 Aug 85	Nuclear [illegible] Qualification Report of Terminal Blocks, Limit Switches, control switches, indicating lights, and Solenoid Valves for Brunswick Steam Electric Plant, Units 1 and 2, Carolina Power & Light

TYPE OF DOC:

DWG - DRAWING
SPEC - SPECIFICATION
PRO - PROCEDURE
QAM - QA MANUAL
QCD - QC DOCUMENT
P.O. - PURCHASE ORDER
IHM - INTERNAL MEMO

LTR - LETTER
RPT - REPORT

PERSONS CONTACTED

Company CCL

Dates 12-9-85

Docket/Report No. 99900511/85-02

Inspector MOIST, Randy

X Pre-Inspection Conference ____ Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR.	MANAGER, QA	CCL
DUNA HATMAKER	MGR. TEST OPERATIONS	CCL
RICHARD LASKY	EQ & TEST ENGINEER	NRC
JIM GROSSMAIN	NRC CONSULTANT (ENGINEER)	SANDIA NATIONAL LABS

PERSONS CONTACTED

Company CCL

Dates 12/9-13/85

Docket/Report No. 99900511/85-02

Inspector RANDY MOIST

Page ___ of ___

___ Pre-Inspection Conference X Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
RICHARD LASKY	EQ & TEST ENGINEER	USNRC
J. GROSSMAN	ENGINEER (NRC CONSULTANT)	SANDIA NATIONAL LABS.
CARSON BLANTON JR.	QA MANAGER	CCL
ROLAND YOW	PRES.	CCL
DUNA E. HATMAKER	SUPERVISOR	CCL

PERSONS CONTACTED

Company Corporate Consulting & Development Co Dates 12/9-13/85

Docket/Report No. 99900511-85-02 Inspector Moist/Lasky

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR	MANAGER, QA	CCL
DON HATMAKER	Mgr TEST OPERATIONS	CCL
JOHNNY JENKINS	GRP/DIVISION DIRECTOR	PATEL ENGINEERS
ROBERT MINADEO	PROJECT ENGINEER	PATEL ENGINEERS
PETE RUTTER	TEST TECHNICIAN	CCL
STEVEN JOBE	EQ PROJECT COORDINATOR	Nebraska Public Power District
J. Roland Yow	President	CCL
GARY HUGHES	VICE President operations	CCL
ALAN MINER	Senior Engineer	CCL
OSCAR Biddy	TEST TECHNICIAN	CCL

PERSONS CONTACTED

Company CORPORATE CONSULTING & Development Co. LTD. Dates 12/9-13/86

Docket/Report No. 99900511/85-02 Inspector GROSSMAN

___ Pre-Inspection Conference ___ Post-Inspection Conference

NAME(Please Print)	TITLE(Please Print)	ORGANIZATION(Please Print)
CARSON BLANTON JR.	MANAGER QA	CCL
DON HATMAKER	MGR. TEST OPERATIONS	CCL
JOHNNY JENKINS	GRP/DIVISION DIRECTOR	PATEL ENGINEERS
ROBERT MINADEO	PROJECT ENGINEER	PATEL ENGINEERS
PETE RUTTER	TEST TECHNICAN	CCL
STEVEN JOBE	EQ PROJECT ENGINEER	Nebraska
ROLAND YOW	President	CCL
GARY HEIGHES	V. P	CCL
OSCAR BIDDY	TEST TECHNICIAN	CCL