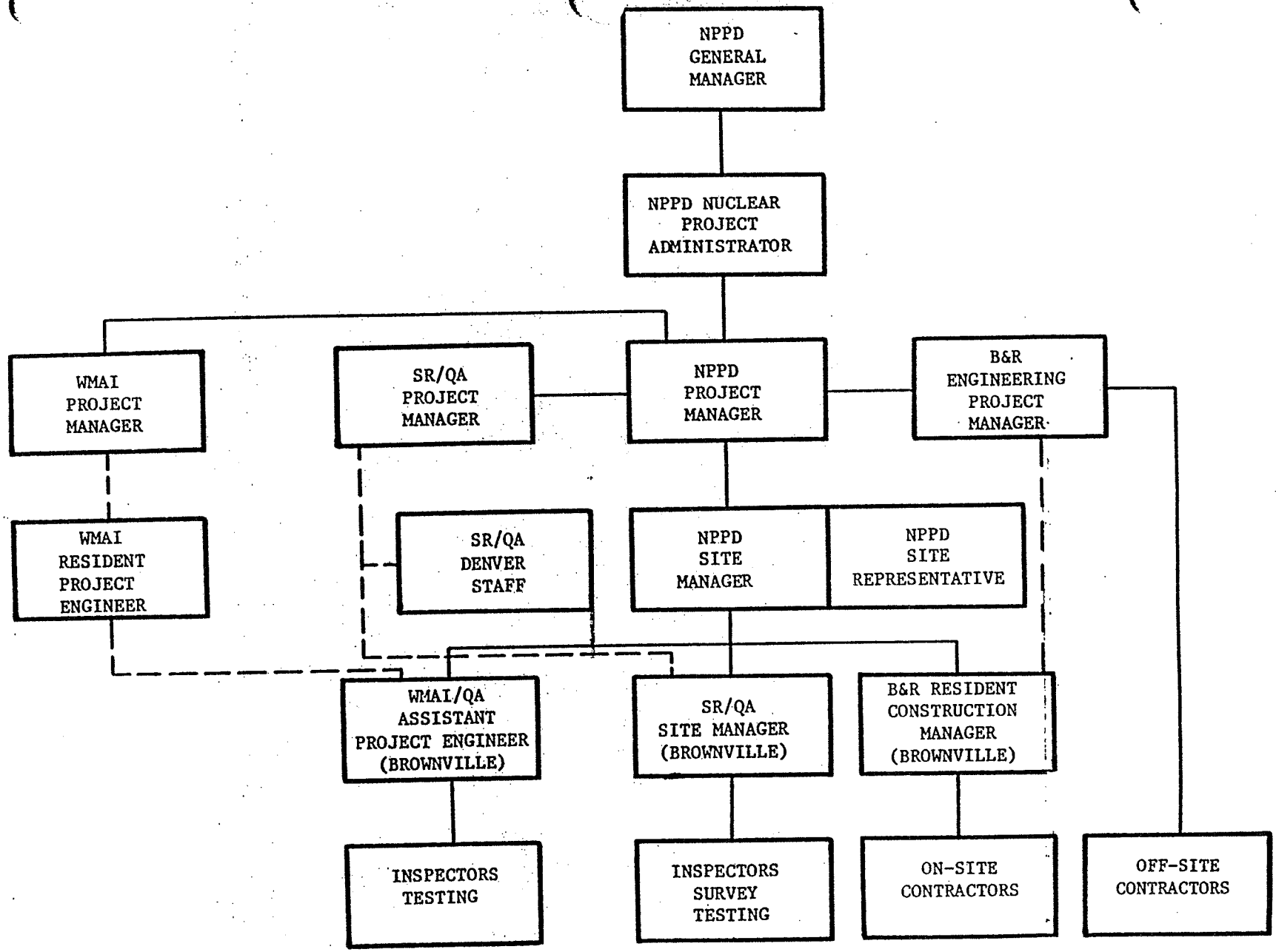
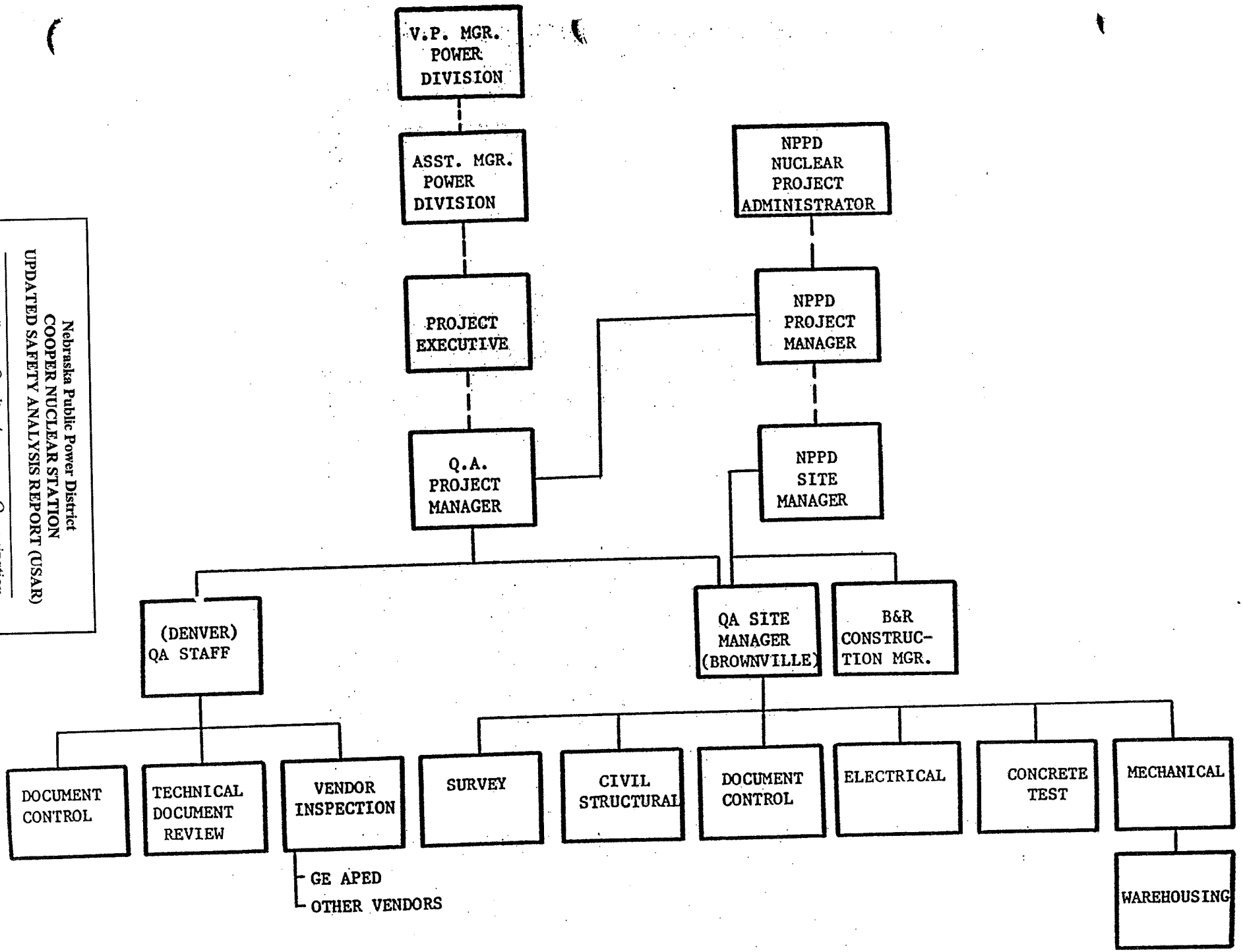


Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

NPPD-QA Organization
Cooper Nuclear Station
Figure D(1)-2-1 10/04/99



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Stearns-Roger Quality Assurance Organization
Cooper Nuclear Station
Figure D(1)-3-1 10/04/99

FORM 114

Stearns-Roger
CORPORATION

PAGE

JOB NO. DATE BY CH'K

CUSTOMER Nebraska Public Power Dist PROJECT Cooper Nuclear Station

SUBJECT Document Review Log

Description	Contract Number	Draft Received	Reviewed By	Comments Date	Final Received	Reviewed By	Comments

DIVISION USAGE					
MM	P	PP	SU	FI	SP
	X				

Stearns-Roger CORPORATION
Engineering Standard

FE04.1
Page 1

WELD PROCEDURE EVALUATION

ISSUED
REVISED

Customer _____ Project _____

Contract No. _____ S-R No. _____

Vendor _____

Procedure No. _____ Rev. # _____ Transmittal No. & Date _____

ASME Section IX _____ Edition and _____ Codes

1. _____ Procedure is accepted w/o comment.

2. _____ Procedure is accepted as noted below. Revised, corrected procedure is to be resubmitted for record.

3. _____ Procedure is not acceptable due to deficiencies noted below. Revised procedure to be resubmitted for approval.

4. COMMENTS

   A. _____ All pages are not numbered and/or do not carry procedure number.

   B. _____ Q-1 form number does not agree with weld procedure specification number.

   C. _____ Q-1 form does not carry signature of authorized employee of manufacturer.

   D. _____ All welding processes used for qualification are not designated or process designated is not used for this procedure qualification.

   E. _____ ASME, ASTM or other base metal specifications used are not specified or "P" number is incorrect.

   F. _____ ASME, ASTM or other filler metal specifications are not specified or are incorrect for base material used.

   G. _____ Group "F" number per ASME Section IX, Table Q11.2, is not specified or is incorrect.

   H. _____ Chemical analysis "A" number per ASME Section IX, Table Q11.3, is not specified or is incorrect.

   I. ____ Flux for submerged arc welding not specified or incorrect.

4. COMMENTS (CONTD)

J. _____ Gas for inert-gas welding not specified, incorrect or incorrect flow range.

K. _____ Position not properly specified or not in accordance with ASME Section IX.

L. _____ Preheat not specified or incorrect for material used.

M. _____ Postweld heat treat cycle not complete or temperatures incorrect.

N. _____ Backing strip use or material not specified.

O. _____ Thickness qualified not stated or incorrect per test material.

P. _____ Preparation of base material improper for this process.

Q. _____ Welding ~~technique, cleaning or appearance of weld improper.~~

R. _____ Defect repairs not specified to a qualified procedure for the process designated.

S. _____ Peening requirements omitted or incorrect.

T. _____ Treatment of backside of double welded joints not specified or incorrect.

U. Other _____

_____

_____

_____

_____

STEARNS-ROGER CORPORATION

BY _____

_____

DATE _____

FORM 114

Stearns-Roger
CORPORATION

PAGE

JOB NO. DATE BY CH'K.

CUSTOMER Nebraska Public Power Dist PROJECT Cooper Nuclear Station

SUBJECT Purchase Order and Mill Test Report Status

P.O. No.	Supplier	MTR's Status	MTR's Yes or No	Shipment No. if Applicable	Heat Numbers	No. of Items	Status	Comments

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Purchase Order and Mill Test Report Status
Figure D(1)-3-4 10/04/99

SHOP INSPECTION OF REACTOR FEED PUMP TURBINES

A. Reference Documents

1. Nebraska Public Power District
Contract E68-13 and Addendum No. 1 and Amendments No. 1, 2, 3 and 4.
Reactor Feed Pump Turbines

2. Codes and Standards incorporated by reference

a) ASTM - A27; A48; A201; A216; A217; A276; A293; A296; A285; B23; B149

b) AISI - Type 410; Type 422

c) ASME

d) AISC

e) AWS

f) NEMA

g) NEC

h) IEEE

i) NBFU

j) Hydraulics Institute

k) State of Nebraska local codes and regulations

l) Uniform Building Code - International Conference of Building Officials

B. Document Reference for Q. A. Checks

1. Turbine Features

a) General Requirements - Pg. G-9, Para. 3.1, subpara. a, sub-subpara. 1, 2 and 3.

b) Casing, Lagging and Blading - Pg. G-9, Para. 3.1, subpara. b, sub-subpara. 1, 2, 3, 4 and 5.

c) Stop Valves - Pgs. G-9 and G-10, Para. 3.1, subpara. c.

d) Governing Devices - Pg. G-10, Para. 3.1, subpara. d, sub-subpara. 1, 2 and 3.

B. Document Reference for Q. A. Checks (cont'd)

e) Protective Devices - Pg. G-10, Para. 3.1, subpara. e, sub-subpara. 1, 2, 3, 4 and 5.

f) Lubrication System - Pgs. G-10 and G-11, Para. 3.1, subpara. f, sub-subpara. 1, 2, 3, 4, 5, 6, 7 and 8.

g) Steam Sealing System - Pg. G-11, Para. 3.1, subpara. g.

h) Turning Gear - Pg. G-11, Para. 3.1, subpara. h.

i) Instrumentation and Controls - Pgs. G-12 and G-13, Para. 3.1, subpara. i, sub-subpara. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13.

j) Soles Plates - Pg. G-13, Para. 3.1, subpara. j.

k) Materials and Workmanship - Pg. G-13, Para. 3.2, subpara. a, b, c and d.

l) Painting and Protection - Pgs. G-13 and G-14, Para. 3.3.

m) Electrical Requirements - Pgs. G-14 and G-15, Para. 3.4, subpara. a, b, c, d, e, f, g, h, i and j, sub-subpara. 1 and 2.

n) Shop Tests - Pg. G-15 and G-16, Para. 3.5, subpara. a, sub-subpara. 1, 2, 3, 4, 5 and 6.

o) Conformed Data Sheets - Pgs. G-19 thru G-23, Para. 1.0; 1.1; 1.2; 1.3; 1.4; 1.5; 1.6; 1.7; 1.8; 1.9; 1.10; 1.11; 1.12; 1.13; 1.14; 1.15; 1.16 and 1.17.

p) Contractors Drawing Submittal

DeLaval Turbine Incorporated

Drawing No. CC-90946	Latest Revision
Drawing No. CC-90945	Latest Revision
Drawing No. CC-90943	Latest Revision
Drawing No. SO-704564-5	Latest Revision
Drawing No. CCA-1788	Latest Revision
Drawing No. H-3832	Latest Revision
Drawing No. F-8736	Latest Revision
Drawing No. D-60234	Latest Revision
Drawing No. D-60232	Latest Revision

q) Other Applicable Data - DeLavel Alternate Proposal, T-2001 Telegrams, May 23 and 24, 1968 and CPPD letter of June 26, 1968 and DeLavel letter of May 24, 1968 - attached to contract documents.

C. Rejectable Criteria

A check mark under "No" for any item in check list CNS - 20Z12.

CHECK LIST FOR SHOP INSPECTION OF REACTOR FEED PUMP TURBINES

Location of Shop _____

		Yes	No	Not Applicable	Inspector	Date
1.	General Requirements per reference B.1.a					
2.	Casing, Lagging and Blading per reference B.1.b					
3.	Stop Valves per reference B.1.c					
4.	Governing Devices per reference B.1.d					
5.	Protective Devices per reference B.1.e					
6.	Lubrication System per reference B.1.f					
7.	Steam Sealing System per reference B.1.g					
8.	Turning Gear per reference B.1.h					
9.	Instrumentation and Controls per reference B.1.i					
10.	Sole Plates per reference B.1.j					
11.	Materials and Workmanship per reference B.1.k					
12.	Painting and Protection per reference B.1.l					
13.	Electrical Requirements per reference B.1.m					

CHECK LIST FOR SHOP INSPECTION OF REACTOR FEED PUMP TURBINES (CONTD)

Location of Shop _____

		Yes	No	Not Applicable	Inspector	Date
14.	Conformed Data Sheets per reference B.1.n	___	___	_____	_____	_____
15.	Contractors Drawing Submittal per reference B.1.p	___	___	_____	_____	_____
16.	Other Applicable Data per reference B.1.q	___	___	_____	_____	_____

Comments: _____

_____

_____

_____

_____

Stearns-Roger

INSPECTION EXPEDITING

Supplier	P.O. No.	Item(s)	Date
Address	Vendor No.	S-R Representative	Pg. 1 of

Contacts w/Title: _____

Delivery Promise: _____

NARRATIVE REPORT

Stearns-Roger CORPORATION

COOPER NUCLEAR STATION

INSPECTION PUNCH LIST REPORT

Distribution: Stearns-Roger QA - Original + 3
Burns & Roe CM - 1
Contractor - 2
NPPD (Site) - 2

Date _____

Inspector _____

Approved _____

Page: _____

Contract No: _____

Contractor: _____

Location: _____

Description: _____

Item of Work To Be Corrected		Disposition, If Required			
		Correct	Date	*Acceptable	Date

* If "Acceptable", state reasons.
REMARKS:

St[illegible]ns-Roger
CORP[illegible]ON

Date: ____________

Inspector: ____________

Approved: ____________

COOPER NUCLEAR S[illegible]ION

DEVIATION REP[illegible]

Distribution: S-R Q.A. - Original + 3
NPPD - 2
B&R, CM & Eng. - 2
Contractor - 2

Contract No: ____________

Contractor: ____________

Location: ____________

Dwg. No.: ____________ Rev. No.: ____________

Spec. Pg. No.: ________ ppg. ____________

DEVIATION	Site Management Disposition		Accepted	
	Rework	Acceptable As Is	S-R Inspector	Date

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Deviation Report
Figure D(1)-3-8 10/04/99

CONTRACT NO.______________ DEVIATION REPORT LOG

CONTRACTOR____

LOCATION____ SHEET NO.__________

D.R. NO.	DESCRIPTION	DATE INITIATED	INITIATED BY	DATE ACCEPTED	ACCEPTE BY

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Deviation Report Log
Figure D(1)-3-9 10/04/99

COOPER NUCLEAR STATION

CONTRACTOR: _____

CONCRETE PLACEMENT CHECKOUT SHEET

Pour Description _____ Date _____

Pour No. and Location _____ Contract No. _____

CONTRACTOR CHECKOUT			QUALITY ASSURANCE CHECKOUT		
Item	Representative	Date	Item	Representative	Date
Carp. Fore.			Forms & Blockouts		
Lab. Fore.			Cleanup		
Resteel			Resteel		
Struct. Steel			Struct. Steel & Bolts		
Mechanical			Piping		
Electrical			Elec. Installation		
Engineer			Line & Grade		
Supt.			Embedded Items		
			Anchor Bolts & Sleeves		
			Weather Protection		

STEARNS-ROGER CORP.
QUALITY ASSURANCE _____

BURNS AND ROE, INC.
CONSTRUCTION MANAGEMENT _____

(ALL ABOVE ITEMS MUST BE SIGNED OFF WHEN APPLICABLE)

CONCRETE PLANT NOTIFIED: DATE _____ TIME _____
SITE MANAGEMENT NOTIFIED: DATE _____ TIME _____
INSPECTOR NOTIFIED: DATE _____ TIME _____
POUR STARTED: DATE _____ TIME _____
POUR COMPLETED: DATE _____ TIME _____
CLASS OF CONCRETE: _____
CUBIC YARDS ESTIMATED: _____
CUBIC YARDS PLACED: _____
WEATHER CONDITIONS: _____

DISTRIBUTION:
NPPD (2 copies)
BURNS & ROE (2 copies)
S-R, Q.A. (2 copies)
BATCH PLANT (1 copy)
BLOUNT BROS. (2 copies)

QUALITY ASSURANCE

NPPD - COOPER NUCLEAR STATION

CONTRACT NO:_____

PIPE BACKFILL TICKET

INSPECTOR_____ DATE_____

IDENT.	GRADE & LINE		INTERNAL CLEANING		NDT		COATING		COMMENT
	CONT.	Q.A.	CONT.	Q.A.	CONT.	Q.A.	CONT.	Q.A.	

SITE MANAGEMENT_____

COOPER NUCLEAR STATION

ELECTRICAL INSTALLATION CHECK OFF LIST

Contract _____ Contractor _____

Description _____

System _____ Location _____

Manufacturer _____ P. O. _____

	Item	Detail Requirements	Check Date	Signature	Date
1.	Identification	Nameplate			
		Tag Data			
		Mill Number			
2.	Routing	Tray			
		Conduit			
		Other			
3.	Termination	Identification Tags			
		Continuity			
4.	Grounding				
5.	Insulation	Per Drawing/Specification Test			
6.	Supports				
7.	Records	Contractor's Quality Control			

CONCRETE BATCH PLANT INSPECTION REPORT

DATE: ____________ CLASS: ____________ CONTRACT: ____________

WEATHER: ____________ INSPECTOR: ____________

MIX DESIGN

Cement: ________ no. ________ sks
Sand: (ssd) ________ no.
3/4" Rock: (ssd) ________ no.
1½" Rock: (ssd) ________ no.
Admixture: ________ oz. ________
Admixture: ________ oz. ________
Design Water: ________ gal.

WEIGHTS PER YD

		Agg.	Excess Water	
Mo: ____ %		____ lb.	____ lb.	____ gal
Mo: ____ %		____ lb.	____ lb.	____ gal
Mo: ____ %		____ lb.	____ lb.	____ gal

________ gal

Total Water: ________ gal/yd

Truck No.	Plant Time In	Plant Time Out	Ticket No.	Vol. yd^3	Cement lb.	Sand lb.	3/4" Rock lb.	1½" Rock lb.	Adm. oz.	Adm. oz.	Water gal.

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Concrete Batch Plant Inspection Report
Figure D(1)-3-13 10/04/99

LAB. WORK SHEET AND FILE

TIME: _____

DATE: _____

SAMPLE LOCATION: _____

MATERIAL: SAND

WET WT. + TARE

DRY WT. + TARE

DRY WT. + TARE _____

TARE _____

_____ x 100 = . %
-.5

Moisture In Sand

TIME: _____

DATE: _____

SAMPLE LOCATION: _____

MATERIAL: 3/4" ROCK

WET WT. + TARE

DRY WT. + TARE

DRY WT. + TARE _____

TARE _____

_____ x 100 = . %
-.7

Moisture In Rock

TIME: _____

DATE: _____

SAMPLE LOCATION: _____

MATERIAL: 1½" ROCK

WET WT. + TARE

DRY WT. + TARE

DRY WT. + TARE _____

TARE _____

_____ x 100 = . %
-.7

Moisture in Rock

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Lab Work Sheet and File
Figure D(1)-3-14 10/04/99

NEBRASKA PUBLIC POWER DISTRICT

Cooper Nuclear Station

Project Laboratory

Lab No.: _____

LAB DATA

Material: _____ Date Sampled: _____

Mark: _____ Time Sampled: _____

Sampled by: _____

Sample Source: _____

Sieve	Weight Retained	% Ret:	Acc. % Ret.	Specs
2"				
1½"				
1"				
3/4"				
3/8"				
# 4				
# 8				
# 16				
# 30				
# 50				
# 100				
# 200				
Pan				
Total				

Initial Wet Wt: _____

Initial Dry Wt: _____

Diff: _____

Moisture: _____ %

Initial Dry Sample Wt.: _____

Dry Wt. After (# 200) Wash: _____

Diff: _____

Loss: _____ %

Remarks: _____

Date:

Lab. Technician Tested by: _____ _____

Lab. Technician Calc. by: _____ _____

Lab. Technician Checked by: _____ _____

Lab. Manager Approved by: _____ _____

CNS-L3

NEBRASKA PUBLIC POWER DISTRICT
COOPER NUCLEAR STATION
PROJECT LABORATORY

CONCRETE FIELD INSPECTION REPORT

DATE: _____

CLASS: _____

LOCATION: _____

TIME	TICKET NO.	SLUMP	AIR	TEMP.	BATCH WATER	JOB WATER	YDS.	REMARKS	INSP

REVIEWED BY: _____

REVIEWED BY: _____

CNS-L1

NEBRASKA PUBLIC POWER DISTRICT
Cooper Nuclear Station
Project Laboratory

Lab No.:_____

LAB FIELD DATA

Class:_____ Material:_____

Mark:_____ Date Sampled:_____ By:_____

Ticket No.:_____ Contract:_____ Time:_____

Sample Source:_____

Spec. Strength:_____ Slump:_____inch

Water Added Job:_____gals. Wet Wt:_____pcf

Batch Volume:_____ Air:_____%

Remarks:_____

Test Date	Age (Days)	Total Load (#)	Compressive Strength (psi)	Tested by:

CNS-L8

NEBRASKA PUBLIC POWER DISTRICT

Cooper Nuclear Station

Project Laboratory

COMPRESSION TEST OF CONCRETE

Lab No: _____ Report Date: _____

Class: _____ Contract No.: _____ Ticket No.: _____

Date Sampled: _____ Sampled By: _____ Time: _____

Source: _____

MIX DATA

CEMENT: _____ LBS

SAND: _____ LBS MO: _____ %*

3/4" ROCK _____ LBS MO: _____ %*

1½" ROCK: _____ LBS MO: _____ %*

ADMIXTURE: _____ OZ _____

MIXTURE: _____ OZ _____

WATER: _____ GALS/YD

BATCH: _____ YDS

BATCH WATER: _____

ADD JOB WATER: _____

AGG. WATER: _____

TOTAL WATER: _____

CONCRETE PROPERTIES

SLUMP: _____ INCH

WET WEIGHT/CUBIC FOOT: _____ PCF

AIR CONTENT: _____ %

NOMINAL CEMENT FACTOR: _____ SKS/YD

ACTUAL CEMENT FACTOR: _____ SKS/YD

WATER/CEMENT RATIO: _____ GAL/YD

REMARKS: _____

COMPRESSION TEST

7 DAY		28 DAY		____ DAY		
Max. Load lbs.	Comp. Strength (psi)	Max. Load lbs.	Comp. Strength (psi)	Max. Load lbs.	Comp. Strength (psi)	
						Specified 28 Day Strength (psi)

Aggregate weights saturated surface dry.
Moisture excess over saturated surface dry.

Project Laboratory

By: _____
Lab. Manager

Sheet No. ____(____
Issue Date _____

COOPER NUCLEAR STATION

DOCUMENTATION REQUIREMENTS

Contract No. _____ Description _____ Contractor _____

P. O. No. _____ Checked By _____ Date _____

Supplier _____

R = Required
A = Accomplished

Item	Cert MTR R	Cert MTR A	Cert Compl R	Cert Compl A	PT R	PT A	MT R	MT A	UT R	UT A	RT R	RT A	Hydro R	Hydro A	Leak R	Leak A	Mfr's Rep't R	Mfr's Rep't A	No Certs Req'd	Additional Requirements and Comments

Sheet No. _____
Issue Date _____

COOPER NUCLEAR STATION

DOCUMENTATION REQUIREMENTS (ELECTRICAL)

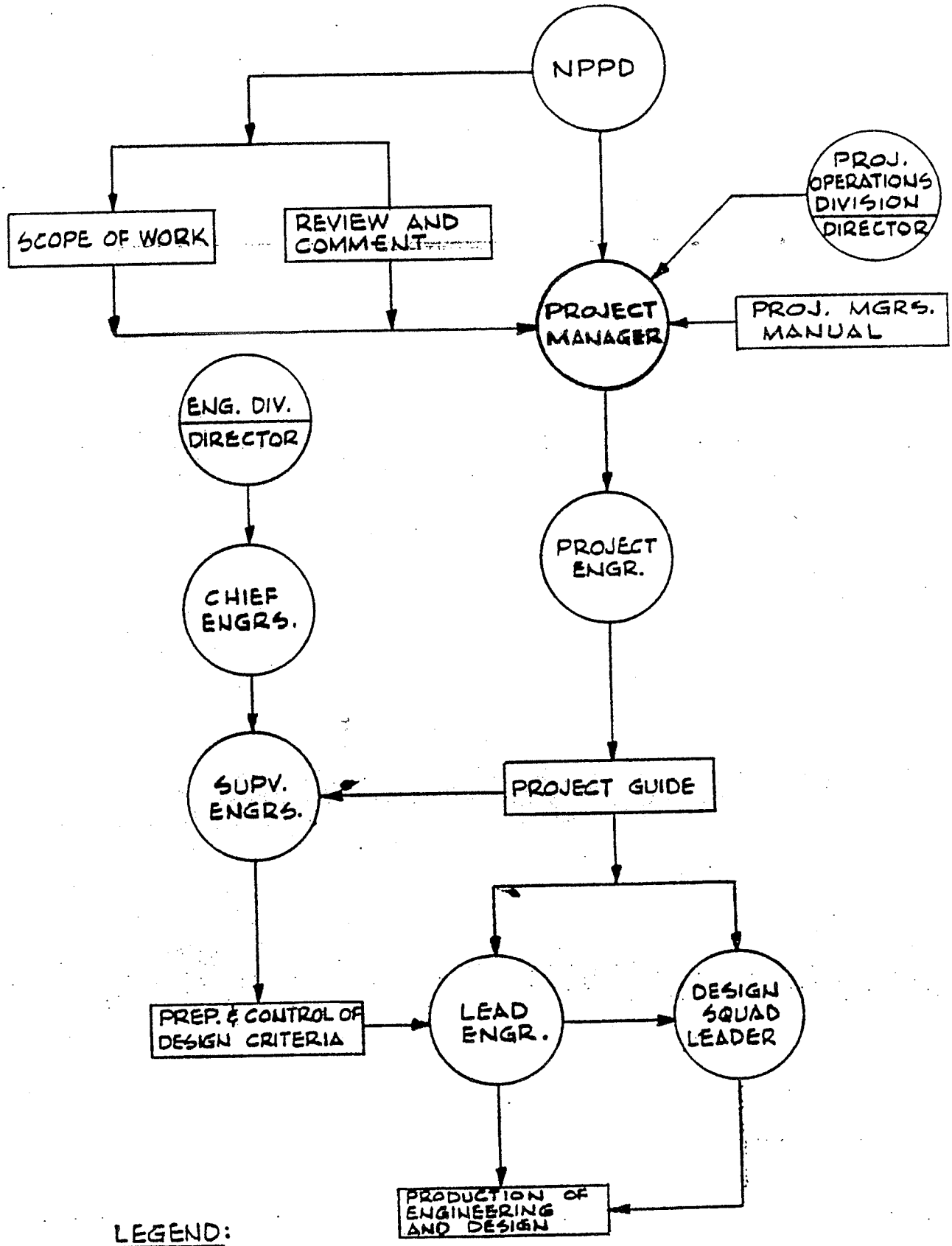
Contract No._____ Description_____ Contractor_____

P. O. No._____ Prepared By_____ Supplier_____

Item Identification	Insert Specific requirement number in Column R and note accomplishment in A.																				Comments
	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	R	A	

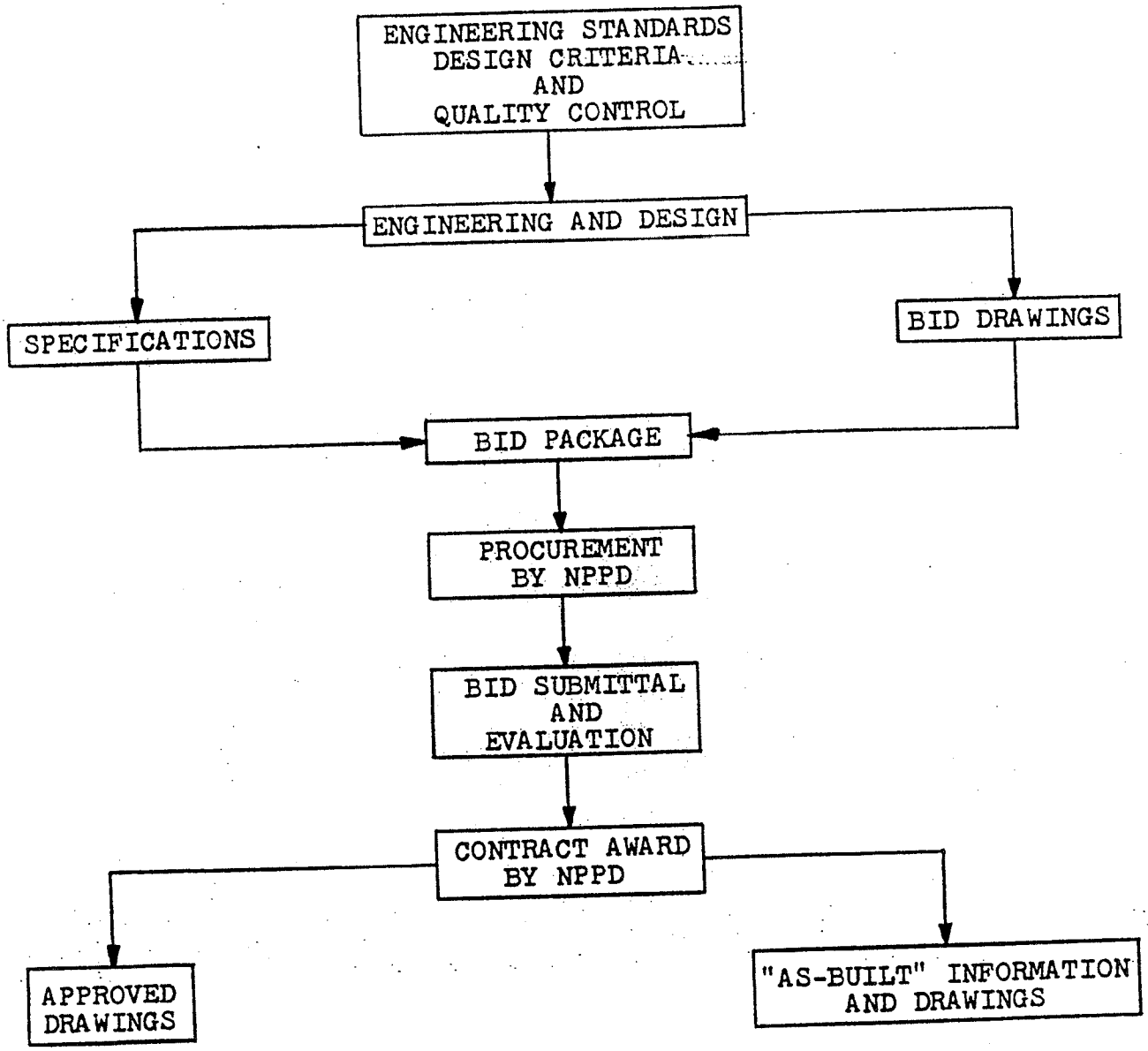
Legend of Document Requirement Numbers:

1. Cert of Compliance (Mfg. and testing)
2. Cert of Compliance (Materials)
3. Dielectric Test Reports
4. Continuity Test Reports
5. Radiation Service Certifications
6. Standard Shop Test Reports
7. Functional Check Reports
8. Calibration Data
9. Instruction Books
10. Other requirements (list each and assign sequential numbers)



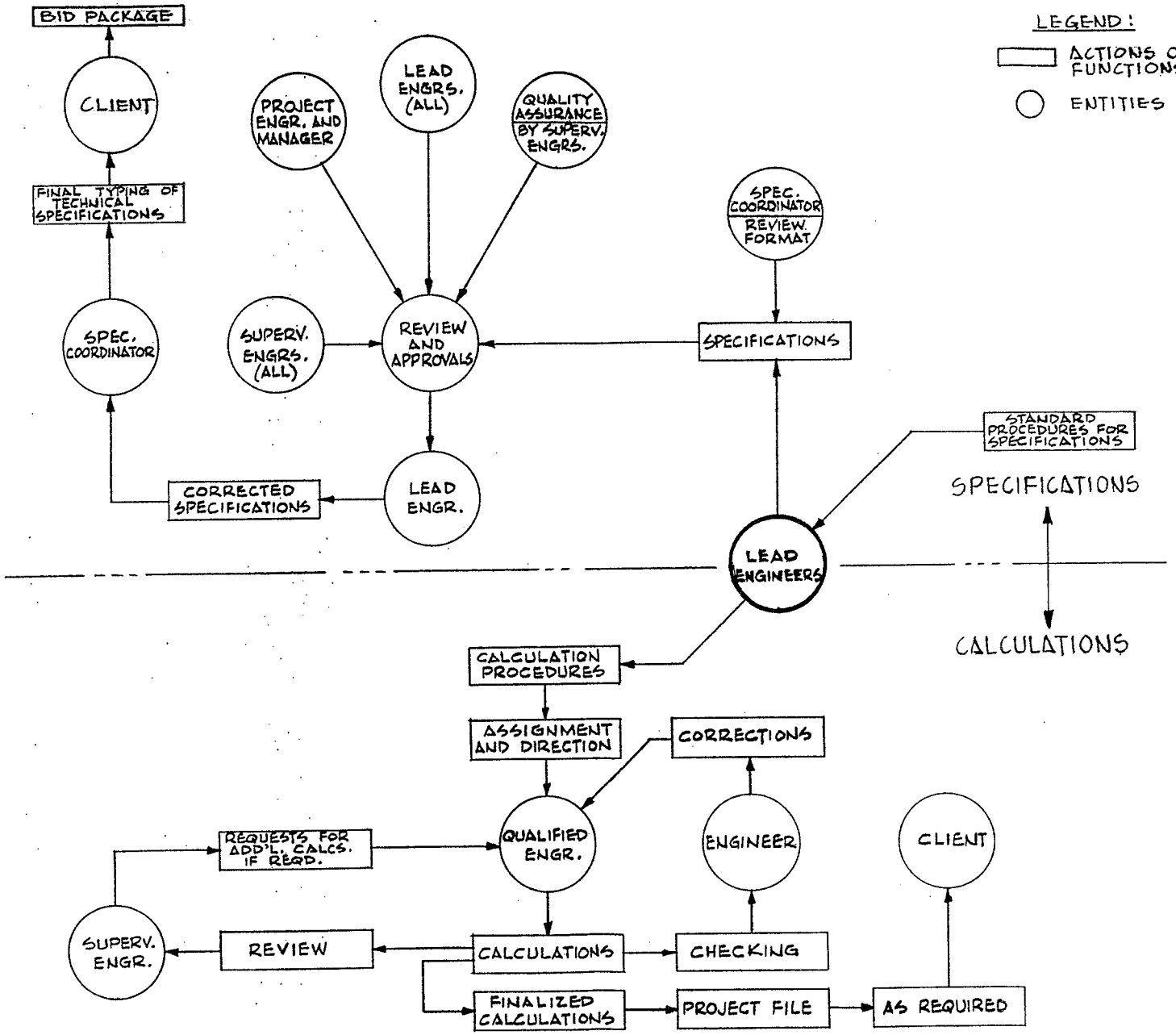
Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Organization Flow Chart
Figure D(1)-4-1 10/04/99



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Engineering and Design Flow Chart
Figure D(1)-4-2 10/04/99



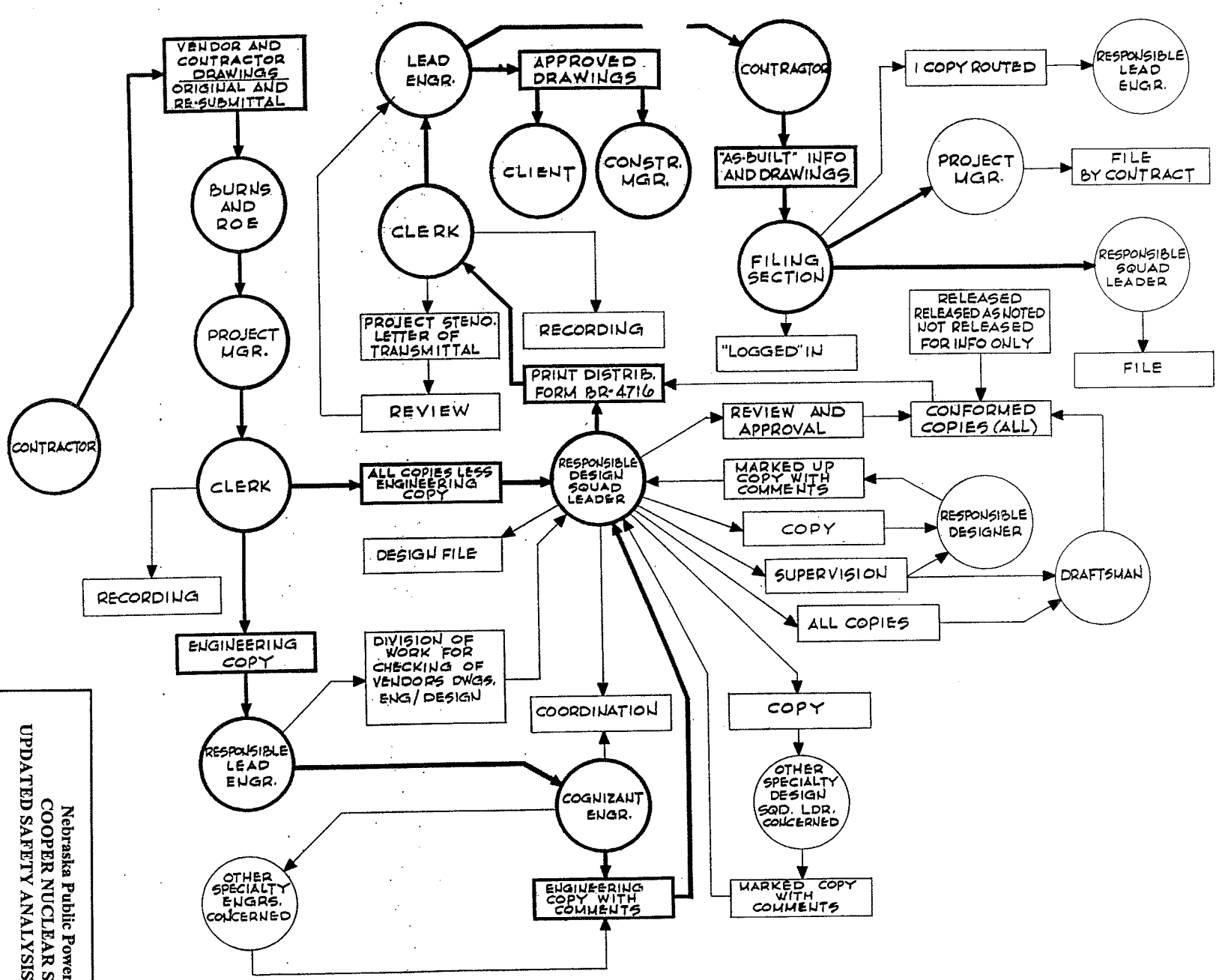
Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Specifications and Calculations Flow Chart

Figure D(1)-4-3 10/04/99

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Drawings Flow Chart
Figure D(1)-4-4 10/04/99



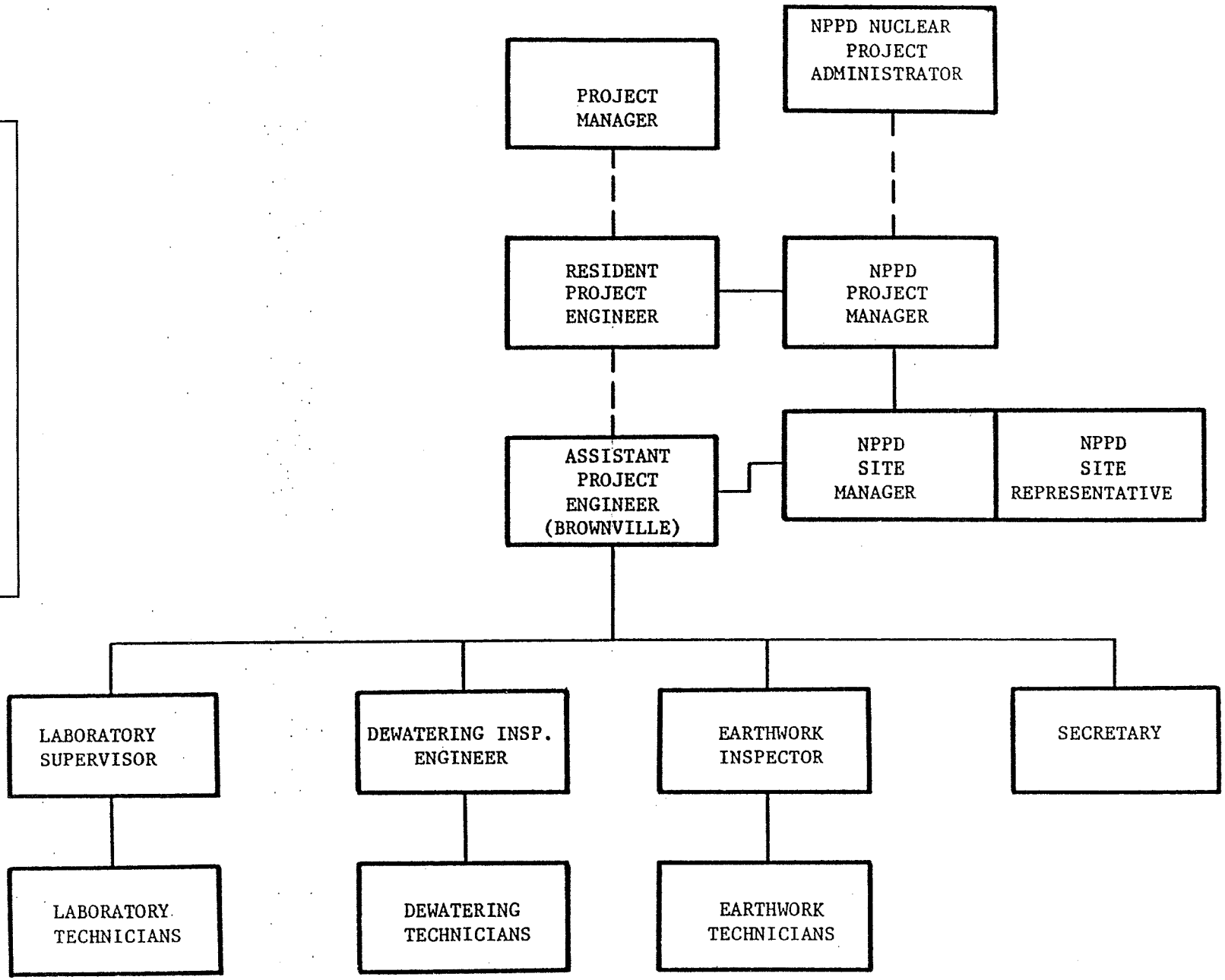
Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

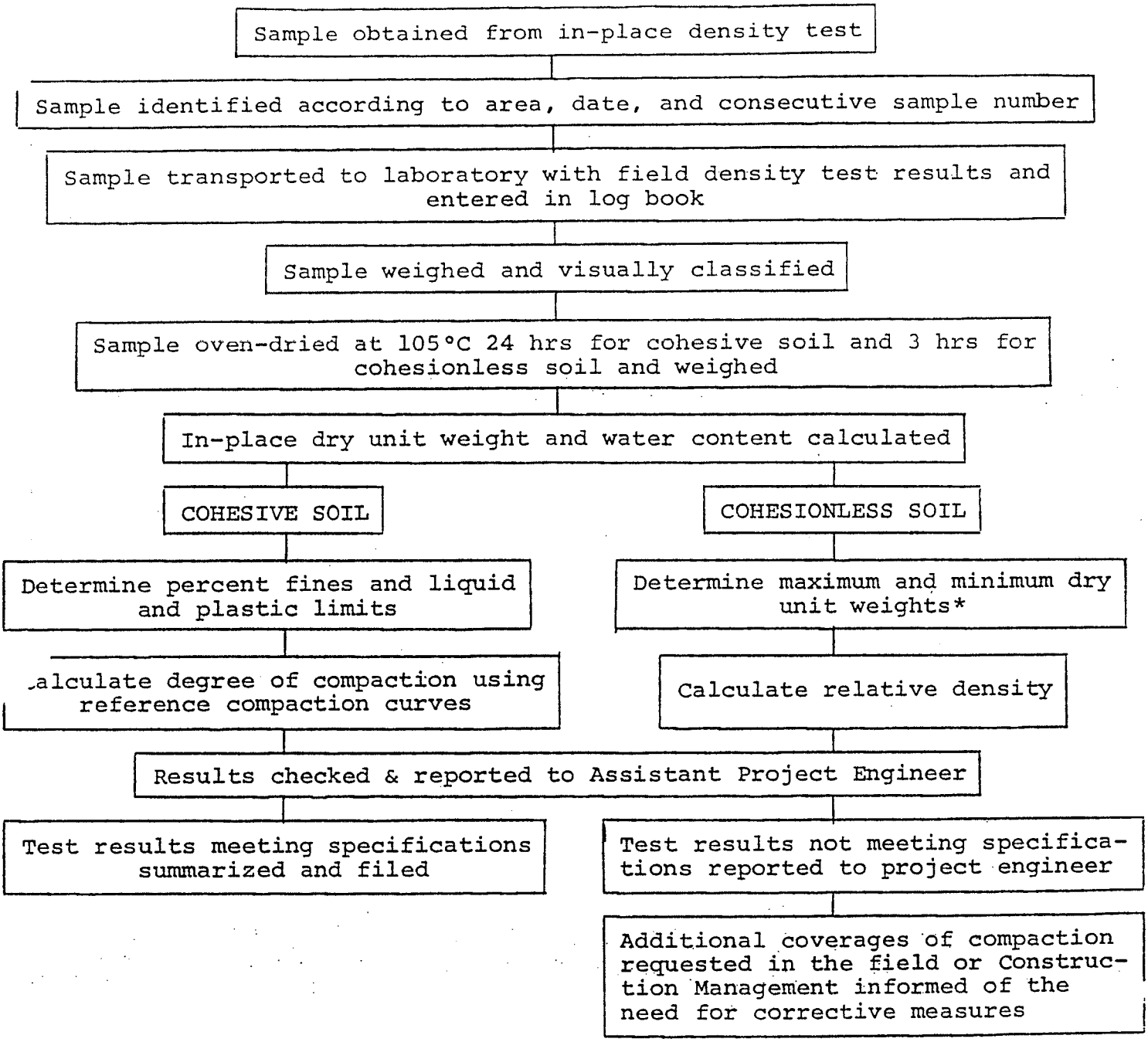
Vendor and As-Built Drawings Flow Chart

Figure D(1)-4-5 10/04/99

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Organization Chart - Cooper Nuclear Station
Woodward-Moorhouse & Associates Inc.
Quality Assurance Program
Figure D(1)-5-1 10/04/99

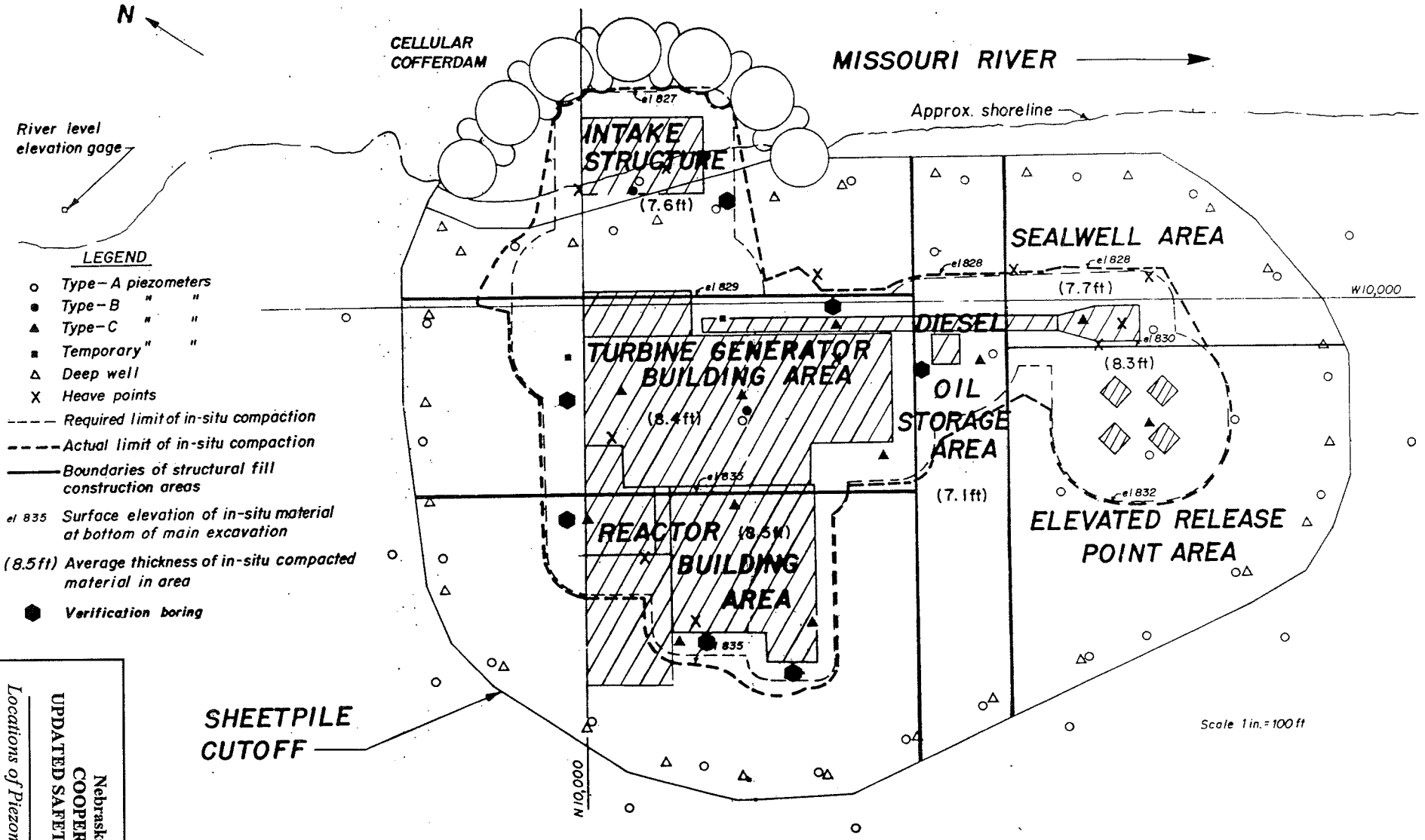




*Vibratory table used for the determination of the maximum dry unit weight; every tenth determination was repeated for reproducibility check; and approx every tenth sample used to determine the maximum dry unit weight according to the "Basic" method.

Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

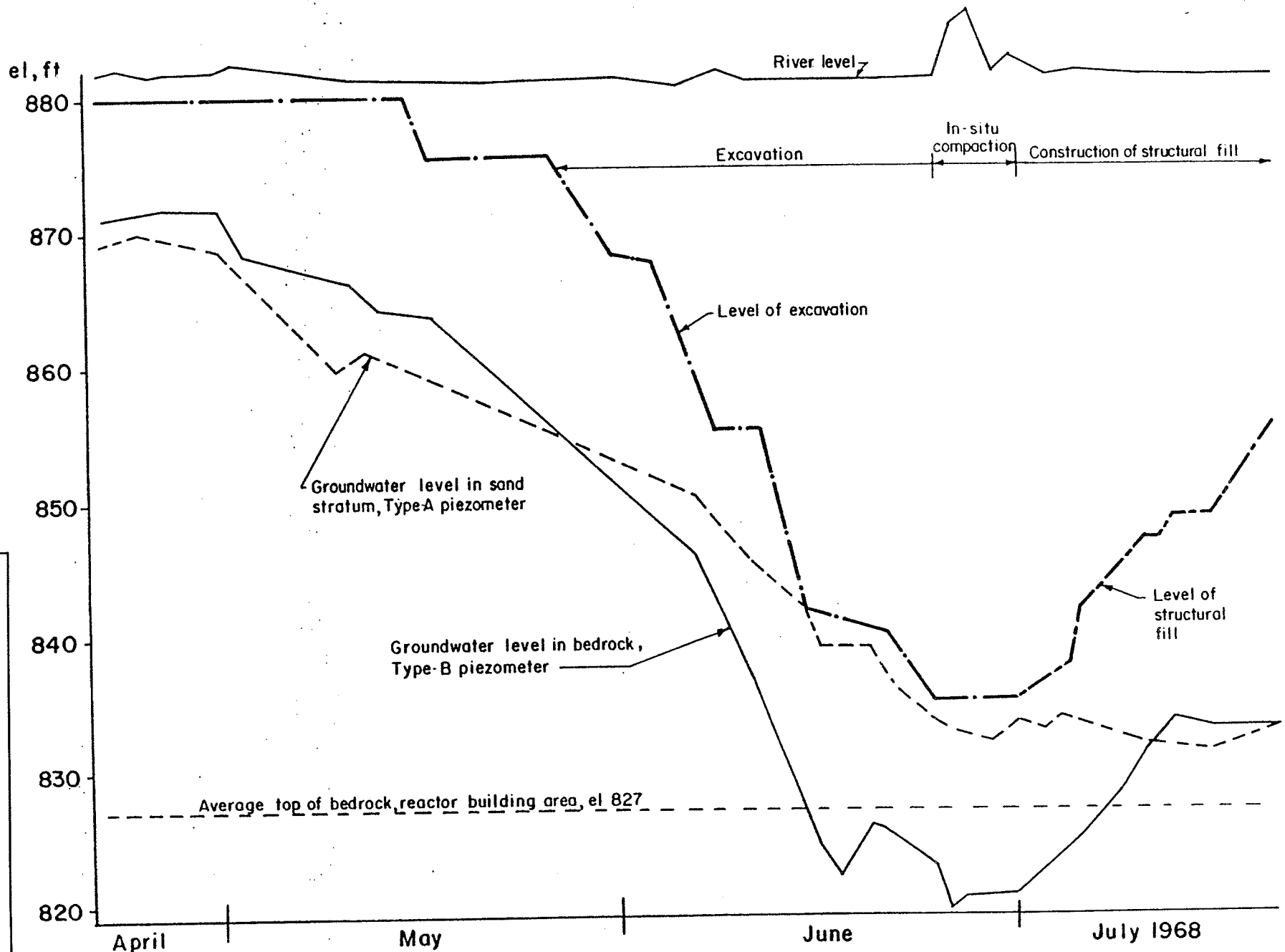
Flow Diagram of Laboratory Phase of Quality Control Testing of Structural and General Fills
Figure D(1)-5-2 10/04/99



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

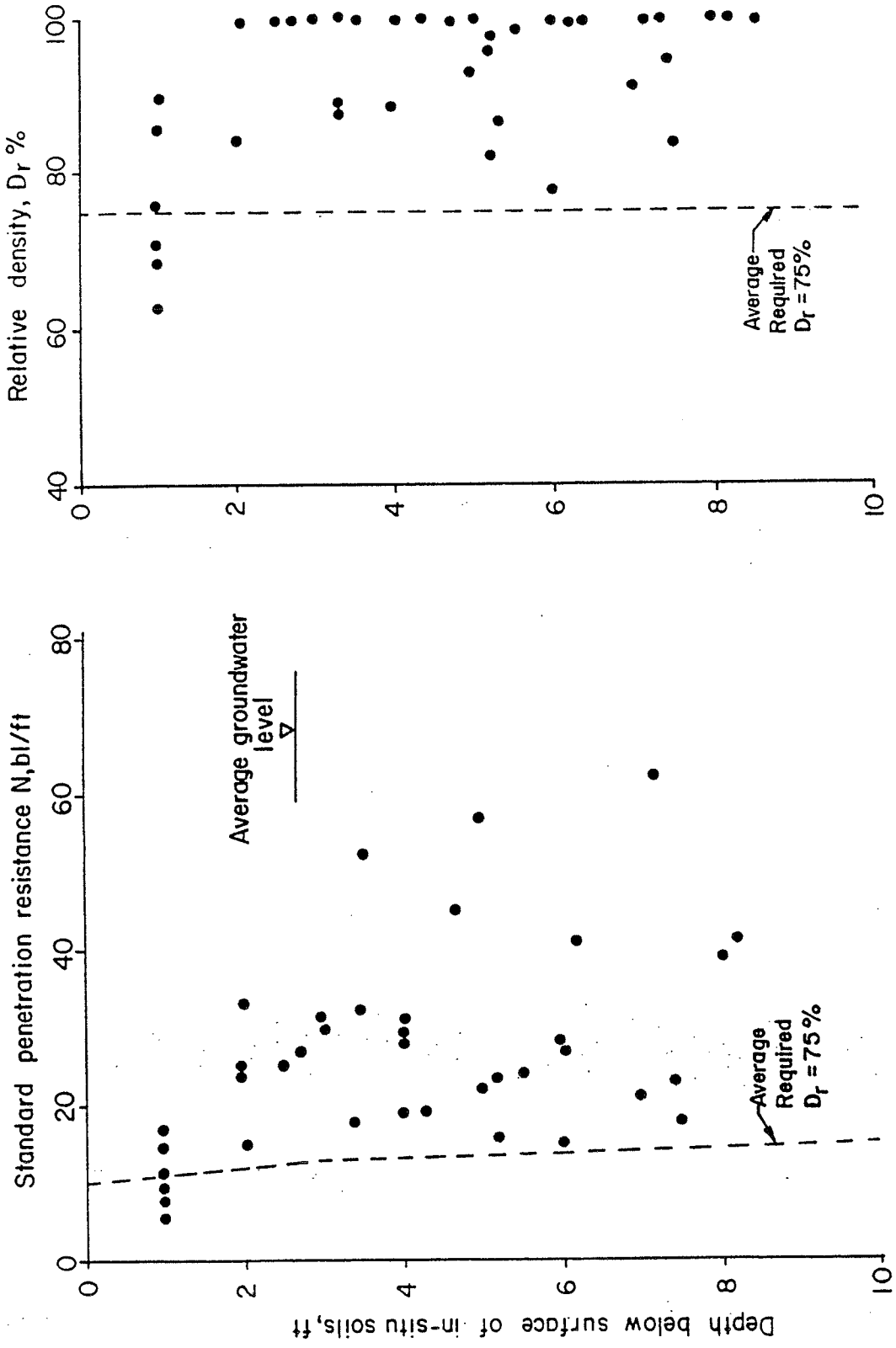
Locations of Piezometers, Heave Points, Deep Wells, Verification Borings, and In-Situ Compaction and Structural Fill Construction Areas

Figure D(1)-5-3 10/04/99



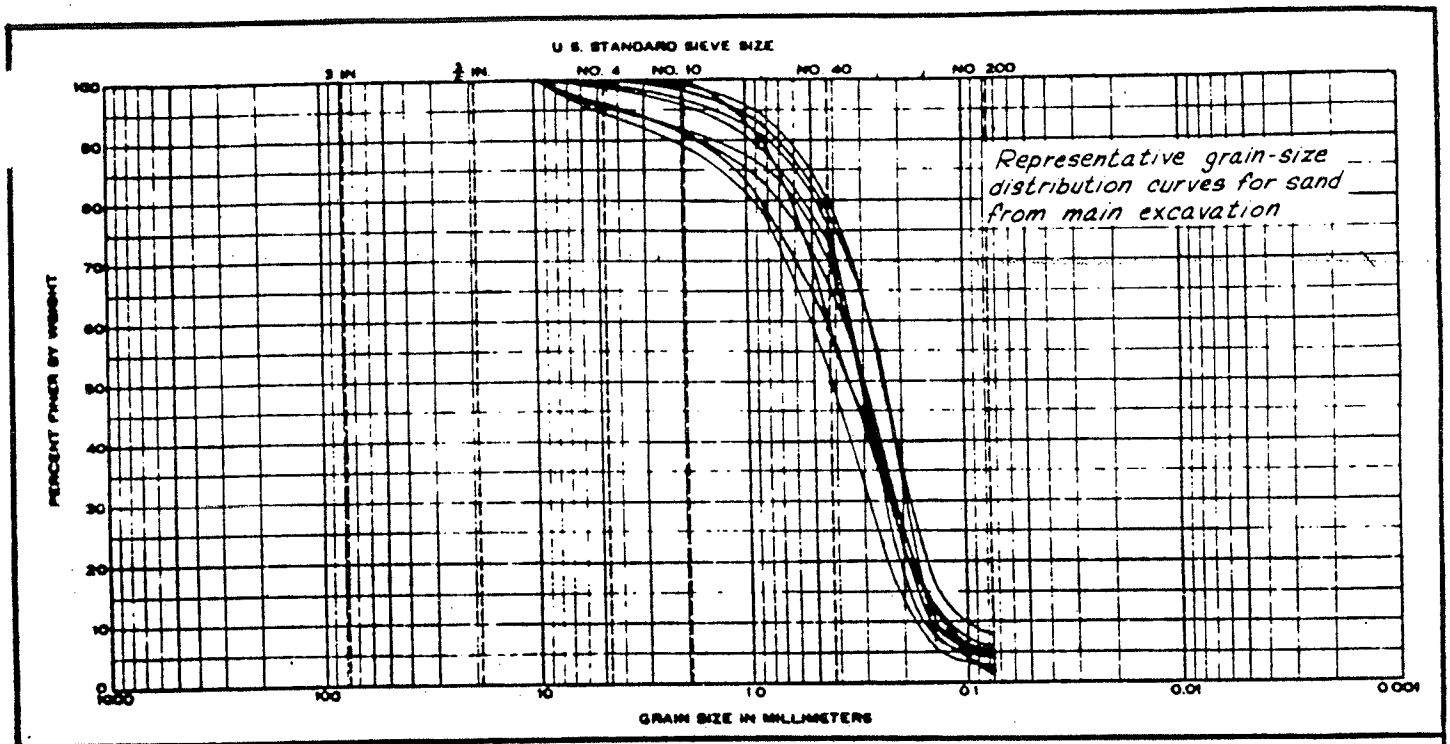
Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

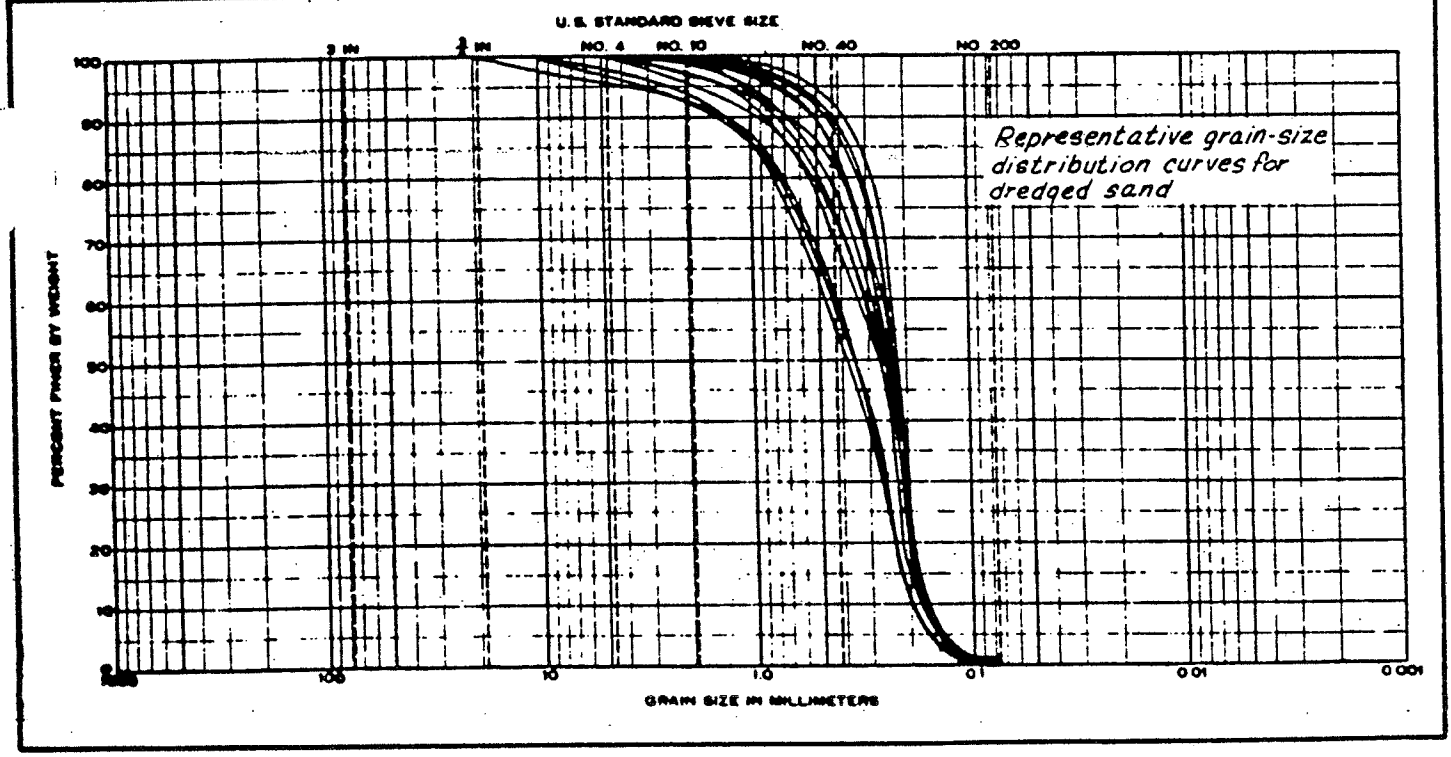
Results of Observations of Excavation and Groundwater Levels in Reactor Building Area
Figure D(1)-5-4 10/04/99



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

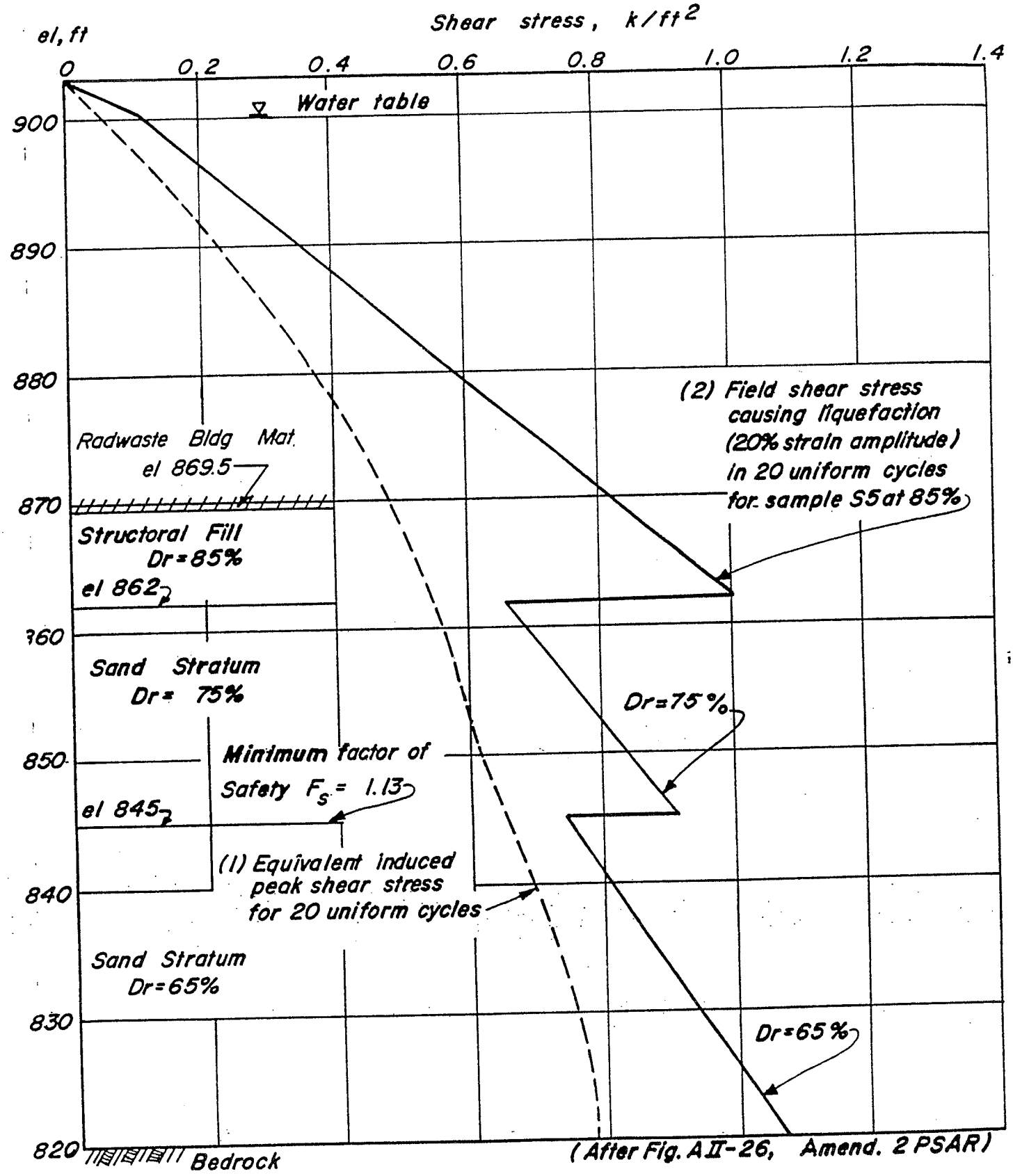
Results of Standard Penetration Tests and Calculated Relative Densities of In-Situ Compacted Material
Figure D(1)-5-5 10/04/99





Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Representative Grain-Size Distribution Curves for Sand from Main Excavation and Dredged Sand
Figure D(1)-5-6 10/04/99



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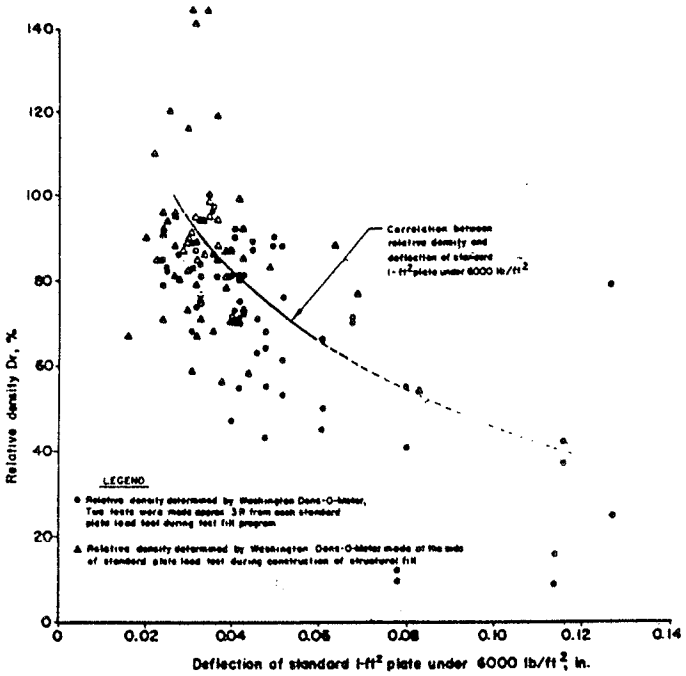
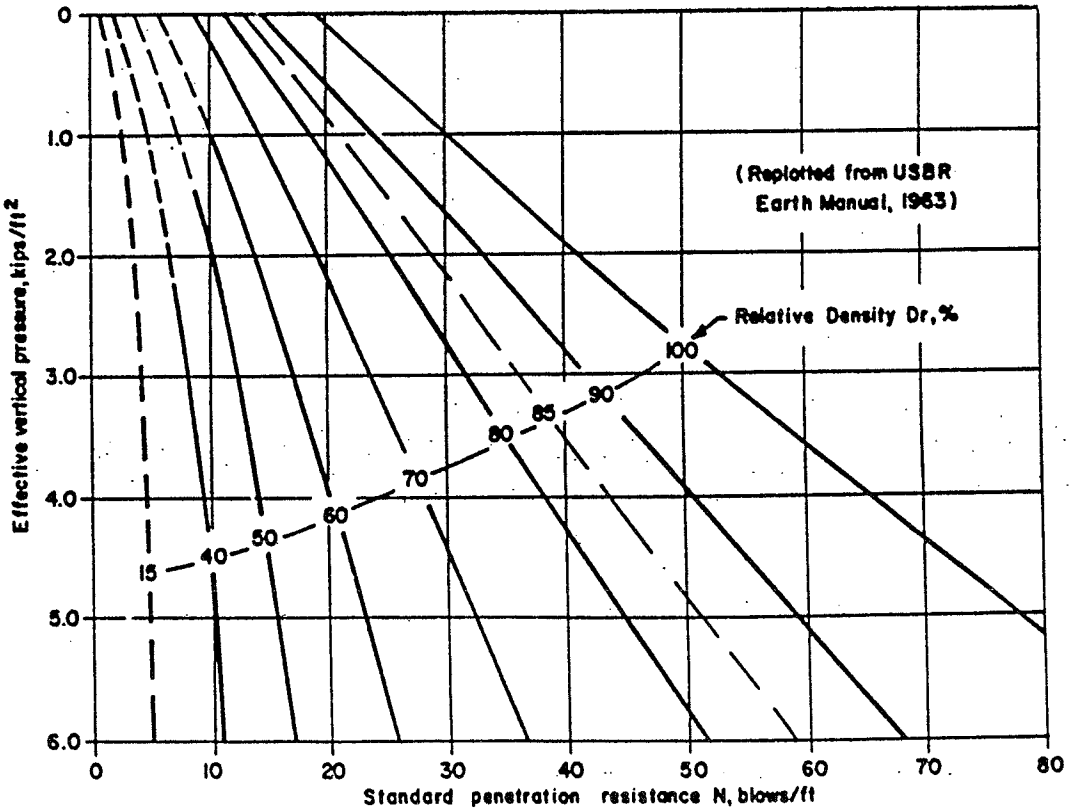
Liquefaction Potential for the Existing Structural Fill and Sand Stratum Beneath the Radwaste Bldg. Mat
Figure D(1)-5-7 10/04/99



a. CORRELATION BETWEEN RELATIVE DENSITY AND DEFLECTION OF STANDARD 1-FT² PLATE UNDER 6000 LB/FT²



b. RELATIONSHIP BETWEEN STANDARD PENETRATION AND RELATIVE DENSITY FOR SAND

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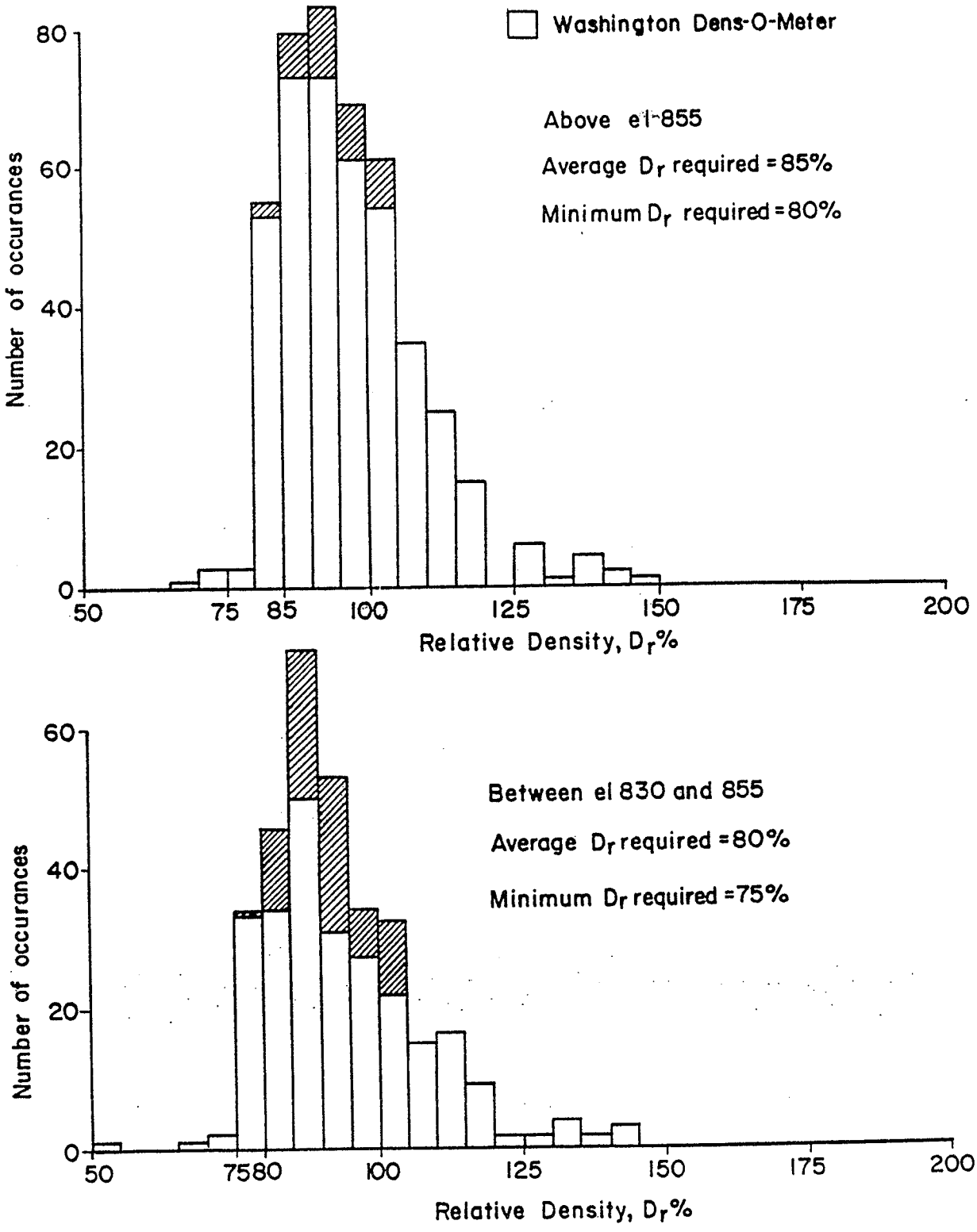
Structural Fill Density Correlations
Figure D(1)-5-8 10/04/99



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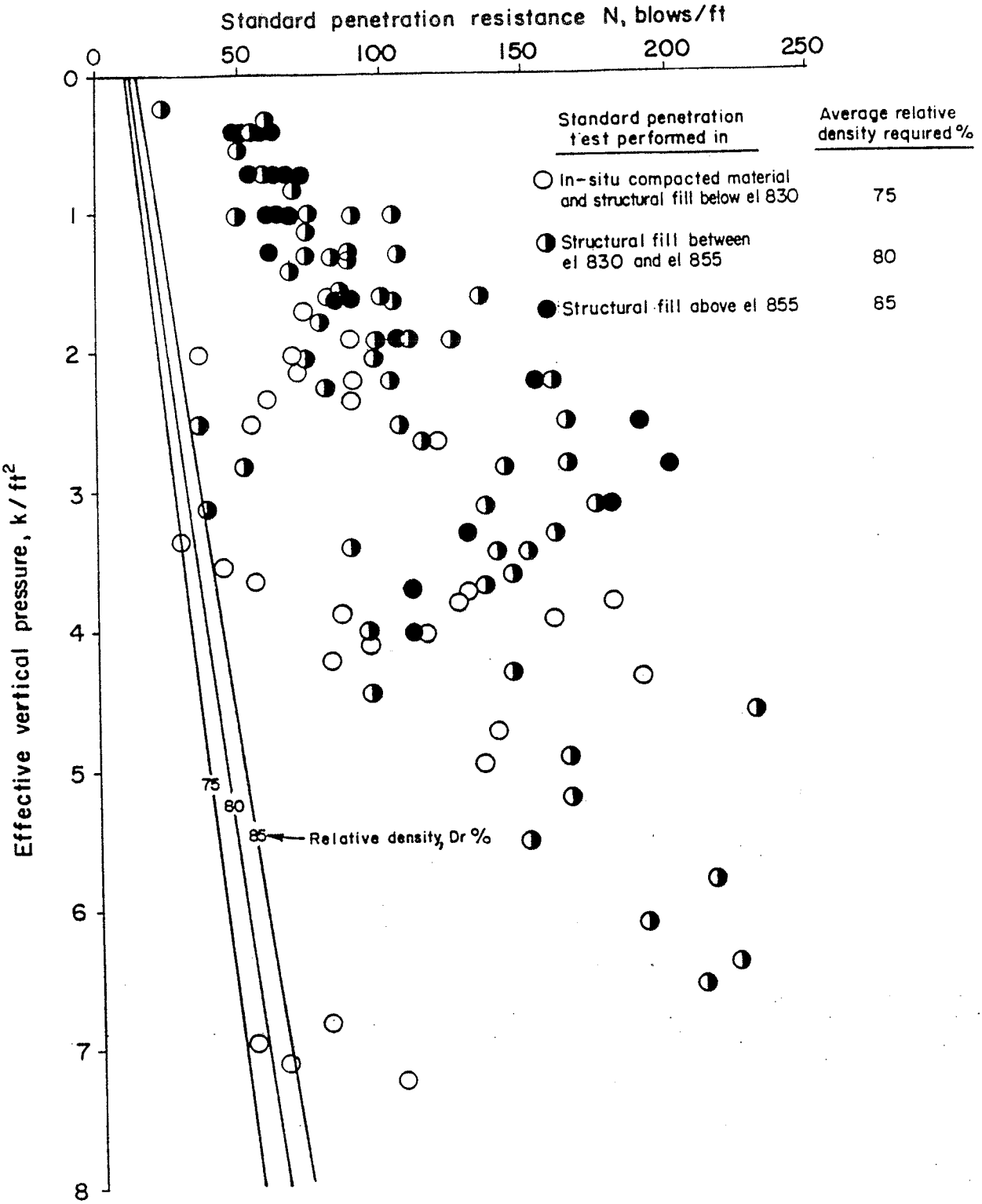
Histograms of Relative Density Values Obtained in Structural Fill
Figure D(1)-5-9 10/04/99



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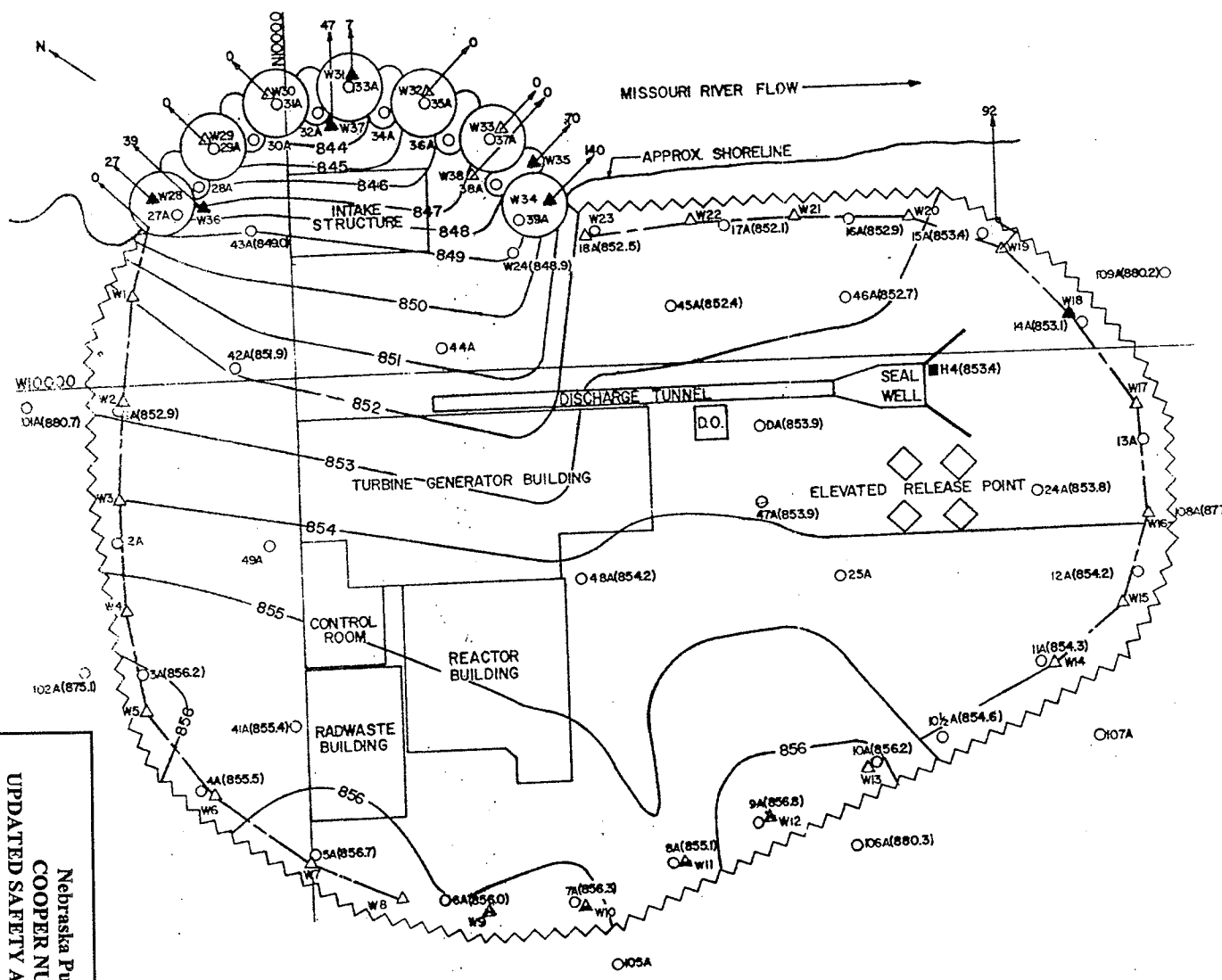
Results of Standard Penetration Tests in Structural Fill
Figure D(1)-5-10 10/04/99



LEGEND

- Deep well backfilled and covered with fill.
- Type A piezometer
- Temporary piezometer
- Deep well operating
- Deep well not operating
- Sheetpile cutoff wall
- Collector pipe
- 70 indicates discharge flow gal/min
- 845 Groundwater contour elevation

Notes:

(1) Contours were interpreted on the basis of water level elevations measured within the sheetpile cutoff wall.
(2) Deep wells W34 and W35 have two pumps operating.
(3) Deep wells W18, W28, W31, W36 and W37 have one pump operating.
(4) River elevation 881.1 at 0800 hrs.
(5) Total discharge rate from cellular cofferdam and plant bowl 422 gal/min.
(6) Deep well casing W8 is capped and covered with fill.
(7) Groundwater level measurements could not be made in piezometers 2A, 13A, 25A, 33A, 39A, 44A, 49A, 105A and 107A because of damage to the risers.
(8) Number adjacent to deep well symbol is deep well number.
(9) Numbers adjacent to piezometer symbols are piezometer numbers and groundwater levels, respectively.

Scale 1in. = 100ft.
Contour interval = 1ft.

Nebraska Public Power District
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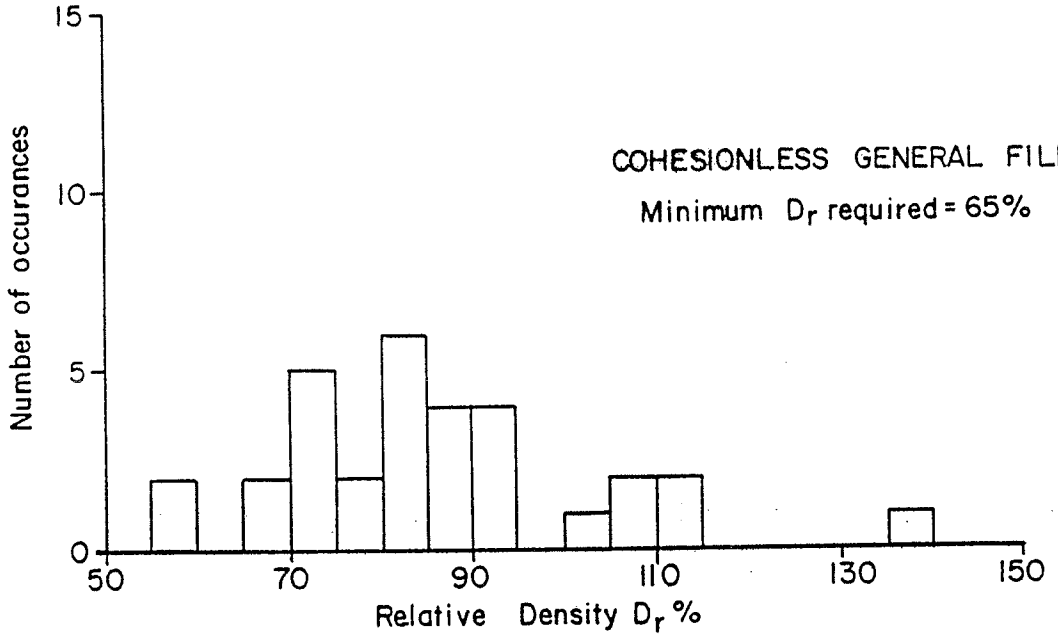
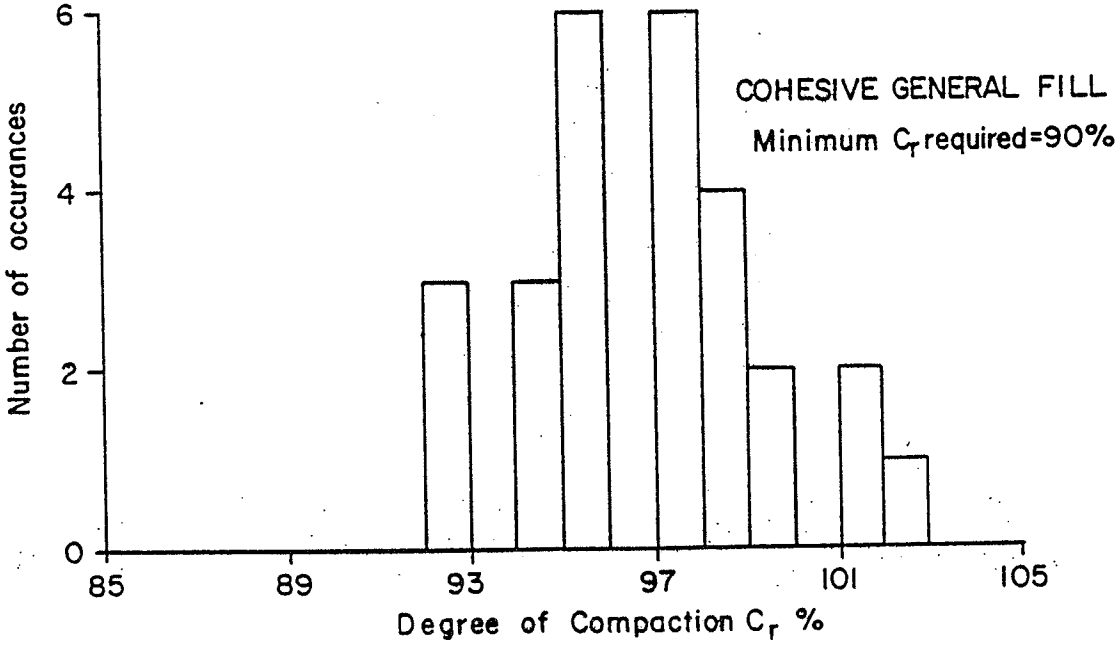
UPDATED SAFETY ANALYSIS REPORT (USAR)

Cooper Nuclear Station Interpreted Groundwater Contour Elevations - March 31, 1970

Figure D(1)-5-11 10/04/99





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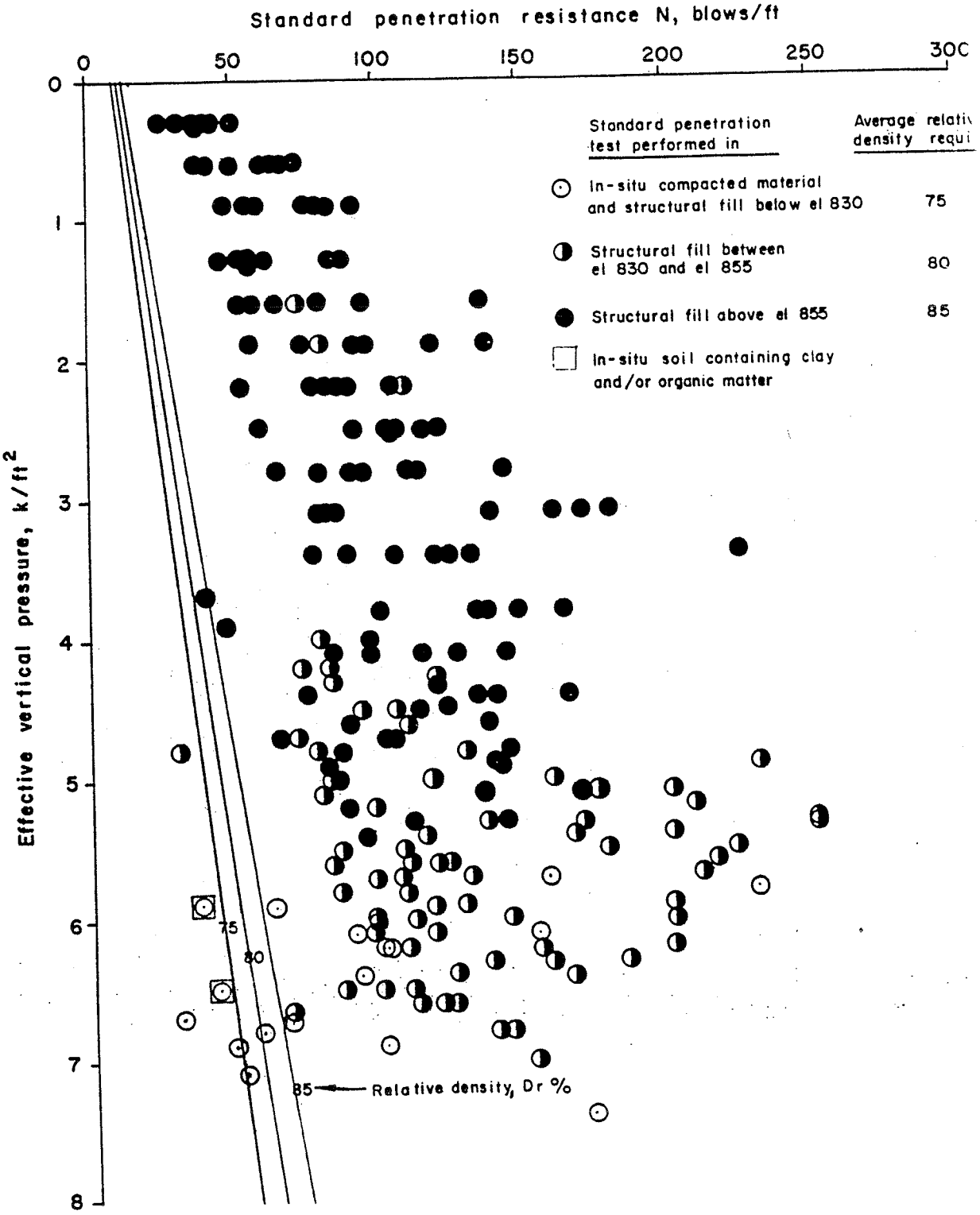
Histograms of Relative Density and Degree of Compaction Values Obtained in General Fill
Figure D(1)-5-12 10/04/99



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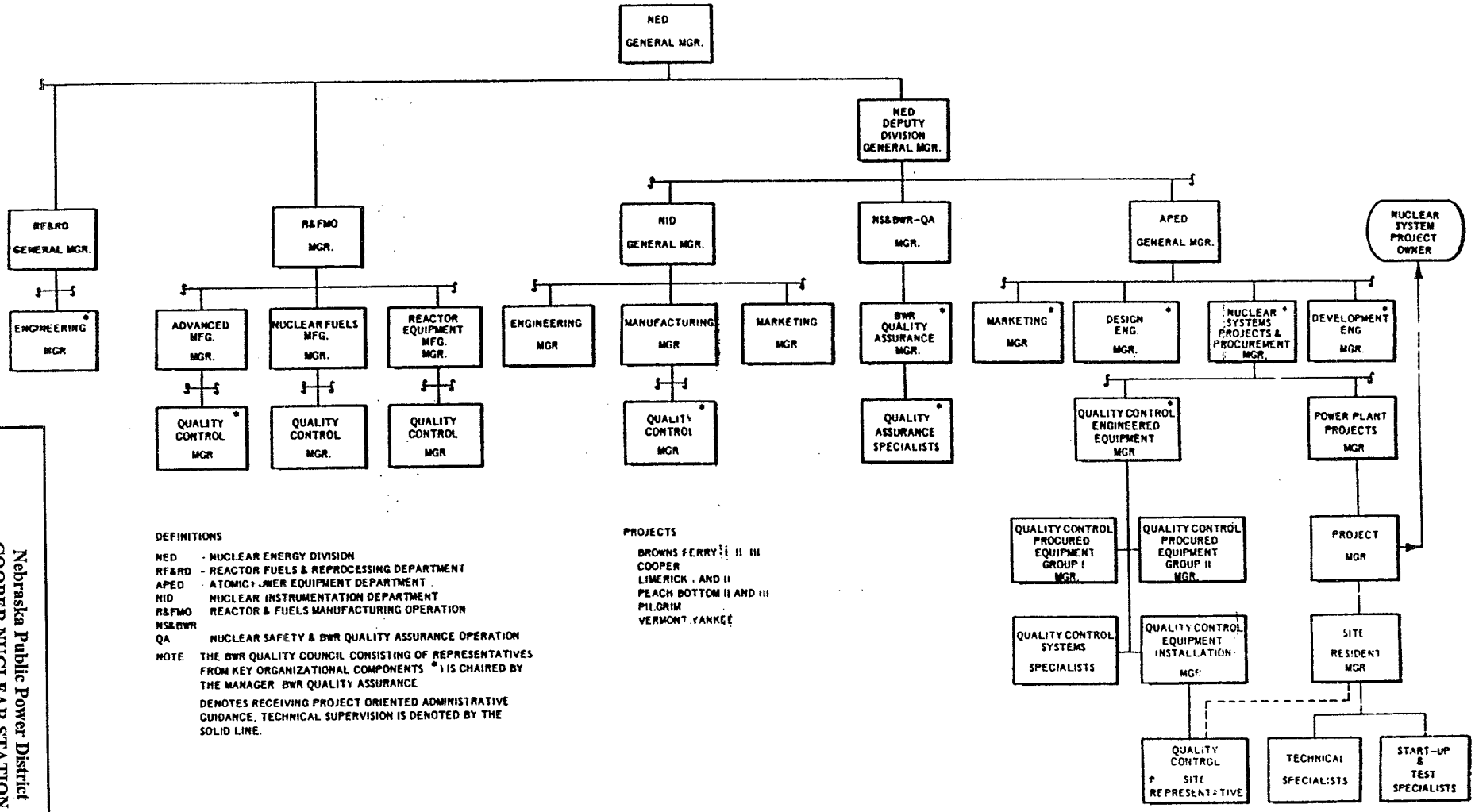
Results of Standard Penetration Tests in Verification Borings
Figure D(1)-5-13 10/04/99



Nebraska Public Power District
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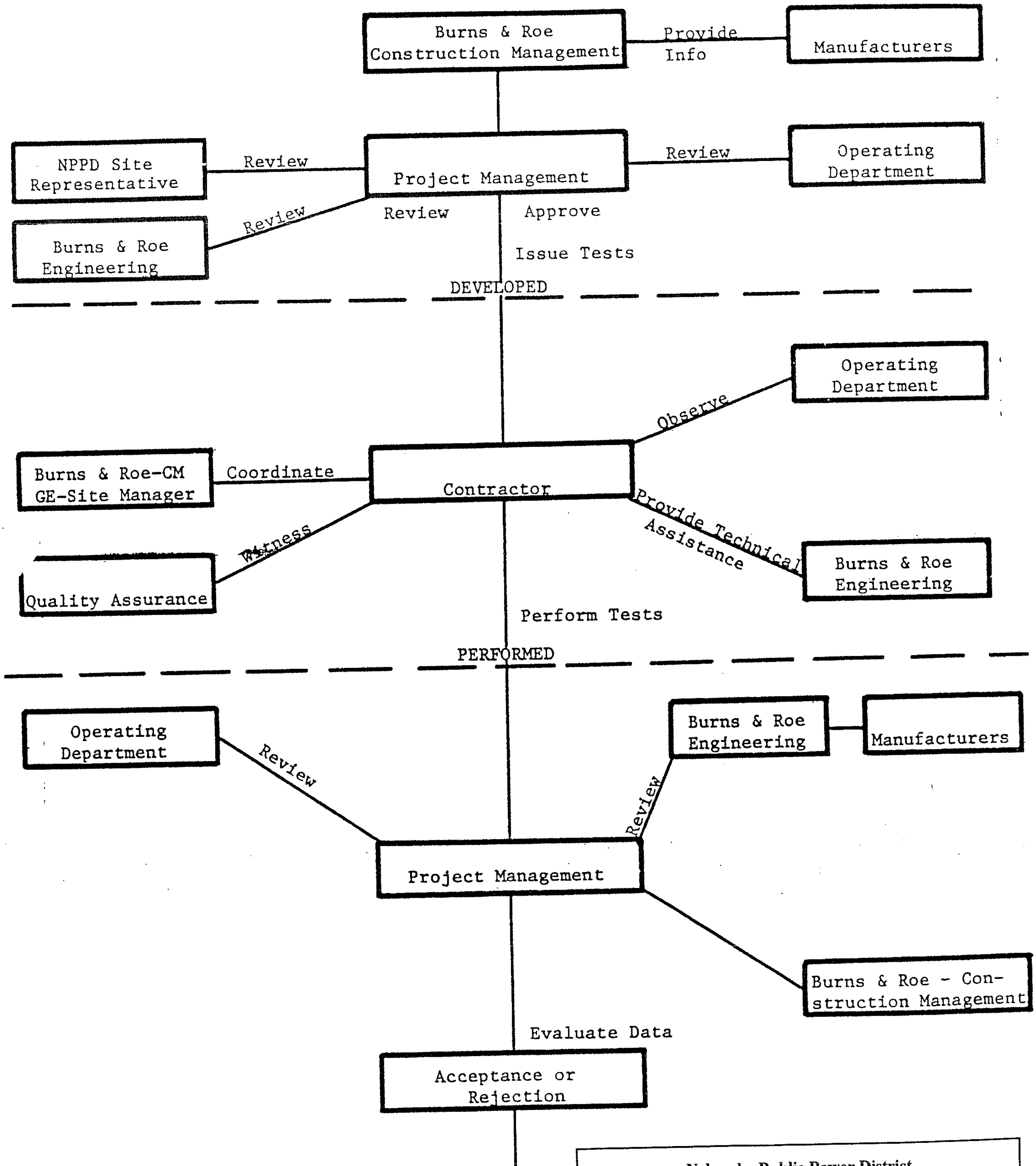
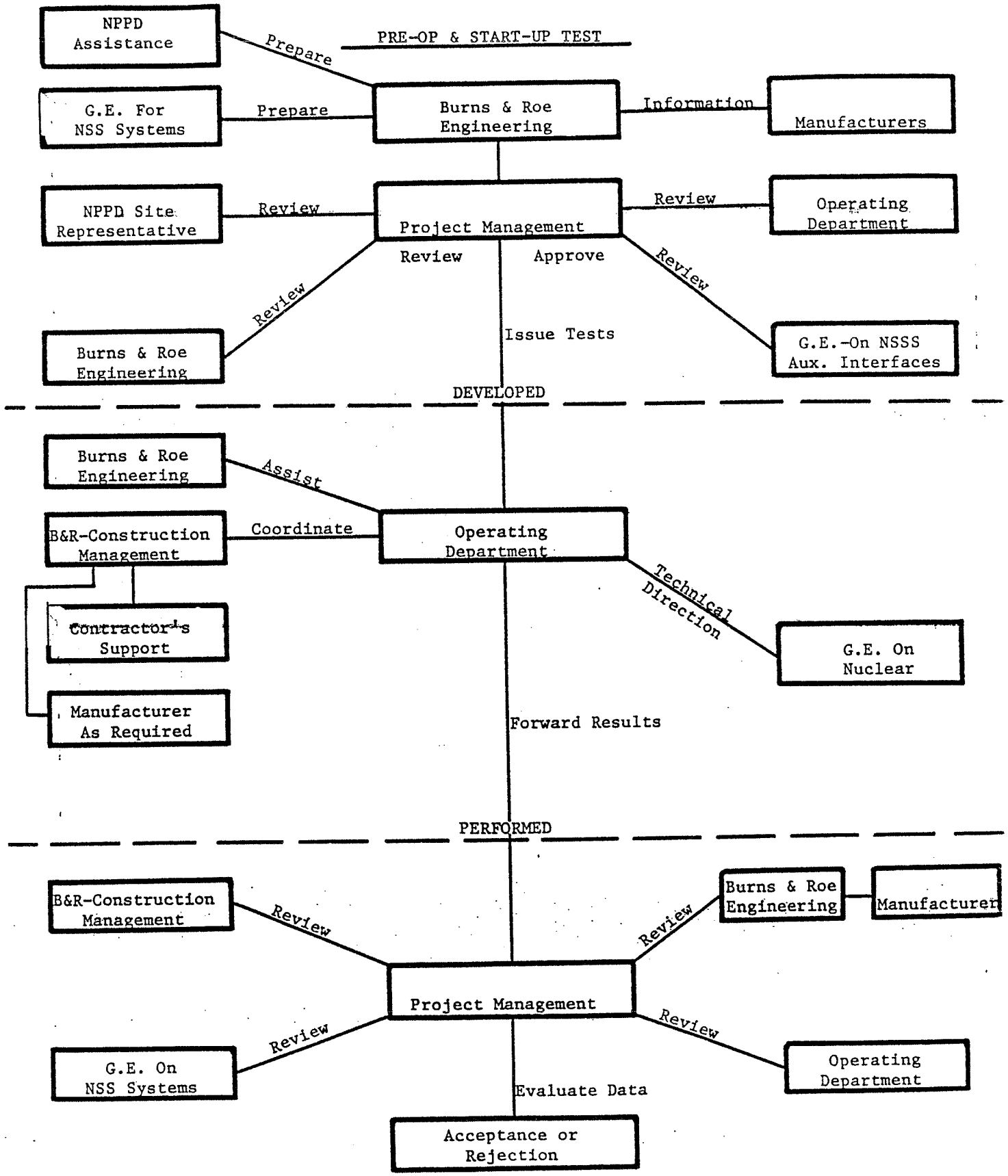
Quality System Organizational Structure
Figure D(1)-6-1 10/04/99

CONSTRUCTION TEST



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Construction Test
Figure D(1)-7-1 10/04/99



Nebraska Public Power District
COOPER NUCLEAR STATION
UPDATED SAFETY ANALYSIS REPORT (USAR)

Pre-Op and Start-Up Test
Figure D(1)-7-2 10/04/99

NEBRASKA PUBLIC POWER DISTRICT

COOPER NUCLEAR STATION

PRE-OPERATIONAL TEST NO. ____

TITLE: _____

PREPARED BY: _____

REVISION: _____ DATE: _____

PROCEDURE APPROVAL:

_____	_____ Date	Plant Test and Operations Manager, Burns and Roe (BOP) (or) Operations Manager, General Electric (NSSS)	_____	_____ Date	AUTHORIZATION TO PERFORM:
_____	_____ Date		_____	_____ Date	
_____	_____ Date	Station Superintendent, Nebraska Public Power District	_____	_____ Date	

CERTIFICATION OF TEST COMPLETION

This test has been conducted in accordance with this procedure.

_____ Test Engineer Burns and Roe (BOP)	_____ Date	_____ Test Engineer General Electric (NSSS)	_____ Date	_____ Pre-Op. Test Engr. N.P.P.D.	_____ Date

CERTIFICATION OF TEST RESULTS

This test has been satisfactorily completed and the system and equipment have met the requirements contained herein.

Exceptions:

_____ Engineering (Site) s and Roe - BOP	_____ Date	_____ Generation Engrg. N.P.P.D. (Site)	_____ Date	_____ Station Superintendent Cooper Nuclear Station	_____ Date

_____ _____

Operations Mgr. Date
General Electric - NSSS