APPENDIX B SUPPLEMENT TO
GENERIC LICENSING TOPICAL REPORT
EDR-1

SUMMARY OF PLANT SPECIFIC CRANE DATA SUPPLIED BY EDERER INCORPORATED FOR NORTHERN STATES POWER COMPANY PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS I & II

AUXILIARY BUILDING CRANE

P.O. NO. PC 9473SQ

EDERER S.O. NO. F-2300

REVISION A - 1/14/92

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REVISION A - 1/14/92

EDR-1 APPENDIX B SUPPLEMENT
SUMMARY OF PLANT SPECIFIC CRANE DATA SUPPLIED BY EDERER
FOR PRAIRIE ISLAND NUCLEAR GENERATING PLANT

TABLE OF CONTENTS AND REVISION STATUS

REVISION A - 1/14/92

EDR-1 APPENDIX B SUPPLEMENT
SUMMARY OF PLANT SPECIFIC CRANE DATA SUPPLIED BY EDERER
FOR PRAIRIE ISLAND NUCLEAR GENERATING PLANT

TABLE OF CONTENTS AND REVISION STATUS

EDR-1 APPENDIX B SUPPLEMENT
SUMMARY OF PLANT SPECIFIC CRANE DATA SUPPLIED BY EDERER
FOR PRAIRIE ISLAND NUCLEAR GENERATING PLANT

REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.1.a	III.C (C.1.a)	1. THE ACTUAL CRANE DUTY CLASSIFICATION OF THE CRANE SPECIFIED BY THE APPLICANT.	1. THE CRANE HAS A CLASS "C" CRANE DUTY CLASSIFICATION IN ACCORDANCE WITH CMAA SPECIFICATION #70.
C.1.b	III.C (C.1.b)	1. THE MINIMUM OPERATING TEMPERATURE OF THE CRANE SPECIFIED BY THE APPLICANT.	1. THE TROLLEY WAS DESIGNED AND FABRICATED FOR A MINIMUM OPERATING TEMPERATURE OF 40° F. (MINIMUM SPECIFIED TEMPERATURE 50° F.)
C.2.b	III.C (C.2.b) III.E.4	1. THE MAXIMUM EXTENT OF LOAD MOTION AND THE PEAK KINETIC ENERGY OF THE LOAD FOLLOWING A DRIVE TRAIN FAILURE.	1. THE MAIN HOIST WAS DESIGNED SUCH THAT THE MAXIMUM LOAD MOTION FOLLOWING A DRIVE TRAIN FAILURE IS LESS THAN 1.5 FOOT AND THE MAXIMUM KINETIC ENERGY OF THE LOAD IS LESS THAN THAT RESULTING FROM 1 INCH OF FREE FALL OF THE MAXIMUM CRITICAL LOAD.
		2. PROVISIONS FOR ACTUATING THE EMERGENCY DRUM BRAKE PRIOR TO TRAVERSING WITH THE LOAD, WHEN REQUIRED TO ACCOMMODATE THE LOAD MOTION FOLLOWING A DRIVE TRAIN FAILURE.	2. PROVISIONS FOR AUTOMATICALLY ACTUATING THE EMERGENCY DRUM BRAKE PRIOR TO TRAVERSING WITH THE LOAD ARE NOT REQUIRED SINCE THE MAXIMUM AMOUNT OF LOAD MOTION AND KINETIC ENERGY HAS BEEN FACTORED INTO THE FACILITY DESIGN.

EDR-1 APPENDIX B SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.3.e	III.C (C.3.e)	1. THE MAXIMUM CABLE LOADING FOLLOWING A WIRE ROPE FAILURE IN TERMS OF THE ACCEPTANCE CRITERIA ESTABLISHED IN SECTION III.C (C.3.e).	1. THE MAXIMUM CABLE LOADING FOLLOWING A WIRE ROPE FAILURE IN THE MAIN HOIST MEETS THE MAXIMUM ALLOWED BY THE ACCEPTANCE CRITERIA ESTABLISHED IN SECTION III.C (C.3.e).
C.3.f	--	1. MAXIMUM FLEET ANGLE	1. 3.5 DEGREES.
		2. NUMBER OF REVERSE BENDS	2. NONE, OTHER THAN THE ONE BETWEEN THE WIRE ROPE DRUM AND THE FIRST SHEAVE IN THE LOAD BLOCK.
		3. SHEAVE DIAMETER	3. PER CMAA SPECIFICATION #70.
C.3.h	III.C (C.3.h) III.E.II	1. THE MAXIMUM EXTENT OF MOTION AND PEAK KINETIC ENERGY OF THE LOAD FOLLOWING A SINGLE WIRE ROPE FAILURE.	1. THE MAIN HOIST WAS DESIGNED SUCH THAT THE MAXIMUM LOAD MOTION FOLLOWING A SINGLE WIRE ROPE FAILURE IS LESS THAN 1.5 FOOT AND THE MAXIMUM KINETIC ENERGY OF THE LOAD IS LESS THAN THAT RESULTING FROM ONE INCH OF FREE FALL OF THE MAXIMUM CRITICAL LOAD.

EDR-1 APPENDIX B SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.3.i	III.C (C.3.i)	1. THE TYPE OF LOAD CONTROL SYSTEM SPECIFIED BY THE APPLICANT.	1. EDERER D.C. ADJUSTABLE VOLTAGE WITH 50:1 MICRO-SPEED CAPABILITY.
		2. WHETHER INTERLOCKS ARE RECOMMENDED BY REGULATORY GUIDE 1.13 TO PREVENT TROLLEY AND BRIDGE MOVEMENTS WHILE FUEL ELEMENTS ARE BEING LIFTED AND WHETHER THEY ARE PROVIDED FOR THIS APPLICATION.	2. THE CRANE WILL NOT BE USED TO LIFT FUEL ELEMENTS FROM THE REACTOR CORE OR SPENT FUEL RACKS. THEREFORE, INTERLOCKS TO PREVENT TROLLEY AND BRIDGE MOVEMENTS WHILE HOISTING HAVE NOT BEEN PROVIDED.

EDR-1 APPENDIX B SUPPLEMENT
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C.3.j	III.C (C.3.j)	1. THE MAXIMUM CABLE AND MACHINERY LOADING THAT WOULD RESULT IN THE EVENT OF A HIGH SPEED TWO BLOCKING, ASSUMING A CONTROL SYSTEM MALFUNCTION THAT WOULD ALLOW THE FULL BREAKDOWN TORQUE OF THE MOTOR TO BE APPLIED TO THE DRIVE MOTOR SHAFT.	1. THE ENERGY ABSORBING TORQUE LIMITER (EATL) WAS DESIGNED SUCH THAT THE MAXIMUM MACHINERY LOAD, WHICH WOULD RESULT IN THE EVENT A TWO BLOCKING OCCURS WHILE LIFTING THE RATED LOAD AT THE RATED SPEED AND THAT ALLOWS THE FULL BREAKDOWN TORQUE OF THE MOTOR TO BE APPLIED TO THE DRIVE SHAFT, WILL NOT EXCEED 3.2 TIMES THE DESIGN RATED LOADING. IN ADDITION, THE EATL DESIGN DOES NOT ALLOW THE MAXIMUM CABLE LOADING TO EXCEED THE ACCEPTANCE CRITERIA ESTABLISHED IN SECTION III.C (C.3.e) DURING THE ABOVE DESCRIBED TWO-BLOCKINGS.
		2. MEANS OF PREVENTING TWO BLOCKING OF AUXILIARY HOIST, IF PROVIDED.	2. THE AUXILIARY HOIST HAS A ROTARY CONTROL TYPE LIMIT SWITCH AS THE FIRST PRIMARY LIMIT AND A BLOCK ACTUATION POWER CIRCUIT TYPE LIMIT SWITCH THAT REMOVES POWER FROM THE HOIST AS A SECONDARY LIMIT.

EDR-1 APPENDIX B SUPPLEMENT
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C.3.k	III.C (C.3.k)	1. TYPE OF DRUM SAFETY SUPPORT PROVIDED.	1. THE ALTERNATE DESIGN DRUM SAFETY RESTRAINT SHOWN IN FIGURE III.D.4 OF EDR-1 IS ARRANGED TO COUNTER GEAR AND BRAKE FORCES AS WELL AS DOWNWARD LOADS. THESE BRACKETS ACT ON THE INSIDE DIAMETER OF THE ENDS OF THE DRUM.
C.3.o	--	1. TYPE OF HOIST DRIVE TO PROVIDE INCREMENTAL MOTION.	1. 50:1 MICRO-SPEED IS PROVIDED AS A PART OF DC ADJUSTABLE VOLTAGE CONTROL.
C.3.p	--	1. MAXIMUM TROLLEY SPEED.	1. 55 F.P.M
		2. MAXIMUM BRIDGE SPEED.	2. 50 F.P.M.
		3. TYPE OF OVERPSEED PROTECTION FOR THE TROLLEY AND BRIDGE DRIVES.	3. BOTH THE TROLLEY AND BRIDGE DRIVES ARE POWERED BY AC MOTORS THAT CAN INHERENTLY NOT OVERSPEED, SINCE THEIR MAXIMUM SPEED IS LIMITED BY THE 60 HZ LINE FREQUENCY.

EDR-1 APPENDIX B SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.3.q	--	1. CONTROL STATION LOCATION.	1. THE COMPLETE OPERATING CONTROL SYSTEM, INCLUDING THE EMERGENCY STOP BUTTONS, ARE LOCATED ON A PENDANT AND ON A REMOTE RADIO CONTROL CONSOLE.
--	III.D.1	1. THE TYPE OF EMERGENCY DRUM BRAKE USED, INCLUDING TYPE OF RELEASE MECHANISM.	1. A SINGLE PNEUMATICALLY RELEASED BAND BRAKE WILL BE USED.
		2. THE RELATIVE LOCATION OF OF THE EMERGENCY DRUM BRAKE.	2. THE EMERGENCY DRUM BRAKE ENGAGES THE MAIN HOIST WIRE ROPE DRUM.
		3. EMERGENCY DRUM BRAKE CAPACITY.	3. THE MAIN HOIST EMERGENCY DRUM BRAKE HAS A MINIMUM CAPACITY OF 130% OF THAT REQUIRED TO HOLD THE DESIGN RATED LOAD.
--	III.D.2	1. NUMBER OF FRICTION SURFACES IN EATL.	1. THE EATL HAS 14 FRICTION SURFACES.
		2. EATL TORQUE SETTING	2. THE SPECIFIED EATL TORQUE SETTING IS APPROXIMATELY 130% OF THE MAIN HOIST DESIGN RATED LOAD.

EDR-1 APPENDIX B SUPPLEMENT
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--	III.D.3	1. TYPE OF FAILURE DETECTION SYSTEM.	1. A TOTALLY MECHANICAL DRIVE TRAIN CONTINUITY DETECTOR AND EMERGENCY DRUM BRAKE ACTUATOR HAVE BEEN PROVIDED IN ACCORDANCE WITH APPENDIX G OF REVISION 3 OF EDR-1 FOR THE MAIN HOIST.
--	III.D.5	1. TYPE OF HYDRAULIC LOAD EQUALIZATION SYSTEM.	1. THE MAIN HOIST HYDRAULIC LOAD EQUALIZATION SYSTEM INCLUDES BOTH FEATURES DESCRIBED IN SECTION III.D.5.
--	III.D.6	1. TYPE OF HOOK.	1. THE MAIN HOOK HAS A SINGLE LOAD PATH.
		2. HOOK DESIGN LOAD.	2. THE MAIN HOOK DESIGN CRITICAL LIFT LOAD IS 125 TONS WITH A 10:1 FACTOR OF SAFETY ON ULTIMATE.

EDR-1 APPENDIX B SUPPLEMENT
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--	III.D.6	3. HOOK TEST LOAD.	3. THE TEST LOAD FOR EACH LOAD PATH OF THE MAIN HOOK WILL BE 250 TONS.
--	III.F.1	1. DESIGN RATED LOAD.	1. MAIN HOIST - 125 TONS.
		2. MAXIMUM CRITICAL LOAD RATING.	2. MAIN HOIST - 125 TONS.
		3. TROLLEY WEIGHT (NET).	3. 92,000 LBS. (INCLUDING HOOKS)
		4. TROLLEY WEIGHT (WITH LOAD).	4. 342,000 LBS.
		5. HOOK LIFT.	5. MAIN HOOK - 89 FEET-0 INCHES.
		6. NUMBER OF WIRE ROPE DRUMS.	6. THE MAIN HOIST HAS ONE WIRE ROPE DRUM.
		7. NUMBER OF PARTS OF WIRE.	7. MAIN HOIST - 8 PARTS PER WIRE ROPE.

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--	III.F.1	8. DRUM SIZE (PITCH DIAMETER).	8. MAIN HOIST - 50 INCHES.
		9. WIRE ROPE DIAMETER.	9. MAIN HOIST - 1 1/8 INCH.
		10. WIRE ROPE TYPE.	10. 6 x 37 CLASS EEIPS/IWRC - MAIN HOIST
		11. WIRE ROPE MATERIAL.	11. CARBON STEEL - MAIN HOIST
		12. WIRE ROPE BREAKING STRENGTH.	12. MAIN HOIST - 143,000 LBS.
		13. WIRE ROPE YIELD STRENGTH.	13. MAIN HOIST - 114,400 LBS.
		:	:
		14. WIRE ROPE RESERVE STRENGTH.	14. MAIN HOIST - .563
		15. NUMBER OF WIRE ROPES.	15. THE MAIN HOIST HAS TWO ROPES.

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

ATTACHMENT 2

Appendix C Supplement to Generic Licensing Topical Report EDR-1

APPENDIX C SUPPLEMENT TO
GENERIC LICENSING TOPICAL REPORT
EDR-1

SUMMARY OF PLANT SPECIFIC CRANE DATA SUPPLIED BY APPLICANT FOR NORTHERN STATES POWER COMPANY PRAIRIE ISLAND NUCLEAR GENERATING PLANT UNITS I & II

AUXILIARY BUILDING CRANE

P.O. NO. PC 9473SQ

EDERER S.O. NO. F-2300

REVISION A - 1/14/92

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REVISION A - 1/14/92

EDR-1 APPENDIX C SUPPLEMENT
SUMMARY OF PLANT SPECIFIC CRANE DATA
SUPPLIED BY NORTHERN STATES POWER CO.
FOR PRAIRIE ISLAND NUCLEAR GENERATING PLANT
AUXILIARY BUILDING CRANE MODIFICATIONS

TABLE OF CONTENTS AND REVISION STATUS

EDR-1 APPENDIX C SUPPLEMENT
SUMMARY OF REGULATORY POSITIONS TO BE ADDRESSED BY THE APPLICANT
PRAIRIE ISLAND NUCLEAR GENERATING PLANT
AUXILIARY BUILDING CRANE MODIFICATIONS

REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
--	III.C(C.1.b(1))	1. THE EXTENT OF VENTING OF OF CLOSED BOX SECTIONS.	1. CLOSED BOX SECTIONS ARE NOT VENTED SINCE THE AUXILIARY BUILDING THAT HOUSE THE CRANE IS NOT PRESSURIZED.
C.1.b(3) C.1.b(4) C.4.d	III.C(C.1.b(3)) III.C(C.1.b(4)) III.C(C.4.d)	1. THE NONDESTRUCTIVE AND COLD PROOF TESTING TO BE PERFORMED ON EXISTING STRUCTURAL MEMBERS FOR WHICH SATISFACTORY IMPACT TEST DATA IS NOT AVAILABLE.	1. THE EXISTING CRANE BRIDGE, INCLUDING ALL ACCESSIBLE STRUCTURAL WELDS, WILL BE VISUALLY INSPECTED BY A COMPETENT STRUCTURAL ENGINEER. VISUAL INDICATIONS OF STRUCTURAL DEGRADATION OF THE EXISTING BRIDGE WILL BE INVESTIGATED FURTHER BY THE APPROPRIATE NONDESTRUCTIVE EXAMINATION TECHNIQUES.

EDR-1 APPENDIX C SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.1.c	III.C(C.1.c)	1. THE EXTENT THE CRANE'S STRUCTURES WHICH ARE NOT BEING REPLACED ARE CAPABLE OF MEETING THE SEISMIC REQUIREMENTS OF REGULATORY GUIDE 1.29.	1. THE CRANE STRUCTURES ARE QUALIFIED FOR BOTH OPERATING BASIS EARTHQUAKE DESIGN BASIS EARTHQUAKE WHILE SUPPORTING THE MAXIMUM CRITICAL LOADS. REF: SEISMIC ANALYSIS REPORT BY NORPAC ENGINEERING INC.
C.1.d	III.C(C.1.d)	1. THE EXTENT WELDS JOINTS IN THE CRANE'S STRUCTURES, WHICH ARE NOT BEING REPLACED, WERE NONDESTRUCTIVELY EXAMINED, AND	1. NONDESTRUCTIVE EXAMINATIONS OF THE EXISTING BRIDGE STRUCTURE WERE NOT REQUIRED BY EXISTING REGULATIONS AT THE TIME OF BRIDGE CONSTRUCTION. HOWEVER, THE X-SAM SYSTEM PROVIDES ADDITIONAL OVERLOAD PROTECTION, AND THE INSPECTIONS OF THE EXISTING STRUCTURE DESCRIBED IN C.1.b(3) ABOVE ARE ADEQUATE TO ENSURE THE STRUCTURAL INTEGRITY OF THE EXISTING BRIDGE.

EDR-1 APPENDIX C SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.1.d	III.C(C.1.d)	1. THE EXTENT THE BASE MATERIAL, AT JOINTS SUSCEPTIBLE TO LAMELLAR TEARING, WAS NONDESTRUCTIVELY EXAMINED.	1. THE WELD JOINT GEOMETRIES USED IN THE EXISTING BRIDGE STRUCTURE ARE NOT CONSIDERED TO BE SUSCEPTIBLE TO LAMELLAR TEARING.
C.1.e	III.C(C.1.e)	1. THE EXTENT THE CRANE'S STURCTURES, WHICH ARE NOT BEING REPLACED, ARE CAPABLE OF WITH-STANDING THE FATIGUE EFFECTS OF CYCLIC LOADING FROM PREVIOUS AND PROJECTED USAGE, INCLUDING ANY CONSTRUCTION USAGE.	1. THE CRANE WAS NOT USED FOR ANY OVER-CAPACITY CONSTRUCTION LIFTS. ALL PAST AND PROJECTED USE OF THE CRANE, AT A MAXIMUM LOADING OF 125 TONS, IS WELL WITHIN THE CYCLIC LOADING CAPABILITY OF THE EXISTING CRANE STRUCTRE AND WELDS.
C.1.f	III.C(C.1.f)	1. THE EXTENT THE CRANE'S STRUCTURES, WHICH ARE NOT BEING REPLACED, WERE POST-WELD HEAT-TREATED IN ACCORDANCE WITH SUB-ARTICLE 3.9 OF AWS D1.1, "STRUCTURAL WELDING CODE."	1. THE MATERIAL THICKNESSES OF THE EXISTING BRIDGE STRUCTURE ARE SUCH THAT PARAGRAPH III.C (C.I.f) OF EDR-1 DOES NOT REQUIRE POST-WELD HEAT-TREATMENT.

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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.2.b	III.C(C.2.b)	1. PROVISIONS FOR ACCOMMODATING THE THE LOAD MOTION AND KINETIC ENERGY FOLLOWING A DRIVE TRAIN FAILURE WHEN THE LOAD IS BEING TRAVERSED AND WHEN IT IS BEING RAISED OR LOWERED.	1. THE SURFACES WHICH SUPPORT THE LOAD (i.e., THE BASE MAT AND THE POOL FLOOR SLAB) ARE CAPABLE OF WITHSTANDING ONE (1) INCH OF FREE FALL OF THE LOAD FOLLOWING A DRIVE TRAIN FAILURE. WHEN THE LOAD IS BEING TRAVERSED, THE LOAD PASSES WITHIN 1.5 FEET VERTICAL DISTANCE FROM CERTAIN PLANT STRUCTURAL ELEMENTS. THESE ELEMENTS WERE ANALYZED FOR THE 1 INCH OF FREE FALL ENERGY, AND ARE EITHER ABLE TO WITHSTAND THE IMPACT OR THEIR FAILURE HAS BEEN SHOWN NOT TO COMPROMISE SAFE OPERATION OF THE PLANT.
C.2.c	III.C(C.2.c)	1. LOCATION OF SAFE LAYDOWN AREAS FOR USE IN THE EVENT REPAIRS TO THE CRANE ARE REQUIRED THAT CANNOT BE MADE WITH THE LOAD SUSPENDED.	1. DRAWING "A", SHEET 1, SHOWS THE LAYDOWN AREAS THAT CAN BE USED IN THE EVENT THAT REPAIRS TO THE CRANE ARE REQUIRED THAT CANNOT BE MADE WITH THE LOAD SUSPENDED.

EDR-1 APPENDIX C SUPPLEMENT
SUMMARY REGULATORY POSITIONS TO BE ADDRESSED BY THE APPLICANT
FOR PRAIRIE ISLAND NUCLEAR GENERATING PLANT
AUXILAIRY BUILDING CRANE MODIFICATIONS

REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.2.d	III.C(C.2.d)	1. SIZE OF REPLACEMENT COMPONENTS THAT CAN BE BROUGHT INTO THE BUILDING FOR REPAIR OF THE CRANE WITHOUT HAVING TO BREAK ITS INTEGRITY.	1. THE REPLACEMENT TROLLEY COMPONENTS WILL BE BROUGHT IN THROUGH THE AUXILIARY BUILDING, WEST END ROLL-UP DOOR, IN ACCORDANCE WITH DRAWING "A", SHEET 2. THIS MEANS THAT ANY TROLLEY COMPONENT CAN BE BROUGHT INTO THE AUXILIARY BUILDING IF NEEDED FOR CRANE REPAIRS.
		2. LOCATION OF AREA WHERE REPAIR WORK CAN BE ACCOMPLISHED ON THE CRANE WITHOUT AFFECTING THE SAFE SHUT-DOWN CAPABILITY OF THE REACTOR, AND	2. REPAIR WORK, INVOLVING HEAVY LIFTS BY NON-SINGLE FAILURE PROOF EQUIPMENT, CAN BE SAFELY ACCOMPLISHED ON THE CRANE WHEN IT IS POSITIONED OVER THE AREAS SHOWN IN DRAWING "A", SUBJECT TO PROVISIONS THEREIN. THERE ARE NO NUCLEAR SAFETY RESTRICTIONS ON CRANE REPAIRS THAT DO NOT INVOLVE HANDLING HEAVY COMPONENTS.

EDR-1 APPENDIX C SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.2.d	III.C(C.2.d)	3. ANY LIMITATIONS ON REACTOR OPERATIONS THAT WOULD RESULT FROM CRANE REPAIRS.	3. THERE ARE NO LIMITATIONS ON REACTOR OPERATIONS THAT WOULD RESULT FROM CRANE REPAIRS.
C.3.b	III.C(C.3.b)	1. THE DESIGN MARGIN AND TYPE OF LIFTING DEVICES THAT ARE ATTACHED TO THE HOOK TO CARRY CRITICAL LOADS.	1. AS AN ALTERNATIVE TO A DUAL LOAD PATH SYSTEM, THE NORMAL STRESS DESIGN FACTORS HAVE BEEN DOUBLED. EACH LIFTING DEVICE ATTACHED TO THE HOOK TO CARRY CRITICAL LOADS WILL SUPPORT A LOAD SIX TIMES THE STATIC PLUS DYNAMIC LOAD BEING HANDLED WITHOUT PERMANENT DEFORMATION. THE SAFETY FACTOR IS 10:1 WHEN COMPARED TO ULTIMATE. THIS IS IN ACCORDANCE WITH NUREG 0612, SECTION 5.1.6, PARAGRAPH 1(A) AND ANSI N14.6, SECTION 7.2.1.

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C.3.t	II.C(C.3.t)	1. THE EXTENT CONSTRUCTION REQUIREMENTS FOR THE CRANE'S STRUCTURES, WHICH WILL NOT BE REPLACED, ARE MORE SEVERE THAN THOSE FOR PERMANENT PLANT SERVICE.	1. THE CONSTRUCTION REQUIREMENTS FOR THE CRANE WERE THE SAME AS FOR PLANT SERVICE.
		2. THE MODIFICATIONS AND INSPECTIONS TO BE ACCOMPLISHED ON THE CRANE FOLLOWING CONSTRUCTION USE, WHICH WAS MORE SEVERE THAN THOSE FOR PERMANENT PLANT SERVICE.	2. NO SPECIAL MODIFICATIONS OR INSPECTIONS WERE REQUIRED WHEN THE CRANE WAS CONVERTED FROM CONSTRUCTION USE TO PERMANENT PLANT SERVICE, SINCE THE REQUIREMENTS FOR BOTH TYPES OF SERVICE WERE THE SAME.

EDR-1 APPENDIX C SUPPLEMENT
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REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.3.u	--	1. THE EXTENT OF INSTALLATION AND OPERATING INSTRUCTIONS.	1. THE INSTALLATION AND OPERATING INSTRUCTIONS WILL BE UPDATED BY EDERER TO FULLY COMPLY WITH THE REQUIREMENTS OF SECTION C.3.u OF REGULATORY GUIDE 1.104 AND SECTIONS 7.1 AND 9 OF NUREG-0554.
C.4.a C.4.b C.4.c C.4.d	--	1. THE EXTENT OF ASSEMBLY CHECKOUT, TEST PROCEDURES, LOAD TESTING AND RATED LOAD MARKING OF THE CRANE.	1. PRIOR TO HANDLING CRITICAL LOADS, THE CRANE WILL BE GIVEN A COMPLETE ASSEMBLY CHECKOUT BY EDERER AND THEN GIVEN A NO-LOAD TEST OF ALL MOTIONS IN ACCORDANCE WITH UPDATED PROCEDURES PROVIDED BY EDERER. A 125% STATIC LOAD TEST AND A 100% PERFORMANCE TEST WILL ALSO BE PERFORMED AT THIS TIME IN ACCORDANCE WITH UPDATED TEST PROCEDURES PROVIDED BY EDERER. A NO-LOAD TEST OF ALL MOTIONS AND A TWO BLOCKING TEST WILL BE PERFORMED BY EDERER PRIOR TO DELIVERY OF THE CRANE PER TOPICAL REPORT EDR-1. THE MAXIMUM CRITICAL LOAD IS PLAINLY MARKED ON EACH SIDE OF THE CRANE.

EDR-1 APPENDIX C SUPPLEMENT
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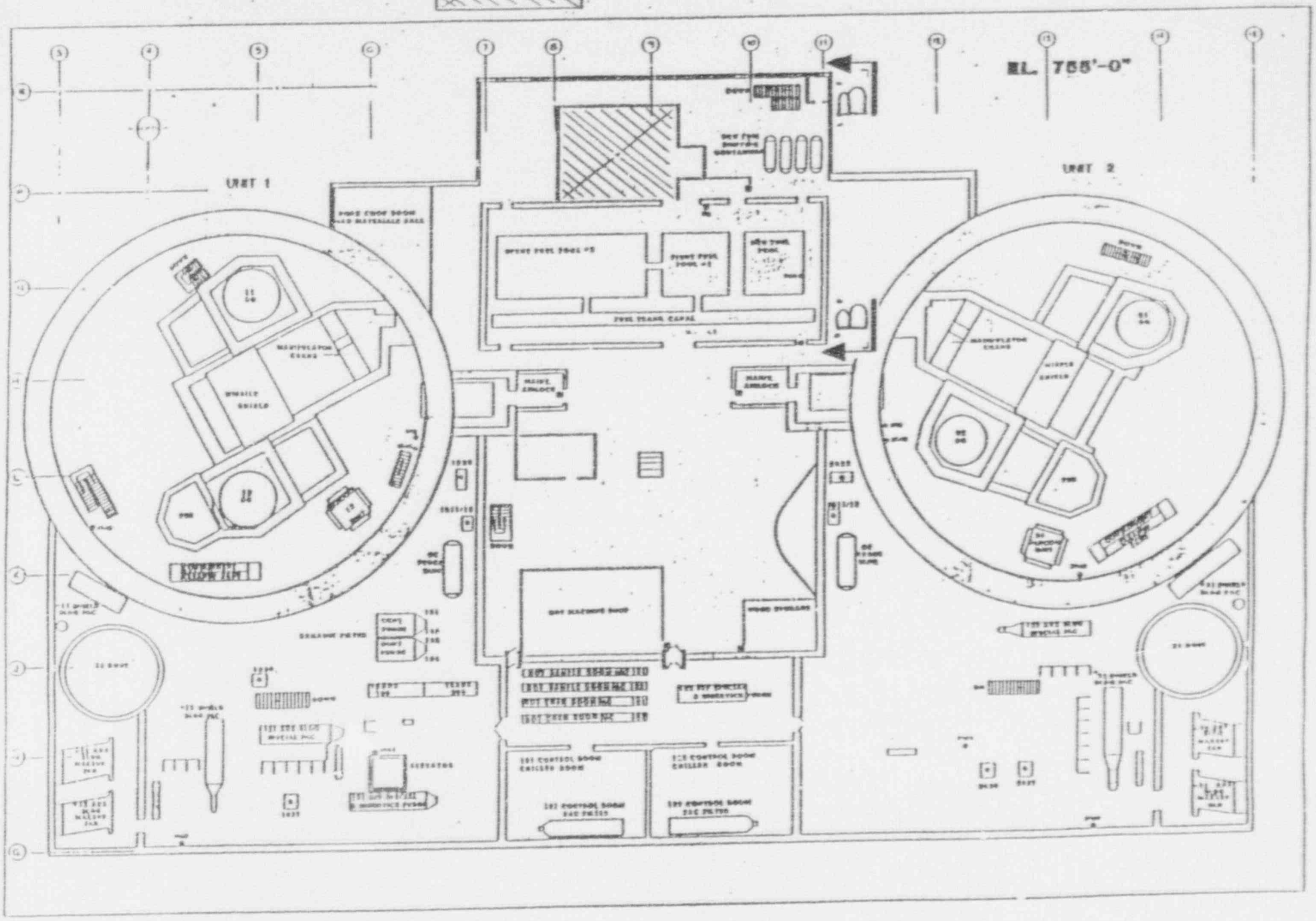
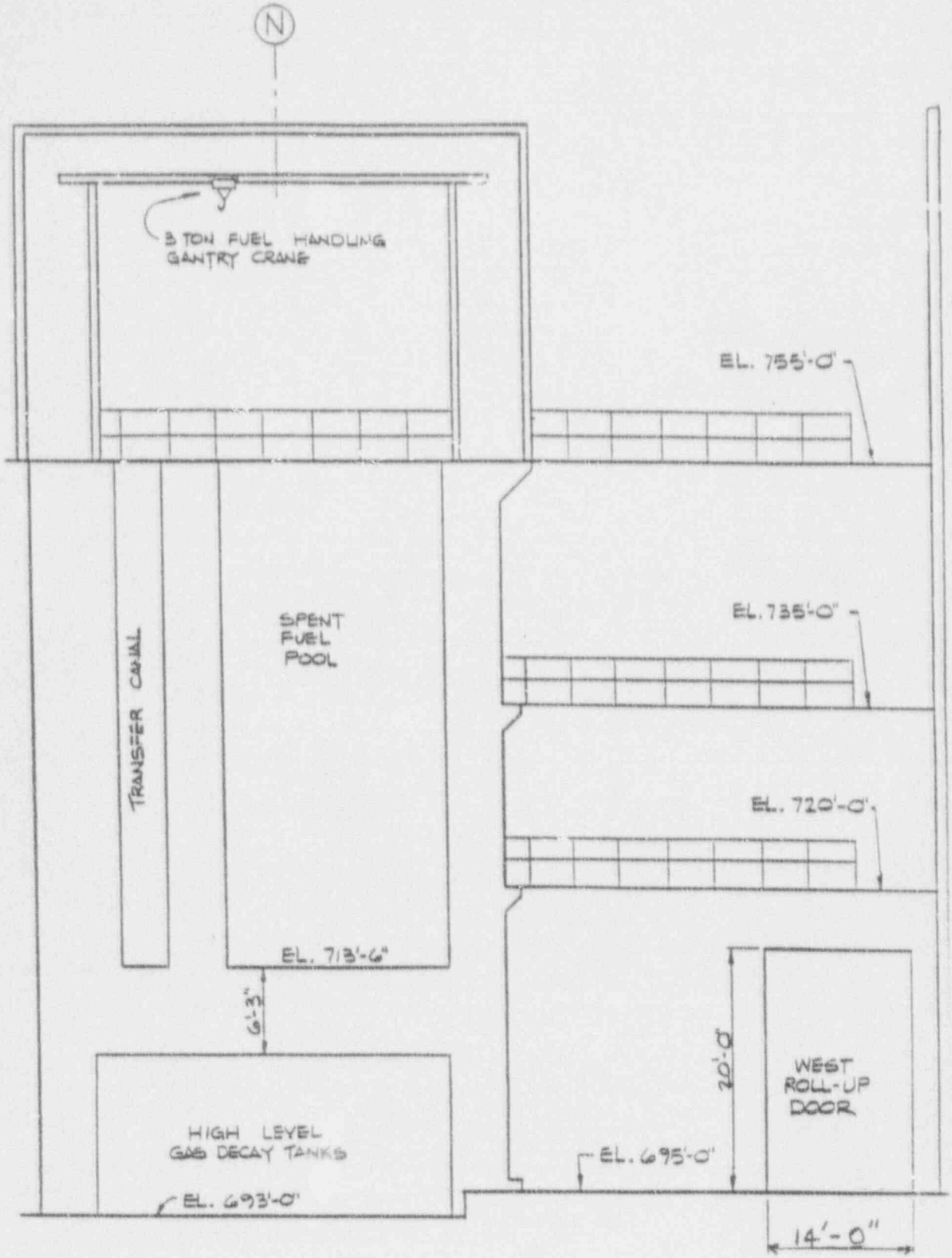
REGULATORY POSITION	TOPICAL REPORT SECTION	INFORMATION TO BE PROVIDED	SPECIFIC CRANE DATA
C.5.d	III.C(C.5.a)	1. THE EXTENT THE PROCUREMENT DOCUMENTS FOR THE CRANE'S STRUCTURE'S, WHICH WILL NOT BE REPLACED, REQUIRED THE CRANE MANUFACTURER TO PROVIDE A QUALITY ASSURANCE PROGRAM CONSISTENT WITH THE PERTINENT PROVISIONS OF REGULATORY GUIDE 1.28.	1. THE PROCUREMENT DOCUMENTS FOR THE EXISTING BRIDGE STRUCTURE DID NOT INVOKE 10CFR50 APPENDIX B, SINCE THE BRIDGE WAS BUILT PRIOR TO THE ISSUANCE OF THIS FEDERAL REGULATION. HOWEVER, THE BRIDGE WAS BUILT TO THE CRANE MANUFACTURER'S QUALITY CONTROL PROCESS IN EFFECT AT THE TIME OF CONSTRUCTION. QUALITY ASSURANCE PROVISIONS DENOTED IN PROCUREMENT SPECIFICATIONS FOR THE EXISTING CRANE COVERED SUCH ITEMS AS DESIGN CONTROL, MATERIAL SELECTION AND INSPECTION AND TESTING.

LAYDOWN AREA



DRAWING A-SH-1
LAYDOWN AREA



ELEVATION B-B

(LOOKING EAST)

SCALE: 1/8" = 1'-0"

DRAWING A, SH. 2
ACCESS

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

ATTACHMENT 3

Design Criteria for Lifting System for TN-40 Dry Storage Cask