LA CROSSE BOILING WATER REACTOR

ANNUAL REPORT

1982

Provisional Operating License No. DPR-45

Dairyland Power Cooperative
2615 East Avenue South
LaCrosse, Wisconsin 54601

DESCRIPTION OF CHANGES, TESTS, AND EXPERIMENTS

1982

FACILITY CHANGES

There were no facility changes performed during 1982 for which prior NRC approval was obtained. The following facility changes, which did not require prior NRC approval, were physically completed in 1982:

6-80-3 Install a Halon 1301 System in Electrical Equipment Room.

The Safety Analysis Review shows that this modification has no effect on the margin of safety and will reduce the probability of loss of equipment in the Electrical Equipment Room due to fire.

06-81-14 Fire-proof column next to Lube Oil Tank and remove conduit for purifier.

The Safety Analysis Review shows that this Facility Change is not safety related but does increase the fire rating of the column.

06-82-16 End of line voltage meter in 1B Diesel Generator Room CO_2 System.

The Safety Analysis Review shows that this Facility Change is not safety related but enhances the reliability of the 1B Diesel Generator Building CO_2 Fire Detection System.

06-82-17 Wiring for Turbine Bldg. Fire Door on Mezzanine Level.

The Safety Analysis Review shows that this Facility Change is not safety related.

19-82-2 (Phase 1)
Pipe installation from make-up demin. drains through west Turbine Building sump to outside sump, for acid and caustic drain to ash pit.

The Safety Analysis Review shows this installation is not safety related.

31-82-2 1982 Refueling Sequence

The Safety Analysis Review shows that this Facility Change does not reduce the margin of safety as defined in any Tech. Spec. It only involves rearranging the fuel, fuel shrouds, control rods and replacing certain high exposure fuel with fresh fuel.

32-82-2 Modification of Control Rod Shear

The Safety Analysis Review shows this Facility Change is not safety related.

FACILITY CHANGES - (cont'd)

37-82-5 Personnel Airlock Thermometer

The Safety Analysis Review shows this Facility Change does not affect operation or integrity of the Personnel Airlock.

38-81-1 6th Stage to ACS/Fire Pump (Diesel)

The Safety Analysis Review shows this Facility Change will improve the performance and reliability of the system; however, the margin of safety is not compromised.

41-81-1 Lockout Relays and Lights to Power/Flow Drawers

The Safety Analysis Review shows this Facility Change only adds indication lights and reset buttons and, therefore, will not interfere with drawer functions.

45-81-4 Stack Gas Sample System in Turbine Building

The Safety Analysis Review shows this installation is not safety related, but will permit post-accident sampling of potential radionuclide releases with acceptably low personnel exposure.

45-82-7 SPING 3 Installation in Stack Shack and Relocation of SPING 4 in Turbine Building.

The Safety Analysis Review shows this modification is not safety related but will improve the plant's capability to analyze the release of radionuclides as required by Tech. Specs.

47-82-1 Channel "B" Instrumentation Rack Installation

The Safety Analysis Review shows this Facility Change will provide more reliable and diversified monitoring. The margin of safety will not be reduced.

48-81-2 Meteorological Monitoring

The Safety Analysis Review shows this Facility Change will not interface with any safety related system. Also, the meteorological system is not addressed in the FSAR.

50-81-3 Remove Upper Face Seal Thermocouples from FCP 1A & 1B

The Safety Analysis Review shows that these thermocouples are not the basis for any Technical Specification and are not safety related or addressed in the SAR.

50-82-4 Remove Studs from FCP Discharge Valves

The Safety Analysis Review shows that this modification does not reduce the margin of safety, as demonstrated by calculations.

FACILITY CHANGES - (cont'd)

52-82-8 Remove all Seal Inject Supply and Leakoff Valves from Upper CRD's (This modification is complete for the leakoff valves only and will not include the supply valves at this time.)

The Safety Analysis Review shows that these valves serve no significant safety or useful purpose.

53-82-3 Install orifice flanges in the HPCS System

The Safety Analysis Review shows incorporation of the flow element will not change the capability or function of the HPCS. The operational and accident margin of safety will be improved due to the flow and pressure measurement ability provided by this modification.

53-82-4 Remove control power fuses to HPSW Valve 53-25-006

The Safety Analysis Review shows the probability of malfunction of the HPCS bundle will be decreased since this change will help prevent particulate matter from inadvertently getting into the bundle.

54-82-4 ATCOR On-Site Storage Container

The Safety Analysis Review shows that use of this concrete shielded storage container in no way impacts upon any safety system and complies with 10 CFR 100, as shown by calculations.

67-82-1 Installation of suction gages and root valves for demin. water transfer pumps 1A and 1B.

The Safety Analysis Review shows this Facility Change is not safety related but will provide more representative values for monthly I.S.I. tests.

71-80-1 Sample system installation for reactor primary coolant and containment atmosphere.

The Safety Analysis Review shows this Facility Change does not reduce the margin of safety, nor does it create the possibility for an accident or malfunction not previously evaluated in the safety analysis report.

74-81-7 Seismic Restraints on Reactor Plant Battery and Charger

The Safety Analysis Review shows that this modification will not interfere with the operation of the reactor plant battery and charger, and the restraints will enhance the availability of the equipment in the event of an SSE.

FACILITY CHANGES - (cont'd)

74-82-11 Install 2 Sealed Junction Boxes in Containment

The Safety Analysis Reviews shows that this modification is for installation of junction boxes which are similar to existing boxes and does not reduce the safety margin.

74-82-12 Seismic Restraints on Electrical Equipment

The Safety Analysis Review shows that this modification will not interfere with the operation of the equipment and will improve the probability that this equipment will function after a seismic event.

74-82-13 Installation of MI Cable for Junction Boxes RP-92 and RP-93 in Containment

The Safety Analysis Review shows that this modification does not change the existing design nor does it change the consequences of the possible failure modes. This Facility Change does not reduce the margin of safety.

78-82-4 Seismic Restraints on 1A Diesel Generator Battery Rack

The Safety Analysis Review shows that this modification does not interact with the function of the equipment but will enhance the margin of safety by reducing the probability of equipment malfunction due to displacement by a seismic event.

78-82-5 1B Diesel Equipment Seismic Restraints

The Safety Analysis Review shows that this modification does not interact with the function of the equipment, but will enhance the margin of safety by reducing the probability of equipment malfunction after a seismic event.

83-82-2 Incorporate Ball Drip Valve Downstream of 83-24-002

The Safety Analysis Review shows that this modification will reduce the potential of a malfunction due to water leakage freezing in the EWSS inlet stations. The reliability and margin of safety of the system will be enhanced due to the added inlet freeze protection.

92-82-1 Turbine Oil Filter (Nugent)

The Safety Analysis Review shows that this modification is not safety related nor the basis of any Technical Specification.

TESTS

There were no tests performed during 1982 which required prior NRC approval. The following tests not discussed in the SAR were performed during 1982:

FC 31-82-2, Proc. 5	Procedures for Certain Tests Required During the First Startup and Power Escalation after the 1982 Refueling Outage. The Safety Evaluation concluded that this test did not constitute an unreviewed safety question and was similar to those conducted following previous refuelings.
STP 50-01	Procedure for Obtaining Data for Startup and Power Escalation with Increased FCP Flow. The Safety Evaluation concluded that this test did not constitute an unreviewed safety question and would help eliminate the possibility of unnecessary scrams.
OP 55-03	Test of Reactor Vent Header Valves. The Safety Evaluation concluded that this test did not involve an unreviewed safety question.
STP 74-01	Procedure for Certain Operations for Plant Startup following December 23, 1981 Scram. The Safety Evaluation concluded that this procedure did not involve an unreviewed safety question.
STP 32-01	Procedure for Cask Handling GE Control Rod Shipment GE Model 1600 Shipping Package.
STP 32-02	B_4C Tubes Retrieval (Cutoff of Control Rod Extension)
STP 32-03	Control Blade Cutting and B_4C Tube Removal The Safety Evaluations for STP 32-01, 32-02 and 32-03 concluded that these procedures did not involve an unreviewed safety question.
OP 53-02	Backflush of High Pressure Core Spray System
OP 53-03	High Pressure Core Spray System Pressure Drop Investigation Procedure
OP 53-04	High Pressure Core Spray Bundle Flushing Procedure The Safety Evaluations for OP 53-02, 53-03 and 53-04 concluded that the tests and activities in these procedures did not constitute unreviewed safety questions.

EXPERIMENTS

No experiments were conducted during 1982.

SAFETY VALVE FAILURES

There were no safety valve failures during 1982.

APPENDIX A

STANDARD FORMAT FOR REPORTING NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION

	Number of Personnel (>100 mRem)			Total Man-Rem		
Work & Job Function	Station Employees	Utility Employees	Contract Workers and Others	Station Employees	Utility Employees	Contract Workers and Others
Reactor Operations & Surveillance						
Maintenance Personnel	0		0	0		0.238
Operating Personnel	22			38.696		
Health Physics Personnel	9			11.221		
Supervisory Personnel	19	0	1	10.987	0.100	0.534
Engineering Personnel	3			1.904		
Maintenance Personnel	21		2	33.314		0.397
Operating Personnel	20			10.218		
Health Physics Personnel	6			2.953		
Supervisory Personnel	14		0	4.737		0.005
Engineering Personnel	3			0.964		
Inservice Inspection						
Maintenance Personnel	1		17	0.559		12.629
Operating Personnel	0			0.196		
Health Physics Personnel	2			0.417		
Supervisory Personnel	5		0	4.200		0.005
Engineering Personnel	2			0.458		
Special Maintenance						
Maintenance Personnel	17		6	14.628		2.093
Operating Personnel	12			3.548		
Health Physics Personnel	6			2.346		
Supervisory Personnel	9		0	4.527		0.078
Engineering Personnel	3			2.256		
Waste Processing						
Maintenance Personnel	7			2.466		
Operating Personnel	3			2.015		
Health Physics Personnel	6			5.090		
Supervisory Personnel	7			4.626		
Engineering Personnel	1			1.297		
Refueling						
Maintenance Personnel	12			7.417		
Operating Personnel	17			6.929		
Health Physics Personnel	6			2.243		
Supervisory Personnel	13		1	4.663		0.143
Engineering Personnel	2			0.509		
TOTAL						
Maintenance Personnel	21		17	58.384		15.357
Operating Personnel	22		0	61.602		0
Health Physics Personnel	9		0	24.270		0
Supervisory Personnel	19		1	33.740	0.100	0.765
Engineering Personnel	3		0	7.388		0
GRAND TOTAL	74	0	18	185.384	0.100	16.122

SPECIAL WORK PERMITS (SWP'S)
HAVING GREATER THAN 1.2 MAN-REM EXPOSURE

SWP No.		
82-015	Repair packing bolts 1A FCP	3.627
82-020	Clean 1A & 1B FCP Cubicles, basement	1.814
82-027	Repair 1B FCP Suction rotoport	1.881
82-059	Remove HN-100 from WTB, place in OSS place OSS in storage location	2.673
82-062	Change S/I suction filters & FESW filters	1.32
82-070	Remove, reinstall Lower CRD's	2.172
82-075	Prepare vessel for refueling	3.737
82-079	Complete tie-in of stack pass to the 6" condenser vacuum pump discharge line	1.671
82-082	Remove shield plates and block from Mezzanine north platform for inspections	3.197
82-087	Remove fuel from Reactor, inspect, dry sip and store in FESW	11.386
82-088	Remove lagging and ISI decay heat piping in 1A cubicles	2.436
82-090	Relag 1B FCP	2.984
82-091	Loop discharge valve actuators - replace piston cups on A & B	1.350
82-092	Remove grid from above #1 control rod	2.060
82-093	Drain 1B FCP loop	2.034
82-095	Replace seals on 1B FCP	4.171
82-098	Clean resin traps in full flow room - repair #1 service tank inlet valve operator	1.820
82-103	Perform PMS on turbine	1.562
82-108	Inspect 1B FCP seal	1.637
82-109	Replace FESW filters	1.675
82-117	Lowering, PM, replacing CRD #16 upper	3.628

SPECIAL WORK PERMITS (SWP'S) - (cont'd)

82-126	Dye penetrant test 1B loop discharge rotoport bypass and decay heat bypass line	1.32
82-127	Reinstall grid bar - prepare Reactor for operations	7.197
82-132	Install pass in Containment Building	1.282
82-148	Service tank resin transfer, sample spent resin liner	1.312
82-154	Prepare resin liner for shipment and load liner into 8-120 cask	3.014
82-165	Cutting up control rod	2.147
82-175	Move casks to 701', load, return to grade and ship	1.416
82-182	Inspect and repair 1A FCP seal	2.693
82-200	Reinsulate the 1B FCP	1.383
82-230	Back off closing stops 1A loop - repair 1A FCP seal	1.79
82-242	Remove shield plugs from upper cavity - remove Reactor head, work on HPCS bundle	7.297
82-244	Clean HPCS bundle	3.853
82-260	Change FESW filters	2.175
82-305	Remove remaining unused equipment in WTB	1.294
82-310	Sample high rad barrels	1.479