Consumers Power

POWERING MICHIGAN'S PROGRESS

Big Rock Point Nuclear Plant, 10269 US-31 North, Charlevoix, MI 49720

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DOCKET 50-155 - LICENSE DPR-6 - BIG ROCK POINT PLANT -
1990 ANNUAL REPORT OF FACILITY CHANGES, TESTS AND EXPERIMENTS

Attachment I to this letter is Consumers Power Company's Annual Report describing the Facility Changes (FC), Specification Changes (SC), Set Point Changes (SPC), tests and experiments performed at the Big Rock Point Plant in 1990. Some of the items listed in this Attachment need not be reported but are included as information. Attachment II provides changes to procedures in 1990 that are reportable to NRC. This report is submitted in accordance with the provisions of 10CFR50.59(b)(2).

William L Beckman
Plant Manager

CC: Administrator, Region III, USNRC
NRC Resident Inspector - Big Rock Point

Attachments

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ATTACHMENT I

Consumers Power Company
Big Rock Point Plant
Docket 50-155

FACILITY CHANGES, SPECIFICATION CHANGES SET POINT CHANGES, TESTS AND EXPERIMENTS

Completed during 1990

6 Pages

Facility Changes (FC)

Safety evaluations performed for each of the following Facility Changes concluded that none of the changes constituted an unreviewed safety question.

FC-465B: Spent Fuel Rack Installation

This change consisted of installation of the third new fuel rack to increase the spent fuel storage capacity. This completes the replacement of fuel racks.

FC-622: Critical Safety Function Display

This change provided a critical safety functions display of plant parameters to allow operators to quickly assess the status of key plant safety parameters during accident and transient situations.

FC-632: Control Panel Status Matrix Re-Arrangement

This change re-arranged the indicating lights for the isolation valve status matrix on the control panel to resolve human engineering discrepancies identified during the control room design review.

FC-652: Heating Boiler Replacement

This change replaced the plant's heating boiler.

FC-653: Turbine Supervisory Instrument Replacement

This change installed/replaced turbine supervisory instrumentation equipment to provide the capability for on-line adjustment of the turbine thrust wear alarm and trip system. This modification also provided for accurate turbine rpm indication and reinstated the original low lube oil pressure inhibit/trip feature of the turbine.

FC-655: Security Door Improvements/Changes

This change involved a security modification.

FC-657: Electrical Temporary Modification Corrections

This change provided for a permanent power source for the heat tape wrapped around the well water line and replaced a temporary light in the radwaste area with permanent lighting.

FC-658: Designated Plant Smoking Area

This change provided a designated plant smoking area.

FC-662: Replace the Plant Conductivity Recorder

This change replaced the plant conductivity recorder and associated conductivity cells in the condensate system to improve operability of the recorder and reduce maintenance costs.

FC-663: Install Flow Meters on the Discharge of Core Spray Pumps and Diesel & Electric Fire Pumps

This change installed flow meters on the discharges of both the core spray pumps and the diesel and electric fire pumps to allow for flow rate measurements during inservice testing of these pumps.

FC-664: Load Rejection/Automatic Recirculation Pump Trip

This change added control circuitry to automatically trip a recirculation pump upon load rejection which will tend to eliminate the secondary side instabilities inherent to load rejections occurring at higher power levels.

FC-667: Heating Boiler Fuel Oil Tank Cathodic Protection

This change connected the heating boiler fuel oil tank to the cathodic protection system to prevent tank corrosion.

FC-670: Modification to EDG 24VDC Circuit Logic

This change modified the emergency diesel generator (EDG) 24 volt dc circuit logic to provide a short time delay when a phase-to-phase fault is sensed by the EDG's overcurrent relays. This allows tripping of the branch protective device before stopping the emergency diesel generator.

Specification Changes (SC)

Safety evaluations performed for each of the following Specification Changes concluded that none of the changes constituted an unreviewed safety question.

SC-88-002

This change involved making minor changes to control room devices based on human engineering discrepancies found during the control room design review to improve uniformity, readability and operability of these devices.

SC-89-008

This change replaced instantaneous relays in the alternate shutdown system ground fault alarm circuit with time delay relays to allow momentary transient spikes to clear before activating the annunciator window.

SC-89-012

This change replaced the enclosure pressure switches for the primary enclosure spray valve actuation circuit on the post incident system due to end of life of the original switches.

SC-89-013

This change reduced the number of bolts on the post incident system suction strainers from eight (8) bolts to three (3) bolts to lower operator exposure to radiation during performance of the core spray pump run and test loop operation procedure.

SC-89-015

This change replaces the 120 volt ac line fuse on NUMAC instruments as recommended in General Electric SIL NO. 499 on the neutron monitoring system to correct a potential generic problem.

SC-90-001

This change consisted of replacing control room heating and cooling unit valves and damper motor to allow for proper operation of the unit. This change also addressed the use of a 150# in place of a 200# gate valve for sizes 2 inch and smaller for class F heating and ventilating system components.

SC-90-004

This specification change is to document the change in the number of threads per inch (TPI) from 5-1/2 TPI to 8 TPI on the studs and nuts for the emergency condenser tube bundles.

SC-90-005

This change involved the cycle 25 reactor core reload. The new fuel falls within previously docketed designs. Reconstituted fuel assemblies are in accordance with Consumers Power Company guidelines and are consistent with previously docketed designs.

SC-90-011

This change capped two feedwater vent valve lines to help prevent leakage if the valves leak through.

SC-90-012

This change established a control rod insertion sequence which allows running control rods in, after the turbine generator has been taken off-line.

SC-90-015

This change replaced the sand filter tanks on the resin regeneration system due to age and corrosion.

SC-90-016

This change replaced two thermal sleeves by the clean-up system discharge valve to #1 and #2 recirculating pump suction. The downstream sleeve was replaced due to a through wall leak in the heat affected zone of the weld. The upstream sleeve was replaced due to potential for common cause failure.

SC-90-017

This specification change involved a security system modification to the closed circuit television cameras.

SC-90-018 & SC-90-019

This change involved the cycle 25 reactor core reload. The new core falls within previously docketed designs.

SC-90-020

This change replaced a control rod drive accumulator shell, due to inadvertent damage during a refueling outage, with a change of material from SA372-V to SA372-V1B.

SC-90-022

This change involved the replacement of a station power system 300 amp breaker with that of a 225 amp breaker that feeds the screenhouse motor control center 2C, due to failure of the original breaker during preventive maintenance testing.

SC-90-023

This specification change replaced a States TYPE NT terminal block with a States TYPE ZWM terminal block on the reactor building air supply shed control panel. The original terminal strip was exhibiting signs of corrosion on the terminals.

Set Point Changes (SPC)

Safety evaluations performed for each of the following Set Point Changes concluded that none of the changes constituted an unreviewed safety question.

SPC-90-001

This set point change raised the emergency diesel generator battery undervoltage alarm from 24.0 volts dc to 24.8 volts dc.

SPC-90-002

This set point change increased the open torque setting switch "B" to "BOOST" on the backup core spray valve operator (VOP-7071) to provide more torque for the operation of the Anchor/Darling valve.

ATTACHMENT II

Consumers Power Company
Big Rock Point Plant
Docket 50-155

1990 PROCEDURE CHANGES REPORTABLE TO THE NRC

Completed During 1990

2 Pages

Procedure O-CRD-11: Bypass of CRD Permissive Interlock Relay 4K1

This is a new procedure permitting bypassing of the Control Rod Drive downscale interlock relay (4K1) when, no fuel is in the core, and allows full withdrawal of a drive to protect against damage to the index tube and spud during removal of fuel channels and blades. This procedure provides for the same function that existed under another procedure which allowed for bypassing a resistive and capacitive network (4R1 and 4C1) which was removed when the new Wide Range Monitoring System was installed and relay 4K1 was added.

The safety evaluation concluded that this change did not constitute an unreviewed safety question.

Procedure T365-05: Battery Verification for Station Alternate Shutdown, UPS and Diesel Fire Pump Batteries

This procedure change eliminated the inspection requirements for the diesel fire pump batteries. T30-57 (Battery Inspection, Voltage and Specific Gravity Data, Diesel Generator and Diesel Fire Pump) was revised to incorporate these inspection requirements which will result in the diesel fire pump battery and rack being inspected each month.

The safety evaluation concluded that this change did not constitute an unreviewed safety question.

Procedure T90-11: Battery Verification for the Emergency Diesel Generator

This procedure was deleted and the associated Technical Specification inspection requirements are being incorporated into T30-57 (Battery Inspection, Voltage and Specific Gravity Data, Diesel Generator and Diesel Fire Pump) which will result in monthly visual inspection of the emergency diesel generator starting battery and rack and make more effective use of plant resources.

The safety evaluation concluded that this change did not constitute an unreviewed safety question.

Procedure T30-57: Battery Inspection, Voltage and Specific Gravity Data (Diesel Generator and Diesel Fire Pump)

This procedure change included the inspection requirements of T90-11 and the portions of T365-05 that are applicable to the diesel fire pump starting batteries which will result in visual inspection of the subject batteries and battery racks on a monthly basis. This revision will also provide instructions for reading the specific gravity and voltage of the batteries.

The safety evaluation concluded that this change did not constitute an unreviewed safety question.

Operations Memo 03-90: Hand Tightened Limitorque Valve MO-7057

This was an operations memo to manually close MO-7057, Reactor Water to Shutdown System Motor Operated Valve, to insure isolation of the Reactor Shutdown Cooling System. This action insured compliance with the FHSR/Technical Specification requirements. This valve failed to close when given a close signal from the control room and repair to the limit switch was anticipated to take place at the 1990 Refueling Outage. Since entry into containment is required to close the breakers to the shutdown system isolation valves, hand operation does not impose additional limitations on system availability.

The safety evaluation concluded that this change did not constitute an unreviewed safety question.