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March 29, 1999

JMHLTR: #99-0039

Director, Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D.C. 20555

Dresden Nuclear Power Station, Unit 3
Facility Operating License No. DPR - 25
NRC Docket No. 50-249

Subject: Refueling Outage 15 (D3R15) Summary

- References:
- 1) Letter from J. M. Heffley (ComEd) to USNRC, "Completion of Isolation Tube Bundle Integrity Testing; Response to NRC IE Bulletin 76-01," dated March 1, 1999
 - 2) Letter from J. S. Perry (ComEd) to USNRC, "Restructure of a Commitment Regarding MSIV Local Leak Rate Test (LLRT) Improvement Measures," dated December 10, 1997

The purpose of this letter is to provide an update of significant accomplishments made by Commonwealth Edison (ComEd) Company at the Dresden Nuclear Power Station during the winter 1999 Unit 3 refuel outage. Also, we wish to reaffirm to the NRC our commitment to address longstanding materiel condition issues at Dresden Station. This letter is provided for your information and no response is requested.

Dresden Station completed a major maintenance and refuel outage for Unit 3 (D3R15) in February 1999. During this outage, many outstanding safety, materiel condition, and regulatory issues were addressed. The more significant accomplishments during D3R15 are listed below:

- Upgraded Unit 3 Main Generator Voltage Regulator
- Modified the Recirculation Motor Generator Set Brush Holders to allow for on-line replacement to eliminate the need for single-loop operation
- Replaced Transverse In-core Probe (TIP) Tubes
- Completed the Reactor Water Cleanup (RWCU) System High Energy Line Break Isolation (HELB) modification
- Repaired 5 Turbine Bypass Valves
- Performed Feedwater System Tuning

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- Completed Control Rod Drive (CRD) System improvements including the replacement of 25 Drives, 178 Scram Inlet/Outlet Valve Diaphragms, and 123 Valve Wedges
- Completed enhancements to the Electro-Hydraulic Control (EHC) Logic System to provide for turbine trip redundancy including High Exhaust Hood Temperature, Low Lubricating Oil (LO) Shaft pump pressure, Moisture Separator High Level, and Low EHC Pump Pressure
- Installed EHC Upgraded Component Cards
- Replaced two (2) drywell cooler coils
- Accelerated replacement of seventeen (17) Local Power Range Monitor (LPRM) detectors
- Replaced 45 General Electric Model SBM Switches
- Improved Condenser performance through 100% hydrolazing of the main condenser tubes, and the replacement of two (2) Circulating Water expansion boots
- Replaced 24 vertical and 1 horizontal condenser bellows assemblies
- Relined Condensate Demineralizer Vessels 3E, 3F and 3G
- Performed a turbine rotor overhaul and steam audit on the 3C Low Pressure Turbine

The Attachment to this letter provides a summary of applicable NRC commitments completed during the refuel outage.

If you have any further questions regarding this matter please contact Mr. Dale Ambler, our Regulatory Assurance Manager, at (815) 942-2920 extension 3800.

Respectfully,



J. M. Heffley
Site Vice President
Dresden Nuclear Power Station

cc: Regional Administrator, Region III
Senior Resident Inspector, Dresden Nuclear Power Station

ATTACHMENT
SUMMARY OF D3R15 OUTAGE WORK ON REGULATORY RELATED ITEMS

References	Subject	Discussion
IR 50-237/249/96201 Independent Safety Inspection (ISI)	Unit 3 Local Leak Rate Testing (LLRT) issues	Modifications E12-3-95-243 and E12-3-95-244 were completed to install a block valve and test taps inside the drywell for valves 3-2001-5 and inboard of valve 3-2001-105 respectively. An LLRT was then performed with acceptable leakage for both modifications.
IEB 76 – 01	BWR Isolation Condenser Tube Failure	The Isolation Condenser Tube Bundle integrity test was performed during the Unit 3 RPV hydrostatic test. The results of this test were forwarded to the NRC via Reference 1.
IEB 96 – 03	Potential Plugging of Emergency Core Cooling System (ECCS) Suction Strainers by Debris in Boiling-Water Reactors	Dresden replaced the NUKON insulation in Unit 3 that is within the Zone of Influence (ZOI) of the Flued Heads (drywell piping penetrations) and which, when combined with other LOCA generated debris, would exceed the allowable head loss limitations across the ECCS suction strainers. Work was performed through DCP 9800236.
IEN 94 – 10	Failure of Motor-Operated Valve Electric Power Train Due to Sheared or Dislodged Motor Pinion Gear Key	Additional actions in this area are not required. As a result of ComEd testing of the existing 1018 material motor pinion gear keys, it was determined that no failures were revealed and that the material was qualified for the intended use. However, the manufacturer has stopped providing the 1018 type keys and has replaced it with the type 4140 keys. Upon depletion of existing ComEd stock of the Type 1018 keys, only Type 4140 keys will be used in the future.
IEN 96 – 14	Degradation of Radwaste Facility Equipment at Millstone Nuclear Power Station, Unit 1	WR 960031419 was generated to open the Radwaste tunnel and inspect and remove debris from the tunnel. On 4/9/98 personnel entered the tunnel for the initial entry/inspection and then again on 4/10/98 to finish the cleanup operation. The tunnel has been inspected for materiel condition and found to be sound both mechanically and structurally.
GL 94 – 03	Intergranular Stress Corrosion Cracking of Core Shrouds in Boiling Water Reactors	BWRVIP-07 is one of fifty documents that will eventually be issued SERs and our "program" will eventually address all of these as issued. All required D3R15 shroud repair inspections are complete.
GL 96 – 06	Assurance Of Equipment Operability And Containment Integrity During Design-Basis Accident Conditions	Modifications E12-3-97-212, E12-3-97-217, and E12-3-97-211 to eliminate thermally induced over pressurization concerns at Unit 3 penetrations X-113, X-139C, and X-122 were installed via WRs 970033466, 970079781, and 970033465.

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CAL RIII – 90 – 001	Unit 3 Reverse Power Protection Scheme	The changes to the reverse power circuitry to prevent failure to actuate at low loads were incorporated into the voltage regulator replacement per modification M12-3-98-001. The main generator voltage regulator has been replaced (Unit 3 only). The new voltage regulator will perform the Volt – Amperes Reactive (VAR) runback feature by running the machine MVARs toward zero upon receipt of a turbine trip or reactor scram signal. As such, when output torque on the turbine generator has been removed the generator machine MVARs will runback such that the existing reverse power relays will sense real reverse power conditions. Proper reverse power relay operation will initiate a generator trip (lockout) and prevent turbine-generator "motoring" effects.
Letter from J. Hosmer (ComEd) to USNRC, Reactor Water Clean Up (RWCU) System, High Energy Line Break (HELB) Outside the Drywell, dated September 4, 1996	RWCU High Energy Line Break (HELB) Activities	The RWCU HELB modification is installed and Operations Authorized.
Letter from J. S. Perry (ComEd) to USNRC, ISI Summary Report for the March 1997 Inservice Inspection of Dresden Nuclear Power Station Unit 3, dated September 17, 1997	Core Spray Inspections and Modifications for D3R15	Core Spray bumper (limit stop) clamp was installed on the 80 degree downcomer per WR 980128920 (DCP #9900009). Additionally, the Core Spray welds P8A and P4D on all four downcomers were inspected per WR 970075580-01. There were no changes in dimensions of known flaws and no new flaws were discovered.

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LER 2-93-026 and LER 2-95-015-01	Repair/Replacement of MSIV Seat Rings	Action is no longer required. As stated in Reference 2, based on past LLRT history of the valves that have yet to receive a liner upgrade, ComEd is taking a performance based approach with respect to continued upgrade of the MSIVs. This approach would include, but not be limited to, inspection of the seating surfaces upon failure of an MSIV to pass the LLRT. If the main seating surface requires replacement, a contingency task will be in place to install the liner upgrade because this will add to the life expectancy of the seating surface.
LER 2-97-003-01	Containment Penetrations Outside of Design Basis due to Analysis of Thermally Induced Post-Accident Over- Pressurization	Three modifications, E12-3-97-211 (penetration X-122), E12-3-97-212 (penetration X-113) and E12-3-97-317 (penetration X-139-C) were installed via WRs 970033465, 970033466 and 970079781.
LER 2-98-003	HPCI Drain Valve AO3-2301-64 found closed	3-2301-64 Air Operated Valve (AOV) diaphragm was replaced in D3P02 by WR 970096593.
LER 2-98-013	Historical Testing of 250 Volts Direct Current (VDC) System Did Not Meet TS Surveillance Requirement	The purpose of this item is test Dresden's U3 250 VDC Battery (service test) per the revised load profile, which includes the Essential Service System (ESS) Uninterruptable Power Supply (UPS) load. This is a corrective action item from LER 2-98-013. To date, the Unit 2 and Unit 3 250 VDC safety-related batteries have been discharge tested to the revised load profile that included the ESS UPS as a 4-hour continuous load.
LER 3-95-011	Type B And C Leakage Limit Exceeded Due To Excessive Leakage Past High Pressure Coolant Injection (HPCI) Check Valve	Evaluation for the replacement of check valve 3-2301-45 has been completed. The evaluation has determined that replacement of the 3-2301-45 valve is not justified for the following reasons. 1) the existing dual check valve design is performing adequately in regards to LLRTs with the reduced surveillance demand of the HPCI System. 2) the payback period for the replacement valve is not within the current established Dresden guidelines.

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LER 3-98-002	U3 HPCI Gland Seal Leak Off (GSLO) Switch Fails Surveillance	THE GSLO Magnetrol level switch inspection has been performed every quarter since the installation of the improved switches in May of 1998. The last Unit 3 inspection was in December of 1998. The switch internals were inspected in October of 1998 under WR 980036228, and found to be in good condition. The switch mechanisms have been performing satisfactorily since installation of the improved switches in May 1998.
LER 3-98-005	Unit 3 Reactor Pressure Boundary Leakage in Excess of Technical Specifications Limit Due to Transverse In-Core Probe Dry Tube Leakage	All Local Power Range Monitors (LPRMs) previously identified as causing problems or having reached end of life have been replaced. WR 970075716 to replaced the LPRMs and was completed on 2/10/99.
LER 3-98-006	Unit 3 Condenser Low Vacuum Scram Switch Potentially Inoperable Due to Excessive Moisture in Sensing Line as a Result of Improper Line Slope	These instrument sensing lines and others associated with Unit 3 condenser vacuum were walked down and line slope was verified to be correct.