

(4c) Status and Summary Reports: Licensee Event Reports			DVD	
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05/11/1979	LER 79-014: Final Report on the TMI-2 Accident of March 28, 1979.pdf	LER	4c-LER	DVD-2 (S1)
10/06/1979	LER-79-014: Final Report, Missing Page 48 of Attachment C.pdf	LER	4c-LER	DVD-2 (S1)
03/28/1979	LER 79-015/13L-0: on 790328, while investigating leakage of radwaste & makeup sys, personnel received radiation doses in excess of allowable quarterly limit. Individual exposures less than five man-rem. Sampling & area surveys suspended.	LER	4c-LER	DVD-2 (S1)
04/28/1979	LER 79-016/03L-0: on 790428, during one day period w/only two fire pumps available, fire pump FS-P1 overheated & was off-line for 3-h. Caused by sys leakage in excess of jockey pump capacity, resulting in fire pumps running continuously.	LER	4c-LER	DVD-2 (S1)
03/29/1979	LER 79-017/12L-0: 790329, while manipulating valve controlling coolant flow & handling lab bottles & flasks containing coolant samples, station personnel received extremity exposures. Detailed procedures developed.	LER	4c-LER	DVD-2 (S1)
08/28/1979	LER 79-018/12L-0: on 790828, while attempting to isolate leak from makeup sys in fuel handling bldg, station personnel received excess whole body & extremity exposures. Cause not stated. Investigation will be conducted.	LER	4c-LER	DVD-2 (S1)
11/01/1979	LER 79-020/03L-0: on 791101, fish movement & population estimate monitoring studies ordered dropped, in violation of Tech Spec requirements. Caused by personnel error. Mgt changes implemented.	LER	4c-LER	DVD-2 (S1)
12/05/1979	LER 79-021/03L-0: on 791205, diesel generator DF-X-1B tripped 20-s after manual start attempt. Apparently caused by low lube oil level. Lube oil level restored & diesel tested. Procedures being revised to insure adequate lube oil level.	LER	4c-LER	DVD-2 (S1)
12/19/1979	LER 79-022/03L-0: on 791219, during disassembly of NR-P-1D due to high pump vibration, top lug on split ring coupling found sheared. Probably caused by high vibration induced by worn bearings. Defective part & worn bearings are being replaced.	LER	4c-LER	DVD-2 (S1)
01/26/1980	LER 80-001/99X-0: on 800126, during mode 5 operation, 60 amp molded case circuit breaker for generator auxiliaries found tripped. Caused by defective internal connection on A phase. Breaker was replaced.	LER	4c-LER	DVD-2 (S1)
01/29/1980	LER 80-002/99X-0: on 800129, during modes operation, emergency diesel generator DF-X-1B failed on manual start signal. Caused by sheared driven pinion. Driven pinion replaced & coupling nut will be staked to prevent recurrence.	LER	4c-LER	DVD-2 (S1)
01/31/1980	LER 80-003/99X-0: on 800131, during mode 5 operation, emergency diesel generator DF-X-1B tripped within 15 seconds due to low oil pressure. Caused by pneumatic timing unit for alarm delay relay T3A timing out in 7 seconds. Unit replaced.	LER	4c-LER	DVD-2 (S1)
02/11/1980	LER 80-004/03L-0: on 800211, during operability test of A makeup pump MU-P-1A & associated discharge surge, test connection valve at discharge pressure switch for B makeup pump MU-P-1B separated from line. Cause indefinite.	LER	4c-LER	DVD-2 (S1)
02/18/1980	LER 80-005/01L-0: on 800218, during mode 5 operation, B emergency diesel generator was out of svc which violated 800215 newly issued interim recovery Tech Specs. Caused by change in Tech Specs for emergency diesel generators.	LER	4c-LER	DVD-2 (S1)
02/18/1980	LER 80-006/01L-0: on 800218, under interim recovery Tech Specs, in mode 5, boric acid mix tank inventory was below requirements of newly implemented Tech Specs. Caused by administrative changeover to more restrictive Tech Specs.	LER	4c-LER	DVD-2 (S1)
02/22/1980	LER 80-007/01L-0: on 800222, w/facility in cold shutdown mode, auxiliary bldg exhaust fan AH-E8C was removed from svc for maint. Caused by transition to interim recovery Tech Specs requiring both fan trains to be operable.	LER	4c-LER	DVD-2 (S1)
02/20/1980	LER 80-008/01L-0: on 800220, during cold shutdown state, Nuclear Svcs river water pump control switch discovered in pull-to-lock position. Caused by operator error. Control switch returned to auto mode.	LER	4c-LER	DVD-2 (S1)
03/03/1980	LER 80-009/03L-0: on 800305, during recovery mode operation, w/emergency diesel generator A down for maint, emergency diesel generator B was tested for operability. Generator would start but could not be loaded. Caused by open switch.	LER	4c-LER	DVD-2 (S1)
03/14/1980	LER 80-010/01L-0: on 800314, using outside personnel air lock entry door, door seals were tested. Leakage exceeded rate criteria. Personnel air lock entry declared inoperable. Caused by use of personnel door after one yr of nonuse.	LER	4c-LER	DVD-2 (S1)
03/21/1980	LER 80-011/99X-0: on 800321, Rosemount 1152 pressure transmitter in limited cases exhibited output between 4 & 20 ma w/input pressure over or under calibr range. Caused by long-term degradation from submergence in water.	LER	4c-LER	DVD-2 (S1)
04/13/1980	LER 80-012/01X-1: on 800413, exhaust flow of fuel handling bldg HVAC sys fell below recovery operation plan requirement. Caused by either sys imbalance or flow rate requiring rev. Fan lineup altered.	LER	4c-LER	DVD-2 (S1)
04/14/1980	LER 80-013/01L-0: on 800414, in-core thermocouple L-6 began to exhibit erratic behavior. Cause is unknown & may be impossible to determine given condition of core relative to in-core instrumentation. No actions will be taken re failure.	LER	4c-LER	DVD-2 (S1)
04/23/1980	LER 80-014/01L-0: on 800423, during recovery mode operation, boric acid mix tank boron concentration was above Tech Spec limits. Caused by use of air sparger & resultant water loss to evaporation. Tank contents were diluted & mixer repaired.	LER	4c-LER	DVD-2 (S1)

04/28/1980	LER 80-015/03L-0: on 800428, boric acid mix tank boron concentration exceeded Tech Specs. Caused by concentrating effects from evaporation due to use of air sparger mixing apparatus. Water added & use of air sparger discontinued.	LER	4c-LER	DVD-2 (S1)
05/01/1980	LER 80-016/03L-0: on 800501, during recovery mode operation, fuel oil tank level found below Tech Spec requirement. Caused by misrecording of level during previous check. Oil added & insp frequency increased.	LER	4c-LER	DVD-2 (S1)
09/02/1980	LER 80-017 was cancelled.		4c-LER	DVD-2 (S1)
05/09/1980	LER 80-018/03L-0: on 800509, while loading white balance of plant diesel generator, oscillations observed in generator frequency, followed by total loss of frequency indication. Caused by mechanical shock blowing two fuses. Fuses replaced.	LER	4c-LER	DVD-2 (S1)
05/18/1980	LER 80-019/01L-0: on 800518, during recovery mode, B once through steam generator level instrumentation became inoperable. Apparently caused by dirt in root valve. Sensing line backflushed, returned to svc on 800525.	LER	4c-LER	DVD-2 (S1)
05/22/1980	LER 80-020/01L-0: on 800522, during containment entry, violation of containment integrity occurred via bulkhead makeup valve E. Caused by procedural deficiencies. Procedures revised.	LER	4c-LER	DVD-2 (S1)
09/02/1980	LER 80-021 was cancelled.		4c-LER	DVD-2 (S1)
05/18/1980	LER 80-022/03Z-0: on 800518, during recovery mode operation, fuel handling bldg exhaust flow discovered below limit. Caused by failure of universal coupling on manual inlet damper for fans AH-E-10A & B causing damper to close.	LER	4c-LER	DVD-2 (S1)
06/03/1980	LER 80-023/03L-0: on 800603, boron concentration in boric acid mix tank found exceeding Tech Specs. Caused by evaporation from use of temporary air sparger mixing apparatus. Boron solution diluted & regular tank mixer returned to svc.	LER	4c-LER	DVD-2 (S1)
05/29/1980	LER 80-024/03L-0: on 800529, while in recovery mode of operations, pressure transducer used to monitor RCS pressure was isolated from RCS w/o control room knowledge. Caused by deficient SOP. Valve reopened within Tech Spec action period.	LER	4c-LER	DVD-2 (S1)
06/07/1980	LER 80-025/03L-0: on 800607, reactor coolant inlet temp meter on remote shutdown monitoring instrument panel found inoperable. Caused by instrument failure. Replacement ordered & voltmeter temporarily installed.	LER	4c-LER	DVD-2 (S1)
06/18/1980	LER 80-026/03L-0: on 800618, during recovery mode, Unit 2 fire pump removed from svc. Unit 1 pump discovered unaligned to fire suppression header. Caused by personnel error. Procedures revised to reflect permanent valve lineup change.	LER	4c-LER	DVD-2 (S1)
07/09/1980	LER 80-027/01X-1: on 800709, while preparing for execution of reactor bldg purge, modified hydrogen purge filters & fire protection deluge valves closed. Charcoal removed from exhaust filters.	LER	4c-LER	DVD-2 (S1)
07/07/1980	LER 80-028/03L-0: on 800707, while being tested by surveillance procedure, emergency diesel generator DF-X-1B tripped on high crankcase pressure. Caused by loose hose clamp resulting in crankcase vacuum loss.	LER	4c-LER	DVD-2 (S1)
07/14/1980	LER 80-029/01L-0: on 800714, during recovery mode operation, gray balance-of-plant diesel generator failed to start during testing. Caused by damaged connection at speed sensor. Connection repaired & diesel generator testing completed.	LER	4c-LER	DVD-2 (S1)
07/17/1980	LER 80-030/01L-0: on 800717, following first reactor bldg entry since Mar 1979 accident, door seal leakage detected in excess of Tech Spec limit. Apparently caused by some foreign matl remaining on seal after cleaning.	LER	4c-LER	DVD-2 (S1)
06/23/1980	LER 80-031/03L-0: on 800623, Gray balance-of-plant diesel generator tripped during surveillance testing. Apparently caused by loose electrical connection. Control panel connections tightened.	LER	4c-LER	DVD-2 (S1)
07/19/1980	LER 80-032/03L-0: on 800719, during re-dewatering of EPICOR-I liner, leak of radioactive liquid discovered. Caused by worn mating surfaces of quick release coupling. Requirements for insp of couplings before & after engagement adopted.	LER	4c-LER	DVD-2 (S1)
07/30/1980	LER 80-033/01L-0: on 800730, Gould-ITE reported possible failure of relay pneumatic timing device, Model J20T3. Caused by age & deterioration, coupled w/two failures of timers & excessive need for recalibr. Failed timers replaced.	LER	4c-LER	DVD-2 (S1)
07/25/1980	LER 80-034/03L-0: on 800725, during recovery mode, use of hot water hydrolasing set off fire alarm in fuel handling bldg. Ventilation automatically shut down & was not returned to svc for 5-h. Caused by operator response to fire alarm.	LER	4c-LER	DVD-2 (S1)
07/31/1980	LER 80-035/03L-0: on 800731, during recovery mode operation, trouble alarm received in control room. Caused by failed flame detectors within balance of plant diesel generator. Detector replaced. Diesel generators removed from specs.	LER	4c-LER	DVD-2 (S1)
08/08/1980	LER 80-036/01L-0: on 800808, failed to perform RCS coolant dissolved boron & hydrogen analyses. Cause by contamination of B&W R&D facility. Util in process of establishing onsite capabilities for performing RCS coolant analyses.	LER	4c-LER	DVD-2 (S1)
08/08/1980	LER 80-037/01L-0: on 800808, leak rate testing of reactor bldg personnel air lock door 2 showed excessive leakage. Caused by failure to equalize pressure inside & outside airlock resulting in door suddenly opening & striking wall.	LER	4c-LER	DVD-2 (S1)
09/24/1980	LER 80-038 was cancelled.		4c-LER	DVD-2 (S1)
08/22/1980	LER 80-039/03X-1: on 800822, during performance of Surveillance Procedure 4331-SA2, two bottles in cable room & transformer room fire suppression sys below min for Halon content. Procedure modified.	LER	4c-LER	DVD-2 (S1)

10/09/1980	LER 80-040 was cancelled.		4c-LER	DVD-2 (S1)
09/09/1980	LER 80-041/01L-0: on 800909, M-9 incore thermocouple exhibited erratic behavior. Cause of failure not known. No action will be taken re failure.	LER	4c-LER	DVD-2 (S1)
09/09/1980	LER 80-042/03L-0: on 800909, during surveillance procedures, RCS flow instrument discovered out of calibr & declared inoperable. Caused by electronic component drift. Instrument recalibr & surveillance completed.	LER	4c-LER	DVD-2 (S1)
09/02/1980	LER 80-043/03L-0: on 800902, during operation of auxiliary bldg ventilation sys B train, fan 8D tripped. Caused by circuit breaker malfunction. Breaker replaced & fan returned to svc.	LER	4c-LER	DVD-2 (S1)
09/25/1980	LER 80-044/01L-0: on 800925, seals of personnel airlock 1 outer door failed seal leak rate test. Caused by malfunctioning door seals. Seals replaced & tested satisfactorily.	LER	4c-LER	DVD-2 (S1)
09/29/1980	LER 80-045/03L-0: on 800929, diesel failed to start while performing surveillance procedure on emergency diesel generator. Caused by personnel error. Control reset & operators reinstructed.	LER	4c-LER	DVD-2 (S1)
09/30/1980	LER 80-046/01L-0: on 800930, feeder breadkers for buses 2-38 & 2-48 were removed for maint & remained out of svc in excess of Tech Spec limit. Caused by failure to initiate time clock. Bus feeder breakers replaced.	LER	4c-LER	DVD-2 (S1)
10/16/1980	LER 80-047/03L-0: on 801016, airlock inner door was leak tested & leak rate exceeded Tech Specs. Apparently caused by foreign matl on sealing surface. Sealing surface cleaned & leak rate tested satisfactorily.	LER	4c-LER	DVD-2 (S1)
10/17/1980	LER 80-048/03L-0: on 801017, after sampling A core flood tank, inner containment isolation valve CF-V115 failed to close. Apparently caused by motor & control circuits grounding out, induced by water leakage. Valve closed & deactivated.	LER	4c-LER	DVD-2 (S1)
10/27/1980	LER 80-049/01X-1: on 801027, discovered that valve LTB-V171 ASME Code stamped by unauthorized valve supply house. Caused by unauthorized use of ASME UV code stamp by North American Safety Valve Industries, Inc.	LER	4c-LER	DVD-2 (S1)
11/08/1980	LER 80-050/01L-0: on 801108, incore thermocouple H-9 exhibited erratic behavior. Cause unknown & may not be possible to determine due to condition of core relative to incore instrumentation. Evaluation is in progress.	LER	4c-LER	DVD-2 (S1)
11/10/1980	LER 80-051/03L-1: on 801110, 18-inch long crack observed which penetrated fire barrier seal 3-484-51. Cause not stated. Hourly fire watch implemented until seal repaired & returned to svc.	LER	4c-LER	DVD-2 (S1)
	LER-80-052 not available or not issued.		4c-LER	DVD-2 (S1)
11/17/1980	LER 80-053/03L-0: on 801117, incore thermocouples N-8 & N-9 exhibited erratic behavior. Cause undetermined. Situation being evaluated.	LER	4c-LER	DVD-2 (S1)
11/17/1980	LER 80-054/03X-1: on 801117, emergency diesel generator DF-X-1R failed to start. Caused by not maintaining diesel at high enough shutdown ambient temp due to heater failure. Heater & contactor replaced.	LER	4c-LER	DVD-2 (S1)
11/27/1980	LER 80-055/03X-1: on 801127, emergency diesel generator DF-X-1B failed to start. Caused by failure to maintain diesel at high enough shutdown ambient temp due to heater failure. Heater & contactor replaced.	LER	4c-LER	DVD-2 (S1)
12/12/1980	LER 80-056/01X-1: on 801212, core floor tank level instrumentation A inoperable. Cause unknown. Tech Spec 3. 3. 3. 6 revised to delete core floor tank level indicators from specs.	LER	4c-LER	DVD-2 (S1)
12/17/1980	LER 80-057/03X-1: on 801217, air intake tunnel chlorine monitor declared inoperable due to failure to respond upon exposure to chlorine vapors. Caused by dirty probe. Probe cleaned & returned to svc.	LER	4c-LER	DVD-2 (S1)
01/19/1981	LER 80-058/01L-0 was cancelled.		4c-LER	DVD-2 (S1)
12/26/1980	LER 80-059/03L-0: on 801226, during training exercise, A emergency diesel generator DF-X-1A started but tripped after approx 9-S. Caused by failure in alarm delay relay, T3B-low lube oil pressure in generator starting circuitry.	LER	4c-LER	DVD-2 (S1)
06/01/1981	LER 81-001 was cancelled.		4c-LER	DVD-2 (S1)
01/26/1981	LER 81-002/01L-0: on 810126, emergency diesel generator B determined inoperable on 810119. Caused by auxiliary operator not completing switching order. No corrective action. Operator counseled.	LER	4c-LER	DVD-2 (S1)
02/02/1981	LER 81-003/03L-0: on 810202, while performing surveillance 4333-R2, deluge valve FS-V-426A failed to operate properly. Apparently caused by malfunction of solenoid operator, arresting automatic release of hydraulic lock.	LER	4c-LER	DVD-2 (S1)
02/04/1981	LER 81-004/03X-1: on 810204, emergency diesel generator DF-X-1B failed to start. Caused by low diesel ambient temp. Pump motor repaired on 810302.	LER	4c-LER	DVD-2 (S1)
02/07/1981	LER 81-005/01L-0: on 810207, incore thermocouple H-9 exhibited erratic behavior. Cause unknown. Thermocouple being monitored to determine trend & long-term safety implications.	LER	4c-LER	DVD-2 (S1)

02/26/1981	LER 81-006/03L-0: on 810226, A emergency diesel generator DF-X-1A tripped approx 15 to 20-s after starting. Cause unknown. Brush recorders are being installed to monitor several components in starting circuitry.	LER	4c-LER	DVD-2 (S1)
03/11/1981	LER 81-007/01L-0: on 810311, EPICOR-II bldg radiation monitor removed from svc for maint w/o initiating air grab samples per ETS. Caused by insufficient communication between personnel & foreman.	LER	4c-LER	DVD-2 (S1)
04/16/1981	LER 81-008/03X-1: on 810416, diesel driven fire pump failed to start. Caused by failed battery. Diesel switched to B bank. Preventive maint procedure written to replace fire svc diesel batteries A & B every 5 yrs.	LER	4c-LER	DVD-2 (S1)
05/03/1981	LER 81-009 was cancelled.		4c-LER	DVD-2 (S1)
04/20/1981	LER 81-010/01X-1: on 810420, shift & daily check logsheet not consistent w/recovery Tech Specs in that seven instruments received daily rather than per shift checks. Caused by errors in procedure logsheet. Procedure revised.	LER	4c-LER	DVD-2 (S1)
04/23/1981	LER 81-011/01X: on 810423, nuclear svc river water pump A exhibited high vibrations & high current readings. Caused by excessive clearance at bottom of pump. Pumps overhauled. Procedures revised.	LER	4c-LER	DVD-2 (S1)
04/22/1981	LER 81-012/03X-1: on 810422, emergency diesel generator A failed to develop output voltage. Caused by corrosion & pitting of relay contacts. Relay replaced. Surveillance Procedure 4603-R1 revised.	LER	4c-LER	DVD-2 (S1)
05/08/1981	LER 81-013/01L-0: on 810508, incore thermocouple L11 exhibited erratic behavior. Cause undetermined due to condition of incore instrumentation. Condition monitored to determine long-term effect on safety.	LER	4c-LER	DVD-2 (S1)
05/07/1981	LER 81-014/03L-0: on 810507, corrosion noted on battery terminals of diesel fire pump. Caused by failure to perform or reschedule surveillance since Sept 1977 due to error in computer entry.	LER	4c-LER	DVD-2 (S1)
06/13/1981	LER 81-015/01L-0: on 810613, control room ventilation sys failed to automatically switch to recirculation mode upon receipt of initiating signal from HP-R-220. Caused by failure to return radiation monitor locks to normal.	LER	4c-LER	DVD-2 (S1)
12/31/1981	LER 81-016/01P was cancelled.		4c-LER	DVD-2 (S1)
08/05/1981	LER 81-017/01L-0: on 810805, emergency diesel generator B not returned to emergency standby status following last operability verification w/generator A removed from svc for maint. Caused by personnel failure to follow procedure.	LER	4c-LER	DVD-2 (S1)
08/19/1981	LER 81-018/03L-0: on 810819, fuel handling bldg ventilation exhaust fans AH-E-10C & D & supply fans AH-E-9A & B tripped. Caused by failure of flow switch on AH-E-10C. Flow switch replaced on 810821.	LER	4c-LER	DVD-2 (S1)
09/14/1982	LER 81-019 was cancelled.		4c-LER	DVD-2 (S1)
08/30/1981	LER 81-020/03X-1: on 810830, fuel handling bldg ventilation sys inoperable due to high pressure differential & low exhaust flow rate. Caused by excessive loading of prefilters & first bank HEPA filters.	LER	4c-LER	DVD-2 (S1)
09/07/1981	LER 81-021/03L-0: on 810907, manual inlet damper to control room bypass supply fan failed closed during control room emergency ventilation performance analysis. Caused by loose set screw on manual actuation control arm.	LER	4c-LER	DVD-2 (S1)
09/09/1981	LER 81-022/03X-1: on 810909, channel calibr of gas partitioner performed past scheduled expiration date. Caused by heavy manpower loads in conducting Unit 1 hot functional tests. Instrument calibr.	LER	4c-LER	DVD-2 (S1)
09/11/1981	LER 81-023/03X-1: on 810911, control bldg charcoal filters lab tested to acceptance criteria of 95% rather than 99%, as required. Caused by misinterpretation of Reg Guide 1. 52. New filters installed.	LER	4c-LER	DVD-2 (S1)
09/11/1981	LER 81-024/03X-1: on 810911, RCS leakage rate increased from approx 0. 1 gpm to 0. 667 gpm. Caused by relocation of remote controls for sampling valve RC-V-122. Leakage isolated.	LER	4c-LER	DVD-2 (S1)
09/14/1981	LER 81-025/03L-0: on 810914, during fire barrier penetration fire seal insp, three penetrations found unsealed. Caused by inadequate controls to ensure resealing of penetrations following maint or const.	LER	4c-LER	DVD-2 (S1)
09/02/1981	LER 81-026/03L-0: on 810902, auxiliary bldg ventilation sys was inoperable. Caused by broken linkage in vortex damper. Damper repaired, tested & returned to svc.	LER	4c-LER	DVD-2 (S1)
10/07/1981	LER 81-027/03L-0: on 811007, during annual surveillance of Firewall-50 seals, some seals found deficient. Caused by cracks which developed in fire barrier penetrations due to dehydration of barriers. Cracks repaired.	LER	4c-LER	DVD-2 (S1)
10/14/1981	LER 81-028/01L-0: on 811014, auxiliary bldg exhaust flowrate decreased approx 7000 cfm. Caused by one of two vortex dampers on each exhaust fan (AH-E-8A & 8B) failing to close. Dampers repaired.	LER	4c-LER	DVD-2 (S1)
10/28/1981	LER 81-029/01L-0: on 811028 discovered that failure of nitrogen supply regulator valve could overpressurize SDS vessel & cause rupturing. Original design inadequate when gas supply changed. Pressure relief valve inserted.	LER	4c-LER	DVD-2 (S1)
10/30/1981	LER 81-030/01L-0: on 811030, eight containment penetration isolation valves found open w/o control per Tech Specs. Caused by lack of proper administrative procedures. Procedures developed.	LER	4c-LER	DVD-2 (S1)

05/03/1981	LER 81-031 was cancelled.		4c-LER	DVD-2 (S1)
11/05/1981	LER 81-032/03X-1: on 811105, while reviewing operating records, discovered that exhaust flow fell below Tech Specs min on 811028. Caused by low auxiliary bldg supply flow rate & problems w/design & operation of supply damper.	LER	4c-LER	DVD-2 (S1)
11/13/1981	LER 81-033/01L-0: on 811113, once-through steam generator level indication B failed. Caused by 12-volt dc power supply for transmitter failure. Power supply replaced.	LER	4c-LER	DVD-2 (S1)
12/01/1981	LER 81-034/01X-1: on 811201, in-core thermocouple F-12 inoperable. Caused by polarity of thermocouple being reversed. Procedures revised to prevent future occurrence.	LER	4c-LER	DVD-2 (S1)
12/01/1981	LER 81-035/03X-1: on 811201, wind direction monitoring instrument inoperable. Caused by ice formation on instrument. Instrument deiced & permanent weather station heater jacket installed.	LER	4c-LER	DVD-2 (S1)
12/14/1981	LER 81-036/03X-1: on 811214, wind direction monitoring instrument inoperable. Caused by ice formation on instrument. Instrument deiced & permanent weather station heater jacket installed on instrument.	LER	4c-LER	DVD-2 (S1)
12/17/1981	LER 81-037/03X-1: on 811217, high motor bearing temp alarm received in control room for nuclear svc river water pump NR-P-1B. Caused by shoulder on motor shaft coming in contact w/bearing cover. Motor replaced.	LER	4c-LER	DVD-2 (S1)
12/28/1981	LER 81-038/03X-1: on 811228, wind direction & wind speed monitoring instruments inoperable. Caused by ice formation on instruments. Instruments heat traced as temporary measure.	LER	4c-LER	DVD-2 (S1)
01/04/1982	LER 82-001/03X-1: on 820104, auxiliary bldg B ventilation sys supply fan AH-E-7B tripped. Caused by tripped thermal overload relay. Relay reset.	LER	4c-LER	DVD-2 (S1)
10/19/1982	LER 82-002 was cancelled.		4c-LER	DVD-2 (S1)
01/11/1982	LER 82-003/03L-0: on 820111, during weekly scheduled preventive maint, pump NR-P-1B failed to start. Caused by loose fuse clip in control power switchgear. Clip repaired.	LER	4c-LER	DVD-2 (S1)
01/10/1982	LER 82-004/03L-0: on 820110, auxiliary bldg ventilation sys exhaust flowrate exceeded Tech Spec max allowable flowrate. Caused by opening auxiliary bldg doors increasing flowrate. Change to recovery operations plan has eliminated problem.	LER	4c-LER	DVD-2 (S1)
01/18/1982	LER 82-005/03L-0: on 820118, during performance of surveillance procedure 4303-M-19, long-term B (LTB) pump LTB-P-1 failed to start. Caused by malfunction of limit switch, due to dust. Switch cycled for correct operation.	LER	4c-LER	DVD-2 (S1)
	LER-82-006 not available or not issued.		4c-LER	DVD-2 (S1)
01/20/1982	LER 82-007/03L-0: on 820120, auxiliary bldg ventilation sys declared inoperable due to low flow conditions. Caused by supply fan trip in fuel handling bldg ventilation sys on 820120 & 26. Supply air flowrate restored to operable status.	LER	4c-LER	DVD-2 (S1)
10/19/1982	LER 82-008 was cancelled.		4c-LER	DVD-2 (S1)
02/01/1982	LER 82-009/03L-0: on 820201, auxiliary bldg ventilation sys declared inoperable due to low exhaust flowrate. Caused by failure to readjust flowrate to be greater than 65, 000 cfm flowrate limit. Exhaust fan vortex dampers adjusted.	LER	4c-LER	DVD-2 (S1)
02/22/1982	LER 82-010/03L-0: on 820222, auxiliary bldg vent sys supply fans (AH-E-7A & B) tripped resulting in low vent sys exhaust flowchart. Caused by malfunctioning interlock relay between radiation monitor & supply fans. Relay replaced.	LER	4c-LER	DVD-2 (S1)
03/03/1982	LER 82-011/01L-1: on 820303, significant airborne particulate contamination generated due to auxiliary & fuel handling bldg ventilation HEPA filter deficiency. Caused by missing cleanout plugs in filter cabinets.	LER	4c-LER	DVD-2 (S1)
05/14/1982	LER 82-012/03L-0: on 820416, fuel handling bldg exhaust flowrate indicated below Tech Spec ref level. Cause not determined. Exhaust & supply fans restarted. Investigation continuing.	LER	4c-LER	DVD-2 (S1)
04/28/1982	LER 82-013/03L-0: on 820428, seven smoke detectors tested failed to provide required trip functions & alarms. Caused by malfunctioning of fire indicating unit (FIU) which controls smoke detectors & alarm/trip. FIU replaced.	LER	4c-LER	DVD-2 (S1)
05/04/1982	LER 82-014/03L-0: on 820504, auxiliary bldg ventilation exhaust flow rate fluctuated between 67, 000 & 63, 000 cfm, dropping below Tech Spec limit. Cause unidentified.	LER	4c-LER	DVD-2 (S1)
05/17/1982	LER 82-015/01L-0: on 820517, w/unit in long-term cold shutdown, incore thermocouple D14 exhibited erratic behavior. Cause not determined, due to condition of core re incore instrumentation. Situation is being monitored.	LER	4c-LER	DVD-2 (S1)
06/18/1982	LER 82-016/03L-0: on 820519, during testing, three hydrogen purge & 18 auxiliary bldg exhaust filter cabinet deluge sprinkler heads inoperable. Caused by reduced flow rate capacity due to blind flange in supply line & debris.	LER	4c-LER	DVD-2 (S1)
05/25/1982	LER 82-017/03L-0: on 820525, air intake tunnel chlorine monitor declared inoperable during Surveillance Procedure 4303-M10. Caused by leak in sample flowpath at intake filter chlorine monitor air sample pump. Leak corrected.	LER	4c-LER	DVD-2 (S1)

06/01/1982	LER 82-018/03L-0: on 820601, air intake tunnel Halon sys triggered actuation of deluge sys & tripped auxiliary & fuel handling bldgs supply & exhaust fans. Caused by lightning setting off ultraviolet light detector. Sys recharged.	LER	4c-LER	DVD-2 (S1)
06/01/1982	LER 82-019/03L-0: on 820601, wind speed, wind direction & air temp indication in control room lost. Caused by lightning striking meteorological tower resulting in blown amplifier chips & fuse. Components replaced.	LER	4c-LER	DVD-2 (S1)
06/03/1982	LER 82-020/01X-1: on 820603, determined recent over flow of auxiliary bldg pump caused by influx of rainwater from borated water storage tank recirculation pump encl sump. Caused by inadequate flood protection. W/831209 ltr.	LER	4c-LER	DVD-2 (S1)
06/06/1982	LER 82-021/03L-0: on 820606, danger alarm along w/instrument fault alarm received for control room chlorine monitor. Monitor found inoperable. Caused by burned out light bulb in meter relay bulb assembly. Bulb replaced.	LER	4c-LER	DVD-2 (S1)
06/12/1982	LER 82-022/03L-0: on 820612, air intake tunnel chlorine monitor failed. Caused by failed optical transistor in monitor. Transistor replaced & monitor returned to svc.	LER	4c-LER	DVD-2 (S1)
06/29/1982	LER 82-023/03X-1: on 820629, air intake tunnel Halon sys actuated, causing actuation of deluge sys & tripping auxiliary & fuel handling bldgs supply & exhaust fans. Caused by lightning. Louvers installed.	LER	4c-LER	DVD-2 (S1)
07/08/1982	LER 82-024/03L-0: on 820708, fuel handling bldg exhaust fans AH-E-10C/D tripped. Caused by inadvertently grounded lead during calibr procedure. Resulting low flow condition of fans AH-E-10A/B due to open exhaust damper on fan 10D.	LER	4c-LER	DVD-2 (S1)
07/09/1982	LER 82-025/03L-0: on 820709, following mod work in personnel airlock, outer door leak rate exceeded Tech Spec limit. Caused by foreign matl on sealing surface preventing seal. Seal surfaces cleaned & O-rings replaced.	LER	4c-LER	DVD-2 (S1)
02/01/1983	LER 82-026 was cancelled.		4c-LER	DVD-2 (S1)
07/26/1982	LER 82-027/03L-0: on 820726, during operability check, emergency diesel generator DF-X-1A permissive lamp did not light, allowing diesel to be loaded & rendering DF-X-1A inoperable. Cause not identified. Lamp bulb replaced.	LER	4c-LER	DVD-2 (S1)
09/15/1982	LER 82-028/03L-0: on 820915, auxiliary bldg exhaust flowrate dropped from 65, 000 to 49, 000 cfm. Cause unknown. Investigation underway. Flowrate returned to 55, 000 cfm.	LER	4c-LER	DVD-2 (S1)
02/01/1983	LER 82-029 was cancelled.		4c-LER	DVD-2 (S1)
09/25/1982	LER 82-030/03L-0: on 820925, emergency generator fuel oil day tank B showed level of 490 gallons, 10 gallons below required level. No specific cause identified. Tank refilled & necessity of reviewing logs stressed to shift foreman.	LER	4c-LER	DVD-2 (S1)
02/01/1983	LER 82-031 was cancelled.		4c-LER	DVD-2 (S1)
10/07/1982	LER 82-032/03L-0: on 821007, 09 & 11, EPICOR II effluent radiation monitor sampler pump ALC-RMI-18 failed. Caused by blown fuse. Pump & cracked fuse holder replaced.	LER	4c-LER	DVD-2 (S1)
10/14/1982	LER 82-033/01L-0: on 821014, discovered surveillance procedures for three Tech Specs delayed. Caused by failure to anticipate need for recovery operations plan change request due to extended schedule. Request submitted 821111.	LER	4c-LER	DVD-2 (S1)
10/21/1982	LER 82-034/01X-1: on 821021, once-through steam generator A level indication failed. Caused by separated electrical connector, failed power supply & inadequate procedure. Valves opened & level indicators repaired.	LER	4c-LER	DVD-2 (S1)
11/10/1982	LER 82-035/01L-0: on 821110, reactor bldg sump level indicator observed reading high. Caused by buildup of sludge in end of sump indicator. Indicator line blown free w/20 lb of pressure.	LER	4c-LER	DVD-2 (S1)
10/28/2008	LER 82-036/03L-0: on 821028, tested smoke detectors failed to provide required trip functions & alarms. Caused by high voltage dc power supply failing to provide proper voltage due to capacitor failure. Capacitor replaced.	LER	4c-LER	DVD-2 (S1)
11/15/1982	LER 82-037/01P: on 821115, B once through steam generator level indication failed, resulting in indication being declared inoperable. Details will be included in followup rept.	LER	4c-LER	DVD-2 (S1)
12/02/1982	LER 82-038/03X-1: on 821202, control room indication for windspeed direction & air temp Delta T failure discovered. Caused by loose cable plug. Defective plug replaced.	LER	4c-LER	DVD-2 (S1)
	LER-82-039 not available or not issued.		4c-LER	DVD-2 (S1)
12/14/1982	LER 82-040/03L-0: on 821214, drive belts on auxiliary bldg ventilation sys fan A4-E-8A failed. Caused by degradation. Belts replaced.	LER	4c-LER	DVD-2 (S1)
12/16/1982	LER 82-041/03X-1: on 821216, while attempting to switch auxiliary bldg ventilation sys exhaust fans AH-E-8C/D to exhaust fans AH-E-8A/B, auxiliary bldg supply fans tripped. Caused by overload relay cracks.	LER	4c-LER	DVD-2 (S1)
01/04/1983	LER 83-001/01X-1: on 830104, after filling secondary side of once-through steam generator A to facilitate cleaning, pressure instrument failed to register expected change. Failed pressure transmitters probable cause.	LER	4c-LER	DVD-2 (S1)

01/14/1983	LER 83-002/01L-0: on 830114, : on 830114, once through steam generator B level indication determined out of svc. Heise gauge GR-PI-1 fell from mount. Caused by tie wraps broken by vibration induced fatigue. Gauge recalibr & remounted using heavy duty	LER	4c-LER	DVD-2 (S1)
02/11/1983	LER 83-003/01L-0: on 830211, while replacing selected fire barrier seals in river water pump house, firewatch tours were performed on less than hourly basis during backshifts. Caused by personnel error. Firewatch implemented on hourly basis.	LER	4c-LER	DVD-2 (S1)
02/16/1983	LER 83-004/03X-2: on 830216, while performing fire sys valve surveillance, standing water discovered on air intake tunnel floor. Caused by failed heat tracing. Leaks repaired. Heat tracing & detectors replaced.	LER	4c-LER	DVD-2 (S1)
02/14/1983	LER 83-005/03L-0: on 830214, air intake chlorine monitor declared inoperable due to restricted flow causing blockage in discharge piping. Caused by frozen water on floor. Pipe shortened to clear obstruction.	LER	4c-LER	DVD-2 (S1)
02/16/1983	LER 83-006/03X-1: on 830216, subsequent to reactor bldg entry, personnel airlock 2 failed leak test. Caused by small gouge in O-ring. O-ring replaced.	LER	4c-LER	DVD-2 (S1)
02/22/1983	LER 83-007/03X-1: on 830222, auxiliary bldg exhaust fan tripped. Cause unknown. Exhaust fans AH-E-8A & B started & sys returned to svc.	LER	4c-LER	DVD-2 (S1)
02/16/1983	LER 83-008/01L-0: on 830216, liquid radwaste transferred through auxiliary bldg w/air cleanup exhaust sys AB in degraded mode. Caused by failure of shift foreman to recognize that water was radwaste. Personnel counseled.	LER	4c-LER	DVD-2 (S1)
03/03/1983	LER 83-009/03L-0: on 830303, air intake tunnel halon sys actuated inadvertently. Cause for detector trip unknown. Auxiliary & fuel handling bldg ventilation fans restarted & flow rates returned to Tech Spec limits.	LER	4c-LER	DVD-2 (S1)
03/22/1983	LER 83-010/01L-0: on 830322, in-core thermocouple H-3 began to exhibit erratic behavior. Cause unknown. To date, no adverse trend in overall core thermocouple sys behavior apparent.	LER	4c-LER	DVD-2 (S1)
03/25/1983	LER 83-011/01L-0: on 830325, verified that 3 h rated fire damper not installed in fire wall separating fuel handling bldg from reactor bldg annulus area. Caused by AE error during const of plant. Hourly firewatch posted.	LER	4c-LER	DVD-2 (S1)
03/29/1983	LER 83-012/03X-1: on 830329, pressure of bottle EI-4C found below chart in Surveillance Procedure 4331-SA1. Caused by failure to perform calculation in timely manner. Bottle repressurized & personnel counseled. W/841025 ltr.	LER	4c-LER	DVD-2 (S1)
04/18/1983	LER 83-013/03L-0: on 830418, control room operator opened wrong breaker, tripping auxiliary & fuel handling bldg ventilation sys & control bldg chlorine monitors. Caused by operator error. Breaker closed. W/830518 ltr.	LER	4c-LER	DVD-2 (S1)
05/06/1983	LER 83-014/03L-1: on 830506, air intake tunnel Halon sys actuated, causing actuation of deluge sys & trip of auxiliary & fuel handling bldgs supply & exhaust fans. Caused by short in actuation leads. Sys repaired. W/830617 ltr.	LER	4c-LER	DVD-2 (S1)
05/27/1983	LER 83-015/03X-1: on 830527, one Halon bottle found below spec (low pressure/weight). Caused by pressure test connection valve left cracked open. Bottle replaced. W/841025 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-83-016 not available or not issued.		4c-LER	DVD-2 (S1)
05/27/1983	LER 83-017/03L-0: on 830527, reactor bldg water level instrumentation indication unchanged all wk despite addition of 24, 000 gallons of water. Caused by improper seating of level instrument equalizing valve. W/830627 ltr.	LER	4c-LER	DVD-2 (S1)
06/03/1983	LER 83-018/03L-0: on 830603, rupture disc on inboard flange of reactor bldg containment penetration R561 breached. Caused by high pressure hose rupture due to line pressure pulsing. Hose & rupture disc replaced. W/830705 ltr.	LER	4c-LER	DVD-2 (S1)
06/10/1983	LER 83-019/01X-1: on 830610, containment isolation valves DSA-FV-004 & DSA-FV-005 operated w/o currently approved procedures. Caused by failure to include one valve in operating procedures. W/841002 ltr.	LER	4c-LER	DVD-2 (S1)
06/10/1983	LER 83-020/03X-1: on 830610, flowrate for auxiliary bldg exhaust fans AH-V-8A/B decreased below Tech Spec limits. Caused by problems w/vortex damper linkage for fans. Vortex damper linkage repaired.	LER	4c-LER	DVD-2 (S1)
06/16/1983	LER 83-021/03X-1: on 830616 & 30, nine fire barrier seals discovered to be nonfunctional. Caused by dehydration cracking in two seals, open pull boxes for four seals & physical deformation of one seal.	LER	4c-LER	DVD-2 (S1)
06/09/1983	LER 83-022/03X-1: on 830609, loop A T-hot instrument declared inoperable. Caused by inadvertent removal of loop A T-hot instrumentation fuse. Fuse replaced & instrument returned to svc.	LER	4c-LER	DVD-2 (S1)
06/30/1983	LER 83-023/01X-1: on 830630, inability to verify containment integrity per Tech Specs discovered for outboard containment penetrations R-561 & R-565. Caused by administrative procedures not requiring review. Procedures revised.	LER	4c-LER	DVD-2 (S1)
07/03/1983	LER 83-024/01X-1: on 830703, Unit Substation 2-11E transformer failed. Caused by turn-to-turn insulation failure near top outer layer of middle high voltage winding. Transformer replaced.	LER	4c-LER	DVD-2 (S1)
06/21/1983	LER 83-025/03X-1: on 830621, air intake tunnel Halon sys partial disarmament discovered. Caused by disarming sys for protection from lightning strike. Louvers installed.	LER	4c-LER	DVD-2 (S1)
	LER-83-026 not available or not issued.		4c-LER	DVD-2 (S1)

07/13/1983	LER 83-027/01L-0: on 830713, in-core thermocouples 0-6 exhibited erratic behavior. No adverse effects on plant identified. Cause unknown. W/830812 ltr.	LER	4c-LER	DVD-2 (S1)
07/14/1983	LER 83-028/01L-0: on 830714, no firewatch performed on three breached Firewall-50 fire barrier seals. Control room not notified that seals were nonfunctional, therefore no firewatch established. Personnel counseled. W/830815 ltr.	LER	4c-LER	DVD-2 (S1)
07/17/1983	LER 83-029/03X-1: on 830717, standby pressure control pressure transmitter SPC-PT-10 failed low & declared inoperable. Disconnected wire interrupted current loop, causing transmitter to fail low. Wire connected. W/830926 ltr.	LER	4c-LER	DVD-2 (S1)
06/28/1983	LER 83-030/03L-0: on 830628, auxiliary bldg & fuel handling bldg ventilation sys declared inoperable due to low exhaust flowrate. Caused by tripping of supply fan AH-E-9A due to blown fuse. Fuse replaced & fan restarted. W/830728 ltr.	LER	4c-LER	DVD-2 (S1)
07/21/1983	LER 83-031/03X-1: on 830621, air intake tunnel Halon sys partial disarmament discovered. Caused by disarming sys for protection from lightning strike. Louvers installed.	LER	4c-LER	DVD-2 (S1)
08/01/1983	LER 83-032/01L-0: on 830801, in-core thermocouples F-8, M-7 & K-11 exhibited erratic behavior. Cause not known & may be indeterminable due to condition of core relative to in-core instrumentation. W/830831 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-83-033 not available or not issued.		4c-LER	DVD-2 (S1)
08/04/1983	LER 83-034/01L-0: on 830804, determined that on 830803, voltage across station storage battery 2-15B below min Tech Specs. Caused by incorrect voltage limit settings on full capacity chargers A, B & C, draining 2-15B. W/830902 ltr.	LER	4c-LER	DVD-2 (S1)
07/20/1983	LER 83-035/01L-1: on 821110, reactor bldg sump level indicator observed reading high & declared inoperable. Caused by sludge buildup in end of sump level indicator. Indicator line blown free. W/831130 ltr.	LER	4c-LER	DVD-2 (S1)
08/08/1983	LER 83-036/03X-2: on 830808, hydraulic truck crane boom struck & grounded 230 kV bus 4 feedline. Caused by allowing crane boom to come too close to 230 kV line due to crane operator & driver personal error.	LER	4c-LER	DVD-2 (S1)
	LER-83-037 not available or not issued.		4c-LER	DVD-2 (S1)
08/19/1983	LER 83-038/01L-0: on 830819, hourly firewatch not in effect for penetration fire seal 4-065-80 in auxiliary bldg. Seal nonfunctional pending replacement. Caused by inaccurate communications. Firewatch reestablished. W/830921 ltr.	LER	4c-LER	DVD-2 (S1)
08/20/1983	LER 83-039/01L-0: on 830820, several hourly fire watches determined not performed during replacement of deteriorated fire barrier seals. Caused by personnel error. Personnel counseled & roving fire watch established. W/830919 ltr.	LER	4c-LER	DVD-2 (S1)
08/18/1983	LER 83-040/03X-1: on 830811, standby pressure control surge tank level transmitter SPC-LT-3A failed low. Caused by loose resistor on SPC-LT-3A terminal block interrupting current loop of level transmitter. Block jumpered.	LER	4c-LER	DVD-2 (S1)
	LER-83-041 not available or not issued.		4c-LER	DVD-2 (S1)
08/18/1983	LER 83-042/01X-1: on 830901, discovered that only one of required two isolation valves between RCS & non-RCS grade water sources closed on three occasions during RCS feed & bleed operations. Caused by incorrect procedure.	LER	4c-LER	DVD-2 (S1)
08/27/1983	LER 83-043/03X-1: on 830827, air intake tunnel Halon sys partially disarmed on three occasions between 830827 & 0912. Caused by disarming sys for protection from lightning strike. Louvers installed.	LER	4c-LER	DVD-2 (S1)
08/22/1983	LER 83-044/03X-1: on 830822, concrete block accidentally dropped on transformer for lighting panel LPF-4E. Caused by shorting core to case degrading insulation. Transformer replaced.	LER	4c-LER	DVD-2 (S1)
08/27/1983	LER 83-045/03L-0: on 830827, reactor bldg pressure transmitter BS-PT-4388-2 found out of calibr. Caused by instrument drift. Transmitter recalibr & returned to svc. W/830923 ltr.	LER	4c-LER	DVD-2 (S1)
08/31/1983	LER 83-046/03X-1: on 830831 & 0901, standby pressure control surge tank level transmitter SPC-LT-3A failed low. Caused by loose or broken conductor in electrical connection assembly between level transmitter & junction box/local indicator.	LER	4c-LER	DVD-2 (S1)
	LER-83-047 not available or not issued.		4c-LER	DVD-2 (S1)
09/28/1983	LER 83-048/03L-0: on 830928, auxiliary bldg supply fans AH-E-7A & B tripped, resulting in AB exhaust fan 8C flowrate below Tech Spec limit. Cause undetermined. Design change in progress. W/831027 ltr.	LER	4c-LER	DVD-2 (S1)
09/24/1983	LER 83-049/03X-1: on 830924, generator A declared inoperable for failing operability test acceleration requirement. Caused by defective control box for diesel governor. Control box replaced.	LER	4c-LER	DVD-2 (S1)
10/05/1983	LER 83-050/01X-1: on 831005, in-core thermocouple B-7 declared inoperable. Cause unknown.	LER	4c-LER	DVD-2 (S1)
10/10/1983	LER 83-051/01X-1: on 831010, discovered Procedure 2104-4. 62, "Temporary Nuclear Sampling Sys," failed to provide double valve isolation of RCS during certain sampling modes. Caused by failure to incorporate SER requirements.	LER	4c-LER	DVD-2 (S1)

09/30/1983	LER 83-052/03X-1: on 830903, discovered nuclear svc river water valve NR-V-32A opened several times between 830920 & 27. Caused by operator error in failing to follow procedure. Operator reprimanded.	LER	4c-LER	DVD-2 (S1)
06/28/1983	LER 83-053/99X-1: on 830628, seismic restraint snubbers on decay heat auxiliary spray line would not respond to in-place exercising. Caused by water hammer event. Snubber replaced. W/841004 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-83-054 not available or not issued.		4c-LER	DVD-2 (S1)
10/26/1983	LER 83-055/03X-1: on 831026, Halon bottle in location EI-5A discovered to be below Tech Spec pressure. Caused by leaking fill valve. Halon bottle replaced.	LER	4c-LER	DVD-2 (S1)
	LER-83-056 not available or not issued.		4c-LER	DVD-2 (S1)
11/15/1983	LER 83-057/01L-0: on 831113-15, air temp delta-T meteorological instruments inoperable. On 831115, wind direction instrumentation failed. Caused by pinched electrical cable & malfunctioning converter card, respectively. W/831215 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-83-058 not available or not issued.		4c-LER	DVD-2 (S1)
	LER-83-059 not available or not issued.		4c-LER	DVD-2 (S1)
11/10/1983	LER 83-060/03L-0: on 831110 & 22, auxiliary bldg exhaust fans AH-E-8C/D cycled periodically, decreasing flowrate below Tech Spec limit. Caused by sticking, broken linkage in vortex damper. Linkage will be replaced. W/831212 ltr.	LER	4c-LER	DVD-2 (S1)
11/10/1983	LER 83-061/03L-0: on 831110 & 16, reactor bldg sump level indicator read high. Caused by obstruction in bubbler & ref lines of level transmitter. Lines blown free & level indication returned to normal. W/831208 ltr.	LER	4c-LER	DVD-2 (S1)
12/01/1983	LER 83-062/03L-0: on 831201, low flow conditions found in auxiliary bldg ventilation sys. Cause traced to supply fan trip in Unit 1 fuel handling bldg ventilation sys. Unit 1 control room notified. W/831229 ltr.	LER	4c-LER	DVD-2 (S1)
12/22/1983	LER 83-063/03L-0: on 831222, following maint on auxiliary bldg (AB) exhaust filter train A, operator inadvertently closed train B inlet damper, tripping AB exhaust fan. Filter trains opened. W/840118 ltr.	LER	4c-LER	DVD-2 (S1)
11/02/1983	LER 83-064/99T-0: on 831102, following semiannual dike insp, depression found in west & south dikes & excess vegetation found on east & west dikes. Caused by natural elements. Repairs completed on 831214.	LER	4c-LER	DVD-2 (S1)
02/14/1984	LER 84-001-00: on 840214, auxiliary bldg exhaust fans AH-E-8A/B tripped, causing auxiliary bldg supply fans AH-E-7A/B to trip. Possibly caused by fluctuation of exhaust flowrate. Fans restarted. W/840309 ltr.	LER	4c-LER	DVD-2 (S1)
02/13/1984	LER 84-002-00: on 840216, determined that load test for polar crane procedure failed to incorporate adequate isolation requirements for nonborated water sources. Tests from 840213-16 conducted in unanalyzed condition. W/840314 ltr.	LER	4c-LER	DVD-2 (S1)
02/15/1984	LER 84-003-00: on 840215, during containment isolation verification Procedure 4301-M8, valve MU-V25 found open instead of closed, per procedure requirements. Caused by lack of verification of valve position. W/840313 ltr.	LER	4c-LER	DVD-2 (S1)
03/02/1984	LER 84-004-01: on 840302, DHR sys pump DH-P-1A declared inoperable when Tech Spec surveillance testing not performed. Cause not stated. Motor for DHR valve DH-V-5A will be removed & replaced. W/841018 ltr.	LER	4c-LER	DVD-2 (S1)
02/22/1984	LER 84-005-00: on 840222, reactor bldg puge train A shut down. Caused by control room operator utilizing wrong rev to Operating Procedure 2104-4. 91. Operator counseled. W/840326 ltr.	LER	4c-LER	DVD-2 (S1)
03/01/1984	LER 84-006-00: on 840301, reactor bldg (RB) water level indication declared out-of-svc due to high reading on RB sump level transmitter RBS-LT-6000. Caused by back pressure in sensing line. Bypass valve installed. W/840328 ltr.	LER	4c-LER	DVD-2 (S1)
05/11/1984	LER 84-007-00: on 840511, during surveillance procedure, containment isolation valve AH-V-4A failed to close. Caused by failed closure spring in valve controller. Valve will be repaired. W/840622 ltr.	LER	4c-LER	DVD-2 (S1)
04/01/1984	LER 84-008-00, providing results of exam & evaluation of core flood tank A & B pressure transmitters CF-1-PT1 & CF-1-PT3 & level transmitters CF-2-LT1, CF-2-LT2 & CF-2-LT3 by INEL. CF-2LT3 showed significant corrosion. W/840620 ltr.	LER	4c-LER	DVD-2 (S1)
06/18/1984	LER 84-009-00: on 840618, in-core thermocouple N-4 declared inoperable during long-term cold shutdown. Cause unknown. Thermocouple checked to ensure problem not in any component accessible for repairs. W/840717 ltr.	LER	4c-LER	DVD-2 (S1)
06/28/1984	LER 84-010-00: on 840628, several containment isolation valves opened w/o required unit work instruction approvals. Personnel will be briefed on event & need to obtain required approvals. W/840726 ltr.	LER	4c-LER	DVD-2 (S1)
07/13/1984	LER 84-011-00: on 840713, control room air inlet radiation monitor interlock placed in defeat. Caused by personnel error. Personnel reprimanded. W/840810 ltr.	LER	4c-LER	DVD-2 (S1)
07/27/1984	LER 84-012-00: on 840727, ionization type fire sys detector found not tested within required interval. Caused by shift foreman/supervisor misjudgement. Detector satisfactorily tested & responsible personnel counseled. W/840827 ltr.	LER	4c-LER	DVD-2 (S1)

06/09/1984	LER 84-013-00: on 840609, two-man temporary change notice for reactor bldg airlock doors not submitted for review within 72 h of approval. Caused by oversight by procedure coordinator. Procedure coordinator counseled. W/840914 ltr.	LER	4c-LER	DVD-2 (S1)
08/17/1984	LER 84-014-00: on 840817, six RCS samples taken during stages of internals indexing fixture processing not representative of reactor vessel vol. Caused by failure to verify open valve. W/840924 ltr.	LER	4c-LER	DVD-2 (S1)
08/31/1984	LER 84-015-00: on 840831, fire barrier penetration rollup Door FH-203 adjoining auxiliary & fuel handling bldgs found breached. Caused by personnel failing to realize door was fire barrier. Door identified as fire barrier. W/840927 ltr.	LER	4c-LER	DVD-2 (S1)
09/10/1984	LER 84-016-00: on 840910, in-core thermocouples M-3, O-10 & F-3 declared inoperable. Cause unknown. Thermocouples to be checked to ensure problem not in any component accessible for repair. W/841004 ltr.	LER	4c-LER	DVD-2 (S1)
10/24/1984	LER 84-017-03: on 841024, sonar insp of flood protection dike revealed degradation of submerged toe in vicinity of river water pump houses. Sept 1985 insp revealed same degradation. Baseline degradation criteria changed. W/851010 ltr.	LER	4c-LER	DVD-2 (S1)
10/12/1984	LER 84-018-01: on 841012, water leakage between cylinder liner & water jacket observed at air intake section of cylinder 9. Caused by failure of O-ring seal. Entire cylinder assembly replaced. W/850227 ltr.	LER	4c-LER	DVD-2 (S1)
10/18/1984	LER 84-019-00: on 841018, fuel handling bldg ventilation sys exhaust flowrate found below Tech Spec limits. Condition present during radwaste processing. Caused by drive belt failure. Exhaust fans secured. W/841115 ltr.	LER	4c-LER	DVD-2 (S1)
10/16/1984	LER 84-020-01: on 841017, determined that RCS samples obtained through temporary nuclear sampling sys on 841016 not representative of reactor vessel vol. Sample lines from RCS to sampling point not purged. W/850130 ltr.	LER	4c-LER	DVD-2 (S1)
10/29/1984	LER 84-021-00: on 841029, 1116, 17 & 18, in-core thermocouples H-5, F-12, O-5 & G-11, mfg by Bel Fab, Inc declared inoperable. Cause unknown. Repair under investigation. W/841127 ltr.	LER	4c-LER	DVD-2 (S1)
11/29/1984	LER 84-022-00: on 841129, one of two electrolyte sensing element leads for air intake tunnel chlorine monitor disconnected, rendering monitor inoperable. Caused by personnel error. Monitor recalibr. W/841227 ltr.	LER	4c-LER	DVD-2 (S1)
01/04/1985	LER 85-001-01: on 850104, survey results indicated minor degradation of flood protection dike. Caused not stated. Degradation minor & no corrective actions necessary at present. W/850912 ltr.	LER	4c-LER	DVD-2 (S1)
01/14/1985	LER 85-002-00: on 850114, in-core thermocouple E-4 declared inoperable due to erratic behavior. Cause unknown. Thermocouple being checked to ensure that failure not caused by inaccessible component. W/850205 ltr.	LER	4c-LER	DVD-2 (S1)
03/03/1985	LER 85-003-00: on 850303, in-core thermocouple G-13 declared inoperable due to erratic behavior. Cause unknown & may not be possible to determine given condition of TMI-2 core. Thermocouple checked. W/850325 ltr.	LER	4c-LER	DVD-2 (S1)
03/06/1985	LER 85-004-00: on 850306 & 26, internal pressure indicator indicated value slightly greater than 0 psig for longer than 1 h. Caused by erroneous internal pressure indications during "double door" reactor bldg entries. W/850405 ltr.	LER	4c-LER	DVD-2 (S1)
03/16/1985	LER 85-005-00: on 850316, reactor bldg internal pressure indication registered value in excess of Tech Spec limits. Caused by decreasing atmospheric pressure while reactor bldg purge exhaust sys shut down. W/850415 ltr.	LER	4c-LER	DVD-2 (S1)
03/27/1985	LER 85-006-00: on 850327, administrative discrepancy discovered re operating procedure for isolation valve RR-V-20E. Caused by typo & personnel error. RR-V-20E declared inoperable & valves closed. W/850425 ltr.	LER	4c-LER	DVD-2 (S1)
04/13/1985	LER 85-007-00: on 850702, containment isolation valve found to be routinely opened since 840413 w/o approved procedure. Caused by inadvertent deletion of section permitting valve opening. W/850721 ltr.	LER	4c-LER	DVD-2 (S1)
08/01/1985	LER 85-008-00: on 850801, fire sys valve FS-V-137 closed. Caused by personnel failure to recognize that closing valve would isolate area fire suppression deluge/sprinkler sys. Fire suppression sys restored. W/850830 ltr.	LER	4c-LER	DVD-2 (S1)
11/05/1985	LER 85-009-00: on 851105, during valve line-up for processing fuel transfer canal water, containment isolation valve DWC-V-099 discovered in open position since 851103. Caused by personnel error. W/851205 ltr.	LER	4c-LER	DVD-2 (S1)
05/01/1985	LER 85-010-00: on 850501, annual cycling of fire suppression water sys valves not completed on time. Caused by personnel error due to lack of adequate communication. Overdue surveillance immediately commenced.	LER	4c-LER	DVD-2 (S1)
12/20/1985	LER 86-001-01: on 851220, Tech Spec 3. 8. 1. 1 found exceeded due to emergency diesel generator DF-X-1B out of svc for more than 7 days. Caused by remote speed control problem due to leaking governor & loose fittings on solenoid. W/870714 ltr.	LER	4c-LER	DVD-2 (S1)
01/03/1986	LER 86-002-00: on 860103, discovered containment isolation valve DW-V-139 open. Cause not identified. Valve locked closed. As precautionary measure, double valve isolation outside containment will be maintained. W/860128 ltr.	LER	4c-LER	DVD-2 (S1)
11/17/1985	LER 86-003-00: on 851117, fuel handling bldg exhaust monitors HPR-221A & HPR-221B not tested within required interval, per Tech Spec 3. 3. 3. 1. Caused by personnel error. Monitors successfully tested. W/860307 ltr.	LER	4c-LER	DVD-2 (S1)
02/24/1986	LER 86-004-00: on 860224, number of transfers of expended filter media to holding drum exceeded limit in SER. Caused by failure to incorporate SER transfer limits into procedure. Procedure revised. W/860326 ltr.	LER	4c-LER	DVD-2 (S1)
03/14/1986	LER 86-005-01: on 860314, canister positioning sys rotated w/o direct supervision of fuel handling senior reactor operator. Caused by personnel error. Direct communications reviewed. W/ 860424 ltr.	LER	4c-LER	DVD-2 (S1)

07/15/1986	LER 86-006-01: on 860715, contaminated camera tripod discovered in dumpster in unrestricted area. Caused by failure of unknown personnel to implement controls when transferring matl. Tripod decontaminated. W/860918 ltr.	LER	4c-LER	DVD-2 (S1)
07/27/1986	LER 86-007-00: on 860727, grab sample not taken & analyzed within Tech Spec limit of 24 h. Caused by declaring Epicor II ventilation sys monitor inoperable on 860724. Another grab sample obtained. W/860826 ltr.	LER	4c-LER	DVD-2 (S1)
08/28/1986	LER 86-008-00: on 860828, nonperformance of May 1986 monthly surveillance test for fire suppression water sys valve lineup verification noted. Caused by personnel error. Personnel counseled. W/860924 ltr.	LER	4c-LER	DVD-2 (S1)
09/04/1986	LER 86-009-00: on 860904, control room bypass filter AH-F-5 deluge sys isolated by tagging out valve FS-V-507 w/o hourly fire watch. Caused by personnel error. Personnel counseled & procedure revised. W/860923 ltr.	LER	4c-LER	DVD-2 (S1)
09/30/1986	LER 86-010-00: on 860930, radiological controls technician discovered AMS-3 at reactor bldg equipment hatch exhibiting failure light. Caused by personnel error. Faulty detector replaced & one hatch door closed. W/861029 ltr.	LER	4c-LER	DVD-2 (S1)
12/07/1986	LER 86-011-00: on 861207, during replacement of charcoal filters, 16 deluge sys fire detectors for fuel handling bldg exhaust filter AH-F-14A/B inoperable. Caused by personnel error. Hourly fire watch established. W/870106 ltr.	LER	4c-LER	DVD-2 (S1)
12/04/1986	LER 86-012-00: on 861214, sprinkler nozzle (IEEE Code NZL) for control room bypass charcoal filter AH-F-5 logged inoperable. Caused by personnel error. Nozzle cleaned, retested & returned to svc. W/870113 ltr.	LER	4c-LER	DVD-2 (S1)
01/23/1987	LER 87-001-00: on 870123, return to svc criteria of Procedure 4210-SUR-3811 not performed properly. Caused by personnel error. Procedure revised to identify required actions. W/870225 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-87-002 not publicly available		4c-LER	DVD-2 (S1)
02/26/1987	LER 87-003-00: on 870226, load consisting of four empty defueling canisters weighing approx 9, 000 lbs transferred from 305 ft elevation to storage. Caused by personnel error. Load lift completed & load placed in storage. W/870326 ltr.	LER	4c-LER	DVD-2 (S1)
02/28/1987	LER 87-004-00: on 870228, Tech Spec 3. 3. 3. 4 requiring operability of control room meteorological instrumentation violated. Caused by inoperable air temp delta T recorder due to inadequate surveillance frequency. W/870331 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-87-005 not publicly available		4c-LER	DVD-2 (S1)
	LER-87-006 not publicly available		4c-LER	DVD-2 (S1)
08/07/1987	LER 87-007-00: on 870807, abnormal pressure indicated on one halon cylinder for cable room & transformer room halon sys. Caused by deficient solenoid pilot valve. Valve replaced. Procedures will be modified. W/870917 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-87-008 not publicly available		4c-LER	DVD-2 (S1)
	LER-87-009 not publicly available		4c-LER	DVD-2 (S1)
07/15/1987	LER 87-010-00: on 870715, mod to EPICOR II ventilation sys radiation monitor resulted in sample flowrate monitor being changed. Caused by personnel error. Personnel counseled & surveillance procedures being reviewed. W/871104 ltr.	LER	4c-LER	DVD-2 (S1)
11/23/1987	LER 87-011-00: on 871123, Halon sys remained out of svc following completion of surveillance per Tech Spec 3. 7. 10. 3 w/o continuance of fire watch. Caused by personnel error. Sys returned to svc & personnel counseled. W/871228 ltr.	LER	4c-LER	DVD-2 (S1)
10/09/1987	LER 87-012-00: on 871009, indications of failure of locknut & stemnut for isolation valve DH-V-4V discovered. Caused by failure to stake locknut & drive sleeve assembly. Locknut & sleeve assembly replaced & locknut staked. W/870203 ltr.	LER	4c-LER	DVD-2 (S1)
01/06/1988	LER 88-001-00: on 880106, discovered that drill indexing platform structure inversely installed. Caused by personnel error. Support structures reinstalled correctly & unit work instruction revised. W/880204 ltr.	LER	4c-LER	DVD-2 (S1)
01/12/1988	LER 88-002-00: on 880112, auxiliary bldg fire detection instrumentation inoperable when ventilation secured & no firewatch initiated. Caused by personnel error. Personnel counseled & procedures revised. W/880211 ltr.	LER	4c-LER	DVD-2 (S1)
01/26/1988	LER 88-003-00: on 880126, wind speed recorder in control room declared inoperable. Caused by adverse weather conditions. Weather improved next day & recorder restored to operable status. W/880222 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-88-004 not publicly available		4c-LER	DVD-2 (S1)
04/21/1988	LER 88-005-00: on 880421, removal of trash from radiologically controlled area in excess of established limits w/o proper release surveys. Caused by lack of awareness requirements. Contaminated matl isolated & analyzed. W/880520 ltr.	LER	4c-LER	DVD-2 (S1)
	LER-88-006 not publicly available		4c-LER	DVD-2 (S1)

04/28/1988	LER 88-007-00: on 880428, one of two reactor bldg personnel airlock doors maintained in closed position. Caused by personnel error. Airlock attendants advised to maintain both doors closed unless transit exit in progress. W/880527 ltr.	LER	4c-LER	DVD-2 (S1)
05/04/1988	LER 88-008-00: on 880504, trash bags containing matl contaminated to levels of up to 35, 000 dpm discovered. Caused by unforseen condition resulting from housekeeping activity. Similar event occurred on 880508. Bags surveyed. W/880603 ltr.	LER	4c-LER	DVD-2 (S1)
05/13/1988	LER 88-009-00: on 880513, flushing operation performed using borated water storage tank/fuel transfer canal fill sys. Caused by personnel error. Flushing activity terminated & control room notified. W/880610 ltr.	LER	4c-LER	DVD-2 (S1)
06/10/1988	LER 88-010-00: on 880610 & 23, automatic cutting equipment sys plasma arc torch operated while reactor bldg purge sys not operating. Caused by personnel failure. Operating Procedure 4210-OPS-3255. 29 revised. W/880726 ltr.	LER	4c-LER	DVD-2 (S1)
08/07/1988	LER 88-011-00: on 880807, control room personnel failed to recognize requirements to enter action statement. Caused by misunderstanding of requirements of Tech Spec 3. 8. 1. 1. Event discussed w/operators. W/880906 ltr.	LER	4c-LER	DVD-2 (S1)
01/20/1989	LER 89-001-00: on 890120, midi air-lift vacuum sys removed from reactor vessel w/o supervision of fuel handling senior reactor operator. Caused by lack of communication. Event will be discussed w/all applicable personnel. W/890217 ltr.	LER	4c-LER	DVD-2 (S1)
05/06/1989	LER 89-002-00: on 890506, effluent monitor in waste handling & packaging facility out-of-svc & auxiliary samples not taken during required Tech Spec frequency. Caused by personnel error. Batteries & surge protection installed. W/890602 ltr.	LER	4c-LER	DVD-2 (S1)
05/09/1989	LER 89-003-00: on 890509, core alteration performed w/o supervision of fuel handling senior reactor operator. Caused by personnel error in that task supervisor failed to implement Procedure 4730-IMP-3221. 02. W/890608 ltr.	LER	4c-LER	DVD-2 (S1)
07/26/1989	LER 89-004-00: on 890725, failure of 4160/480-volt transformer resulted in action statement entry of Tech Spec 3. 8. 2. 1. 1. Caused by degradation of insulation on windings on primary side. Power restored to bus 2-46 w/cross-tie. W/890824 ltr.	LER	4c-LER	DVD-2 (S1)
08/30/1989	LER 89-005-00: on 890830, operations personnel observed that voltage of cell 71 of station storage battery decreased more than 0. 1 volts below baseline voltage required by recovery operation plan. Caused by degradation of cell. W/890922 ltr.	LER	4c-LER	DVD-2 (S1)
08/30/1989	LER 89-006-01: on 890925, extremity exposure experienced to hand. Caused by poor radiological work practices & failure to update radiation work permit. Workers examined & barred from entering radiation controlled area. Withheld.	LER	4c-LER	DVD-2 (S1)
02/19/1990	LER 90-001-00: on 900104 & 0219, discovered that polar crane moved over exclusion zone w/maint hoist energized, in violation of SER. Caused by personnel error. Fuel handling operators counseled & future incidents tracked. W/900321 ltr.	LER	4c-LER	DVD-2 (S1)
06/20/1990	LER 90-002-00: on 900620, Tech Spec surveillance visual insp of fire sys hoses not conducted within required time period. Caused by poor tracking & turnover practices by personnel. Event will be reviewed w/personnel involved. W/900717 ltr.	LER	4c-LER	DVD-2 (S1)
01/21/1991	LER 91-001-00: on 910121, quarterly checks not performed on penetration isolation valve SGC-FV-2. Caused by personnel error. Temporary change notice initiated & independent reviews of procedures completed. W/910219 ltr.	LER	4c-LER	DVD-2 (S1)
03/08/1991	LER 91-002-00: on 910308, recirculation valve found partially open resulting in portion of accident generated water feed to bypass evaporator & mix w/evaporator effluent. Caused by design deficiency. Event reviewed. W/910405 ltr.	LER	4c-LER	DVD-2 (S1)
04/03/1991	LER 91-003-00: on 910403, processed water disposal sys valve found closed due to receipt of low pump discharge. Caused by personnel error. Valve opened, event reviewed & addl training implemented for operator. W/910503 ltr.	LER	4c-LER	DVD-2 (S1)
04/12/1991	LER 91-004-00: on 910412, processed water disposal sys sample valve misaligned. Caused by personnel error. Addl training for evaporator operators & rev to PWDS operating procedure & areas of responsibility addressed. W/910510 ltr.	LER	4c-LER	DVD-2 (S1)
06/26/1991	LER 91-005-00: on 910626, processed water disposal sys sample valve misalignment occurred. Caused by personnel error. Operating procedure revised to require independent verification & sign-off by second operator. W/910724 ltr.	LER	4c-LER	DVD-2 (S1)
01/26/1993	LER 93-001-00: on 930126, failure to sample PWDS source tank identified. Caused by personnel error & programmatic deficiency. Procedure 4215-OPS-3185. 06 & shift foreman turnover checklist revised. W/930223 ltr.	LER	4c-LER	DVD-2 (S1)
06/01/1993	LER 93-002-00: on 930601, failed to obtain weekly tritium grab samples of chemical cleaning building exhaust due to inadequate monitoring of Tritium sample apparatus sample chamber operability. Initiated weekly insp. W/930630 ltr.	LER	4c-LER	DVD-2 (S1)
06/07/1993	LER 93-003-00: on 930607, discovered that required channel functional test not performed on HP-R-226 within required monthly interval. On 930605, reactor bldg purge operated w/ HP-R-225 & 226 inoperable. Test sucessfully performed.	LER	4c-LER	DVD-2 (S1)
06/04/1998	LER 98-001-00: on 980604, flood barriers breached between turbine bldg & control bldg area. Caused by work planning process for dismantlement work failed to include adequate controls. Openings verified to be sealed.	LER	4c-LER	DVD-2 (S1)
01/12/1999	LER 99-001-00: on 990112, discovered flood barriers breached between turbine bldg & control bldg area. Caused by inadequate prior insp. Sealed three penetrations found not to be IAW design specifications & inspected all penetrations.	LER	4c-LER	DVD-2 (S1)