

Byron Station
1995 Annual Exercise
November 15, 1995

EXERCISE CONTROL
MANUAL

Paul Elkmann
Lead Scenario Developer
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BYRON 1995 GSEP EXERCISE
 NOVEMBER 15, 1995

EXERCISE CONTROLLER MANUAL
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GENERAL INFORMATION

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- * Exercise Ground Rules
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<<< *** THIS IS AN EXERCISE *** >>>

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SCOPE OF PARTICIPATION

DATE : Wednesday, November 15, 1995

TYPE : Daytime Exercise, Partial State Participation

PURPOSE : The purpose of this Exercise is to test the basic elements of the ComEd Generating Stations Emergency Plan (GSEP). The Exercise will include the mobilization of ComEd personnel and resources to verify their capability to respond to a simulated emergency.

OFFSITE AGENCY PARTICIPATION :

- Partial Participation, State of Illinois
- * Radiological Emergency Assessment Center
 - * Joint Public Information Center
- Partial Participation, Ogle County, Illinois
- * Ogle County Emergency Operations Center

COMED FACILITIES ACTIVATED :

- * Simulator Control Room
- * TSC
- * OSC
- * Environs Teams
- * CEOF
- * EOF
- * JPIC

COMED FACILITIES NOT ACTIVATED : NONE

The exercise "Nuclear Duty Officer" will be notified of simulated events as appropriate on a real-time basis. The dispatch of exercise participants to the CEOF, Dixon EOF, and Dixon JPIC will be initiated by the exercise Nuclear Duty Officer. Exercise Participants will be prepositioned close the CEOF and EOF to permit the use of ComEd personnel from distant working locations.

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ComEd will demonstrate the capability to make contact with contractors whose assistance would be required by the simulated accident situation, but will not actually incur the expense of using contractor support, except as pre-arranged specifically for the Exercise.

ComEd will arrange to provide actual transportation and communications support in accordance with existing agreements to the extent specifically prearranged for the Exercise. ComEd will provide unforeseen actual assistance only to the extent that resources are available and do not hinder the normal operation of the Company.

All of the events described in this Exercise are simulated.

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Exercise Ground Rules

1. Take immediate actions to prevent or remedy an unsafe condition, regardless of the effect on exercise play. **Participants are not permitted to enter actual contaminated or High Radiation areas to perform exercise-related work.**
2. **Take no actions that affect active or operating plant equipment. Use only mock equipment designated for the exercise.**
3. Data conflicts between the Control Room and Point History will be resolved by Lead Facility Controllers in favor of the exercise Point History.
4. Participants and controllers are expected to lead and follow each communication with the phrase **"THIS IS AN EXERCISE"**.
5. Participants are expected to use actual means of communications except for exercise-related telephone numbers, response (simulation) cells, and other designated systems. Participants should make contact with those persons they feel necessary to their response, without regard to whether those persons are pre-designated as exercise participants. Vendors should be contacted for information only and to verify phone numbers. **No exercise-related work is to be requested from vendors.**
6. Participants should follow all procedures and take expected actions to respond to the scenario. Participants should decide the level of documentation necessary to the situation; documents (Work Packages, Out of Services, RWPs, etc.) should be marked **"FOR GSEP EXERCISE USE ONLY"**.
7. All special-purpose (first aid, fire, hazmat, etc.) plant teams should be dispatched as needed.
8. Provide only information derived from the approved Exercise Manual, or approved by the appropriate Lead Facility Controller. **Do not improvise information.** Information will only be provided at the location where it would normally be available, following participant actions to obtain it. Information shall be provided in units appropriate to the measurements being read.
9. Participants are required to have appropriate tools and equipment available at all work sites to be permitted to perform (simulate) the work. Parts must be verified to be available from Stores **but shall not be removed from Stores.**
10. Required chemistry and environmental samples shall be actually collected.
11. Controllers are not permitted to direct, prompt, or lead Participants, except through the use of designated exercise control messages. Controllers are permitted to question participants in order to gain information necessary to evaluate the exercise.

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Summary of Exercise Conditions

Description	Simulated	Actual
Nuclear Duty Officer		Name Here
Near Site EOF	Dixon EOF	
Joint Public Information Center	Dixon JPIC	
Communications Services		Participating
State Facilities Participating	REAC, IEMA Dispatcher, IEMA Public Information	
Counties Participating	Ogle County EOC	
NRC Participation (Base Team, HPN, ENS)	Response Cell	
NRC Participation (Site Team)	Mock Site Team	
Murray & Trettel (Meteorology)	Response Cell	
Teledyne Brown (Environs Sampling)	Response Cell	
NARS Phone		Actual
Emergency Notification System (ENS) Phone	Simulated	
Health Physics Network (HPN) Phone	Simulated	
Point History Source	GSEP.SIM with GSEP.EX Back Up	
ERDS Source	GSEP.SIM	
HRSS Teams	Simulated	
Station Assembly	Simulated	
Station Evacuation	Simulated	
Station Relocation Center	Simulated	
Station Drills Conducted	None	

<<< *** THIS IS AN EXERCISE *** >>>

Exercise Versus Clock Time :

<<-----TIME----->>	
EXERCISE MINUTES	CLOCK
-30	0700
-20	0710
-10	0720
0	0730
10	0740
20	0750
30	0800
40	0810
50	0820
60	0830
70	0840
80	0850
90	0900
100	0910
110	0920
120	0930
130	0940
140	0950
150	1000
160	1010
170	1020
180	1030

<<-----TIME----->>	
EXERCISE MINUTES	CLOCK
190	1040
200	1050
210	1100
220	1110
230	1120
240	1130
250	1140
260	1150
270	1200
280	1210
290	1220
300	1230
310	1240
320	1250
330	1300
340	1310
350	1320
360	1330
370	1340
380	1350
390	1400
400	1410

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EXERCISE NARRATIVE SUMMARY

INITIAL CONDITIONS

Unit 0 / Common

Overnight Ice Storm
Debris in Rock River
Security Doors #170 and
#445 deactivated

Unit 1

38% Power for Entry
LCOs : RCS Activity, Cnmt
Air Locks, Secondary Sources ; Known 2 gpm RCS Leak
Failed Fuel Monitor **ALARM**
RCS @ 2.1 $\mu\text{Ci/g}$ I-131 DEQ
Damaged Personnel Hatch
FHB Inner Door OOS
Leakrate Surveillance Due

Unit 2

95% Power @ 8 Days
LCOs : 2SD002C and 2A SG
PORV (valves are isolated)
27B HTR MAG OOS
Reduced Letdown to 75 gpm

EXERCISE EVENTS

- 0700 (-030) Participant Briefing(s) & 0730 (+000) Exercise Start
- 0750 (+020) BPO request to ramp to 100% Power (Loss of Zion Unit 2)
- 0805 (+035) **ALERT on EAL MA3 (Auto Trip Not Successful)**
U1 Main Turbine Trip after Turbine Thrust Bearing failure with failure of automatic Reactor Trip ; successful Manual Trip
- 0830 (+060) FHB ARM fails high w/Booster Fan autostart ; Fan cable failure.
- 0900 (+090) Small Break in Containment, 1 hr ramp 30 gpm to 160 gpm with I-131 ramp to 300 $\mu\text{Ci/g}$
- 1000 (+150) **SITE EMERGENCY on EAL FS1 (Fission Product Barriers) Leak Exceeds Capacity of 1 Charging Pump [3d] and RCS > 300 $\mu\text{Ci/g}$ I-131 DEQ ; Manual Safety Injection and Containment Isolation ; 1A RHR Pump failure**
- 1020 (+170) Security Vehicle slides on ice and damages outer FHB Roll Up Door (creates release path through FHB)
- 1110 (+220) Failure of Bus 142 (ESF Train B) on overcurrent with failure to start on 1B Diesel Generator and failure of Bus 242/142 Crosstie
- 1155 (+275) **GENERAL EMERGENCY on EAL FG1 (Fission Product Barriers) Maximum LOCA in Containment with core uncover ; failure of 1A Containment Spray Valve; damage to inner Containment Personnel Hatch; Environmental Release**
- 1215 (+285) Sheared pin on 0B Travelling Screens
- 1330 (+360) Approximate end of environmental release
- 1400 (+390) Exercise Termination

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EXERCISE NARRATIVE SUMMARY

Initial Conditions
0700 - 0729 (T-030 - T-001)

UNIT 0 / COMMON :

At about 1600 - 1700 hours on Tuesday, November 14, 1995, a major ice storm moved into the northern Illinois area from Wisconsin. The storm has affected most of central and southern Wisconsin, parts of southeastern Minnesota, and Illinois along a line roughly north of Interstate 80, and east of State Route 78 and State Route 88 to Lake Michigan. The heaviest precipitation occurred between the hours of 2100 on November 14th through 0400 on November 15th. There has been a significant build-up of ice throughout the region, making roads slippery and very hazardous. Road crews have been working throughout the night to keep local roads open by salting and sanding roads. Numerous auto accidents have been reported throughout the region and on Interstate 88. All schools in Ogle, Stephenson, Winnebago, and Boone Counties were ordered closed at 0515 hours this morning. The freezing rain had largely become freezing drizzle by the time that day-shift personnel reported to Byron for work this morning. The precipitation is forecast to end entirely by mid-morning, with clearing conditions throughout the remainder of the day. Unusual amounts of debris have been observed in the Rock River, which is at a slightly higher than normal level (+8-10 inches).

Security doors #170 and #445 are deactivated due to recent door ajar incidents.

UNIT 1 :

Unit 1 (U1) has been at power for 110 days. It is currently steady at 38% power to permit a containment entry. The following Limiting Conditions of Operation (LCOs) are in effect: Excessive ^{131}I Coolant Activity (48 hours to be in Cold Shutdown), Containment Air Locks, and Secondary Sources. The following significant pieces of equipment are Out of Service (OOS): Containment Personnel Hatch (Outer Door) [see below], valve 1AF-017A, 0C CW Make Up Pump Discharge Valve, 1G Steam Dump, 1A CV Mixed Resin Bed, and the Fuel Handling Building inner roll-up door (open to about 20' with a twisted track). The following significant plant evolutions are scheduled for today : Leakrate Surveillance, maintenance on 0OG064, maintenance on the 1B Diesel Generator Jacket Water Switch Setpoint, and checking MPT N2 (1X/4hr). Containment valve 1-CV-222 (Regen Heat Exchanger Charging Line Valve) is known to be leaking at a rate of 2 gpm.

Unit 1 began a ramp down from 95% power at 2200 hours on Tuesday, November 14, 1995, and reached 38% power at 0135 hours on Wednesday, November 15th (this morning). A routine power change chemistry sample was collected at 0320 and was reported as normal at 0430. At 0500 a three-person team entered containment via the 426 elevation Personnel Hatch to repair the 1-CV-222 valve; the team consisted of a Radiation Protection Technician (RPT) and two contractors from Furmanite Engineering. At 0530 a **LOW/HI** alarm was received on the Failed Fuel Monitor (1PR006). At about the same time the containment team reported that they were exiting containment due to unexpectedly high area radiation readings of 5 R/hr. The team was

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not able to complete repairs to the 1-CV-222 valve. The Control Room requested that Chemistry obtain an RCS sample in response to the Failed Fuel Monitor alarm.

At 0535, the containment team reported that they had exited the containment and that the outer personnel hatch door had been damaged and would not seal. At 0630 Chemistry reported the results of the RCS sample as 2.1 $\mu\text{Ci/g}$. A confirmatory RCS sample was immediately requested and is currently in progress; sample results are expected between 0745 and 0815 (T+015 - T+045) [NOTE : the collection of this sample is simulated by Controllers and Controllers will issue the sample results as appropriate].

UNIT 2 :

Unit 2 (U2) has been at power for eight days coming out of Refueling Outage B2R05. It is currently steady at 95% power. The following Limiting Conditions of Operation (LCOs) are in effect : the 2DS002C containment isolation valve and the 2A Steam Generator Pressurizer Overpressure Relief Valve - both valves are isolated. The following significant pieces of equipment are Out of Service (OOS) : 27B Heater Magnatrol (Level Switch). No major Unit 2 plant evolutions are scheduled for today. There is a current 2D Steam Generator Flow Mismatch alarm.

**Normal Operations / UNUSUAL EVENT Classification
0730 - 0804 (T+000 - T+034)**

At approximately 0750 (T+020) the Control Room will receive a call from Bulk Power Operations to inform them that Zion Unit 2, which had been at 100% power, has tripped off line, leaving the system condition as **RED**, due to voltage problems. The Nuclear Duty Officer (NDO) will also be contacted with the information about Zion U2. Byron will be requested to bring both Units to 100% power as soon as possible. At about 0800 (T+030), results of the RCS sample requested at 0630 (T-060) will be provided to the Unit 1 Unit Chemist; the results will read 3.0 $\mu\text{Ci/g I}^{131}$ Dose Equivalent Iodine (DEQ), confirming the earlier sample and the Failed Fuel Monitor value.

Expected Actions

The Shift Engineer (Acting Station Director) should immediately (0730, T+000) evaluate the available RM-11 and chemistry information against the requirements of EAL MU7 (Fuel Clad Degradation); the Shift Engineer may elect to classify an **UNUSUAL EVENT** emergency classification based on the elevated Failed Fuel Monitor and a preliminary chemistry result of 2.1 $\mu\text{Ci/g I}^{131}$ DEQ. IF an UNUSUAL EVENT is classified then a NARS form should be transmitted. The Shift Engineer will have to decide whether to honor the Load Dispatcher's request to increase to full power on Unit 1. It is most likely that Unit 1 will be maintained at current power and not be ramped to 100%, while Unit 2 will begin a power ramp from 95% to 100% power at 1 MW/MIN. Maintenance may begin preparations to make repairs to the damaged Containment Hatch and to repair the FHB Inner Door.

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**ALERT Classification
0805 - 0959 (T+035 - T+149)**

At 0805 (T+035), the Turbine Thrust Bearing Pressure Switch will fail, causing a Main Turbine trip. The reactor will fail to auto-trip. A manual reactor trip from the Control Room will be successful. After 0810 (T+040), the Control Room will receive a call from an Outside Operator at the River Screen House on his/her rounds; the Operator will report a high river level with a lot of river debris, and the travelling screens running continuously (screens are operating on SLOW speed). At 0830 (T+060) the Fuel Handling Building (FHB) Fuel Handling Incident Area Radiation Monitor (3AS155 / ORE-AR-055, FHB 426' elevation) will fail upscale, causing the 0A FHB Booster Fan to autostart. At 0840 (T+040) there will be a failure of the power cable to the FHB Booster Fan motor, making the Booster Fan inoperative for the remainder of the exercise. At 0845 (T+045) Control Room indication will be lost on the N-31 Source Range Monitor.

At 0900 (T+090) a small break of about 30 gpm will occur within containment (not from the 1-CV-222 valve) and the leak will ramp to 160 gpm over one hour and then become steady. At the same time, the I^{131} DEQ will begin to ramp from 3 to 300 $\mu\text{Ci/g}$. At about 0955 (T+145) the TSC will be issued a Chemistry message informing them that the post-trip sample contained in excess of 300 $\mu\text{Ci/g}$ DEQ I^{131} .

Expected Actions

The Acting Station Director (Shift Engineer) should classify an **ALERT** emergency classification based on EAL MA3 (Auto Trip not Successful), and issue a NARS form. The TSC and OSC should be staffed. Bulk Power Operations should initiate the staffing of the CEOF and should notify the exercise Nuclear Duty Officer of the event. The TSC should assume Command-and-Control from the Control Room as soon as possible.

Operations should be dispatched to perform a variety of routine post-reactor trip tasks. Radiation Protection should be dispatched to survey the FHB. Instrument Maintenance should be dispatched to investigate the problems with ORE-AR055 and with the N31 Source Range Monitor. Electrical Maintenance should be requested to investigate the FHB Booster Fan problems. The Control Room should increase the travelling screens from low to high speed. Chemistry may be requested to collect additional RCS and containment air samples.

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**SITE EMERGENCY Classification
1000 - 1157 (T+150 - T+267)**

At 1000 (T+150) the leak inside containment will exceed 150 gpm (exceeds the capacity of one Charging Pump) and will then stabilize at about 160 gpm. At 1020 (T+170) a Security Mobile Patrol will slide on the ice outside the Fuel Handling Building, sliding into the FHB Outer Roll-Up Door, and knocking one side from its track. At 1050 (T+200), a report will be received in the TSC of a three-car accident blocking the State Route 72 bridge over the Rock River into the town of Byron. At 1110 (T+220) Bus 142 (ESF Train B) will trip on overcurrent and the 1B Diesel Generator will fail to autostart. When Operators attempt to use the Bus 242/Bus 142 Crosstie to re-energize Bus 142, the crosstie will not close in.

Expected Actions

The Station Director (TSC) should classify a **SITE EMERGENCY** emergency classification on EAL FS1 (Loss of Fission Product Barriers : LOSS of Fuel Clad (2d) and LOSS of Reactor Coolant System (3a & 3d)) and issue a NARS form. The NDO should be contacted to begin staffing the Dixon EOF and Dixon JPIC. Command-and-Control should be transferred from the TSC to the CEOF as soon as possible. Environs teams should be dispatched from the Station if they are not already out. A (simulated) station assembly should be initiated. The TSC should begin to identify non-essential personnel and begin planning for site evacuation.

After the charging pump capacity is exceeded, Control Room staff should enter procedure BEP-0 (Reactor Trip) and perform a manual Safety Injection (SI). The 1A Residual Heat Removal (RHR) Pump will not operate during the SI, because of a failure of the pump motor breaker. The Control Room should then transition through procedures BEP-1 (LOCA) and BEP-1.2 (Post-LOCA Cooldown). **NOTE** that the 1B Diesel Generator receives an autostart signal and starts as a result of the Safety Injection and should be secured prior to 1030 (T+180) according to BEP-1 Step 11.c.

Operators should be dispatched to perform routine post-SI tasks. Operators should also respond to the Bus 142 trip, the 1B Diesel Generator, and the 1A RHR Pump. Electrical Maintenance (and possibly Station OAD) should be dispatched to investigate the Bus 142 failure. A multi-disciplinary team should be dispatched to the 1B Diesel Generator and will discover a failure of the butterfly valve on the air line to the Starting Air Header. Teams of EMs should be dispatched to repair the Bus 242/Bus 142 crosstie and the 1A RHR pump. Mechanical Maintenance should be dispatched to investigate and make temporary repairs to the FHB Door(s).

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GENERAL EMERGENCY Classification
1158 - 1400 (T+268 - T+390)

At 1158 (T+268) the existing small reactor coolant leak inside containment increases to a maximum break. Containment pressure increases rapidly. Discharge Header Isolation Valve MOV-1CS-007A fails to open, preventing containment sprays from operating [valve 1CS-007B cannot open due to a loss of power]. At about 1200 (T+270) the inner Containment Personnel Hatch gives way, releasing containment activity to the Fuel Handling Building. An unfiltered, unmonitored, release begins to the environment by way of the open Inner FHB Roll Up Door and the damaged Outer FHB Roll Up Door. The environmental release will continue for approximately 90 minutes until the containment has reached a pressure equilibrium with the FHB. At 1215 (T+285) a high differential pressure alarm is received in the Control Room for the 0B Travelling Screen in the River Screen House; operators will discover that the screen has a sheared pin which has immobilized it, and that debris has built up on the river side so that an adequate water level cannot be maintained in the Circ Water Bay.

Expected Actions

The Manager of Emergency Operations (CEO or EOF) should classify a **GENERAL EMERGENCY** emergency classification on EAL FG1 (Loss of Fission Product Barriers : LOSS of Containment Barrier (1d), LOSS of Fuel Clad (2d) and LOSS of Reactor Coolant System (3a & 3d)). Minimum Protective Action Recommendations (PARs) should be issued while dose assessment activities are in progress. Environs teams should be directed to monitor and map the plume. Command-and-Control should be transferred from the CEO to the EOF, if that has not already occurred; control of the environs teams should be transferred from the TSC to the EOF.

Operations should respond to the Travelling Screen alarm and Mechanical Maintenance should be dispatched to repair the sheared pin before station circ water is lost.

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Summary of Expected EALs

	EAL #	Description	Time
1.	MU7	Fuel Clad Degradation	0730 (T+000)
2.	MA3	Auto Trip Not Successful	0805 (T+035)
3.	MU8	RCS Leakage	0905 (T+095)
4.	FA1	Fission Product Barriers	0930 (T+120)
5.	FS1	Fission Product Barriers	1000 (T+150)
6.	FG1	Fission Product Barriers	1200 (T+270)
7.	RG1	> 1 rem TEDE	>1200 (T+280)

Fission Product Barrier Matrix :

LOSS - RCS (3a)	0930
LOSS Fuel Cladding (2d)	0955
POTENTIAL LOSS - RCS (3d)	1000
POTENTIAL LOSS Containment Barrier (1b)	1200
LOSS Containment Barrier (1d)	1200

Exercise Meteorology

A strong low pressure moved through the northern Illinois region overnight, bringing freezing rain and thick accumulations of ice. Today's forecast is for freezing rain to taper off by mid-morning and conditions to begin gradually clearing by noon. Winds will be generally out of the east throughout the morning and early afternoon; wind speeds will increase from near calm (2 mph) early to about 14 mph by the end of the exercise.

At the time of the release (1200, T+280), surface winds will be from 72° at about 12 mph (downwind sector M), with a D Stability Class. The wind direction will be steady from the start of the release until the end of the exercise, while wind speeds continue to increase slightly, ending the exercise at about 14 mph.

Release Information

An unmonitored, unfiltered, environmental release begins at approximately 1158 (T+268) following the large break LOCA in containment and the failure of the inner containment personnel hatch. The release pathway is from containment through the Fuel Handling Building and to the environment via the FHB Trackway (open inner door and damaged outer door). The initial release rate is $1E+07$ μ Ci/sec with a peak of approximately $5E+07$ μ Ci/sec (combined Noble Gas, Iodine, and Particulate activity) occurring at 1201 (T+271). The release will follow containment pressure and steadily decrease in magnitude from its peak value until effectively reaching zero (0) at 1330 (T+360), when containment pressure reaches equilibrium with the outside. Significant amounts of particulate fission product activity will be deposited within the Fuel Handling Building as a result of this release.

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Approximately 0.75% (less than 1 percent) of the total release will be entrained through Fuel Handling Building and Auxiliary Building ventilation systems and be released through the Aux. Building Stack (a monitored pathway). The maximum Wide Range Gas Monitor (WRGM) value (gas channel) will be near $9E+04$ $\mu\text{Ci}/\text{sec}$, and will be approximately the same as the 2x ODCM value of $9.8E+04$ $\mu\text{Ci}/\text{sec}$. In order to make a correct dose assessment, the environs staff will have to recognize that only a portion of the total release is through a monitored pathway. Environs teams will be required to track the plume and participants will have to obtain effective release rates by back-calculation from field results.

The release is from 72° and the centerline path is through Sector M near the line with Sector N. There is no wind shift during the exercise and the position of the centerline remains generally constant. At 5.2 m/s (12 mph), the plume crosses the site boundary at approximately 1203 (T+273), reaches 2 miles downwind at 1210 (T+280), reaches 5 miles downwind at 1225 (T+295), and exits the 10-mile EPZ at 1250 (T+320). After the release effectively terminates, the trailing edge crosses the 2-mile ring at 1340 (T+370) and crosses the 5-mile ring at 1355 (T+385). The plume does not completely exit the EPZ during the exercise.

Environmental Measurements

Environs teams will be able to measure radiation levels in excess of 1 mR/h to a downwind distance of 5 miles in Sector L and to about 3 miles in Sector N. The maximum exposure rate is 19 mR/h at point N12 at 1208 to 1212 (T+278 - T+282). The plume is measurable by CP instruments (> 1 mR/h) to a distance of about eight (8) miles downwind; the plume is measurable using a GM instrument in all locations in M sector.

The maximum iodine cartridge values of $>250,000$ cpm are seen at points M13, M Reuter-Stokes, N12 [all at 1159 - 1212, T+268 - T+282], and at M16 [1213 - 1227, T+283 - T+297]. Particulate pre-filter measurements are also in excess of 250,000 cpm at these locations and times.

Onsite and Emergency Worker Protective Actions

The ComEd environs staff is expected to evaluate whether to issue Potassium Iodide (KI) to company emergency workers (environs teams). Based on iodine air sample information the expected maximum calculated Thyroid dose (CDE) is 49.2 rem, exceeding the 25 rem PAG for emergency workers. Environs teams are expected to be issued KI.

Expected Protective Action Recommendations (PARs)

The expected PARs for the UE NARS form (0740 - 0800) are : 5A [Release to the Environment : None], 6A [Type of Release : Not Applicable], 7 Wind Direction From : 91° / Downwind Sector : N, 8 Wind Speed : 1.3 m/s, 9A [Recommended Actions : None].

The expected PARs for the ALERT NARS form (0810 - 0830) are : 5A [Release to the

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Environment : None], 6A [Type of Release : Not Applicable], 7 Wind Direction From : 84° / Downwind Sector : N, 8 Wind Speed : 1.5 m/s, 9A [Recommended Actions : None].

The expected PARs for the SITE EMERGENCY NARS form (1015 - 1035) are : 5A [Release to the Environment : None], 6A [Type of Release : Not Applicable], 7 Wind Direction From : 78° / Downwind Sector : M, 8 Wind Speed : 3.3 m/s, 9B [Recommended Actions : Prepare for Possible Action involving the Public].

The expected PARs for the GENERAL EMERGENCY NARS form (1210 - 1225) are : 5C [Release to the Environment : Occurring], 6B [Type of Release : Radioactive Gas], 7 Wind Direction From : 73° / Downwind Sector : M, 8 Wind Speed : 5.4 m/s, 9C [Initiate Public Notification Procedures], 9H [Evacuate 0-2 mile radius], 9J [Evacuate 2-5 miles for Sectors L-M-N].

The expected PARs for the GENERAL EMERGENCY RELEASE TERMINATION NARS form (1330 - 1345) are : 5D [Release to the Environment : Terminated], 6A [Type of Release : Not Applicable], 7 Wind Direction From : 71° / Downwind Sector : M, 8 Wind Speed : 5.8 m/s, 9C [Initiate Public Notification Procedures], 9H [Evacuate 0-2 mile radius], 9J [Evacuate 2-5 miles for Sectors L-M-N]. NOTE that IDNS procedures based on reactor conditions MAY drive the evacuation of the 5-10 mile downwind zone for sectors L-M-N - if so, the appropriate PARs are 9C/9H/9J/9K.

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Controller Exercise Summary

TIME		Class / EAL	Event Descriptions	Wind Direction (deg)	Wind Speed (m/s)	NG Release ($\mu\text{Ci/s}$)
Exercise	Clock					
-150	0500	N/A	Containment Entry to fix 1CV222 Leak	N/A	N/A	N/A
-120	0530	N/A	Alarm on FFM, Cnmt Exit on high rads, Broken Outer Hatch	N/A	N/A	N/A
-060	0630	N/A	Chem results 2.1 $\mu\text{Ci/g}$ DEQ I-131	N/A	N/A	N/A
000	0730	UE @ MU7	High RCS Levels	91	1.7	N/A
015	0745	UE	Routine Operations	88	1.7	N/A
030	0800	UE	BPO Call - Loss of Zion Unit 2	85	1.9	N/A
045	0815	ALERT MA3	Turbine Trip , Auto Reactor Trip fails	84	2.0	N/A
060	0830	ALERT	ARM Failure - FHB Booster Fan on	84	2.2	N/A
075	0845	ALERT	FHB Booster Fan failure	82	2.3	N/A
090	0900	ALERT	RCS Leak begins (ramp over 1 hour)	80	2.4	N/A
105	0915	ALERT	RCS Leak continues	79	2.5	N/A
120	0930	ALERT	RCS Leak continues	79	3.5	N/A
135	0945	ALERT	RCS Leak continues	79	3.5	N/A
150	1000	SITE E. FS1	RCS Leak > 150 gpm, I131 > 300 μCi	79	4.7	N/A
165	1015	SITE EMER	Manual SI, Source Range Monitor fails	79	5.2	N/A

Byron 1995 GSEP Exercise ; November 15, 1995

Controller Exercise Summary

TIME		Class / EAL	Event Descriptions	Wind Direction (deg)	Wind Speed (m/s)	NG Release ($\mu\text{Ci/s}$)
Exercise	Clock					
180	1030	SITE EMER	Outer FHB Door Damaged	77	6.5	N/A
195	1045	SITE EMER	1A/1B Diesels secured	77	6.9	N/A
210	1100	SITE EMER	RCS Leak steady @ 160 gpm	75	7.6	N/A
225	1115	SITE EMER	Bus 142 failure, 1B Diesel failure	75	8.8	N/A
240	1130	SITE EMER	Equipment repairs	75	9.5	N/A
255	1145	SITE EMER	Equipment repairs	74	9.6	N/A
270	1200	GE @ FG1	Max LOCA ; Inner Cnmt Hatch fails	72	9.8	1.4E+07
285	1215	GEN EMER	Environs Release - partially monitored	73	10	9.5E+06
300	1230	GEN EMER	Travelling Screen failure	73	10.2	5.6+06
315	1245	GEN EMER	Equipment repairs	72	10.5	3.2E+06
330	1300	GEN EMER	Equipment repairs	72	10.5	2.1E+06
345	1315	GEN EMER	Equipment repairs	72	10.7	1.6E+06
360	1330	GEN EMER	Release terminated - lack of pressure	72	11	1.3E+06
375	1345	GEN EMER	Evaluation for Recovery classification	71	11.1	N/A
390	1400	GEN EMER	Exercise Terminated	70	11.4	N/A

Byron 1995 GSEP Exercise
November 15, 1995

EVENT SUMMARY
EVENT #1

Event	High I¹³¹ Activity in Reactor Coolant
Event Description	<p>The U1 Reactor is steady at 38% power after an overnight power reduction to permit a containment entry. Prior to the reduction, the reactor had been at near 100% power for 110 days. The routine post-power reduction sample showed normal RCS iodine activity. At 0530 (T-120) the U1 Gross Failed Fuel Monitor (1RE-PR006) receives a Hi ALARM and at the same time increases are seen in containment radiation levels.</p> <p>Initial sample results shows that the U1 RCS is at 2.1 µCi/g I¹³¹ Dose Equivalent (DEQ) and a confirmatory sample has results of 3.0 µCi/g.</p> <p>Following the 0900 (T+090) small break leak, I¹³¹ activity levels ramp to 300 µCi/g DEQ. A report showing greater than 300 µCi/g iodine DEQ will be issued by Controllers to Chemistry at about 1000 (T+210). The iodine DEQ value is needed to correctly make the SITE EMERGENCY classification.</p> <p>NOTE : there is actual industry Operating Experience which indicates that this sort of delayed cladding damage is possible.</p>
Expected Response	<p>The Control Room should compare the initial (0630 to 0800, T-060 to T+030) results with U1 Technical Specifications [> 2.0 µCi/g is a Limiting Condition of Operation]. The Control Room should declare an UNUSUAL EVENT (UE) based on EAL MU7 (Valid Failed Fuel Monitor activity greater than Tech Spec Limits) and transmit a NARS form. The high activity in coolant should be considered in deciding whether to ramp U1 to full power when the Zion unit is lost. The affect of elevated coolant activity on area radiation levels should be considered. A contingency message will not be issued if the UE is not classified by the Control Room.</p>
Mock Up Information	RM-11 Data (Simulator), Chemistry Isotopic Reports
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #2**

Event	Potential Loss of Containment Integrity
Event Description	An 0500 (T-150) containment entry is performed in order to make repairs on a known leaking valve. At 0530 (T-120) the entry team encounters unexpectedly high area radiation levels and immediately exits the containment area. As they exit, they find that the outer personnel hatch door does not latch. The failure is the shear of a key on a locking gear.
Expected Response	The Control Room is expected to send a work analyst to develop an expedited repair package for the door; the package will not be complete prior to OSC activation. After the OSC is staffed, a Mechanical Maintenance team should be dispatched to begin door repairs. The outer personnel hatch will not be permitted to be repaired prior to 1200 (T+280).
Mock Up Information	Actual Location
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #3**

Event	Request to Ramp to 100% Power
Event Description	At 0750 (T+020) Bulk Power Operations (BPO) will make a call to the Byron Control Room to request an immediate ramp of both units to 100% power at their maximum allowable ramp rates. This is based on the loss of Zion Unit 2 and a unsafe system stability.
Expected Response	The Control Room will have to carefully consider whether the condition of Unit 1 (48 hr LCO on High I-131 activity, etc.) permits ramping the unit to full power to meet BPO's needs. The Control Room is expected to decide to maintain Unit 1 at 38% and ramp Unit 2 from 95% to 100% power.
Mock Up Information	Simulator
Exercise Messages	

Byron 1995 GSEP Exercise
November 15, 1995

EVENT SUMMARY
EVENT #4

Event	Main Turbine Trip and Manual Reactor Trip
Event Description	At 0805 (T+035) the Pressure Switch on the U1 Turbine Thrust Bearing fails, causing the Turbine to trip. The automatic U1 reactor trip does not occur and Operators are required to manually trip the reactor. The manual trip is successful.
Expected Response	<p>Operators are expected to recognize the failure of the automatic U1 Reactor trip and to trip the reactor. The Shift Engineer is expected to classify an ALERT based on EAL MA3 (Auto Trip Not Successful), transmit a NARS form, and to initiate the staffing of the TSC, OSC and CEOF.</p> <p>Operators are expected to be dispatched to perform a variety of routine post-trip in-plant tasks. All tasks performed in connection with the turbine and reactor trips will be performed successfully. Command-and-Control should be transferred from the Control Room to the TSC as soon as practical.</p>
Mock Up Information	Simulator, Actual Turbine Building Locations
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #5**

Event	Fuel Handling Building (FHB) Area Rad Monitor Failure (3AS-155) and FHB Booster Fan Failure
Event Description	At 0830 (T+60) the check source on area radiation monitor ORE-AROSS sticks in place, giving a false high signal and giving an autostart signal to the 0A FHB Booster Fan. After running for about ten minutes the fan stops due to a power cable failure on the fan motor. The loss of this fan is necessary in order to obtain a mostly-unmonitored release from the Fuel Handling Building later in the exercise.
Expected Response	The Control Room is expected to dispatch Radiation Protection Technicians (RPTs) to survey the FHB. When area radiation levels are discovered to be normal, Instrument Maintenance should be dispatched to troubleshoot the radiation monitor. Additional maintenance staff may be dispatched to the Control Room (to check the RM-11) and to the fan motor (to check the condition of the fan). Note : immediate indication of the fan failure may not be received in the Control Room, depending on the participant's choice of controller switch position for the fan. The 0A FHB Booster Fan may not be returned to service during the exercise.
Mock Up Information	Simulator, Actual Location(s)
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #6**

Event	Small Break LOCA in Containment (30-160 gpm)
Event Description	At 0900 (T+090) a small leak will develop in containment (not from the previously identified 2 gpm source). This leak will start out at about 30 gpm and ramp to about 160 gpm by 1000 (T+150). At the same time the iodine sample activity will be ramped from 3.0 $\mu\text{Ci/g}$ to 300 $\mu\text{Ci/g}$ (see Event #1). After 1000 (T+150) the leak rate will be steady at about 160 gpm.
Expected Response	Control Room staff are expected to enter procedure BOP PRI-1 (Containment Leak) and monitor the leak rate, holding reactor level constant and increasing make-up flow as necessary. The Control Room is not expected to take further action as long as the leak rate remains at less than 150 gpm (Capacity of 1 Charging Pump). The Shift Engineer should recognize that EAL MU8 (2nd UE) is exceeded at about 0905 (T+095), and should recognize that EAL FA1 (2nd ALERT) is reached at about 0930 (T+120) when the containment radiation level exceeds 10 R/h due to the RCS leakage (RCS LOSS 3a).
Mock Up Information	Simulator, Area Radiation Maps
Exercise Messages	

Byron 1995 GSEP Exercise
November 15, 1995

EVENT SUMMARY
EVENT #7

Event	Leak Rate exceeds Charging Pump Capacity and Manual Safety Injection (SI)
Event Description	At approximately 1000 (T+150) the ongoing containment leak rate exceeds the capacity of 1 Charging Pump (150 gpm). This constitutes a POTENTIAL LOSS of the RCS Fission Product Barrier (3d).
Expected Response	<p>The TSC should classify a SITE EMERGENCY based on EAL FS1 (Loss or Potential Loss of 2 Fission Product Barriers : LOSS Fuel Clad 2d and either LOSS RCS 3a or POTENTIAL LOSS RCS 3d) and transmit a NARS form. The NDO should be contacted to staff the Dixon EOF and JPIC. Command-and-Control should be transferred to the CEOF as soon as practical.</p> <p>The Control Room is expected to enter procedures BEP-0 (Reactor Trip) and BEP-1 (LOCA). The Control Room should perform a manual safety injection and isolate the containment. The Control Room should transition to procedure BEP-1.2 (Post-LOCA Cool-down). Operators should be dispatched to verify the condition of a variety of routine post-SI equipment.</p>
Mock Up Information	Simulator, Actual In-Plant Locations
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #8**

Event	Failure of the 1A Residual Heat Removal (RHR) Pump during Manual Safety Injection
Event Description	Between 1000 and 1010 (T+150 - T+160) the Control Room crew can be expected perform a manual Safety Injection (SI) according to procedure BEP-1. The 1A and 1B RHR pumps should receive an autostart signal as part of the SI and the 1A RHR pump will not start. The failure is in the 1A RHR pump motor breaker.
Expected Response	The Control Room should request that a mixed discipline maintenance team be dispatched from the site to repair the pump. Participants will be permitted to return the 1A RHR Pump to service.
Mock Up Information	Simulator, Actual In-Plant Location
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #9**

Event	Source Range Monitor Fallure (N31)
Event Description	At 1015 (T+165) Source Range Monitor number N31 fails down-scale, though redundant indication is available from N32.
Expected Response	The Control Room should request the dispatch of Instrument Maintenance from the OSC to repair the Source Range Monitor. Participants will be permitted to return the N31 Source Range Monitor to service.
Mock Up Information	Simulator
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #10**

Event	Loss of FHB Integrity (Damage to Outer Roll Up Door)
Event Description	At 1020 (T+170) a Security Mobile Patrol slides on ice outside the Fuel Handling Building, is unable to stop, and rams the outer roll up door. The driver is uninjured. The door is dented in, has some broken panels, and is knocked from its track. The door is not able to move after being damaged. The damaged door creates a leak path for the unmonitored release from the FHB to the environment.
Expected Response	Security is expected to report the incident to the Security Shift Supervisor and to the TSC. Mechanical Maintenance should be dispatched to evaluate the damage and plan temporary repairs. This event may initially be assigned a low priority because of ongoing work related to the Turbine Trip. Participants will not be permitted to successfully repair this door.
Mock Up Information	Actual Location
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #11**

Event	Failure of Bus 142
Event Description	At 1110 (T+220) Bus 142 trips on overcurrent, de-energizing all Train B Emergency Safety Function (ESF) equipment.
Expected Response	The Control Room is expected to request a High Voltage Operator (HVO) be dispatched to Bus 142. After the initial damage assessment, a team of EMs should be dispatched to attempt to make repairs to the Bus. Participants will not be permitted to return Bus 142 to service during the exercise. Note : The Control Room may transition from BEP-1.2 back into normal operating procedures following the Bus 142 event with B Train pumps secured.
Mock Up Information	Simulator, Actual In-Plant Location(s)
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #12**

Event	1B Diesel Generator Failure to Start following Loss of Bus 142
Event Description	At 1110 (T+220) Bus 142 trips. The 1B Diesel Generator should autostart and pick up Bus 142 loads following the trip but does not. The butterfly valve on the starting air line has failed, preventing the pressurizing of the starting air header, and the Diesel will not run.
Expected Response	The Control Room is expected to request an Equipment Operator be dispatched from the OSC. After investigating, a Mechanical Maintenance team should be dispatched to replace the failed air line valve. Participants will not be permitted to return the 1B Diesel Generator to service PRIOR to 1300 (T+330). Note : the 1B Diesel Generator DID autostart during the 1010 (T+160) Manual SI, but should be secured at about 1030 (T+ 190) by procedure BEP-1 Step 11.c. <u>If the 1B Diesel Generator is not secured</u> then the 1B breaker will not close into the bus at 1110 (T+220) following the Bus 142 trip.
Mock Up Information	Simulator, Actual In-Plant Location
Exercise Messages	

Byron 1995 GSEP Exercise
November 15, 1995

EVENT SUMMARY
EVENT #13

Event	Large Break LOCA with failure of Discharge Header Isolation Valve MOV-1CS-007A
Event Description	At 1155 (T+265) large-break failure will occur on Recirc Leg A (design basis accident). Core uncover will occur. Containment will rapidly rise to about 30 psig. Containment Spray valve MOV-1CS-007A will fail in the closed position (1CS-007B is without power).
Expected Response	<p>The Control Room will re-enter procedure BEP-1 (LOCA) and try to maintain vessel level as best they can.</p> <p>The Manager of Emergency Operations (CEO or EOF) should classify a GENERAL EMERGENCY based on EAL FG1 (Loss/Potential Loss of 2 Fission Product Barriers and Potential Loss of a 3rd : POTENTIAL LOSS Containment (1b) & LOSS Fuel Clad (2d) & LOSS RCS (3a)). Appropriate Protective Action Recommendations should be developed and a NARS form transmitted.</p>
Mock Up Information	
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #14**

Event	Failure of the Inner Personnel Containment Hatch and Environmental Release
Event Description	<p>Between 1155 and 1200 (T+265 - T+270), when containment pressure reaches its maximum of about 30 psig, the inner containment personnel hatch will give way, releasing containment activity into the 426 elevation of the Fuel Handling Building. Because of the earlier loss of the 0A FHB Booster Fan and Bus 142 (taking away the 0B FHB Booster Fan), and the damage to the inner and outer FHB roll up doors, a pathway exists for an unfiltered, unmonitored, release to the environment. Only about 1% to 15% of the release is entrained by FHB and Aux Building ventilation systems. The remaining FHB radiation monitors will go into alarm, as will most Aux. Building monitors.</p> <p>Notes : (1) If temporary repairs have been made to the outer containment personnel hatch earlier in the exercise, these repairs will not hold against containment pressure. Participants will not be permitted to mitigate the environs release. (2) The monitored portion of the release is approximately equal to the ALERT EAL threshold for releases. (3) Participants should compare the environs teams results with B-Model projections and conclude that the monitored component is not large enough to cause the observed offsite radiation levels. (4) Participants should conclude from FHB monitors that the entire release is not being monitored.</p>
Expected Response	<p>Workers in the FHB and Aux. Buildings should be evacuated when area radiation levels rise suddenly; workers in the FHB may become contaminated. Environs teams should locate and track the offsite plume. Dose projections should be calculated and appropriate PARs derived. Air samples should be collected in the field and in the FHB; air sample results should be compared with existing protective action guides to determine whether to issue thyroid blocking agents (KI) to ComEd workers. KI should be authorized for use by the environs teams.</p>
Mock Up Information	Simulator, Environs Data
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

**EVENT SUMMARY
EVENT #15**

Event	Travelling Screen Failure at the River Screen House
Event Description	<p>As a result of the overnight ice storm, a great deal of debris has been deposited in the Rock River, some of which has washed into the intake screens. At 0810 (T+040) the Control Room will receive a trouble alarm on the travelling screens and a call from an Outside Operator who is at the River Screen House as part of his daily rounds.</p>
Expected Response	<p>At 1215 (T+295) a pin on the 0B Travelling Screen in the River Screen House will break, binding the travelling screen. The Control Room will receive another trouble alarm on the travelling screen. Debris will rapidly build up on the outside of the screen.</p> <p>At 0810 - 0815 (T+040 - T+045) the Control Room should shift the travelling screens from low speed to high speed and then clear the trouble alarm, which will reset.</p> <p>At 1215 (T+295) the Control Room should request that an Outside Operator be dispatched to the River Screen House. After receiving a damage report, a Mechanical Maintenance team may be dispatched to replace the pin and return the travelling screen to service.</p>
Mock Up Information	Simulator, River Screen House
Exercise Messages	

**Byron 1995 GSEP Exercise
November 15, 1995**

EXERCISE POINT HISTORY

Exercise Point History for Byron Station is available through the Exercise version of the UNIX GSEP Applications Programs. Exercise Catalogs for Unit 1 and Unit 2 are attached.

1. **For the TSC / OSC :** Log onto the personal computer available at your work location, using station procedures or your person login ID.

OR

For the CEOF / EOF / JPIC : Log onto the personal computer available at your work station, following the posted instructions and using the login ID and password provided.

2. After Windows has loaded, locate and open the Program Group marked "GSEP Exercise Rev 0.1"
3. Locate and open those GSEP applications programs which apply to your needs (Point Trend, Point Text, Significant Events, etc.).

NOTE : Many Byron Station point history points are duplicated in the catalogs of **BOTH** Unit 1 and Unit 2. Due to the limited number of points which can be included in an exercise catalog, some important or desired Unit 1 points may be located **only** in the Unit 2 catalog.

AM001	15 MIN AVG 30 FT WIND VEL	M/SEC	P
AM002	15 MIN AVG 250 FT WIND VEL	M/SEC	P
AM004	15 MIN AVG 30 FT WIND DIR	DGREES	P
AI 5	15 MIN AVG 250 FT WIND DIR	DGREES	P
AM007	15 MIN STD DEV WIND DIR 30FT	DGREES	P
AM008	15 MIN STD DEV WIND DIR 250FT	DGREES	P
AM010	15 MIN AVG DIFF TEMP 30/250FT	C/100M	P
AM012	AVG CONTAINMENT RAD. UNIT 1	R/HR	P
AM013	AVG CONTAINMENT RAD. UNIT 2	R/HR	P
AM014	AVG INT RANGE POWER LEVEL UNIT 1	MCAMPS	P
AM015	AVG INT RANGE POWER LEVEL UNIT 2	MCAMPS	P
DELTA2	DIFF TEMP LV1/LV2	C/100M	P
DEWPT	DEW POINT	DEG C	P
DLA014	CORE EXIT T AVG 10 HOTTEST UNIT	DEGF	P
F0001	LIQUID RADWASTE DISCHARGE F	GPM	A
F0054	GAS DECAY TANK EFFLUENT F	SCFM	A
F0128	CHARGING HDR FLOW	GPM	A
F0134	LETDOWN LINE FLOW	GPM	A
F0400	RC LOOP 1A F FT-414	PC	A
F0403	S/G 1A FW F FT-510	KBH	A
F0405	S/G 1A STEAM F FT-512	KBH	A
F0407	S/G 1A BLOWDOWN	GPM	A
F0420	RC LOOP 1B F FT-424	PC	A
F0423	S/G 1B FW F FT-520	KBH	A
F0425	S/G 1B STEAM F FT-522	KBH	A
F0427	S/G 1B BLOWDOWN	GPM	A
F0440	RC LOOP 1C F FT-434	PC	A
F0443	S/G 1C FW F FT-530	KBH	A
F 5	S/G 1C STEAM F FT-532	KBH	A
F0447	S/G 1C BLOWDOWN	GPM	A
F0460	RC LOOP 1D F FT-444	PC	A
F0463	S/G 1D FW F FT-540	KBH	A
F0465	S/G 1D STEAM F FT-542	KBH	A
F0467	S/G 1D BLOWDOWN	GPM	A
F0626	RH PP 1A DSCH FLOW	GPM	A
F0627	RH PP 1B DSCH FLOW	GPM	A
F0903	SAFETY INJ FLOW TO 1B COLD LEG	GPM	A
F0904	SAFETY INJ FLOW TO 1C COLD LEG	GPM	A
F0905	SAFETY INJ FLOW TO 1D COLD LEG	GPM	A
F0906	SAFETY INJ FLOW TO 1A COLD LEG	GPM	A
F2201	FW PUMP 1A DSCH F	KBH	A
F2202	FW PUMP 1B DSCH F	KBH	A
F2203	FW PUMP 1C DSCH F	KBH	A
F2231	CNDS BSTR PUMP 1A DSCH F	KBH	A
F2232	CNDS BSTR PUMP 1B DSCH F	KBH	A
F2233	CNDS BSTR PUMP 1C DSCH F	KBH	A
F2234	CNDS BSTR PUMP 1D DSCH F	KBH	A
F2331	SJAE 1A GAS DISCHARGE F	CFH	A
F2332	SJAE 1B GAS DISCHARGE F	CFH	A

Point ID Catalog : BY95.UNIT1.EXER

P0485	PRESSURIZER RELIEF TANK P	PSIG		A
P0491	RCS WIDE RNG CH IV LP 1 P	PSIG		A
P0492	RCS WIDE RNG CH II LP 1 P	PSIG		A
P0493	RCS WIDE RNG CH I LP 3 P	PSIG		A
P0494	RCS WIDE RNG CH III LP 3 P	PSIG		A
P0496	STMLINE HDR PRESS PT-507	PSIG		A
P0498	RC LOOP 1C WR PRESS	PSIG		A
P0499	RC LOOP 1A WR PRESS	PSIG		A
P1000	CONTAINMENT PRESS PT-936	PSIG		A
P2201	FW PUMP DSCH HDR P	PSIG		A
P2202	FW PUMP SUCTION P	PSIG		A
P2203	CNDS PUMP DSCH HDR P	PSIG		A
P2204	CNDS BOOSTER PUMP DSCH HDR P	PSIG		A
P2301	AF PUMP 1A SUCT P	PSIA		A
P2302	AF PUMP 1B SUCT P	PSIA		A
P3201	CNMT SPRAY PUMP 1A DSCH P	PSIG		A
P3202	CNMT SPRAY PUMP 1B DSCH P	PSIG		A
PN0445	RWST LEVEL	NOT LO	LO	A
PN0578	ACCUMULATOR 1C PRESS (1PT-0964)	N HIGH	HIGH	D
PN0579	ACCUMULATOR 1C PRESS (1PT-0964)	N LOW	LOW	D
PN0580	ACCUMULATOR 1C LEVEL (1LT-0954)	N HIGH	HIGH	D
PN0581	ACCUMULATOR 1C LEVEL (1LT-0954)	N LOW	LOW	D
PN0582	ACCUMULATOR 1D PRESS (1PT-0966)	N HIGH	HIGH	D
PN0583	ACCUMULATOR 1D PRESS (1PT-0966)	N LOW	LOW	D
PN0584	ACCUMULATOR 1D LEVEL (1LT-0956)	N HIGH	HIGH	D
PN0585	ACCUMULATOR 1D LEVEL (1LT-0956)	N LOW	LOW	D
PN0598	ACCUMULATOR 1A PRESS (1PT-0960)	N HIGH	HIGH	D
PN0599	ACCUMULATOR 1A PRESS (1PT-0960)	N LOW	LOW	D
P0600	ACCUMULATOR 1A LEVEL (1LT-0950)	N HIGH	HIGH	D
PN0601	ACCUMULATOR 1A LEVEL (1LT-0950)	N LOW	LOW	D
PN0602	ACCUMULATOR 1B PRESS (1PT-0962)	N HIGH	HIGH	D
PN0603	ACCUMULATOR 1B PRESS (1PT-0962)	N LOW	LOW	D
PN0604	ACCUMULATOR 1B LEVEL (1LT-0952)	N HIGH	HIGH	D
PN0605	ACCUMULATOR 1B LEVEL (1LT-0952)	N LOW	LOW	D
PRECIP	PRECIPITATION	MM		P
Q2800	GEN MW	MW		A
Q2810	UAT 141-1 X WDG WATTS	MW		A
Q2811	UAT 141-1 Y WDG WATTS	MW		A
Q2812	SAT 142-1 X WDG WATTS	MW		A
Q2813	SAT 142-1 Y WDG WATTS	MW		A
Q2816	UAT 141-2 X WDG WATTS	MW		A
Q2817	UAT 141-2 Y WDG WATTS	MW		A
Q2818	SAT 142-2 X WDG WATTS	MW		A
Q2819	SAT 142-2 Y WDG WATTS	MW		A
Q2820	345 KV LINE 0621 MW	MW		A
Q2822	345 KV LINE 0622 MW	MW		A
Q2826	345 KV LINE 0624 MW	MW		A
Q2828	345 KV LINE 15501 MW	MW		A
Q2901	DG 1A WATTS	KW		A
Q2902	DG 1B WATTS	KW		A

Point ID Catalog : BY95.UNIT1.EXER

RA0001	FHB FH INCDT		MR/HR	A
RA0002	FHB FH INCDT		MR/HR	A
RA0003	AUX BLDG ELEV 346		MR/HR	A
RA0004	AUX BLDG ELEV 346		MR/HR	A
RA0005	AUX BLDG ELEV 346		MR/HR	A
RA0006	AUX BLDG ELEV 364		MR/HR	A
RA0007	AUX BLDG ELEV 364		MR/HR	A
RA0008	AUX BLDG ELEV 364		MR/HR	A
RA0010	AUX BLDG ELEV 383		MR/HR	A
RA0011	AUX BLDG ELEV 383		MR/HR	A
RA0012	AUX BLDG ELEV 383		MR/HR	A
RA0013	AUX BLDG ELEV 401		MR/HR	A
RA0014	AUX BLDG ELEV 401		MR/HR	A
RA0015	PRIMARY SAMPLE ROOM		MR/HR	A
RA0017	HIGH LEVEL LAB		MR/HR	A
RA0018	AUX BLDG ELEV 426		MR/HR	A
RA0019	AUX BLDG ELEV 426		MR/HR	A
RA0020	AUX BLDG ELEV 451		MR/HR	A
RA0021	MAIN CONTROL ROOM		MR/HR	A
RA0023	FUEL HANDLING BUILDING ELEV 426		MR/HR	A
RA0024	FUEL HANDLING BUILDING ELEV 401		MR/HR	A
RA0025	RADWASTE BLDG ELEV 401		MR/HR	A
RA0026	RADWASTE BLDG TRUCK BAY		MR/HR	A
RA0038	TSC HEALTH PHYSICS OFFICE		MR/HR	A
RA0039	CNTMT BLDG 1 FUEL HANDL INCDT		MR/HR	A
RA0040	CNTMT BLDG 1 FUEL HANDL INCDT		MR/HR	A
RA0041	VOL CONTR TK CUBICLE UNIT 1		MR/HR	A
RA0042	CONTAINMENT ELEV 426 UNIT 1		MR/HR	A
RA0043	CONTAINMENT ELEV 401 UNIT 1		MR/HR	A
RA0044	INCORE SEAL TABLE UNIT 1		MR/HR	A
RA0045	AUX BLDG ELEV 401		MR/HR	A
RA0046	CONTAINMENT HI RANGE UNIT 1		R/HR	A
RA0047	CONTAINMENT HI RANGE UNIT 1		R/HR	A
RA0048	MAIN STEAMLINE 1A		MR/HR	A
RA0049	MAIN STEAMLINE 1B		MR/HR	A
RA0050	MAIN STEAMLINE 1C		MR/HR	A
RA0051	MAIN STEAMLINE 1D		MR/HR	A
RA0052	MAIN STEAMLINE 1A		MR/HR	A
RA0053	MAIN STEAMLINE 1B		MR/HR	A
RA0054	MAIN STEAMLINE 1C		MR/HR	A
RA0055	MAIN STEAMLINE 1D		MR/HR	A
RA0056	MAIN STEAMLINE PENETRAT 1A & 1D		MR/HR	A
RA0058	PIPE PENETRATION ELEV 364-R5		MR/HR	A
RA0061	PIPE PENETRATION ELEV 383-R7		MR/HR	A
RP0011	STATION BLOWDOWN		UCI/ML	A
RP0016	GAS DECAY TANK CUB -GAS		UCI/ML	A
RP0024	AUX BLDG EXH 0A - GAS		UCI/ML	A
RP0025	AUX BLDG EXH 0A - IOD		UCI/ML	A
RP0027	AUX BLDG EXH 0B - GAS		UCI/ML	A
RP0029	FUEL HANDLING BLDG EXH -PART		UCI/ML	A

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RP0030	FUEL HANDLING BLDG EXH - GAS	UCI/ML	A
RP0031	FUEL HANDLING BLDG EXH - IOD	UCI/ML	A
RP0032	FILTERED VENT EFF - PART	UCI/ML	A
R. 033	FILTERED VENT EFF - GAS	UCI/ML	A
RP0034	FILTERED VENT EFF - IOD	UCI/ML	A
RP0065	CNTMT PURGE EFF -PART - UNIT 1	UCI/ML	A
RP0066	CNTMT PURGE EFF - GAS - UNIT 1	UCI/ML	A
RP0067	CNTMT PURGE EFF - IOD - UNIT 1	UCI/ML	A
RP0070	GROSS FAILED FUEL LO ENERGY - 1	UCI/ML	A
RP0071	GROSS FAILED FUEL HI ENERGY - 1	UCI/ML	A
RP0073	STEAM GEN BLOWDOWN - UNIT 1	UCI/ML	A
RP0075	CONTMT ATMOS-PART - UNIT 1	UCI/ML	A
RP0076	CONTMT ATMOS-GAS LO-UNIT 1	UCI/ML	A
RP0077	CONTMT ATMOS- IOD - UNIT 1	UCI/ML	A
RP0078	CONTMT ATMOS-GAS HI-UNIT 1	UCI/ML	A
RP0094	SJAE/GLAND STM EXH - GAS 1	UCI/ML	A
RP0095	AUX BLDG 1 VENT STACK PART	UCI/ML	A
RP0096	AUX BLDG 1 VENT STACK GAS LO	UCI/ML	A
RP0097	AUX BLDG 1 VENT STACK IOD	UCI/ML	A
RP0099	AUX BLDG 1 VENT WRGM GAS LO	UCI/ML	A
RP0100	AUX BLDG 1 VENT WRGM GAS MID	UCI/ML	A
RP0101	AUX BLDG 1 VENT WRGM GAS HI	UCI/ML	A
RP0102	AUX BLDG 1 VENT WRGM RELEASE	UCI/SEC	A
RP0140	AUX BLDG 2 VENT WRGM RELEASE	UCI/SEC	A
STDLV1	STD DEV WIND DIR LEVEL 1	DEGREES	P
STDLV2	STD DEV WIND DIR LEVEL 2	DEGREES	P
T0067	RV UPPER HEAD TEMPERATURE A	DEGF	A
T0068	RV UPPER HEAD TEMPERATURE B	DEGF	A
T 012	EXCESS LETDOWN HX OUTLET T	DEGF	A
T0126	REGEN HX CHARGING OUTLET T	DEGF	A
T0127	REGEN HX LETDOWN OUTLET T	DEGF	A
T0140	VOLUME CONTROL TANK T	DEGF	A
T0145	LETDOWN HX OUTLET T	DEGF	A
T0400	RC LOOP 1A TAVE	DEGF	A
T0402	RC LOOP 1A TCOLD	DEGF	A
T0403	RC LOOP 1A DELTA T	PC	A
T0406	RC LOOP 1A WR COLD LEG T	DEGF	A
T0419	RC LOOP 1A WR HOT LEG T	DEGF	A
T0420	RC LOOP 1B TAVE	DEGF	A
T0422	RC LOOP 1B TCOLD	DEGF	A
T0423	RC LOOP 1B DELTA T	PC	A
T0426	RC LOOP 1B WR COLD LEG T	DEGF	A
T0439	RC LOOP 1B WR HOT LEG T	DEGF	A
T0440	RC LOOP 1C TAVE	DEGF	A
T0442	RC LOOP 1C TCOLD	DEGF	A
T0443	RC LOOP 1C DELTA T	PC	A
T0446	RC LOOP 1C WR COLD LEG T	DEGF	A
T0459	RC LOOP 1C WR HOT LEG T	DEGF	A
T0460	RC LOOP 1D TAVE	DEGF	A
T0462	RC LOOP 1D TCOLD	DEGF	A

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T0463	RC LOOP 1D DELTA T	PC		A
T0466	RC LOOP 1D WR COLD LEG T	DEGF		A
'79	RC LOOP 1D WR HOT LEG T	DEGF		A
'9	AUCTIONEERED HIGH TAVE	DEGF		A
T0621	COMPONENT CLG HX 1 OUT T	DEGF		A
TEMP	TEMPERATURE	DEG C		P
U0092	HOTTEST INCORE TC LOCATION			C
U0414	S/G 1A AVG STM PRESS	PSIG		C
U0415	S/G 1A AVG NAR RNG LEVEL	PC		C
U0434	S/G 1B AVG STM PRESS	PSIG		C
U0435	S/G 1B AVG NAR RNG LEVEL	PC		C
U0454	S/G 1C AVG STM PRESS	PSIG		C
U0455	S/G 1C AVG NAR RNG LEVEL	PC		C
U0474	S/G 1D AVG STM PRESS	PSIG		C
U0475	S/G 1D NAR RNG LEVEL	PC		C
U0482	PRESSURIZER AVG PRESS	PSIG		C
U0483	PRESSURIZER AVG LEVEL	PC		C
U0609	STM GEN 1 FW NOZZLE F	KBH		A
U0629	STM GEN 2 FW NOZZLE F	KBH		A
U0649	STM GEN 3 FW NOZZLE F	KBH		A
U0650	STM GEN 3 FW NOZZLE F TIM IN ALM	HOURS		C
U0669	STM GEN 4 FW NOZZLE F	KBH		A
U0932	AVG TEMP 10 HOTTEST T/C S	DEGF		C
U0934	DEGREES OF SUBCOOLING	DEGF		C
U1000	CNMT PRESS (DETECTOR AVG)	PSIG		C
U1029	S/G TOTAL BLOWDOWN FLOW	KBH		C
U1038	S/G TOTAL FW FLOW	KBH		C
U1039	S/G TOTAL STM FLOW	KBH		C
'1	UNIT AUX TRANSFORMER Q	MW		A
J2092	SYS AUX TRANSFORMER Q	MW		A
U8010	TOTAL CNMT PRESSURE	PSIG		A
U8011	TOTAL CNMT TEMPERATURE	DEGF		A
U8014	WET CNMT H2 CONC - PS343	PC		A
U8015	WET CNMT H2 CONC - PS344	PC		A
U8059	TOTAL CALCULATED RX POWER	PC		C
U9007	1 MIN AVG STD WIND DIR 30 FT LVL	NONE		C
U9009	1 MIN AVG STD WIND DIR 250 FT LV	NONE		C
WDLV1	WIND DIRECTION LEVEL 1	DEGREES		P
WDLV2	WIND DIRECTION LEVEL 2	DEGREES		P
WSLV1	WIND SPEED LEVEL 1	M/SEC		P
WSLV2	WIND SPEED LEVEL 2	M/SEC		P
X0010	RCL T AVG ICONIC SPOKE	FRACTION		C
X0011	RCL T AVG HI LIMIT	NORMAL	ALARM	D
X0012	RCL T AVG LO LIMIT	NORMAL	ALARM	D
X0013	RCL T MOST DEVIANT	DEGF		C
X0014	RCL T AVG REFERENCE	DEGF		C
X0015	RCL T AVG MOST DEV LP	LOOP		C
X0020	PWR MISMATCH ICONIC SPOKE	FRACTION		C
X0021	PWR MISMATCH HI LIMIT	NORMAL	ALARM	D
X0022	PWR MISMATCH LO LIMIT	NORMAL	ALARM	D

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X0023	NUCLEAR POWER AVG	PC		C
X0024	TURBINE POWER AVG	PC		C
X0030	CNMT CONDITIONS ICONIC SPOKE	FRACTION		C
X0031	CNMT COND HI LIMIT	NORMAL	ALARM	D
X0032	CNMT COND LO LIMIT	NORMAL	ALARM	D
X0033	CNMT AIR TEMP AVG	DEGF		C
X0034	CNMT FLR SUMP LVL	INCHES		C
X0040	NR RADIATION ICONIC SPOKE	FRACTION		C
X0041	NR RAD HI LIMIT	NORMAL	ALARM	D
X0043	PARTICULATE RADIATION STATUS			C
X0044	IODINE RADIATION STATUS			C
X0045	GAS RADIATION STATUS			C
X0046	STEAM GENERATOR RADIATION			C
X0047	SJAE/GLAND RADIATION			C
X0050	NAR S/G ICONIC SPOKE	FRACTION		C
X0051	NAR S/G HI LIMIT	NORMAL	ALARM	D
X0052	NAR S/G LO LIMIT	NORMAL	ALARM	D
X0053	NAR S/G MOST DEVIANT	PC		C
X0054				C
X0055	NAR S/G MOST DEVIANT LP	LOOP		C
X0060	NET CHARGING F ICONIC SPOKE	FRACTION		C
X0061	NET CHARGING F HI LIMIT	NORMAL	ALARM	D
X0062	NET CHARGING F LO LIMIT	NORMAL	ALARM	D
X0063	NET CHARGING FLOW	GPM		C
X0070	NR PZR LVL ICONIC SPOKE	FRACTION		C
X0071	NR PZR LVL HI LIMIT	NORMAL	ALARM	D
X0072	NR PZR LVL LO LIMIT	NORMAL	ALARM	D
X0073	NR PRESSURIZER LEVEL AVG	PC		C
X0074	NR PRESSURIZER LEVEL REF	PC		C
X0080	PZR PRESS ICONIC SPOKE	FRACTION		C
X0081	PZR PRESS HI LIMIT	NORMAL	ALARM	D
X0082	PZR PRESS LO LIMIT	NORMAL	ALARM	D
X0083	PZR PRESS AVERAGE	PSIG		C
X0110	CORE EXIT T ICONIC SPOKE	FRACTION		C
X0111	CORE EXIT HI LIMIT	NORMAL	ALARM	D
X0112	CORE EXIT LO LIMIT	NORMAL	ALARM	D
X0113	CORE EXIT T AVG 10 HOTTEST	DEGF		C
X0114	CORE EXIT T REFERENCE	DEGF		C
X0120	START-UP RATE ICONIC SPOKE	FRACTION		C
X0121	START-UP RATE HI LIMIT	NORMAL	ALARM	D
X0122	START-UP RATE LO LIMIT	NORMAL	ALARM	D
X0123	START-UP RATE	DPM		C
X0130	CNMT PRESS ICONIC SPOKE	FRACTION		C
X0131	CNMT PRESS HI LIMIT	NORMAL	ALARM	D
X0132	CNMT PRESS LO LIMIT	NORMAL	ALARM	D
X0133	CONTAINMENT PRESS AVG	PSIG		C
X0140	WD RADIATION ICONIC SPOKE	FRACTION		C
X0141	WD RAD HI LIMIT	NORMAL	ALARM	D
X0142	FUEL HANDLING RAD STATUS			C
X0143	CNMT AREA 426 FT RAD STATUS			C

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X0144	CNMT AREA 401 FT RAD STATUS			C
X0145	INCORE SEAL TABLE RAD STATUS			C
0146	MAIN STEAM LINE A RAD STAT			C
0147	MAIN STEAM LINE B RAD STAT			C
X0148	MAIN STEAM LINE C RAD STAT			C
X0149	MAIN STEAM LINE D RAD STAT			C
X0150	WID S/G LVL ICONIC SPOKE	FRACTION		C
X0151	WID S/G LVL HI LIMIT	NORMAL	ALARM	D
X0152	WID S/G LVL LO LIMIT	NORMAL	ALARM	D
X0153	WID S/G LVL MOST DEVIANT	PC		C
X0154				C
X0155	WID S/G LVL MOST DEVIANT	LOOP		C
X0160	RVLIS ICONIC SPOKE	FRACTION		C
X0162	RVLIS LO LIMIT	NORMAL	ALARM	D
X0170	WD PZR LVL ICONIC SPOKE	FRACTION		C
X0171	WD PZR LVL HI LIMIT	NORMAL	ALARM	D
X0172	WD PZR LVL LO LIMIT	NORMAL	ALARM	D
X0173	WD PRESSURIZER LEVEL AVG	PC		C
X0174	WD PRESSURIZER LEVEL REF	PC		C
X0180	WR RC PRESS ICONIC SPOKE	FRACTION		C
X0181	WR RC PRESS HI LIMIT	NORMAL	ALARM	D
X0182	WR RC PRESS LO LIMIT	NORMAL	ALARM	D
X0183	WR RC PRESS AVG	PSIG		C
X0184	WR RC PRESS REFERENCE	PSIG		C
X0190	DEGREES OF SUBCOOLING	DEGF		C
Y2021	CNMT H2 CONC PS343	PC		A
Y2022	CNMT H2 CONC PS344	PC		A
V2801	MAIN XFMR 1E CURRENT	AMPS		A
02	MAIN XFMR 1W CURRENT	AMPS		A
12010	UAT 141-1 X WDG CURRENT	AMPS		A
Y2811	UAT 141-1 Y WDG CURRENT	AMPS		A
Y2812	SAT 142-1 X WDG CURRENT	AMPS		A
Y2813	SAT 142-1 Y WDG CURRENT	AMPS		A
Y2816	UAT 141-2 X WDG CURRENT	AMPS		A
Y2817	UAT 141-2 Y WDG CURRENT	AMPS		A
Y2818	SAT 142-2 X WDG CURRENT	AMPS		A
Y2819	SAT 142-2 Y WDG CURRENT	AMPS		A
Y2821	345 KV LINE 0621 CURRENT	AMPS		A
Y2822	345 KV LINE 0622 CURRENT	AMPS		A
Y2824	345 KV LINE 0624 CURRENT	AMPS		A
Y2825	345 KV LINE 15501 CURRENT	AMPS		A
Y4002	AIR TEMP AT 30 FT	DEGF		A
Y4011	MET TWR CH1 WIND SPEED 30 FT LVL	MPH		A
Y4012	MET TWR CH2 WIND DIR 30 FT LVL	DEG		A
Y4013	MET TWR CH3 WIND SPEED 250 FT LV	MPH		A
Y4014	MET TWR CH4 WIND DIR 250 FT LVL	DEG		A
Y4015	MET TWR CH5 AIR TEMP 30 FT LVL	DEGF		A
Y4016	MET TWR CH6 DELTA T (250-30)	DEGF		A
Y4017	MET TWR CH7 DEWPOINT 30 FT LVL	DEGF		A
Y4019	MET TWR CH9 PRECIPITATION	INCHW		A

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AM001	15 MIN AVG 30 FT WIND VEL	M/SEC	P
AM002	15 MIN AVG 250 FT WIND VEL	M/SEC	P
AJ004	15 MIN AVG 30 FT WIND DIR	DGREES	P
A005	15 MIN AVG 250 FT WIND DIR	DGREES	P
AM007	15 MIN STD DEV WIND DIR 30FT	DGREES	P
AM008	15 MIN STD DEV WIND DIR 250FT	DGREES	P
AM010	15 MIN AVG DIFF TEMP 30/250FT	C/100M	P
AM012	AVG CONTAINMENT RAD. UNIT 1	R/HR	P
AM013	AVG CONTAINMENT RAD. UNIT 2	R/HR	P
F0128	CHARGING HDR FLOW	GPM	A
F0134	LETDOWN LINE FLOW	GPM	A
F9999	FEEDER FOR POINT X0063		A
K8010	NORMAL CNMT TEMPERATURE	DEGF	A
L0404	S/G 1A WIDE RNG LEVEL LT-501	PC	A
L0424	S/G 1B WIDE RNG LEVEL LT-502	PC	A
L0444	S/G 1C WIDE RNG LEVEL LT-503	PC	A
L0464	S/G 1D WIDE RNG LEVEL LT-504	PC	A
L0487	RVLIS HEAD LEVEL CH A	PC	A
L2001	CNMT FLR DRN SUMP LEVEL PC-002	INCHES	A
P0499	RC LOOP 1A WR PRESS	PSIG	A
Q2800	GEN MW	MW	A
RA0001	FHB FH INCDT	MR/HR	A
RA0002	FHB FH INCDT	MR/HR	A
RA0003	AUX BLDG ELEV 346	MR/HR	A
RA0004	AUX BLDG ELEV 346	MR/HR	A
RA0005	AUX BLDG ELEV 346	MR/HR	A
RA0006	AUX BLDG ELEV 364	MR/HR	A
RA0007	AUX BLDG ELEV 364	MR/HR	A
R0008	AUX BLDG ELEV 364	MR/HR	A
RA0009	DRUMMING STATION	MR/HR	A
RA0010	AUX BLDG ELEV 383	MR/HR	A
RA0011	AUX BLDG ELEV 383	MR/HR	A
RA0012	AUX BLDG ELEV 383	MR/HR	A
RA0013	AUX BLDG ELEV 401	MR/HR	A
RA0014	AUX BLDG ELEV 401	MR/HR	A
RA0015	PRIMARY SAMPLE ROOM	MR/HR	A
RA0016	DECON FACILITY ELEV 426	MR/HR	A
RA0017	HIGH LEVEL LAB	MR/HR	A
RA0018	AUX BLDG ELEV 426	MR/HR	A
RA0019	AUX BLDG ELEV 426	MR/HR	A
RA0020	AUX BLDG ELEV 451	MR/HR	A
RA0021	MAIN CONTROL ROOM	MR/HR	A
RA0023	FUEL HANDLING BUILDING ELEV 426	MR/HR	A
RA0024	FUEL HANDLING BUILDING ELEV 401	MR/HR	A
RA0025	RADWASTE BLDG ELEV 401	MR/HR	A
RA0026	RADWASTE BLDG TRUCK BAY	MR/HR	A
RA0038	TSC HEALTH PHYSICS OFFICE	MR/HR	A
RA0039	CNTMT BLDG 1 FUEL HANDL INCDT	MR/HR	A
RA0040	CNTMT BLDG 1 FUEL HANDL INCDT	MR/HR	A

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RA0042	CONTAINMENT ELEV 426 UNIT 1	MR/HR	A
RA0043	CONTAINMENT ELEV 401 UNIT 1	MR/HR	A
RA0044	INCORE SEAL TABLE UNIT 1	MR/HR	A
RA0045	AUX BLDG ELEV 401	MR/HR	A
RA0046	CONTAINMENT HI RANGE UNIT 1	R/HR	A
RA0047	CONTAINMENT HI RANGE UNIT 1	R/HR	A
RA0048	MAIN STEAMLINE 1A	MR/HR	A
RA0049	MAIN STEAMLINE 1B	MR/HR	A
RA0050	MAIN STEAMLINE 1C	MR/HR	A
RA0051	MAIN STEAMLINE 1D	MR/HR	A
RA0052	MAIN STEAMLINE 1A	MR/HR	A
RA0053	MAIN STEAMLINE 1B	MR/HR	A
RA0054	MAIN STEAMLINE 1C	MR/HR	A
RA0055	MAIN STEAMLINE 1D	MR/HR	A
RA0064	CNTMT BLDG 2 FUEL HAND INCDT	MR/HR	A
RA0065	CNTMT BLDG 2 FUEL HAND INCDT	MR/HR	A
RA0069	INCORE SEAL TABLE UNIT 2	MR/HR	A
RA0070	AUX BLDG ELEV 401	MR/HR	A
RA0071	CONTAINMENT HI RANGE UNIT 2	R/HR	A
RA0072	CONTAINMENT HI RANGE UNIT 2	R/HR	A
RA0073	MAIN STEAMLINE 2A	MR/HR	A
RA0074	MAIN STEAMLINE 2B	MR/HR	A
RA0075	MAIN STEAMLINE 2C	MR/HR	A
RA0076	MAIN STEAMLINE 2D	MR/HR	A
RA0077	MAIN STEAMLINE 2A	MR/HR	A
RA0078	MAIN STEAMLINE 2B	MR/HR	A
RA0079	MAIN STEAMLINE 2C	MR/HR	A
RA0080	MAIN STEAMLINE 2D	MR/HR	A
RA0081	MAIN STEAMLINE PENETRAT 2A & 2D	MR/HR	A
RA0082	MAIN STEAMLINE PENETRAT 2B & 2C	MR/HR	A
RA0083	PIPE PENETRATION ELEV 364-R26	MR/HR	A
RA0084	PIPE PENETRATION ELEV 364-R28	MR/HR	A
RA0085	PIPE PENETRATION ELEV 383-R26	MR/HR	A
RA0086	PIPE PENETRATION ELEV 383-R28	MR/HR	A
RA0087	PIPE PENETRATION ELEV 401-R26	MR/HR	A
RA0088	PIPE PENETRATION ELEV 401-R28	MR/HR	A
RP0001	LIQUID RADWASTE EFF	UCI/ML	A
RP0023	AUX BLDG EXH 0A - PART	UCI/ML	A
RP0024	AUX BLDG EXH 0A - GAS	UCI/ML	A
RP0025	AUX BLDG EXH 0A - IOD	UCI/ML	A
RP0026	AUX BLDG EXH 0B - PART	UCI/ML	A
RP0027	AUX BLDG EXH 0B - GAS	UCI/ML	A
RP0028	AUX BLDG EXH 0B - IOD	UCI/ML	A
RP0029	FUEL HANDLING BLDG EXH -PART	UCI/ML	A
RP0030	FUEL HANDLING BLDG EXH - GAS	UCI/ML	A
RP0031	FUEL HANDLING BLDG EXH - IOD	UCI/ML	A
RP0035	RADWASTE VENT EFF - PART	UCI/ML	A
RP0036	RADWASTE VENT EFF - GAS	UCI/ML	A
RP0037	RADWASTE VENT EFF - IOD	UCI/ML	A
RP0038	MCR OUTSIDE AIR INTAKE A - PART	UCI/ML	A

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RP0039	MCR OUTSIDE AIR INTAKE A - GAS	UCI/ML	A
RP0040	MCR OUTSIDE AIR INTAKE A - IOD	UCI/ML	A
RP0050	MCR TURB BLDG AIR INTAKE A- PART	UCI/ML	A
R. 051	MCR TURB BLDG AIR INTAKE A- GAS	UCI/ML	A
RP0052	MCR TURB BLDG AIR INTAKE A- IOD	UCI/ML	A
RP0073	STEAM GEN BLOWDOWN - UNIT 1	UCI/ML	A
RP0075	CONTMT ATMOS-PART - UNIT 1	UCI/ML	A
RP0076	CONTMT ATMOS-GAS LO-UNIT 1	UCI/ML	A
RP0077	CONTMT ATMOS- IOD - UNIT 1	UCI/ML	A
RP0078	CONTMT ATMOS-GAS HI-UNIT 1	UCI/ML	A
RP0092	PIPE TUNNEL - GAS - UNIT 1	UCI/ML	A
RP0094	SJAE/GLAND STM EXH - GAS 1	UCI/ML	A
RP0102	AUX BLDG 1 VENT WRGM RELEASE	UCI/SEC	A
RP0104	CNTMT PURGE EFF - GAS - UNIT 2	UCI/ML	A
RP0108	GROSS FAILED FUEL LO ENERGY - 2	UCI/ML	A
RP0109	GROSS FAILED FUEL HI ENERGY - 2	UCI/ML	A
RP0111	STEAM GEN BLOWDOWN - UNIT 2	UCI/ML	A
RP0113	CONTMT ATMOS- PART -UNIT 2	UCI/ML	A
RP0114	CONTMT ATMOS-GAS LO-UNIT 2	UCI/ML	A
RP0115	CONTMT ATMOS- IOD -UNIT 2	UCI/ML	A
RP0116	CONTMT ATMOS-GAS HI-UNIT 2	UCI/ML	A
RP0130	PIPE TUNNEL - GAS - UNIT 2	UCI/ML	A
RP0132	SJAE/GLAND STM EXH - GAS 2	UCI/ML	A
RP0134	AUX BLDG 2 VENT STACK GAS LO	UCI/ML	A
RP0136	AUX BLDG 2 VENT STACK GAS HI	UCI/ML	A
RP0137	AUX BLDG 2 VENT WRGM GAS LO	UCI/ML	A
RP0138	AUX BLDG 2 VENT WRGM GAS MID	UCI/ML	A
RP0139	AUX BLDG 2 VENT WRGM GAS HI	UCI/ML	A
R .40	AUX BLDG 2 VENT WRGM RELEASE	UCI/SEC	A
T0400	RC LOOP 1A TAVE	DEGF	A
T0420	RC LOOP 1B TAVE	DEGF	A
T0440	RC LOOP 1C TAVE	DEGF	A
T0460	RC LOOP 1D TAVE	DEGF	A
T0499	AUCTIONEERED HIGH TAVE	DEGF	A
U0415	S/G 1A AVG NAR RNG LEVEL	PC	C
U0435	S/G 1B AVG NAR RNG LEVEL	PC	C
U0455	S/G 1C AVG NAR RNG LEVEL	PC	C
U0475	S/G 1D NAR RNG LEVEL	PC	C
U0482	PRESSURIZER AVG PRESS	PSIG	C
U0483	PRESSURIZER AVG LEVEL	PC	C
U0932	AVG TEMP 10 HOTTEST T/C S	DEGF	C
U0934	DEGREES OF SUBCOOLING	DEGF	C
U1000	CNMT PRESS (DETECTOR AVG)	PSIG	C
U8011	TOTAL CNMT TEMPERATURE	DEGF	C
U8059	TOTAL CALCULATED RX POWER	PC	A
X0010	RCL T AVG ICONIC SPOKE	FRACTION	C
X0011	RCL T AVG HI LIMIT	NORMAL ALARM	D
X0012	RCL T AVG LO LIMIT	NORMAL ALARM	D
X0013	RCL T MOST DEVIANT	DEGF	C
X0014	RCL T AVG REFERENCE	DEGF	C

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X0015	RCL T AVG MOST DEV LP	LOOP		C
X0020	PWR MISMATCH ICONIC SPOKE	FRACTION		D
X0021	PWR MISMATCH HI LIMIT	NORMAL	ALARM	D
X0022	PWR MISMATCH LO LIMIT	NORMAL	ALARM	D
X0023	NUCLEAR POWER AVG	PC		C
X0024	TURBINE POWER AVG	PC		C
X0030	CNMT CONDITIONS ICONIC SPOKE	FRACTION		C
X0031	CNMT COND HI LIMIT	NORMAL	ALARM	D
X0032	CNMT COND LO LIMIT	NORMAL	ALARM	D
X0033	CNMT AIR TEMP AVG	DEGF		C
X0034	CNMT FLR SUMP LVL	INCHES		C
X0040	NR RADIATION ICONIC SPOKE	FRACTION		C
X0041	NR RAD HI LIMIT	NORMAL	ALARM	D
X0043	PARTICULATE RADIATION STATUS			C
X0044	IODINE RADIATION STATUS			C
X0045	GAS RADIATION STATUS			C
X0046	STEAM GENERATOR RADIATION			C
X0047	SJAE/GLAND RADIATION			C
X0050	NAR S/G ICONIC SPOKE	FRACTION		C
X0051	NAR S/G HI LIMIT	NORMAL	ALARM	D
X0052	NAR S/G LO LIMIT	NORMAL	ALARM	D
X0053	NAR S/G MOST DEVIANT	PC		C
X0054				C
X0055	NAR S/G MOST DEVIANT LP	LOOP		C
X0060	NET CHARGING F ICONIC SPOKE	FRACTION		C
X0061	NET CHARGING F HI LIMIT	NORMAL	ALARM	D
X0062	NET CHARGING F LO LIMIT	NORMAL	ALARM	D
X0063	NET CHARGING FLOW	GPM		C
X0071	NR PZR LVL ICONIC SPOKE	FRACTION		C
X0072	NR PZR LVL HI LIMIT	NORMAL	ALARM	D
X0073	NR PZR LVL LO LIMIT	NORMAL	ALARM	D
X0074	NR PRESSURIZER LEVEL AVG	PC		C
X0080	NR PRESSURIZER LEVEL REF	PC		C
X0081	PZR PRESS ICONIC SPOKE	FRACTION		C
X0082	PZR PRESS HI LIMIT	NORMAL	ALARM	D
X0083	PZR PRESS LO LIMIT	NORMAL	ALARM	D
X0083	PZR PRESS AVERAGE	PSIG		C
X0110	CORE EXIT T ICONIC SPOKE	FRACTION		C
X0111	CORE EXIT HI LIMIT	NORMAL	ALARM	D
X0112	CORE EXIT LO LIMIT	NORMAL	ALARM	D
X0113	CORE EXIT T AVG 10 HOTTEST	DEGF		C
X0114	CORE EXIT T REFERENCE	DEGF		C
X0120	START-UP RATE ICONIC SPOKE	FRACTION		C
X0121	START-UP RATE HI LIMIT	NORMAL	ALARM	D
X0122	START-UP RATE LO LIMIT	NORMAL	ALARM	D
X0123	START-UP RATE	DPM		C
X0130	CNMT PRESS ICONIC SPOKE	FRACTION		C
X0131	CNMT PRESS HI LIMIT	NORMAL	ALARM	D
X0132	CNMT PRESS LO LIMIT	NORMAL	ALARM	D
X0133	CONTAINMENT PRESS AVG	PSIG		C

Point ID Catalog : BY95.UNIT2.EXER

X0140	WD RADIATION ICONIC SPOKE	FRACTION		C
X0141	WD RAD HI LIMIT	NORMAL	ALARM	D
X0142	FUEL HANDLING RAD STATUS			C
X0143	CNMT AREA 426 FT RAD STATUS			C
X0144	CNMT AREA 401 FT RAD STATUS			C
X0145	INCORE SEAL TABLE RAD STATUS			C
X0146	MAIN STEAM LINE A RAD STAT			C
X0147	MAIN STEAM LINE B RAD STAT			C
X0148	MAIN STEAM LINE C RAD STAT			C
X0149	MAIN STEAM LINE D RAD STAT			C
X0150	WID S/G LVL ICONIC SPOKE	FRACTION		C
X0151	WID S/G LVL HI LIMIT	NORMAL	ALARM	D
X0152	WID S/G LVL LO LIMIT	NORMAL	ALARM	D
X0153	WID S/G LVL MOST DEVIANT	PC		C
X0154				C
X0155	WID S/G LVL MOST DEVIANT	LOOP		C
X0160	RVLIS ICONIC SPOKE	FRACTION		C
X0162	RVLIS LO LIMIT	NORMAL	ALARM	D
X0170	WD PZR LVL ICONIC SPOKE	FRACTION		C
X0171	WD PZR LVL HI LIMIT	NORMAL	ALARM	D
X0172	WD PZR LVL LO LIMIT	NORMAL	ALARM	D
X0173	WD PRESSURIZER LEVEL AVG	PC		C
X0174	WD PRESSURIZER LEVEL REF	PC		C
X0180	WR RC PRESS ICONIC SPOKE	FRACTION		C
X0181	WR RC PRESS HI LIMIT	NORMAL	ALARM	D
X0182	WR RC PRESS LO LIMIT	NORMAL	ALARM	D
X0183	WR RC PRESS AVG	PSIG		C
X0184	WR RC PRESS REFERENCE	PSIG		C
X0190	DEGREES OF SUBCOOLING	DEGF		C
Y4011	MET TWR CH1 WIND SPEED 30 FT LVL	MPH		A
Y4013	MET TWR CH3 WIND SPEED 250 FT LV	MPH		A
Y4015	MET TWR CH5 AIR TEMP 30 FT LVL	DEGF		A
Y4019	MET TWR CH9 PRECIPITATION	INCHW		A
YD0006	RX TRIP BRKR A	RESET	TRIP	D

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PARTICIPANT TELEPHONE LIST

NUCLEAR DUTY OFFICER : -----

PAGER at 708-512-xxxx, OFFICE at 708-663-xxxx (DG x----)

Nuclear Duty Officer Update Voice Box

708 / 663-7167

SIMULATOR / CONTROL ROOM

[Byron Station Extensions, Tie Line 297]

Shift Engineer

Unit 1 Supervisor

Unit 2 Supervisor

Center Desk NSO

Unit 1 NSO

Unit 2 NSO

Emergency Number

CONTROL ROOM FAX (OUTSIDE LINE)

815 - 234 - xxxx

PARTICIPANT STAGING AREAS, PRIOR TO OSC ACTIVATION (Byron Extensions)

Operations

Mechanical Maintenance

Electrical Maintenance

Instrument Maintenance

Radiation Protection

Chemistry

OTHER PARTICIPANTS

Voice Phone

Fax Number

Bulk Power Operations

Byron x----

815 - 942 - 8026

Illinois Emergency Mangement Agency

815 - 942 - 8159

815 - 942 - 5603

NRC Region III Base Team Manager

815 - 942 - 5883

815 - 942 - 8168

NRC ENS Phone Line

815 - 942 - 8155

n/a

NRC HPN Phone Line

815 - 942 - 8156

n/a

Murray & Trettel

815 - 942 - 5086

n/a

Teledyne Isotopes

815 - 942 - 6264

n/a

Emergency / "911"

815 - 942 - 8403

n/a

All participating facilities or agencies which are not listed above should be contacted at their actual telephone numbers.

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CONTROLLER TELEPHONE LIST

BYRON STATION	
Outside Telephone Line To Byron Station	815 / 234 - 5441
ComEd Tie Line To Byron Station	8-297 - xxxx
LEAD ONSITE CONTROLLER (BYRON SIMULATOR)	BYR x
SIMULATOR / CONTROL ROOM : Simulator Operator	BYR x
LEAD CONTROLLER, TECHNICAL SUPPORT CENTER	BYR x
LEAD CONTROLLER, OPERATIONS SUPPORT CENTER	BYR x
LEAD OFFSITE CONTROLLER (DIXON EOF) & LEAD CONTROLLER (DIXON JPIC)	815 /
LEAD OFFSITE CONTROLLER@ Mtg Rm, Brandywine Inn	815 / 284 - 1890
LEAD CONTROLLER, CORPORATE EOF	8-347-7307 *
LEAD CEOF Controller, prior to Activation (Waukegan Rm.)	8-347-6594
LEAD CONTROLLER, RESPONSE CELL	815 / 942 - 8153 (Dresden x2753)
LEAD CONTROLLER, REAC (ask for REAC Controller)	217 / 785 - 0600
Mike Sinclair (Cellular Phone)	217 / 494 - 3128
Kay Foster (Cellular Phone)	217 / 494 - 8467

(*) The CEOF Controller phone is monitored by EP Clerical staff; ask for the CEOF Lead Controller.

GUIDANCE FOR ACTIVATING AND ACCESSING THE MOCK HPN CONFERENCE LINE

NOTE:

*
* MCI CONFERENCE BRIDGE SETUP INFORMATION, TO BE USE BY THE RESPONSE CELL
* ONLY:
*
* TELEPHONE NUMBER : 1-800-475-4700
* ACCOUNT CODE : 6122025
* BRIDGE ACCESS TELEPHONE NUMBERS (ALL BRIDGE PARTICIPANTS):
* 1-800-857-7522 PASSWORD = HPN

- 1) TO SET UP THE CONFERENCE BRIDGE (Mock - NRC HPN Communicator):
 - a) Call the MCI Conference bridge SETUP OPERATOR on 1-800-475-4700.
 - b) Identify yourself as being a Commonwealth Edison representative and provide the appropriate ACCOUNT CODE:
6122025
 - c) The TOTAL NUMBER on the bridge will be 6.
 - d) Answer any additional questions the operator may have (e.g. name, contact phone number, etc.)
 - e) The operator will proceed to set up the requested Conference Bridge, this should take approximately 20 minutes.
- 2) TO ACCESS THE CONFERENCE BRIDGE (All participants):
 - a) Call the MCI Conference Bridge Operator on:
1-800-857-7522
 - b) Provide the "PASSWORD" HPN, when requested.
 - c) Provide your name, if requested.
 - d) The operator will connect you to the bridge.
- 3) Any person can access the bridge, as long as they have the "800" number and the "PASSWORD". The bridge, however, will be set up for a maximum number of six (6) people.
- 4) If you choose to leave the bridge you simply hang-up. To return to the bridge, you follow the same procedure as outlined in STEP 2.
- 5) If there is a concern or it is necessary to add additional people to a bridge, the Mock-NRC ENS Communicator will ENTER "**0" to connect the Bridge Operator.

GUIDANCE FOR ACTIVATING AND ACCESSING THE MOCK HPN CONFERENCE LINE

GUIDANCE FOR ACCESSING THE MOCK HPN CONFERENCE LINE

- 1) TO ACCESS THE CONFERENCE BRIDGE (All participants):
 - a) Call the MCI Conference Bridge Operator on:
1-800-857-7522
 - b) Provide the "PASSWORD" HPN, when requested.
 - c) Provide your name, if requested.
 - d) The operator will connect you to the bridge.
- 2) Any person can access the bridge, as long as they have the "800" number and the "PASSWORD". The bridge, however, will be set up for a maximum number of six (6) people.
- 3) If you choose to leave the bridge you simply hang-up. To return to the bridge, you follow the same procedure as outlined in STEP 2.

GUIDANCE FOR ACCESSING THE MOCK HPN CONFERENCE LINE

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EXERCISE EVALUATION OBJECTIVES

- ComEd Objectives
- State of Illinois Objectives

<<< *** THIS IS AN EXERCISE *** >>>

BYRON 1995 GSEP EXERCISE
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EVALUATION GUIDANCE

Scoring of the exercise is accomplished by the evaluators assigned to each facility. Each Controller/Evaluator will be provided Evaluation Forms specific to the evaluator positions in their facility. Each Evaluation Package has the terminal and enabling objectives for their position and space to put comments applicable to each terminal objective. Also included are data sheets where you can keep a chronological log of observations. It is recommended that notes are kept of observations and the resultant comments be transferred to the evaluation forms later. The exercise should be when observations are made and afterward, the observations are judged, resulting in a more objective evaluation of performance.

After the exercise, the evaluators for each facility should meet to compare observations and judgements with the Lead Facility Controller presiding. This is where each of the enabling objectives should be scored. A full facility Evaluation Form should be filled out by the Lead Controller that contains all of the enabling objective grades. The following table contains the grading criteria for the enabling objectives:

Outstanding (10) - An enabling objective can be rated as OUTSTANDING if the objective was met satisfactorily while demonstrating exemplary performance through the use of unique procedures, equipment, training, or techniques that have not been dictated to the station by outside forces. The strength noted should have applicability to the other stations' EP programs. No problems were identified during the accomplishment of the objective.

Excellent (8) - An enabling objective can be rated as EXCELLENT if the objective was demonstrated satisfactorily but with a performance level that was above what would normally be expected.

Satisfactory (7) - An enabling objective can be rated as SATISFACTORY if the objective was demonstrated within acceptable performance at a level that would normally be expected.

Minor problems (6) - An enabling objective for which the facility demonstrated acceptable performance, but for which Minor Problems were encountered, none of which would have contributed to the failure of the objective under different circumstances.

Weak (3) - An enabling objective is WEAK if demonstration of the objective was minimally or marginally acceptable. Problems were noted that could have contributed to the failure of the objective under different circumstances, Corrective Actions are required to be included in the exercise evaluation.

Not Met (0) - An enabling objective can be rated as NOT MET if the demonstration was unacceptable under any circumstances. These involve serious problems which contributed to the inability to meet the performance criteria and require Corrective Actions included in the exercise evaluation.

Evaluation Objectives Selected for the 1995 Byron GSEP Exercise

Rev. 1, 08/14/95

Critical Objectives		" * " denotes a critical objective. Critical objectives are selected by facility for terminal objectives only.
Shaded Objectives not Selected for the 1995 Byron GSEP Exercise.		
1. FACILITY DIRECTION AND CONTROL		
1.a	Demonstrate the ability to staff an ERF. (CR, TSC, OSC, EOF, CEOF)	
1.a.1	Augment staff with personnel needed to assist with GSEP activities (communicators, etc.) within thirty (30) minutes of an Alert or higher classification.	(CR)
1.a.2	Establish minimum staffing within thirty (30) minutes of an Alert or higher classification during a daytime event and within sixty (60) minutes during an off-hours event without pre-staging.	(TSC)
1.a.3	Provide OSC Director and OSC Supervisor within thirty (30) minutes of an Alert or higher classification during a daytime event and within sixty (60) minutes during an off-hours event without pre-staging.	(OSC)
	[Shaded Objectives]	
1.a.6	Augment ERF staff beyond normal levels as needed to perform ERF functions.	(CR, TSC, OSC, EOF, CEOF)

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1.b	Demonstrate the ability to transfer Command and Control to and/or accept Command and Control from another Emergency Response Facility/area of responsibility. <p style="text-align: right;">(CR, TSC, EOF, CEOF)</p>	
	1.b.1	Recognize that minimum staffing exists in the facility/area of responsibility that is accepting Command and Control. (TSC, EOF, CEOF)
	1.b.2	Brief the minimum staff on the status of the event and the current proposed plan of action prior to accepting Command and Control. (TSC, EOF, CEOF)
	1.b.3	A turnover is made between the Emergency Directors/personnel involved. (CR, TSC, EOF, CEOF)
	1.b.4	Transfer Command and Control officially and announce the transfer to the ERFs involved and to offsite officials. (CR, TSC, EOF, CEOF)
	1.b.5	Transfer control of the Environs Teams. (TSC, EOF)

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1.c	Demonstrate the ability to direct and operate an ERF during an emergency event. (CR, TSC, OSC, EOF, CEOF)	
	1.c.1	Direct activities of personnel in their respective areas as specified in the GSEP and position-specific procedures. (CR, TSC, OSC, EOF, CEOF)
	1.c.2	Perform the non-delegable responsibilities of command and control to include: <ul style="list-style-type: none"> - Final decision to declare the emergency classification. - Final decision to notify and make Protective Action Recommendations to offsite authorities. - Authorization of personnel exposure beyond 10CFR20 limits under emergency conditions. - Issuance of thyroid blocking agents to ComEd emergency workers and onsite personnel. (CR, TSC, EOF, CEOF)
	1.c.3	Perform duties in accordance with current position-specific procedures. (CR, TSC, OSC, EOF, CEOF)
	1.c.4	Prepare for a shift change within the facility. Not Selected for the CR, OSC, CEOF (* TSC, *EOF)
	1.c.5	Maintain a record of GSEP related events. (CR, TSC, OSC, EOF, CEOF)
	1.c.6	Establish priorities for plant tasks. (CR, TSC)
	1.c.7	Maintain cognizance of priorities for plant tasks. (CR, TSC, EOF, CEOF)
1.d	Demonstrate the ability to interface with the NRC Site Team. (TSC, EOF)	
	1.d.1	Provide access for the NRC Site Team. (TSC, EOF)
	1.d.2	Provide an initial briefing to the NRC Site Team. (TSC, EOF)
	1.d.3	Introduce NRC Site Team to ComEd counterparts. (TSC, EOF)
	1.d.4	Provide the NRC Site Team with adequate and timely information pertaining to critical emergency response activities. (TSC, EOF)
	1.d.5	Provide answers to NRC Site Team questions as soon as practicable. (TSC, EOF)

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2. ASSESSMENTS, CLASSIFICATIONS AND PROTECTIVE ACTION RECOMMENDATIONS	
2.a	Demonstrate the ability to classify an event for conditions(*CR, *TSC, *EOF, *CEOF)
2.a.1	Determine conditions exceed an EAL Threshold Value within fifteen (15) minutes of reaching the threshold value for that EAL. (CR, TSC, EOF, CEOF)
2.a.2	Declare the highest classification corresponding to the appropriate EAL. (CR, TSC, EOF, CEOF)
2.a.3	Monitor EALs to see if conditions cause other EAL Threshold Values to be exceeded. (CR, TSC, EOF, CEOF)
2.a.4	Report if any EAL Threshold Values are exceeded to the facility with command and control. (CR, TSC, EOF, CEOF)
2.b	Demonstrate the ability to identify and recommend protective actions. (*CR, *TSC, *EOF, *CEOF)
2.b.1	Recommend appropriate Protective Action Recommendations (PARs) within fifteen (15) minutes of an emergency classification. (CR, TSC, EOF, CEOF)
2.b.2	Implement appropriate protective actions for ComEd emergency workers considering: <ul style="list-style-type: none"> - Current plant status - Current dose assessment and projections - Current meteorology and expected weather conditions (CR, TSC, EOF, CEOF)
2.c	Demonstrate the ability to analyze events from available information. (CR, TSC, EOF, CEOF)
2.c.1	Use instrumentation displays to determine plant status and recognize abnormal conditions. (CR, TSC, EOF, CEOF)
2.c.2	Develop strategies to bring the plant to a safe shutdown condition. (CR, TSC, EOF, CEOF)
2.c.3	Assess equipment or component failures and develop corrective actions. (CR, TSC, EOF, CEOF)
2.c.4	Estimate core damage per procedures. (TSC, EOF)
2.c.5	Identify actual and/or potential release paths. (CR, TSC, EOF, CEOF)

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3. NOTIFICATIONS		
3.a	Demonstrate the ability to make notifications of classified events to offsite officials.	
		(*CR, *TSC, *EOF, *CEOF)
	3.a.1	Notify the appropriate States and local organizations within fifteen (15) minutes of classifying an event or a change of any condition indicated on a NARS form via NARS or a backup means if NARS fails. (CR, TSC, EOF, CEOF)
	3.a.2	Complete NARS forms correctly. (CR, TSC, EOF, CEOF)
	3.a.3	Notify the NRC as soon as possible after the State notifications but not later than one (1) hour after classifying the event. (CR, TSC, EOF, CEOF)
	3.a.4	Complete Event Notification Worksheets correctly if an Event Notification System (ENS) open line is not being maintained. (CR, TSC, EOF, CEOF)
	3.a.5	Verify ANI and INPO notifications have been made. (EOF)
3.b	Demonstrate the ability to provide information updates to offsite officials.	
		(CR, TSC, EOF, CEOF)
	3.b.1	Provide information updates to the States at least every sixty (60) minutes using the State Agency Update Checklist (SAUC). (CR, TSC, EOF, CEOF)
	3.b.2	Complete SAUC forms correctly. (CR, TSC, EOF, CEOF)
	3.b.3	Report significant changes in conditions to the NRC as soon as possible if an Event Notification System (ENS) open line is being maintained, and within thirty (30) minutes through use of the Event Notification Worksheet if the open line is not maintained. (CR, TSC, EOF, CEOF)

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4. COMMUNICATIONS AND INFORMATION PROCESSING	
4.a	Demonstrate the ability to communicate with offsite agencies. (CR, TSC, EOF, CEOF)
4.a.1	Establish and maintain an Event Notification System (ENS) open line with the NRC upon request. (CR, TSC, EOF, CEOF)
4.a.2	Establish and maintain a Health Physics Network (HPN) open line with the NRC upon request. (TSC, EOF, CEOF)
4.a.3	Establish communications and exchange information with offsite agencies performing environmental monitoring. Not Selected for the TSC (EOF, CEOF)
4.a.4	Establish communications and exchange information with State and County EOC(s). (EOF, CEOF)
4.a.5	Contact vendor support organizations that can provide emergency assistance. (TSC, EOF, CEOF)
4.a.6	Activate and/or verify operation of the Emergency Response Data System (ERDS). (CR, TSC, EOF, CEOF)
4.a.7	Provide answers to offsite agency information requests. (CR, TSC, EOF, CEOF)
4.b	Demonstrate the ability to communicate with other Emergency Response Facilities (ERF) and ComEd support groups. (CR, TSC, OSC, EOF, CEOF, JPIC)
4.b.1	Exchange data and technical information between ERFs. (CR, TSC, OSC, EOF, CEOF)
4.b.2	Establish counter-part communications with other ERFs. (CR, OSC, TSC, EOF, CEOF, JPIC (remote only))
4.b.3	Establish communications with ComEd support groups/executives. (TSC, EOF, CEOF, JPIC)
4.b.4	Provide/obtain technical information to/for the JPIC for use in media releases. (EOF, JPIC)

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4.c	Demonstrate the ability to communicate within an ERF. (CR, TSC, OSC, EOF, CEOF, JPIC)	
	4.c.1	Provide briefings and updates concerning plant status, event classification and activities in progress at least every thirty (30) minutes for the EOF and CEOF and per station procedures for the CR, TSC and OSC. (CR, TSC, OSC, EOF, CEOF)
	4.c.2	Share information within the ERF. (CR, TSC, OSC, EOF, CEOF, JPIC)
	4.c.3	Use Point History to provide plant technical information. (TSC, EOF, CEOF)
	4.c.4	Update status boards at least every thirty (30) minutes with current and accurate information. (TSC, OSC, EOF, CEOF)
	4.c.5	Maintain Significant Events Log. (TSC, EOF)
5. RADIATION PROTECTION		
5.a	Demonstrate the ability to provide radiation protection for onsite personnel. (CR, TSC, OSC, EOF, CEOF)	
	5.a.1	Obtain and/or document radiological survey information. (TSC, OSC) Not Selected for the CR
	5.a.2	Provide or ensure radiological protection. (TSC, OSC) Not Selected for the CR
	5.a.3	Issue and control dosimetry. (OSC)
	5.a.4	Provide and ensure radiation protection for visitors. Not Selected for the CR
	5.a.5	Determine need for and administer thyroid blocking agent. (TSC, OSC, EOF, CEOF)
5.b	Demonstrate the ability to provide control of radiation exposure. (TSC, OSC, EOF, CEOF) Not Selected for the CR	
	5.b.1	Evaluate onsite radiological information. (TSC, OSC, EOF, CEOF) Not Selected for the CR
	5.b.2	Monitor, track and document radiation exposure to in-plant personnel. (OSC)
	5.b.3	Evaluate personnel exposure against administrative and 10CFR20 exposure limits. (TSC, OSC, EOF, CEOF)
	5.b.4	Evaluate projected exposures and implement ALARA practices to reduce exposure to in-plant personnel. (TSC, OSC) Not Selected for the CR

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5.c	Demonstrate the ability to establish and monitor effectiveness of ERF radiological controls. Not Selected for the EOF (Zion only) (TSC, OSC)	
	5.c.1	Perform habitability surveys. Not Selected for the EOF (Zion only) (TSC, OSC)
	5.c.2	Establish radiological access control. Not Selected for the EOF (Zion only) (TSC, OSC)
6. ENVIRONS ASSESSMENT AND MONITORING (E = Environs Drill Objective)		
6.a	Demonstrate the ability to determine the magnitude of the source term of a release. (TSC, EOF, CEOF)	
YOP →		6.a.1 Determine the magnitude of the source term of a release using the following methods:
		6.a.2 Determine the magnitude of the source term of a release using the following methods:
	6.a.3	Calculate release rates for unmonitored releases. (TSC, EOF, CEOF)
6.b	Demonstrate the ability to perform offsite dose projections. (TSC, EOF, CEOF)	
		6.b.1 Determine dose projections for unmonitored releases through the use of the following methods:
		6.b.2 Determine or confirm Event Classification using environs sample data and: - computer programs or - manual calculations (TSC, EOF, CEOF)
		6.b.3 Determine or confirm Protective Action Recommendations using environs sample data and: - computer programs or - manual calculations (TSC, EOF, CEOF)
		6.b.4 Determine dose projections for unmonitored releases through the use of environs sample data and: - computer programs or - manual calculations (TSC, EOF, CEOF)

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6.c	Demonstrate the ability to obtain and use meteorological data(CR, TSC, EOF,CEOF)	
	6.c.1	Obtain and assess meteorological data and forecasts via: <ul style="list-style-type: none"> - Demand Poll - Contractor Services - Point History - Plant Instruments - A-Model - other (e.g., radio station) Not Selected for the CR (TSC, EOF, CEOF)
	6.c.2	Determine stability class from: <ul style="list-style-type: none"> - Demand Poll - Delta T (°C/100m)/Sigma Theta - Point History - Contractor Services - other (TSC, EOF, CEOF)
	6.c.3	Determine affected sectors based on meteorological and dose modeling data. Not Selected for the CR (TSC, EOF, CEOF)

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6.d	Demonstrate the ability to direct Environs Team activities. (E) (TSC, EOF)	
	6.d.1	Initially assemble, brief and dispatch the Environs Teams within forty-five (45) minutes of determining need for Environs Teams Or from declaration of Site Emergency. (E) (TSC)
	6.d.2	Use the GSEP radio or backup means to communicate with Environs Teams. (Including using call letters every 15 minutes per FCC requirements) (E) (TSC, EOF)
	6.d.3	Direct Environs Team movement through use of: - ComEd and/or IDNS Maps - input from Safeguards Specialist or Security Director - other information (i.e., County EOCs or LLEAs) (E) (TSC, EOF)
	6.d.4	Formulate sampling strategy. (E) (TSC, EOF)
<p>6.d.5: The following are the minimum requirements for the Environs Teams:</p>		
	6.d.6	Keep Environs Teams aware of critical information such as: - release status - plant status - command and control status - findings from the other Env. Team(s) - met data - PARS - event classification (E) (TSC, EOF)
	6.d.7	Monitor and record personnel exposure to the Environs Teams. (E) (TSC, EOF)
	6.d.8	Obtain exposure approvals for the Environs Teams. (E) (TSC, EOF)
	6.d.9	Assess the radiological protection needs of the Environs Teams, including equipment and thyroid blocking agent. (E) (TSC, EOF)

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6.e	Demonstrate the ability of the Environs Teams to collect environs samples and perform environmental monitoring.		(E) (ET)
6.e.1	Conduct an inventory of equipment per station procedures.	(E) (ET)	
6.e.2	Obtain dose rate measurements and collect environmental samples in accordance with approved procedures for: <ul style="list-style-type: none"> - water samples - soil samples - vegetation samples - snow samples 	(E) (ET)	
6.e.3	Collect and evaluate air samples for: <ul style="list-style-type: none"> - iodine activity - particulate activity 	(E) (ET)	
6.e.4	[REDACTED]	[REDACTED]	
6.e.5	Use the ComEd and/or IDNS maps.	(E) (ET)	
6.e.6	Use the GSEP radio or backup means to communicate with ERFs.	(E) (ET)	
6.e.7	Maintain a record of GSEP related events.	(E) (ET)	
6.e.8	Simulate the replacement of environmental TLDs.	(E) (ET)	
6.e.9	Package, label and store all required environs samples for the analysis lab.	(E) (ET)	
6.e.10	Demonstrate use of monitoring equipment including: <ul style="list-style-type: none"> - personal dosimetry - radiation monitoring instrumentation - environs sampling equipment 	(E) (ET)	
6.e.11	Perform Environs Team duties in accordance with approved procedures.	(ET)	
6.e.12	Demonstrate health physics, ALARA and contamination control practices.	(E) (ET)	

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6.1	Demonstrate the ability to perform as an Environs Group. (E) (TSC, EOF)	
	6.1.1	Execute the responsibilities of Environs Director/Staff in accordance with approved procedures. (TSC, EOF)
	6.1.2	Maintain a record of GSEP related events. (E) (TSC, EOF)
	6.1.3	Provide environs data to the ODCS Specialist. (TSC, EOF)
7. IN-PLANT TEAM PERFORMANCE AND CONTROL		
7.a	Demonstrate the ability to dispatch and control In-Plant Teams (CR, TSC, *OSC)	
	7.a.1	Assemble In-Plant Teams. (OSC)
	7.a.2	Brief In-Plant Teams on their tasks and radiological conditions/hazards prior to dispatching. Not Selected for the CR (OSC)
	7.a.3	Dispatch In-Plant Teams. (CR, OSC)
	7.a.4	Prioritize personnel resources for In-Plant Teams. (CR, OSC)
	7.a.5	Ensure Environs Teams are dispatched from the OSC without delay. (OSC)
	7.a.6	Debrief In-Plant Teams upon return to the OSC. (OSC)
	7.a.7	Keep In-Plant Teams aware of critical information such as: - radiological status - plant status - command and control status - event classification (CR, OSC)
	7.a.8	Monitor activities of In-Plant Team such as: - problems - dose rates - job progress (CR, OSC)

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7.b	Demonstrate the ability of In-Plant Teams to perform their assigned functions(OSC)	
	7.b.1	Perform assigned task(s). (OSC)
	7.b.2	Locate and demonstrate use of personnel protection equipment. (OSC)
	7.b.3	Demonstrate use of monitoring equipment to include: - personal dosimetry - radiation monitoring instrumentation (OSC)
	7.b.4	Monitor personal exposure to radiation and keep within pre-established limits, administrative limits and 10CFR20 limits. (OSC)
	7.b.5	Maintain ALARA practices to reduce overall cumulative team radiation exposure. (OSC)
	7.b.6	Communicate with ERFs while in the field. (OSC)
	7.b.7	Locate, transport and demonstrate use of emergency equipment and supplies. (OSC)
	7.b.8	Locate or identify need for spare parts. (OSC)
	7.b.9	Perform and document radiation surveys. (OSC)
8. SECURITY		
8.a	Demonstrate the ability of the Security Force, Security Director and Safeguards Specialist to implement the Security Plan during an emergency other than a security event driven scenario. (CR, TSC, EOF)	
	8.a.1	Respond to the emergency in accordance with the Security Plan and procedures. (CR, TSC, EOF)
	8.a.2	Coordinate implementation of the Security Plan with the GSEP. (TSC, EOF)
	8.a.3	Coordinate emergency response action with offsite agencies. (TSC, EOF)
8.b	Demonstrate the ability to establish access control at the ERFs. (CR, TSC, OSC, EOF, JPIC)	
	8.b.1	Establish access control. (TSC, OSC, EOF, JPIC) Not Selected for the CR
	8.b.2	Ensure security practices do not impede emergency response. (TSC, OSC, EOF) Not Selected for the CR

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8.c	Demonstrate the ability to assemble, account for and evacuate onsite personnel. (CR, *TSC, EOF)	
	8.c.3	Initiate search and rescue operations for missing personnel. (TSC)
	8.c.4	Identify essential personnel within thirty (30) minutes after completion of Site Accountability. (TSC)
	8.c.5	Initiate Site Evacuation when deemed appropriate and at least at a Site Emergency. (TSC)
	8.c.6	Plan and explain travel route for Site Evacuation, Environs Teams and shift relief. (TSC, EOF)
	8.c.7	Arrange for offsite traffic control prior to initiating Site Evacuation. (TSC, EOF)

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10. EMERGENCY NEWS CENTER (ENC)/JOINT PUBLIC INFORMATION CENTER (JPIC)		
10.a	Demonstrate the ability to exercise facility direction and control in the JPIC. (JPIC)	
	10.a.1	Open the JPIC to the media within thirty (30) minutes of arrival of JPIC Coordinator or JPIC Staff. (JPIC)
	10.a.2	Direct activities of personnel in the ENC and JPIC as specified in the GSEP and position-specific procedures. (JPIC)
	10.a.3	Perform duties as specified in the GSEP and position-specific procedures. (JPIC)
	10.a.4	Conduct turnover of news center duties from Communications Services. (JPIC)
	10.a.5	Establish rumor control activities. (JPIC)
	10.a.6	Coordinate/exchange news information among ComEd and offsite spokespersons. (JPIC)
	10.a.7	Monitor the media to detect and correct errors. (JPIC)
	10.a.8	Maintain a ComEd representative in the JPIC at all times. (JPIC)
	10.a.9	Maintain a chronological event description log. (JPIC)
	10.a.10	Maintain a record of GSEP activities. (JPIC)
10.b	Demonstrate the ability to provide media briefings. (JPIC)	
	10.b.1	Ensure technical accuracy of the briefings. (JPIC)
	10.b.2	Present briefings on schedule and after a significant event while in a Site or General Emergency. (JPIC)
	10.b.3	Prepare information at a level that the public can understand. (JPIC)
	10.b.4	Use visual aids as necessary to support media briefings. (JPIC)
	10.b.5	Respond to media requests for information. (JPIC)
10.c	Demonstrate the ability to provide press releases. (JPIC)	
	10.c.1	Ensure technical accuracy of the press releases. (JPIC)
	10.c.2	Deliver press releases after a significant event while in a Site or General Emergency. (JPIC)
	10.c.3	Prepare information at a level that the public can understand. (JPIC)
	10.c.4	Obtain PIM approval for press releases. (JPIC)

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

EXERCISE CONTROL MESSAGES

- * INITIAL CONDITIONS FOR COMED PARTICIPANTS
- * EXERCISE CONTROL MESSAGES
- * A-MODEL MESSAGES AND REPORTS
- * EXERCISE CONTINGENCY MESSAGES
- * EXERCISE TERMINATION MESSAGES

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CONTROLLER GUIDANCE :
TSC

1. The TSC Lead Controller has responsibility to make the initial exercise notification to the NRC Operations Center.
2. All procedures in force should be used by Participants.
3. Do not direct Participants to complete forms or documentation. All documents which are prepared shall be marked **"FOR GSEP EXERCISE USE ONLY"**.
4. Appropriate notifications to **offsite** agencies shall actually be made to the agency (when participating) or to those numbers provided (when simulated). Controllers shall not permit exercise notification to be made non-participating offsite agencies.
5. TSC participants are expected to react to information conveyed from the Control Room, or displayed on appropriate data screens. Information which duplicates information sources (computer print outs [A-Mode!], SPDS and computer displays, etc.) that are not available in the TSC may be posted at the applicable times, and in the appropriate locations, for participants to read.
6. Participants and Controllers should follow station-specific procedures for TSC accountability **when a station assembly** is conducted as part of the exercise.

For those exercises in which a pre-determined Point History is used (GSEP.EX), the TSC Lead Controller has responsibility for initializing the exercise database.
8. The TSC Lead Controller has responsibility for starting ERDS when contacted by Control Room Controllers.
9. If evacuation of TSC personnel becomes appropriate during the exercise, participants should be directed to formulate an appropriate evacuation plan. **Unless directed otherwise by the Lead Facility Controller, an actual evacuation of the TSC should not be performed.**

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CONTROLLER GUIDANCE :
CEOF, EOF, JPIC

1. All procedures in force should be used by Participants.
2. Do not direct Participants to complete forms or documentation. All documents which are prepared shall be marked "**FOR GSEP EXERCISE USE ONLY**".
3. Appropriate notifications to **offsite** agencies shall actually be made to the agency (when participating) or to those response cell numbers provided (when simulated). Controllers shall not permit exercise notification to be made non-participating offsite agencies.
4. Participants are expected to react to information conveyed from the Control Room, or displayed on appropriate data screens. Information which duplicates information sources (computer print outs [A-Model], SPDS and computer displays, etc.) that are not available in a facility may be posted at the applicable times, and in the appropriate locations, for participants to read.
5. If evacuation of facility personnel becomes appropriate during the exercise, participants should be directed to formulate an appropriate evacuation plan. **Unless directed otherwise by the Lead Facility Controller, the actual evacuation of any emergency response facility should not be performed.**
6. The EOF Lead Controller has responsibility for making the end of exercise notification to the NRC Operations Center.

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CM-1

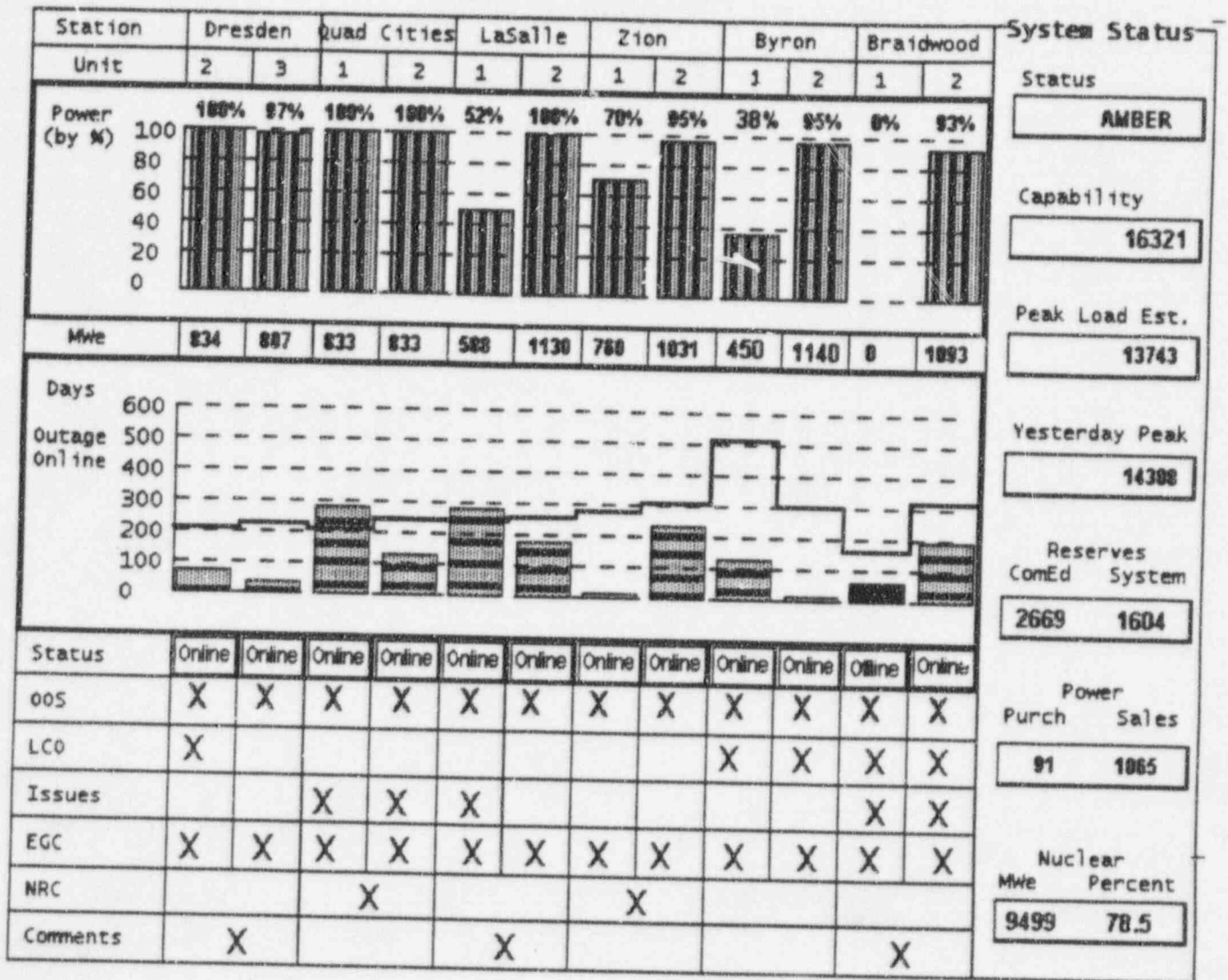
TIME: 0700 - 0730 (T-030 - T+000)
ISSUED TO: NUCLEAR DUTY OFFICER
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through Wisconsin and the northern Illinois area yesterday and last night, leaving many area roads slippery and roads in some areas ice-covered and extremely hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan. The storm generally affected the areas around Zion, Byron, and Braidwood.
2. Scattered power outages have been reported which are affecting about twelve thousand persons, with the most severe interruptions being in the areas of Freeport, DeKalb/ Sycamore, Marengo, and Elgin (all in Illinois).
3. Overnight you have been informed of the following events occurring at Byron Station :
 - a. An overnight power drop from 95% to 38% to support a Unit 1 containment entry to repair a known 2 gpm leaking valve.
 - b. The containment team entered at 0500 and encountered unexpectedly high radiation levels at 0530 and exited without completing valve repairs.
 - c. The outer containment personnel hatch was found to be damaged when the team exited containment. This is an LCO condition.
 - d. A Failed Fuel Monitor alarm occurred at 0530.
 - e. A chemistry sample was collected at about 0630 which had results of 2.1 $\mu\text{Ci/g}$ of Dose Equivalent Iodine-131. A confirmatory chemistry sample is in progress. The chemistry results puts Unit 1 in an LCO for coolant activity.
4. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph. Schools have been cancelled for the day in several central Illinois counties, including Ogle, Winnebago, and Boone.
5. Attached is the ComEd System Status Report for November 15, 1995.

Byron 1995 GSEP Exercise ; November 15, 1995



ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

THIS IS AN EXERCISE

Dresden

Updated: Nov 15 1995 7:04AM

	Unit : 2	Status : Online	Unit : 3	Status: Online
OOS:	TIPs ; 2B SDC ; 2/3 SBT		OOS:	TIPS ; 3A Instrument Air Compressor ; ECCS Jockey Pump
LCO's:	Service Water Rad Monitor ; 2/3A SBT (3 of 7)		LCO's:	None.
Other:	Increase in Drywell air activity - investigating		Other:	None.
EGC:	Off EGC		EGC:	Off EGC
NRC:				
Comment:	Duty Officer : Shift Manager ; GSEP TSC tabletops today			

Quad-Cities
7:08AM

Updated: Nov 15 1995

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1B2 & 1B3 FW Htr ; normal LCV in manual ; 1601-33C Vacuum Breaker indication		OOS:	None
LCO's:	None		LCO's:	None
Other:	Weekend Load Drop - Nov 18 Turbine Weekly		Other:	None
EGC:	Inop.		EGC:	Inop.
NRC:	ENC call made for fire in MCC 28-1 cubicle yesterday due to potential public interest. Fire was extinguished by station fire brigade			
Comment:	Duty Officer - A. Misak			

ComEd Nuclear Operations Daily Plant Status

NOV 15 1995

8:01AM

THIS IS AN EXERCISE

LaSalle

Updated: Nov 15 1995 7:24AM

Unit : 1		Status : Online	Unit : 2		Status: Online
OOS:	1B VT Exh Fan ; TIP Ball Valves; 1A CW Pump; 2nd stage reheat; 1A TDRFP; B Amertap unavail.		OOS:	2A RT Pump; D HD Pump; 2C CW Pump	
LCO's:	None		LCO's:	None	
Other:	1B RR pp ongoing, LOS-DG-M1 LOS-SC-Q1 SAC concerns ; unit in coastdown to L1R07 on 1/2-7/96		Other:	2B TDRFP uncoupled test; PORC today on S/U issues	
EGC:	Inop.		EGC:	Inop.	
NRC:					
Comment:	Limited U1 load following capabilities				

Zion

Updated: Nov 15 1995 7:06AM

Unit : 1		Status : Online	Unit : 2		Status: Online
OOS:	1A BA Transfer Pump; 1C CW Pump; 1A C/CB Pp		OOS:	2C SW Pump; 2C CW Pump	
LCO's:	None		LCO's:	None	
Other:	PT-3C Thermal Overload Issue		Other:	PT-3C Thermal Overload Issue, PT-11 - 2B D/G ; PT-5-2 Rx Prot	
EGC:	Off by BPO		EGC:	Off EGC	
JRC:	NRC Radiation Protection Inspection 11/13 to 11/22				
Comment:					

ComEd Nuclear Operations Daily Plant Status

8:01AM

NOV 15 1995

Byron

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:49AM

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1AF017A, 1A CV Bed, 0B Sx Basin CW M/U		OOS:	2C CD/CB Pump; Startup FW pump;
LCO's:	Cnmt Air Lock, RCS Activity, Secondary Sources		LCO's:	2A SG PORV
Other:	At 38% power for cnmt entry, 2 gpm leak, Failed Fuel Alarm		Other:	2B D/G monthly surv. Letdown reduced to 75 gpm
EGC:	Off EGC		EGC:	Off EGC
NRC:				
Comment:	Preliminary U1 chemisty sample at 2.1 µCi/g			

Braidwood

Updated: Nov 15 1995 7:47AM

	Unit : 1	Status : Refuel	Unit : 2	Status: Online
OOS:	U0 SAC/0B VC; 0C CW makeup		OOS:	2A CD/CB, 2C HD
LCO's:	0B VC, 1B H2 monitor		LCO's:	0B VC, 2FW43A
Other:	0B VC, 1B D/G run; 1B Cnmt chiller; VI chiller, TSC chiller, U0 SAC & air Dryer		Other:	2A CD/CB pump, PR N44, slaves, 2C HD pump alignment
Outage	A1R05	RTS: 11/22/- 95		
C.P.	Prep for start-up testing			
Cause:	Scheduled			
EGC:	Off		EGC:	Off EGC
NRC:				
Comment:	1B HD pump work to start 11/29 ; 2C CD/CB work after 2A CD/CB is RTS ; injured man sent to hospital @ 0707 (not contaminated)			

**Byron 1995 GSEI² Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-2**

TIME: 0700 - 0730 (T-030 - T+000)
ISSUED TO: CONTROL ROOM
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through the Ogle County, Illinois, area yesterday and last night, leaving most area roads ice-covered and hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.
3. Attached is the 0700 Control Room Shift Turnover Package.

Shift Engineer Turnover

UNIT 1	
Mode: ONE	%Pwr: 38
	MW: 450
IN PROGRESS	
RAMPED TO 38% FOR CNMT ENTRY TO REPAIR 1CV222 CNMT ENTRY @ 0500 TO REPAIR 1CV222 0530-RPT EXITED CNMT DUE TO ELEVATED RADS >5R. RECIEVED FAILED FUEL MONITOR ALARM, CHEMIST NOTIFIED TO SAMPLE RCS 0535- OUTER CNMT PERSONNEL HATCH BROKEN 0630- RCS CHEMISTRY SAMPLE = 2.1MICROCI/GM INNER FUEL HANDLING ROOLUP DOOR OOS-OPEN	
LCOAR	SURVEILLANCE
SECONDARY SOURCES CNMT AIR LOCKS RCS ACTIVITY	LEAKRATE
MAINTENANCE	*OOS / RTS / T/L
00G064-DEL 1CV222 1B D/G JACKET H2O SW SETPT? ON DEL	1AF 017A-DEL 1A CV MIXED BED OB SX BASIN CW M/U 1G STM DMP OC CW M/U PP DISCH
PENDING	
<h2>THIS IS AN EXERCISE</h2>	
CHECKING MPT N2 1X/4HR UNLESS RATE INC	
*ITEMS TO DISCUSS WITH UNIT OP ENGINEER / SOS	
RCS ACTIVITY	

UNIT 2	
Mode: ONE	%Pwr: 95
	MW: 1140
IN PROGRESS	
STEADY STATE REDUCED LETDOWN TO 75 GPM	
LCOAR	SURVEILLANCE
25D002C	
2A S13 PORV	
MAINTENANCE	*OOS / RTS / T/L
2713 HTR MAG determed OK/S PENDING	
PENDING	
<h2>THIS IS AN EXERCISE</h2>	
*ITEMS TO DISCUSS WITH UNIT OP ENGINEER / SOS	

Shift Engineer Turnover

ADMINISTRATIVE

Temporary Procedures	X	SE Notes	X	SCRE Turnover-Admin	X	* General Access Keys	X
Temporary Alterations	2	Special Operating Orders	X	SS Turnover-Admin	X	* Temp Lifts	X
	X	Surveillance Schedule	X	RWS Turnover-Admin	X	Degraded Equipment Log	X
SE is the Security Admin.	X	SE Logbook	X	* New Fuel Vault Key	X		

2RYB000A, 0C CW M/U PP MAN. DISCH VLV

STATION DUTY OFFICER	DUTY STATION MANAGER
RASMUSSEN	B. KOUBA

TURNOVER ITEMS	NORMAL YES/NO	COMMENTS
NSO Shiftly and Daily Surv.	NO/1	0PR01J
Reporting/PIF/NRC/Corporate	NO/2	2RFO08,0PR010J,2D S/G FLOW MISMATCH ALARM
GSEP Conditions	YES	
BPO/Division LD/System	YES	
Radiation Release	YES	
Radiation Precautions	YES	
Daily Orders	YES	
*Locked Equipment (Note 1)	NO/8	8) 1A CV PP MINIFLOW CV 8479A

SECURITY DOORS # 170 DEACTIVATED, # 445 ROPED OFF TO ELIMINATE DOOR AJAR INCIDENTS.

Note 1: This review shall include a check against the required operable safety train. Toward this effort, the specific EPN for applicable safety related locked equipment should be recorded on the turnover form.

MISCELLANEOUS

ICE STORM IN AREA ALL NIGHT, ROADS HAZARDOUS
debris in river

THIS IS AN EXERCISE

Post Review: SS, SCRE, RWS, Unit NSO, CD NSO, Turnovers, Logs, MCR Tour, and Daily Orders

TIME	DATE	SHIFT	OFF-GOING	ON-COMING
0630	9/1/95	93 to 92		

(Final)

Station Control Room Engineer Turnover

UNIT 1	
Mode: ONE	%Pwr:38
Cs:547 ppm	MW:440
IN PROGRESS	
RAMPED TO 38% FOR CNMT ENTRY TO REPAIR 1CV222 CNMT ENTRY @ 0500 TO REPAIR 1CV222 RECIEVED FAILED FUEL MONITOR ALARM , CHEMISTRY NOTIFIED TO SAMPLE RCS 0535- OUTER CNMT PERSONNEL HATCH BROKEN LCOAR ENTERED 0630- RCS CHEMISTRY SAMPLE RESULTS= 2.1 MICROCURIES/GRAM OAD repair of Power System Stabilizer -Refer to SPOG 1-3-F-1 - hold for parts (1 - 7 days)	
LCOAR	SURVEILLANCE
VQ SECONDARY SOURCES CNMT AIR LOCKS RCS ACTIVITY	RCS Leakrate
MAINTENANCE	OOS / T/L / RTS
00GO64-DEL 1CV222 1B D/G JACKET WTR SW SETPT7-DEL	1AF017A 0CW100B 1G STM DUMP 0C CW M/U PP DISCH
MAJOR PROC.	
	RTS
	T/L
PENDING	
RCFC BOS=>FRIDAY DAYS FH BLDG CRANE OOS=> FRIDAY DAYS Containment Release Package AVAILABLE 1D045D=>REPACK 9/4 FEED AND BLEED GEN=> Only when high H2 temp in - DAY SHIFT 1C CD Pp backwash VLV 1CD038C REPAIR=>NEXT WEEK ** DIESEL SAC hooked up UNIT 1 , tested OK	

UNIT 2	
Mode: ONE	%Pwr:95
Cs:95 ppm	MW: 1135
IN PROGRESS	
STEADY STATE COMPUTER INVERTER BROKE=>ON DIRTY POWER	
LCOAR	SURVEILLANCE
VQ 2SD002C 2MS018A	
MAINTENANCE	OOS / T/L / RTS
2MS018A 27B HTR MAGNETROL	OOS Computer Inv 2A S/G PORV
MAJOR PROC.	
	RTS
	T/L
PENDING	
Computer inverter OOS=> testing AGAIN	
<h2>THIS IS AN EXERCISE</h2>	
CST LINE TO M/U HEADER HIGH POINT VENT REPAIR - still planning repair	

Station Control Room Engineer Turnover

ADMINISTRATIVE		COMMENTS
Temporary Procedures	X	2) MS/FW PEN COOLING - mod PENDING 12) 0VC044Y, 2PR028J, and U2 Delta-T Defeat Switch 13) FOCUS DUE 1300
Temporary Alterations	2	
Ion Cards	X	
Unit 0 Logbook	X	
Unit 1 Logbook	X	
Unit 2 Logbook	X	
Train Inop. Status Board	X	
Degraded Equipment log	X	
Aux Electric Room	X	
Daily Orders	X	
Special Operating Orders	X	
*PIFs	12	
AR FOCUS Report Review	13	

RECORDER ON U2 VOLTAGE REGULATOR

TURNOVER ITEMS		NORMAL YES/NO	COMMENTS
NSO Shiftly and Daily Surv.	YES		
SSPS Channels/Bistables	YES		
SYS - Safeguards	NO/3		3) 1AF017A,, 2MS018A HAD INTERNAL LEAKAGE
SYS - Primary	NO/4		4) 2A CV MIXED BED DP HIGH , 125 PSIG DP LIMIT
SYS - Balance of Plant	NO/5		5) CW M/U TO OB ISOLATED, 1B RCFC VIBS, 1SD045D STM LEAK LOWER TO COOLER WS ISOLATED
Nuclear Instrumentation	YES		7) 2LI-PC006 MONITOR (ENTER LCOAR IF BECOMES INOPERABLE)
MCB Instrumentation	NO/7		1LI-PC002 & 3 (3" DEVIATION) ICONIC SPOKE TOGGLES IN/OUT
MCB Controllers	YES		9) 1E & 1W MPT N2 LEAK MONITORING
Electrical Distribution - AC	NO/9		
Electrical Distribution - DC	YES		
Division LD/System Protection	YES		
Slowdown (CW/SD)	NO/12		12) RSH CO2
Alarms (MCB)	NO/13		13) CW B/D TARGET 13,000 GPM,
Chemistry	NO/14		14) U-2 CMPTR INVERTER TROUBLE, U1 pen. cooling, 2MS018D, power stabilizer trip
Radiation Precautions	YES		15) U-1 RCS ACTIVITY

- MIS to swap monitors NEXT WEEK

THIS IS AN EXERCISE

REMIND CREWS TO KEEP UP WITH SE NOTES

MISCELLANEOUS

UPDATE 0BOS LIC-1

SCRE SCHEDULE CHANGES FOR NOV AFFECTING COLTMAN, KARR, SMITH

INNER FH BLDG ROLLUP DOOR OOS FOR MM'S

LOTS OF DEBRIS IN THE RIVER

Post Review: MCR Tour, Unit NSO, CD NSO Turnovers, Logs, Daily Orders

TIME	DATE	SHIFT
0630	9/1/95	93 to 92

OFF-GOING	ON-COMING
	SCRE
	ADMIN SCRE
	STA

(Final)

FILE LOCATION: 1.02.0167

RADWASTE SUPERVISOR TURNOVER

TANK LEVELS		0A	0B	0C	
SRST		68%			
RELEASE TANKS		89%			09psig
WX MONITOR	WX	6%	90%		
AUX. BLDG. EQUIPMENT	WE	3%	7%		
TURBINE FLOOR	TF	23%	19%		
TURBINE EQUIPMENT	TE	25%	20%		
LAUNDRY	WY	7%	5%	12%	
CHEM/REGEN WASTE	WZ	29%	12%	9%	
AUX. BLDG. FLOOR	WF	13%	56%		
BLOWDOWN MONITOR	SD	11%	20%	0%	
HUT		36%	85%		
AB MONITOR		10%	9%		2.25psig

DEMINS STATUS	0A	0B	0C	0D
CONDENSATE POLISHERS	STBY	STBY	STBY	STBY
RADWASTE DEMINS	STBY	ROUGH	OOS	
BLOWDOWN DEMINS	U-1	U-1	U-2	U-2
MAKEUP DEMINS	STBY	STBY		

RELEASE IN PROGRESS					
LIQUID					
01T			26T		
GASEOUS					
0A	0B	0C	0D	0E	0F

S/G BLOWDOWN FLOW	A	B	C	D
UNIT 1 UPPER	30 gpm	30 gpm	30 gpm	30 gpm
UNIT 1 LOWER	40 gpm	40 gpm	40 gpm	0 gpm
UNIT 2 UPPER	0 gpm	0 gpm	0 gpm	0 gpm
UNIT 2 LOWER	70 gpm	70 gpm	70 gpm	70 gpm

FLOW	U-1	U-2
CP	0 gpm	0 gpm
SD	330 gpm	310 gpm

GDT'S	0A	0B	0C	0D	0E	0F
STORAGE DATE						
PRESSURE	6psig	6psig	4psig	3psig	5psig	66psig
STATUS	STANDBY	STANDBY	STANDBY	STANDBY	STANDBY	SERVICE
COMPRESSORS	OFF	OFF				
VENT HEADER PRESSURE	2.3psig					

COMMENTS

OOS HUNG ON CP CAUSTIC TANK AND PUMPS.

WROTE AR # 950047166 ON 0WX02FA FOR WHEN IT GOES OUT ON HI DP. PRESENTLY AT 15 #.

1SD002D OOS- 1D S/G LOWER ISOL VLV.- FOR REPAIR OF FLANGE LEAK ON FLOW TRANSMITTER

AR# 950047413 WRITTEN 0OD004D- PACKING GLAND NUT MISSING

AR # 950047218 TO RECOAT TANK CP ACID TANK, DO NOT FILL UNTIL RECOATING IS DONE

HUNG OOS ON #1 WETWELL BLOWER- CKT.#7 ON OSTO1J- PER BAP 3000-7 ATTACHMENT B- #1 WETWELL IS A NON-PERMIT CONFINED SPACE.

OC SD MON TK IS OOS-- MM'S DID NOT REMOVE ACTUATORS ON 0WX058C&D- PER R PETERSON- WILL TURNOVER TO DAYS OR DO FIRST SHIFT WEDNESDAY.

0D CP FLOW IND. INDICATING FLOW WHEN ISOLATED, AR #950047216 TOTALIZER COUNTING UP ALSO.

PE NDING WORK: - WE SUMPS TO BE CLEANED NEXT WEEK STARTING ON TUE
 - 2B TENDON SUMP SELECTED FOR LEAD AS PART OF PMV TESTING

0A MUDS IN STBY WITH 160K
 0B MUDS IN STBY WITH 234K

THIS IS AN EXERCISE

LCOAR

...R10J IS IN LCOAR DUE TO SPIKING
 1SD002D IN LCOAR

THIS IS AN EXERCISE

FP COMMENTS

NPDES COMMENTS

ST ON RECIRC ---4.5FT

TR ON LINE - OA TK @ 6%, OB TK @ 90%

ADDITIONAL COMMENTS

CP ROOM CLEANING WAS DONE SATURDAY. ALL HOSES AND PUMPS WERE PICKED UP. MOST OF THE BIG HOSE WAS MOVED TO THE C-VAN SOUTH OF THE CP ROOM (SECOND FROM WEST). SANDPIPER, HORSE TROUGH AND OTHER MISC. SUPPLIES WERE MOVED OUT THERE ALSO. CHECK IT OUT WHEN YOU GET TIME. WW ASKED THAT WE GET THE DOOR LABELED, AND TRY NOT TO LET IT TURN INTO A 'RAT-HOLE'.

CHEMISTRY WILL TAKE WX DEMIN SAMPLES ON DAY SHIFTS WHILE COND. INPUT IS SO LARGE. ONCE WE STABILIZE, THEY WILL SAMPLE ONE ONE TANK A DAY., THEY REALIZE THAT IT MAY BE ON THE BACKSHIFTS. PANEL OP. TOLD TO CARRY THIS ON THEIR TURNOVER.

RTS'D 2RE9160B CNMT ISOL UNIT 2 RCDT, CAUTION CARD AT RADWASTE PNL FOR OPERATOR TO MONITOR POINT TREND WHEN PUMPING DOWN RCDT TO KEEP THE PRESSURE ABOVE ZERO ON POINT TREND. SE TO PUSH AR FOR THEIR CONCERNS WITH OPERATING WITHOUT PROPER INDICATION

OWX26T RELEASE PACKAGE AT HP
 OWXD1T RELEASE PACKAGE READY TO GO TO CHEMISTRY
 READINGS TAKEN ON GW-8003: OA HUT- 1.28% O2
 OB HUT- 0.72% O2
 OF GDT- 1.58% O2

SAVE-----SAVE-----SAVE-----SAVE-----SAVE-----

SHIFTLY MANAGEMENT FOCUS ITEMS WALKDOWNS
 MATERIAL CONDITIONS---AUX. BLDG. INCLUDING ECCS ROOMS (CV, SI, RH, AF)
 PAY SPECIAL ATTENTION TO AREA GENERAL CLEANINESS AND CLUTTER---USE AR'S AS NEEDED.
 FIRE DOORS---ARE THEY CLOSED OR TAGGED WITH FBI CARDS IF OPEN---ARE THEY OPERABLE?
 IDENTIFY ALL DEFICIENCIES INCLUDING UNAUTHORIZED TEMP ALTS, WRITE AR'S, HANG THE LAUNDRY TAGS

TIME	DATE	SHIFT	OFF GOING	ON COMING
0600	9/5/95	1 TO 2		

(Final)

Center Desk Operator Turnover

PLANT	U1 MODE:ONE	%PWR:36	MW:440	IN PROGRESS
STATUS	U2 MODE:ONE	%PWR:95	MW:1135	
				0vc044y dmpc fic. works when stroked with c/s.
				GD CHAR BOOSTER FAN - IN TL TILL TOMORROW
MUDS	BOILER	IA DRYERS ON LINE		
OA:STBY	U1:WLU	U0 / U2		
OB:STBY	U2:WLU	AS	U1 ES	

ADMINISTRATIVE	
1. Temporary procedures	X
2. Temporary Alterations	X
3. Caution Cards	X
4. Unit 0 Logbook	X
5. Center Desk Routine	X
6. Daily Orders	X
7. SE Notes	X
8. Switching Orders / BPO / Division LD	X
9. Control Board Walkdown	X
10. 1st Shift Annun Check Completed	X

WS TO U1/U2 SD CDSRs THROTTLED TO 30% OPEN TO INCREASE WS FLOW TO OTHER EQUIP

DEBRIS IN RIVER

LCOAR	OOS / RTS	Surveillances	Maint / AR
U-1 CNBIT AIR LOCK	OB SX BASIN MAU OCW100B/171B		WS PP DSCH CHK VLVs
U-1 RCS ACTIVITY	OSX182D U-1 SAC		RIVER LVL RCDR OB & OC CW MAU PPs 0vc044y dmpc

TURNOVER ITEMS	NORMAL
1. HVAC	YES
2. 345 KV Systems, Relay House	NO
3. Air Systems (IA, SA)	NO
4. Fire Protection	YES
5. slowdown	NO
6. Radiation Releases	YES
7. MCB Instrumentation	YES
8. MCB Controllers	NO
9. Tank Capacity	YES
10. Chemistry	NO
11. Radiation Protection	YES
12. Alarms - MCB Annun	YES
13. Alarms - FP / Other	YES
14. SYS - Safeguards	YES
15. SYS - Primary	YES
16. SYS - Balance of Plant	NO
17. MDCT	NO
18. NDCT, Flume	YES
19.	
20.	
21.	
22.	
23.	
24.	

COMMENTS

GA & OB VA CHILLER RUNNING / RSH VERT FANS - IN REMOTE (IN ORDER TO START FROM MCR - IF NEEDED, RUN FROM 8 AM TO 8 PM ONLY)

DOING CHECKS ONCE EVERY 4 HRS ON 1W SPT R2 PRESS (2000F BOTTLE HOOKED UP TO CHANGE OUT 8000 BOTTLES TOMORROW) / ALSO WATCHING 1E MPT FOR LEAKS / COMM TROUBLE

U-1 SAC COVERS REMOVED / DIESEL SAC CONNECTED TO U-1 - OUTSIDE OF BOILER ROOM

BUS-TIE BKR 5-7, BUS 7 DISC - DID NOT CLOSE WITH MOTOR (AR WRITTEN)

CHEMISTRY WANTS 15000 GPM CW B/D

S TRN OF CW MAU TO SX BASIN OCW100B OOS - R/O TO BASIN FROM DEEPWELL OR OVERFLOW ONLY - PARTS DUE IN NOVEMBER

U-1 RCS ACTIVITY

3A RISER DRAIN LINE SUPPLYING TOWER MOD TEST MODEL TO VERIFY COMPATIBILITY WITH OUR CHEMISTRY

OSX182D OOS

GA WS PP UPPER BEARING RUMS HOT - GA WS PP STATOR RUMS HOT (LIMIT IS 150 - BEG AWARE)

OB CW MAU PP STATOR TEMP HIGH WHEN RUNNING - AR WRITTEN

CONSTRUCTION RUNOFF POND - HAS STANDBY DIESEL PP

CW MAU @ 1820, RECIRCS @ 20%

THIS IS AN EXERCISE

TIME	DATE	SHIFT	OFF GOING	ON COMING
0700	9/1/95	1 TO 2		

Unit 1 Nuclear Station Operator Turnover

PLANT STATUS	MODE:ONE	%PWR:38.4	MW:420	ADMINISTRATIVE	
	GRP:D @:214 _{steps}	Cs:547 _{ppm}	Xe:STEADY STATE		
LCOAR VQ VLVs CNMT AIR LOCKS RCS ACTIVITY	OOS / RTS	Surveillance s	Maint / AR	1. Temporary procedures	X
				2. Temporary Alterations	X
	3. Caution Cards	X			
	4. Unit Logbook	X			
	5. Unit Routine	X			
	6. Aux Elec Equip Rm General Inspection	X			
	7. Daily Orders	X			
	8. SE Notes	X			
	9. Control Board Walkdown	X			
	10. Abnormal Valve Line-ups	X			
	11. 1st Shift Annun Check Completed	X			
	12. *AMS Panel Check Completed	X			

IN PROGRESS	PENDING
1C CD/CB PP IN STANDBY, CAN'T B/W CD SUCT STRR DUE TO BROKEN B/W VALVE RAMPED TO 38% FOR CNMT ENTRY TO REPAIR 1CV222 FAILED FUEL MONITOR ALARM- @ 0630 SAMPLE RESULTS= 2.1 MICROCI/GM	NEW DELTA-I TARGETS RCS LEAKRATE S/IRV RCFC MONTHLY SURV

TURNOVER ITEMS	NORMAL	COMMENTS
1.No Major Procedures in Progress	YES	<p style="text-align: center; font-size: 2em; font-weight: bold;">THIS IS AN EXERCISE</p>
2.NSO Shiftly, and Daily Surveillance	YES	
3.SSPS Channels / Bistables	YES	
4.ALARMS - SER / Annunciators	NO	
5.ALARMS - Process / RM - 11	YES	
*6.SER / Alarm Typer / Trend Typer	YES	
7.Alarms - FP / Other	YES	
8.Tank Capacity	YES	
9.Chemistry	NO	
10.Radiation Precautions	YES	
11.Nuclear Instrumentation	YES	
12.MCB Instrumentation	NO	
13.MCB Controllers	YES	
14.Electrical Distribution - AC	NO	
15.Electrical Distribution - DC	YES	
16.SYS - Safeguards	NO	
17.SYS - Primary	NO	
18.SYS - Balance of Plant	NO	
19.		
20.		
21.		
22.		
23.		
24.		

TIME	DATE	SHIFT	OFF GOING	ON COMING
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(PAGE 1) Revision 5

Unit 2 Nuclear Station Operator Turnover

PLANT	MODE: ONE	%PWR: 95	MW: 1140	ADMINISTRATIVE	
STATUS	GRP: D @ :207	Ce: 951 ppm	Xe: STEADY STATE	1. Temporary procedures	X
LCOAR	OOS / RTS	Surveillance	Maint / AR	2. Temporary Alterations	X
VQ VLV8 SD002C 2A S/G PORV	2RE91808 (C/S) 2SX138 OPEN COMP. INV. 2MS018A		COMP. INV. 2LI-PC008	3. Caution Cards	X
				4. Unit Logbook	X
				5. Unit Routine	X
				6. Aux Elec Equip Rm General Inspection	X
				7. Daily Orders	X
				8. SE Notes	X
				9. Control Board Walkdown	X
				10. Abnormal Valve Line-ups	X
				11. 1st Shift Annun Check Completed	N/A
				12. *AMS Panel Check Completed	X

IN PROGRESS	PENDING
-2MS018A - PLEASE LEAVE C/S IN CLOSE FOR 1.M.'s - GRID IS GREEN - MONITOR EXCITER FIELD VOLTAGE - SEE DAILY ORDER RECORDER HOOKED UP TO GEN MVAR	

TURNOVER ITEMS	NORMAL	COMMENTS
1. No Major Procedures in Progress	YES	
2. NSO Shiftly, and Daily Surveillance	YES	
3. SSPS Channels / Bistables	YES	
4. ALARMS - SER / Annunciators	NO	COMPUTER INVERTER OOS
5. ALARMS - Process / RM - 11	YES	
*6. SER / Alarm Typer / Trend Typer	NO	TREND TYPER FAULTS
7. Alarms - FP / Other	YES	
8. Tank Capacity	YES	
9. Chemistry	YES	
10. Radiation Precautions	YES	
11. Nuclear Instrumentation	YES	
12. MCB Instrumentation	NO	CRIBT FLOOR WATER LVL (2LI-PC008) - AR / 'B' TRN H2 MONITOR 'READY' LIGHT FLICKERING - AR
13. MCB Controllers	NO	DEHC LAMP TEST CHANGES DISPLAYS IN WINDOWS (e.g. REF. & REF DEMAND) - AR
14. Electrical Distribution - AC	YES	
15. Electrical Distribution - DC	YES	
16. SYS - Safeguards	NO	2SX138 (RETURN HEADER CROBETIE) OOS OPEN - DUE TO UNDERSIZED VALVE STEM
17. SYS - Primary	NO	2RY2008A CLOSED DUE TO PACKING LEAK (SEE C.C.) / 2RE91808 CLOSED (C/S ONLY) TO PREVENT DRAINING VACUUM ON U2 NCDT
18. SYS - Balance of Plant	NO	2E FW PP TURNING GEAR ONLY ENGAGES MANUALLY (AR) / 2C FW PP ON CENTRIFUGE / 2C FW PP HP STOP VLV OPEN L/S - (AR) 2FW005 OPEN - PER SPP
19.		
20.		
21.		
22.		2MS018A DRIFTS FROM 100 TO 80% OPEN - AR
23.		WS THROTTLED TO 80 CND8R (-80% OPEN) / H2 COOLER BYPASS CLOSED. GC & EXCITER COOLER BYPASSES THROTTLED.
24.		LOWER T.O. COOLER SMALL WS LEAK - AR / T.O. CLR SMALL AND BIG BYPASS VLV8 OPEN DUE TO HI WS TEMPS / WS TO LOWER MAIN T.O. COOLER ISOL TO INCR WS HDR PRESS AND IMPROVE COOLING - ABNORMAL VLV L/U

THIS IS AN EXERCISE

TIME	DATE	SHIFT	OFF GOING	ON COMING
------	------	-------	-----------	-----------

Byron 1995 GSEP Exercise ; November 15, 1995

Station	Dresden		Quad Cities		LaSalle		Zion		Byron		Braidwood		System Status	
Unit	2	3	1	2	1	2	1	2	1	2	1	2		
Power (by %)	100%	97%	100%	100%	52%	100%	70%	95%	38%	95%	8%	93%	Status <div style="border: 1px solid black; padding: 2px; text-align: center;">AMBER</div>	
													Capability <div style="border: 1px solid black; padding: 2px; text-align: center;">16321</div>	
Mwe	834	887	833	833	588	1130	760	1031	450	1140	0	1093	Peak Load Est. <div style="border: 1px solid black; padding: 2px; text-align: center;">13743</div>	
Days Outage Online													Yesterday Peak <div style="border: 1px solid black; padding: 2px; text-align: center;">14388</div>	
Status	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Offline	Online	Reserves ComEd System <div style="border: 1px solid black; padding: 2px; text-align: center;">2669 1604</div>	
oos	X	X	X	X	X	X	X	X	X	X	X	X	Power Purch Sales <div style="border: 1px solid black; padding: 2px; text-align: center;">91 1085</div>	
LCO	X								X	X	X	X		
Issues			X	X	X						X	X		
EGC	X	X	X	X	X	X	X	X	X	X	X	X		
NRC			X				X						Nuclear Mwe Percent <div style="border: 1px solid black; padding: 2px; text-align: center;">9499 78.5</div>	
Comments	X				X							X		

File Location: 1.02.0165

Equipment Operator Turnover - Unit One

Plant Status	U-1 Mode	% Power	MW Output
	1	38	440

Surveillances	ODS/RTS
/	/

Switching	Main/AR
/	/

Pending
/

In Progress
/

Administrative	
Temporary Procedures	✓
Temporary Alterations	✓
RWP's	✓
Daily Orders	✓
SE Notes	✓
Switching Orders	✓
Duty Keys Turned Over	✓
Log Package BOP 199-ED U1	✓

Turnover Items	Normal	Yes	No	Comments
Electrical Distribution-AC		✓		
Electrical Distribution-DC		✓		
Batteries on Equalize		✓		
Ground Test Devices		✓		
Aux Electric Rooms		✓		
Switchgear Rooms		✓		
MEER Rooms		✓		
Radiation Precautions		✓		
Diesel Generators		✓		
Main Generator & Auxiliaries		✓		5 th bleed; feed 1x/sh. ft
Main Turbine & Auxiliaries		✓		1A LPTu-b CS Reg fixed (maybe)
Condensate Polishers		✓		CP Regen pending (Bed Separated)
Vibration		✓		
Make-up Demineralizers		✓		0A → U-2CST (over) Acid Line ODS to fix elbow pinhole Leaks 0B → 5th

THIS IS AN EXERCISE

Time	Date	Shift	Off Going	On Coming
0700	4/1/95	N-D	Mc...	Scott Miller

(Final)

APPROVED
MAR 02 1994

File Location: 1.02.0165

Equipment Operator Turnover - Unit Two

Plant Status	U-2 Mode	%Power	MW Output
	1	95	1135

Surveillances	OOS/RTS
1	1

Switching	Maint/AR
1	1

Pending
1

In Progress
1

Administrative	
Temporary Procedures	✓
Temporary Alterations	✓
RWP's	✓
Daily Orders	✓
SE Notes	✓
Switching Orders	✓
Duty Keys Turned Over	✓
Log Package BOP 199-EO U2	✓

Turnover Items	Normal	Yes	No	Comments
Electrical Distribution-AC		✓		THIS IS AN EXERCISE
Electrical Distribution-DC		✓		
Batteries on Equalize		✓		
Ground Test Devices		✓		
Aux Electric Rooms		✓		
Switchgear Rooms		✓		
MEER Rooms		✓		
Radiation Precautions		✓		
Diesel Generators		✓		
Main Generator & Auxiliaries		✓		
Main Turbine & Auxiliaries		✓		
Condensate Polishers		✓		
Vibration		✓		
Volume Reduction		✓		
Radwaste				

Time	Date	Shift	Off Going	On Coming
0700	4/1/95	N-D	<i>[Signature]</i>	<i>[Signature]</i>

(Final)

APPROVED

MAR 02 1994

B.O.S.R.

File Location: 1.02.0166

Equipment Attendant Turnover

Applicable System Status
<p>ALL HOTWELL PPS ALL SD DEMANDS OB WK OA AB Mon Tk PP</p> <p style="text-align: center; font-size: 2em;">THIS IS AN EXERCISE</p>

Jobs Performed

Jobs in Progress

Jobs Pending

Turnover Review Items	
1. Logs (Round Review)	✓
2. Valving Changes	✓
3. Abnormal Conditions	✓
4. OOS Jobs	✓
5. Radiation/ Chemical Hazards	✓
6. SE Notes (Center Desk)	✓
7. Aux Boiler Status	✓
8. Procedures Returned	✓
9. Equipment Returned	✓
10. All Keys Returned	✓

Notes / Review Explanations
<p>OB WF TK P OA WE TK - 005 OE GAS DELAY TK - 005 LAUNDRY HOT WATER TK - 005 OWM 955 CLOSED OA AB Mail TK RECIRC VIA CD DEMAND MONITOR SD SAMPLE TK 45% @ 0545 COVER GAS ISOL TO HUTS</p>

Shift Off-On	Date	Time	Off - Going	On - Coming
N-D	5-1-95	0700	<i>Will [unclear]</i>	<i>[Signature]</i>

LOG PACKAGE : BOP 199 - EA (RW)

(Final)

APPROVED

MAR 02 1994

B.O.S.R.

File Location: 1.02.0166

Equipment Attendant Turnover -

Applicable System Status
ATC WS ALL WS STRNRS ALL CWPP B+C CW m/v PP TRAV SCRNS → SLOW → Debris in River RSH AIR COMP/DRYER AQUA GUARD

Jobs Performed
- OAFP TO A JOCKEY PUMP OOS
- OARSH AIR COMP OOS

Jobs In Progress

Jobs Pending
LEAVES @ River

Turnover Review Items	
1. Logs (Round Review)	
2. Valving Changes	
3. Abnormal Conditions	
4. OOS Jobs	
5. Radiation/ Chemical Hazards	
6. SE Notes (Center Desk)	
7. Aux Boiler Status	
8. Procedures Returned	
9. Equipment Returned	
10. All Keys Returned	

Notes / Review Explanations
- BOTH CROP PP → AUTO
- WS HDR Reg VLV TO CWPP IS CRACKED OPEN
- BOTH FP PP RELIEF VLVs CLOSED AND CAUTION CARDDED
- OA FP + OA JOCKEY PP OOS
- OA RSH AIR COMP OOS
- LOTS OF LEAVES & DEBRIS IN RIVER
THIS IS AN EXERCISE

Shift Off-On	Date	Time	Off - Going	On - Coming
1-2	5/11/95	0700	Don Lauer	[Signature]

LOG PACKAGE: BOP 199 - EA (OS)

(Final)

APPROVED

MAR 02 1994

THIS IS AN EXERCISE

BAP 335-1TB
Revision 2

File Location: 1.02.0166

Equipment Attendant Turnover

Applicable System Status	
0B UC HVAC 0B SB Chiller 2B FW pp: Cant 2C FW pp: Purif PW H ₂ - Recirc U-2 IA Dryer MTD Purif ZA, 2B SIAE: AS EAL	2A, 2B WG Filter 2B, C, D CD/CO pp 2A, B HD pp 2B SM pp 0A AS Cond Col TH pp

Jobs Performed
2A CD/CO pp OOS

Jobs In Progress

Jobs Pending

Turnover Review Items	
1. Logs (Round Review)	
2. Valving Changes	
3. Abnormal Conditions	
4. OOS Jobs	
5. Radiation/ Chemical Hazards	
6. SE Notes (Center Desk)	
7. Aux Boiler Status	
8. Procedures Returned	
9. Equipment Returned	
10. All Keys Returned	

Notes / Review Explanations
OOS - 2A CD/CO pp Turb Brg Deluge 0A SB Chiller 2I Steam Dump 0A2 to 5 0A Vault chiller: HTR 2C WH Filter AS Reg Load Hdr Level Alarms insp: 25B H₂ H₂-2 26A H₂ 26B H₂ H₂-2 27B H ₂ , H ₂ -2 2ES032A - FO 2ES067 - Cycles 2ES091 - F.O. @ 40%

Shift Off-On	Date	Time	Off-Going	On-Coming
1-2	5-1-95	0600	Bob Kelly	[Signature]

LOG PACKAGE: BOP 199 - EA (TB-2)

(Final)

APPROVED

MAR 02 1994

B.O.S.R.

File Location: 1.02.0166

Equipment Attendant Turnover

Applicable System Status	
OA, OD VA Sup 3 Exh Fans	RWST Pp Auto
OA, OBYAWC Pps	OB PW m/v Pp
OD VF Fan	1B SX Pp
U-1 SFP Pp.	
SFP Skimmer Pp.	
2B VP Chiller	
2B CV Pp	
2B CC Pp	

Jobs Performed
2A S/P P-005
2B AF Battery Serv.

Jobs in Progress

Jobs Pending
U-1 LCSR CO2-005

Notes / Review Explanations
2B VP Chiller Fluctuating Amps SF/Tech Staff Aware
2A VP Chiller-005
Sluiceway N2 Press. Set at 50# Placard on Wall, Rounds to be Adjusted, Adjust Pags. as Required

THIS IS AN EXERCISE

Turnover Review Items	
1. Logs (Round Review)	✓
2. Valving Changes	✓
3. Abnormal Conditions	✓
4. OOS Jobs	✓
5. Radiation/ Chemical Hazards	✓
6. SE Notes (Center Desk)	✓
7. Aux Boiler Status	NA
8. Procedures Returned	✓
9. Equipment Returned	✓
10. All Keys Returned	✓

Shift Off-On	Date	Time	Off - Going	On - Coming
1 → 2	5-1-95	0700	Todd VanBuren	

LOG PACKAGE : BOP 199 - EA (AB-2)

(Final)

APPROVED

MAR 02 1994

File Location: 1.02.0166

Equipment Attendant Turnover

Applicable System Status	
U-1 SH H ₂ @ 5% IB & IC FW RP w/L.O. purif M.T.O. purif IA SJA IA & IB GS cond Exh IB SHRP U-1 SAC - man U-0 SAC - Ave U-0 IA dryer	Sec Samp Sys IA, IB & IC CD/CB RP IB & IC WG Filters IB & IC HD RP OB Wm RP OA Recycle X-for RP

Jobs Performed

Jobs In Progress

Jobs Pending

Turnover Review Items	
1. Logs (Round Review)	✓
2. Valving Changes	✓
3. Abnormal Conditions	✓
4. OOS Jobs	✓
5. Radiation/ Chemical Hazards	✓
6. SE Notes (Center Desk)	✓
7. Aux Boiler Status	✓
8. Procedures Returned	✓
9. Equipment Returned	✓
10. All Keys Returned	✓

Notes / Review Explanations

✓ N-16 monitor
 - Monitor Potable water tk.
 Hi Press alarm comes in spuriously

THIS IS AN EXERCISE

Shift Off-On	Date	Time	Off - Going	On - Coming
1-2	5-1-95	0700	<i>J. Kelen</i>	<i>D. Kels</i>

LOG PACKAGE : BOP 199 - EA (TB-1)

(Final)

APPROVED

MAR 02 1994

B.O.S.R.

File Location: 1.02.0166

Equipment Attendant Turnover

Applicable System Status
IB VP Chlr OB VC Chlr $\approx \frac{1}{4}$ " IA CC PP IB CV PP RWST PP - AUTO ZA SX PP

Jobs Performed

Jobs In Progress

Jobs Pending

Turnover Review Items	
1. Logs (Round Review)	✓
2. Valving Changes	✓
3. Abnormal Conditions	✓
4. OOS Jobs	✓
5. Radiation/ Chemical Hazards	✓
6. SE Notes (Center Desk)	✓
7. Aux Boiler Status	N/A
8. Procedures Returned	✓
9. Equipment Returned	✓
10. All Keys Returned	✓

Notes / Review Explanations
- Monitor OB VC Chlr O.I. Lvl
- SX Sump PPs Bkrs - Off Dsch vlv's closed
- IFCOZF - AR
- IB CV PP Gear Box O.I. Leak - AR - Coffee Can Watch
THIS IS AN EXERCISE

Shift Off-On	Date	Time	Off - Going	On - Coming
N-D	5-1-85	0700	P. Edes	Itis/Noop

LOG PACKAGE : BOP 199 - EA (AB-1)

(Final)

APPROVED

MAR 02 1994

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-3**

TIME: 0700 - 0730 (T-030 - T+000)
ISSUED TO: MAINTENANCE FOREMEN and STAFF (MM, EM, IM)
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through the Ogle County, Illinois, area yesterday and last night, leaving most area roads ice-covered and hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-4**

TIME: 0700 - 0730 (T-030 - T+000)

ISSUED TO: RADIATION PROTECTION FOREMAN (OSC SUPERVISOR)

PREREQUISITE: EXERCISE HAS BEEN INITIATED ; ISSUE THIS MESSAGE ONLY IF THE OSC SUPERVISOR/DIRECTOR ARE STAGED INDEPENDENTLY FROM THE CONTROL ROOM CREW

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through the Ogle County, Illinois, area yesterday and last night, leaving most area roads ice-covered and hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.

BOP RPLS TURNOVER

PLANT STATUS	U-1 Mode:	% Power: 34
	U-2 Mode:	% Power: 95

*** LCOARS ***

Monitor	Sample Due	RP & OPs Review 1x/8 Hrs
NONE	0400/1200/2000	Y / N TIME:
	0400/1200/2000	Y / N TIME:
	0400/1200/2000	Y / N TIME:
	0400/1200/2000	Y / N TIME:
	0400/1200/2000	Y / N TIME:

Comments:

Duty HP on call	S.D. Robinson
Phone #	Pager #

Duty HPSS on call	D.G. Goldsmith
Phone #	Pager #

Radiation Release	0WX01T	U-1 CNMT	WGOT
	0WX26T	U-2 CNMT	

TURNOVER ITEMS COMPLETE	YES	NO
*Review "R" Keys Log	X	
*Review CNMT Entry Log	X	
Bicron Source Check	X	
WST-18 Source Check	X	
Daily A/S & PRN's		X
AMS-3 Source Checks		X
Weeklys		X
PM-7s Friskers SOP		X
IPMs / HPMs	X	
RORs / PCRs		X
Review Duty RPLS Log	X	
Hemo / Daily Orders		X

CONFINED SPACE PENDING
NONE

JOB IN PROGRESS
U-1 CNMT Entry - see Comments -

JOB PENDING
See Work Planning Schedule Book

ADMIN ITEMS COMPLETE	YES	NO
BCS Updates (M W F)	X	
Review RHPs	X	
Review Timesheets	X	
Off Duty Notices		X

* Station Commitment 6-87-0149 & 6-87-0150

THIS IS AN EXERCISE

APPROVED
JUL 07 1992
B.O.S.R

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-5**

TIME: 0700 - 0730 (T-030 - T+000)

ISSUED TO: TSC DIRECTORS, NRC & IDNS RESIDENT INSPECTORS (IF PARTICIPATING)

PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through the Ogle County, Illinois, area yesterday and last night, leaving most area roads ice-covered and hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan. As a result of the storm, schools have been closed in Ogle and Winnebago Counties.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.
3. Attached is the ComEd System Status Report for November 15, 1995.

Byron 1995 GSEP Exercise ; November 15, 1995

Station	Dresden		Quad Cities		LaSalle		Zion		Byron		Braidwood		System Status
Unit	2	3	1	2	1	2	1	2	1	2	1	2	
Power (by %)	100%	97%	100%	100%	52%	100%	70%	95%	38%	95%	0%	93%	Status AMBER
Mwe	834	887	833	833	588	1138	768	1831	450	1140	0	1893	Capability 16321
Days outage													Peak Load Est. 13743
Days online													Yesterday Peak 14388
Status	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Reserves ComEd System 2669 1604
oos	X	X	X	X	X	X	X	X	X	X	X	X	Power Purch Sales 91 1865
LCO	X								X	X	X	X	Nuclear Mwe Percent 9499 78.5
Issues			X	X	X							X	
EGC	X	X	X	X	X	X	X	X	X	X	X	X	
NRC			X				X						
Comments	X				X							X	

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

Dresden

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:04AM

	Unit : 2	Status : Online	Unit : 3	Status: Online
OOS:	TIPs ; 2B SDC ; 2/3 SBT		OOS:	TIPS ; 3A Instrument Air Compressor ; ECCS Jockey Pump
LCO's:	Service Water Rad Monitor ; 2/3A SBT (3 of 7)		LCO's:	None.
Other:	Increase in Drywell air activity - investigating		Other:	None.
EGC:	Off EGC		EGC:	Off EGC
NRC:				
Comment:	Duty Officer : Shift Manager ; GSEP TSC tabletops today			

Quad-Cities

7:08AM

Updated: Nov 15 1995

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1B2 & 1B3 FW Htr ; normal LCV in manual ; 1601-33C Vacuum Breaker indication		OOS:	None
LCO's:	None		LCO's:	None
Other:	Weekend Load Drop - Nov 18 Turbine Weekly		Other:	None
EGC:	Inop.		EGC:	Inop.
NRC:	ENC call made for fire in MCC 28-1 cubicle yesterday due to potential public interest. Fire was extinguished by station fire brigade			
Comment:	Duty Officer - A. Misak			

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

THIS IS AN EXERCISE

LaSalle

Updated: Nov 15 1995 7:24AM

Unit : 1		Status : Online	Unit : 2		Status: Online
OOS:	1B VT Exh Fan ; TIP Ball Valves; 1A CW Pump; 2nd stage reheat; 1A TDRFP; B Amertap unavail.		OOS:	2A RT Pump; D HD Pump; 2C CW Pump	
LCO's:	None		LCO's:	None	
Other:	1B RR pp ongoing, LOS-DG-M1 LOS-SC-Q1 SAC concerns ; unit in coastdown to L1R07 on 1/2-7/96		Other:	2B TDRFP uncoupled test; PORC today on S/U issues	
EGC:	Inop.		EGC:	Inop.	
NRC:					
Comment:	Limited U1 load following capabilities				

Zion

Updated: Nov 15 1995 7:06AM

Unit : 1		Status : Online	Unit : 2		Status: Online
OOS:	1A BA Transfer Pump; 1C CW Pump; 1A C/CB Pp		OOS:	2C SW Pump; 2C CW Pump	
LCO's:	None		LCO's:	None	
Other:	PT-3C Thermal Overload Issue		Other:	PT-3C Thermal Overload Issue, PT-11 - 2B D/G ; PT-5-2 Rx Prot	
EGC:	Off by BPO		EGC:	Off EGC	
NRC:	NRC Radiation Protection Inspection 11/13 to 11/22				
Comment:					

ComEd Nuclear Operations Daily Plant Status

8:01AM

NOV 15 1995

Byron

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:49AM

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1AF017A, 1A CV Bed, 0B Sx Basin CW M/U		OOS:	2C CD/CB Pump; Startup FW pump;
LCO's:	Cnmt Air Lock, RCS Activity, Secondary Sources		LCO's:	2A SG PORV
Other:	At 38% power for cnmt entry, 2 gpm leak, Failed Fuel Alarm		Other:	2B D/G monthly surv. Letdown reduced to 75 gpm
EGC:	Off EGC		EGC:	Off EGC
NRC:				
Comment:	Preliminary U1 chemisty sample at 2.1 μ Ci/g			

Braidwood

Updated: Nov 15 1995 7:47AM

	Unit : 1	Status : Refuel	Unit : 2	Status: Online
OOS:	U0 SAC/0B VC; 0C CW makeup		OOS:	2A CD/CB, 2C HD
LCO's:	0B VC, 1B H2 monitor		LCO's:	0B VC, 2FW43A
Other:	0B VC, 1B D/G run; 1B Cnmt chiller; VI chiller, TSC chiller, U0 SAC & air Dryer		Other:	2A CD/CB pump, PR N44, slaves, 2C HD pump alignment
Outage	AIR05	RTS: 11/22/-95		
C.P.	Prep for start-up testing			
Cause:	Scheduled			
EGC:	Off		EGC:	Off EGC
NRC:				
Comment:	1B HD pump work to start 11/29 ; 2C CD/CB work after 2A CD/CB is RTS ; injured man sent to hospital @ 0707 (not contaminated)			

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-6**

TIME: 0700 - 0730 (T-030 - T+000)
ISSUED TO: SECURITY SHIFT SUPERVISOR (TSC SECURITY DIRECTOR)
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through the Ogle County, Illinois, area yesterday and last night, leaving most area roads ice-covered and hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.
3. Attached is the Security Shift Turnover for November 15, 1995.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-7**

TIME: 0730 (T+000)
ISSUED TO: CEOF STAFF
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through Wisconsin and the northern Illinois area yesterday and last night, leaving many area roads slippery and roads in some areas are ice-covered and extremely hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan. Schools have been closed in several central Illinois and southern Wisconsin Counties, including Ogle, Winnebago and Boone (in Illinois), and Walworth and Kenosha (in Wisconsin).
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.
3. Attached is the ComEd System Status Report (EIS) for November 15, 1995.

Byron 1995 GSEP Exercise ; November 15, 1995

Station	Dresden		Quad Cities		LaSalle		Zion		Byron		Braidwood		System Status
Unit	2	3	1	2	1	2	1	2	1	2	1	2	Status
Power (by %)	100%	97%	100%	100%	52%	100%	70%	95%	38%	95%	0%	93%	AMBER
Mwe	834	887	833	833	588	1138	768	1831	450	1140	0	1893	Capability 16321
Days outage online													Peak Load Est. 13743
Status	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Offline	Online	Yesterday Peak 14398
OOS	X	X	X	X	X	X	X	X	X	X	X	X	Reserves ComEd System 2669 1604
LCO	X								X	X	X	X	Power Purch Sales 91 1065
Issues			X	X	X						X	X	Nuclear Mwe Percent 9499 78.5
EGC	X	X	X	X	X	X	X	X	X	X	X	X	
NRC			X				X						
Comments	X				X							X	

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

THIS IS AN EXERCISE

Dresden

Updated: Nov 15 1995 7:04AM

	Unit : 2	Status : Online		Unit : 3	Status: Online
OOS:	TIPs ; 2B SDC ; 2/3 SBT		OOS:	TIPS ; 3A Instrument Air Compressor ; ECCS Jockey Pump	
LCO's:	Service Water Rad Monitor ; 2/3A SBT (3 of 7)		LCO's:	None.	
Other:	Increase in Drywell air activity - investigating		Other:	None.	
EGC:	Off EGC		EGC:	Off EGC	
NRC:					
Comment:	Duty Officer : Shift Manager ; GSEP TSC tabletops today				

Quad-Cities
7:08AM

Updated: Nov 15 1995

	Unit : 1	Status : Online		Unit : 2	Status: Online
OOS:	1B2 & 1B3 FW Htr ; normal LCV in manual ; 1601-33C Vacuum Breaker indication		OOS:	None	
LCO's:	None		LCO's:	None	
Other:	Weekend Load Drop - Nov 18 Turbine Weekly		Other:	None	
EGC:	Inop.		EGC:	Inop.	
NRC:	ENC call made for fire in MCC 28-1 cubicle yesterday due to potential public interest. Fire was extinguished by station fire brigade				
Comment:	Duty Officer - A. Misak				

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

THIS IS AN EXERCISE

LaSalle

Updated: Nov 15 1995 7:24AM

Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1B VT Exh Fan ; TIP Ball Valves; 1A CW Pump; 2nd stage reheat; 1A TDRFP; B Amertap unavail.	OOS:	2A RT Pump; D HD Pump; 2C CW Pump
LCO's:	None	LCO's:	None
Other:	1B RR pp ongoing, LOS-DG-M1 LOS-SC-Q1 SAC concerns ; unit in coastdown to L1R07 on 1/2-7/96	Other:	2B TDRFP uncoupled test; PORC today on S/U issues
EGC:	Inop.	EGC:	Inop.
NRC:			
Comment:	Limited U1 load following capabilities		

Zion

Updated: Nov 15 1995 7:06AM

Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1A BA Transfer Pump; 1C CW Pump; 1A C/CB Pp	OOS:	2C SW Pump; 2C CW Pump
LCO's:	None	LCO's:	None
Other:	PT-3C Thermal Overload Issue	Other:	PT-3C Thermal Overload Issue, PT-11 - 2B D/G ; PT-5-2 Rx Prot
EGC:	Off by BPO	EGC:	Off EGC
NRC:	NRC Radiation Protection Inspection 11/13 to 11/22		
Comment:			

ComEd Nuclear Operations Daily Plant Status

8:01AM

NOV 15 1995

Byron

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:49AM

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1AF017A, 1A CV Bed, 0B Sx Basin CW M/U		OOS:	2C CD/CB Pump; Startup FW pump;
LCO's:	Cnmt Air Lock, RCS Activity, Secondary Sources		LCO's:	2A SG PORV
Other:	At 38% power for cnmt entry, 2 gpm leak, Failed Fuel Alarm		Other:	2B D/G monthly surv. Letdown reduced to 75 gpm
EGC:	Off EGC		EGC:	Off EGC
NRC:				
Comment:	Preliminary U1 chemisty sample at 2.1 µCi/g			

Braidwood

Updated: Nov 15 1995 7:47AM

	Unit : 1	Status : Refuel	Unit : 2	Status: Online
OOS:	U0 SAC/0B VC; 0C CW makeup		OOS:	2A CD/CB, 2C HD
LCO's:	0B VC, 1B H2 monitor		LCO's:	0B VC, 2FW43A
Other:	0B VC, 1B D/G run; 1B Cnmt chiller, VI chiller, TSC chiller, U0 SAC & air Dryer		Other:	2A CD/CB pump, PR N44, slaves, 2C HD pump alignment
Outage	A1R05	RTS: 11/22/- 95		
C.P.	Prep for start-up testing			
Cause:	Scheduled			
EGC:	Off		EGC:	Off EGC
NRC:				
Comment:	1B HD pump work to start 11/29 ; 2C CD/CB work after 2A CD/CB is RTS ; injured man sent to hospital @ 0707 (not contaminated)			

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-8**

TIME: 0730 (T+000)
ISSUED TO: EOF and JPIC STAFF
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

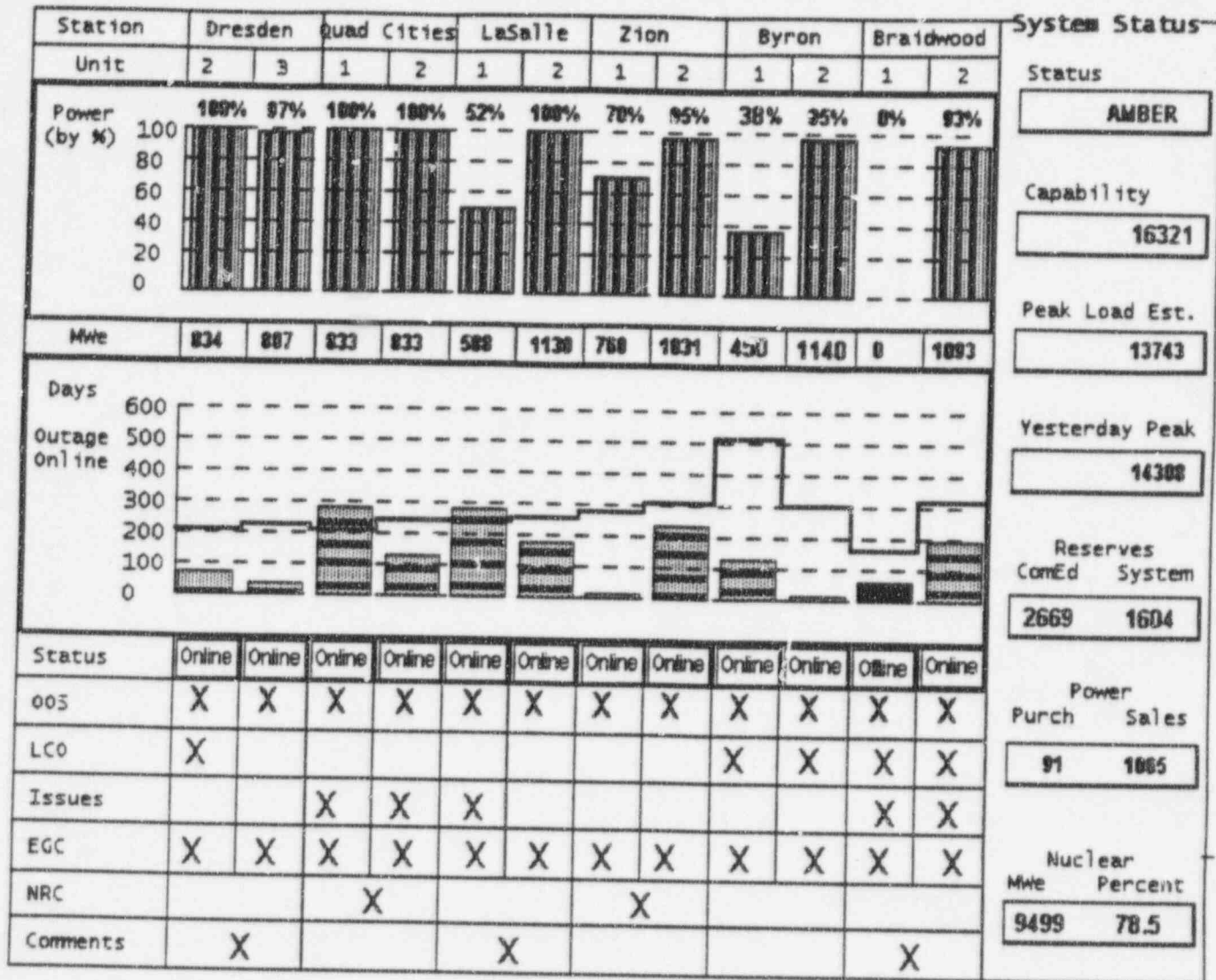
The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through Wisconsin and the northern Illinois area yesterday and last night, leaving many area roads slippery and roads in some areas are ice-covered and extremely hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan.
2. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.
3. Assume that you reached the Dixon EOF/JPIC after starting from your normal working location, and taking the most direct route. Road conditions in transit are wet with frequently slippery areas and traffic is moving much slower than normal; while road travel requires caution, all roads are open and passable. While in transit, you hear the following information on WMAQ News Radio (AM 670) :

"There has been an incident at the Byron Nuclear Power plant located on the Rock River near Oregon, Illinois. This morning around 8 o'clock a generator failed and the associated Unit 1 nuclear reactor did not shut down automatically as it was designed to do. Operators were able to manually shut down the reactor."

4. Attached is the ComEd System Status Report (EIS) for November 15, 1995.

Byron 1995 GSEP Exercise ; November 15, 1995



Byron 1995 GSEP Exercise
November 15, 1995

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

2:01AM

Dresden

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:04AM

	Unit : 2	Status : Online	Unit : 3	Status: Online
OOS:	TIPs ; 2B SDC ; 2/3 SBT		OOS:	TIPS ; 3A Instrument Air Compressor ; ECCS Jockey Pump
LCO's:	Service Water Rad Monitor ; 2/3A SBT (3 of 7)		LCO's:	None.
Other:	Increase in Drywell air activity - investigating		Other:	None.
EGC:	Off EGC		EGC:	Off EGC
JRC:				
Comment:	Duty Officer : Shift Manager ; GSEP TSC tabletops today			

Quad-Cities
7:08AM

Updated: Nov 15 1995

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1B2 & 1B3 FW Htr ; normal LCV in manual ; 1601-33C Vacuum Breaker indication		OOS:	None
LCO's:	None		LCO's:	None
Other:	Weekend Load Drop - Nov 18 Turbine Weekly		Other:	None
EGC:	Inop.		EGC:	Inop.
NRC:	ENC call made for fire in MCC 28-1 cubicle yesterday due to potential public interest. Fire was extinguished by station fire brigade			
Comment:	Duty Officer - A. Misak			

Byron 1995 GSEP Exercise
November 15, 1995

ComEd Nuclear Operations Daily Plant Status NOV 15 1995

8:01AM

THIS IS AN EXERCISE

LaSalle

Updated: Nov 15 1995 7:24AM

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1B VT Exh Fan ; TIP Ball Valves; 1A CW Pump; 2nd stage reheat; 1A TDRFP; B Amertap unavail.		OOS:	2A RT Pump; D HD Pump; 2C CW Pump
LCO's:	None		LCO's:	None
Other:	1B RR pp ongoing, LOS-DG-M1 LOS-SC-Q1 SAC concerns ; unit in coastdown to L1R07 on 1/2-7/96		Other:	2B TDRFP uncoupled test; PORC today on S/U issues
EGC:	Inop.		EGC:	Inop.
NRC:				
Comment:	Limited U1 load following capabilities			

Zion

Updated: Nov 15 1995 7:06AM

	Unit : 1	Status : Online	Unit : 2	Status: Online
OOS:	1A BA Transfer Pump; 1C CW Pump; 1A C/CB Pp		OOS:	2C SW Pump; 2C CW Pump
LCO's:	None		LCO's:	None
Other:	PT-3C Thermal Overload Issue		Other:	PT-3C Thermal Overload Issue, PT-11 - 2B D/G ; PT-5-2 Rx Prot
EGC:	Off by BPO		EGC:	Off EGC
NRC:	NRC Radiation Protection Inspection 11/13 to 11/22			
Comment:				

ComEd Nuclear Operations Daily Plant Status

8:01AM

NOV 15 1995

Byron

THIS IS AN EXERCISE

Updated: Nov 15 1995 7:49AM

Unit : 1		Status : Online	Unit : 2		Status: Online
OOS:	1AF017A, 1A CV Bed, 0B Sx Basin CW M/U		OOS:	2C CD/CB Pump; Startup FW pump;	
LCO's:	Cnmt Air Lock, RCS Activity, Secondary Sources		LCO's:	2A SG PORV	
Other:	At 38% power for cnmt entry, 2 gpm leak, Failed Fuel Alarm		Other:	2B D/G monthly surv. Letdown reduced to 75 gpm	
EGC:	Off EGC		EGC:	Off EGC	
NRC:					
Comment: Preliminary U1 chemisty sample at 2.1 µCi/g					

Braidwood

Updated: Nov 15 1995 7:47AM

Unit : 1		Status : Refuel	Unit : 2		Status: Online
OOS:	U0 SAC/0B VC; 0C CW makeup		OOS:	2A CD/CB, 2C HD	
LCO's:	0B VC, 1B H2 monitor		LCO's:	0B VC, 2FW43A	
Other:	0B VC, 1B D/G run; 1B Cnmt chiller; VI chiller, TSC chiller, U0 SAC & air Dryer		Other:	2A CD/CB pump, PR N44, slaves, 2C HD pump alignment	
Outage	A1R05	RTS: 11/22/- 95			
C.P.	Prep for start-up testing				
Cause:	Scheduled				
EGC:	Off		EGC:	Off EGC	
NRC:					
Comment: 1B HD pump work to start 11/29 ; 2C CD/CB work after 2A CD/CB is RTS ; injured man sent to hospital @ 0707 (not contaminated)					

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-9**

TIME: 0730 (T+000)
ISSUED TO: COMMUNICATIONS SERVICES
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The following are INITIAL CONDITIONS for the Byron 1995 Exercise :

1. A major ice storm moved through Wisconsin and the northern Illinois area yesterday and last night, leaving many area roads slippery and roads in some areas are ice-covered and extremely hazardous. The storm affected an area from central Illinois north of Interstate 80 to north of the Wisconsin border and east to Lake Michigan. As a result of the storm, schools in several central Illinois and Wisconsin counties have been closed, including those in Ogle, Winnebago and Boone (in Illinois) and Walworth and Kenosha (in Wisconsin). Areas in northern Indiana and western Michigan have not been seriously affected by this storm.
2. Scattered power outages have been reported affecting about twelve thousand customers, with the most severe interruptions being in the areas of Freeport, DeKalb/Sycamore, Marengo, and Elgin (all in Illinois).
3. The weather forecast for today (WGN radio 0630 forecast) is for freezing rain to end this morning with overcast skies clearing after noon, colder than normal temperatures with a high of 38°F, and winds from the east to northeast at 10 mph.

Byron 1995 GSEP Exercise ; November 15, 1995

Station	Dresden		Quad Cities		LaSalle		Zion		Byron		Braidwood		System Status		
Unit	2	3	1	2	1	2	1	2	1	2	1	2	Status		
Power (by %)	100%	97%	100%	100%	52%	100%	70%	95%	38%	95%	0%	83%	<div style="border: 1px solid black; padding: 2px;">AMBER</div>		
Mwe	834	887	833	833	588	1138	760	1031	450	1140	0	1093	<div style="border: 1px solid black; padding: 2px;">16321</div>		
Days outage													<div style="border: 1px solid black; padding: 2px;">13743</div>		
Days Online													<div style="border: 1px solid black; padding: 2px;">14388</div>		
Status	Online	Online	Online	Online	Online	Online	Online	Online	Online	Online	Offline	Online	<div style="border: 1px solid black; padding: 2px;">Reserves ComEd System</div>		
oos	X	X	X	X	X	X	X	X	X	X	X	X	<div style="border: 1px solid black; padding: 2px;">2669 1604</div>		
LCO	X								X	X	X	X	<div style="border: 1px solid black; padding: 2px;">Power Purch Sales</div>		
Issues			X	X	X							X	X	<div style="border: 1px solid black; padding: 2px;">91 1065</div>	
EGC	X	X	X	X	X	X	X	X	X	X	X	X	<div style="border: 1px solid black; padding: 2px;">Nuclear Mwe Percent</div>		
NRC			X				X						<div style="border: 1px solid black; padding: 2px;">9499 78.5</div>		
Comments	X				X							X			

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-10**

TIME: 0730 (T+000)
ISSUED TO: ALL PARTICIPANTS
PREREQUISITE: EXERCISE HAS BEEN INITIATED

MESSAGE

The 1995 Byron Exercise has been initiated. The exercise Shift Engineer has taken control of the Simulator Control Room. All participants should be prepared to respond as necessary to exercise events.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CM-11

TIME: 0800 (T+030)

ISSUED TO: UNIT 1 DUTY CHEMIST

PREREQUISITES: PERMISSION OF THE LEAD OSC CONTROLLER

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is _____, Counting Room Chemist. I have the results of the confirmatory RCS sample which was collected at about 0700. The sample shows that there is 3 $\mu\text{Ci/g}$ (micro-Curies per gram) Iodine-131 Dose Equivalent."

CONTROLLER NOTE : Provide a copy of the sample report attached to message Chem-3.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-12**

TIME: 0810 (T+040)

**ISSUED TO: OUTSIDE EQUIPMENT OPERATOR SIMULATING ENTRY TO
THE RIVER SCREEN HOUSE**

PREREQUISITES: PERMISISON OF THE LEAD ONSITE CONTROLLER

MESSAGE

1. **PROVIDE** the following information to the designated Operator :

"THIS IS AN EXERCISE : This is _____, at the River Screen House. I'm down here on my morning rounds. There is a lot of debris in the river, mostly tree branches and leaves. The screens are running continuously. Current differential pressure (DP) is 15 inches of water."

2. **DIRECT THE OPERATOR** to call this information to the Control Room via his/her Operations Radio.

CONTROLLER NOTE : 1. In order to deliver this message, a participating Outside Operator should be designated from the operations staging area. This operator should be removed from the staging area to a nearby location at about 0800 (T+030). After they deliver the scripted message, allow the designated Operator to return to the staging area for other duties as directed by the scenario.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-13**

TIME: 0835 (T+065)

ISSUED TO: ACTING STATION DIRECTOR / CONTROL ROOM SHIFT ENGINEER

PREREQUISITES: HAS NOT RECOGNIZED THE ALERT CLASSIFICATION ON EAL MA3 ENTRY CONDITION ; HAS NOT DECLARED THE ALERT CLASSIFICATION

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : You are directed to declare an ALERT emergency classification based on EAL MS3 (Auto Trip Not Successful). The cause of this ALERT is the failure of the automatic reactor SCRAM following the Main Turbine trip which occurred at 0805 (T+035). Complete and issue the attached NARS form."

UTILITY MESSAGE NO. _____

STATE OF ILLINOIS NUCLEAR ACCIDENT REPORTING SYSTEM FORM

STATE MESSAGE NO. _____

AUGUST 1994

1. STATUS

- (A) ACTUAL
- (B) EXERCISE
- (C) DRILL
- (D) TERMINATION

2. STATION

- (A) DRESDEN
- (B) LASALLE
- (C) QUAD CITIES
- (D) ZION
- (E) BYRON
- (F) BRAIDWOOD
- (G) CLINTON

3. ON-SITE ACCIDENT CLASSIFICATION

- (A) UNUSUAL EVENT
- (B) ALERT
- (C) SITE AREA EMERGENCY
- (D) GENERAL EMERGENCY
- (E) RECOVERY
- (F) NOT APPLICABLE

4. ACCIDENT CLASSIFIED

TIME: 0835
 DATE: 11/15/95
 EALS: MS3

ACCIDENT TERMINATED

TIME: NA
 DATE: _____

5. RELEASE TO ENVIRONMENT

- (A) NONE
- (B) POTENTIAL
- (C) OCCURRING
- (D) TERMINATED

6. TYPE OF RELEASE

- (A) NOT APPLICABLE
- (B) RADIOACTIVE GAS
- (C) RADIOACTIVE LIQUID

7. WIND DIRECTION:

FROM 82 (DEGREES)

DOWNWIND SECTOR: N

8. WIND SPEED (COMPLETE ONE OF THE FOLLOWING:)

(A) METERS/SEC.: 1.7

(B) MILES/HR.: _____

9. RECOMMENDED ACTIONS

- (A) NONE
- (B) PREPARE FOR POSSIBLE ACTION INVOLVING THE PUBLIC
- (C) INITIATE PUBLIC NOTIFICATION PROCEDURES

INSTRUCT THE PUBLIC TO TAKE THE FOLLOWING ACTIONS:

SHELTER	EVACUATE	UTILITY ONLY
(D)	(H)	0 - 2 MILE RADIUS
(E)	(I)	0 - _____ MILE RADIUS
(F)	(J)	2 - 5 MILES FOR SECTORS _____
(G)	(K)	5 - 10 MILES FOR SECTORS _____

(L) SHELTER	SUB-AREAS: _____	(STATE USE ONLY)
(M) EVACUATE	SUB-AREAS: _____	(STATE USE ONLY)

- (N) RECOMMEND POTASSIUM IODIDE (KI) IN ACCORDANCE WITH PROCEDURES (STATE USE ONLY)
- (O) CONFINE MILK-PRODUCING ANIMALS ON STORED FEED AND PROTECTED WATER OUT TO _____ MILE RADIUS (STATE USE ONLY)
- (P) COMMENCE RETURN OF PUBLIC (STATE USE ONLY)
- (Q) OTHER _____

THIS IS AN EXERCISE

10. **ADDITIONAL INFORMATION:** TURBINE TRIP WITHOUT REACTOR TRIP, MANUAL REACTOR TRIP WAS SUCCESSFUL

11. **MESSAGE TRANSMITTED BY:**

 (NAME)

 (ORGANIZATION)

 (OUTSIDE PHONE NUMBER)

12. **MESSAGE TRANSMITTED:**

CURRENT TIME: _____

CURRENT DATE: _____

13. **MESSAGE RECEIVED BY:**

 (NAME)

 (ORGANIZATION)

UTILITY USE ONLY

APPROVED BY: _____
 (INITIALS)

 (TIME)

(BPO ONLY) NDO NOTIFIED: _____
 (NAME)

 (TIME/DATE)

OUTSIDE PHONE NUMBERS

BPO	708-691-4744	INITIAL CALL	FINAL ROLL CALL
IEMA	217-762-7860	<input type="checkbox"/>	<input type="checkbox"/>
IDNS	217-785-0800	<input type="checkbox"/>	<input type="checkbox"/>
WDEG	800-943-0003 (ZION ONLY)	<input type="checkbox"/>	<input type="checkbox"/>
IOWA EMD	515-281-3231 (QUAD CITIES ONLY)	<input type="checkbox"/>	<input type="checkbox"/>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CM-14

TIME : 0845 - 1400 (T+075 - T+390)
ISSUED TO : A-MODEL PRINTERS
PREREQUISITES : A-MODEL CONTROL HAS BEEN SHIFTED TO ALTERNATE FACILITY

MESSAGE

0 .951115.084500

*** INFORMATIONAL MESSAGE ***
*** BYRON UNIT 1 ***
*** DATE > 11/15/95 TIME> 08:45 ***
*** A-MODEL MESSAGES AND REPORTS ARE BEING DIRECTED TO THE ***
*** PRINTER IN THE _____. A-MODEL OUTPUT WILL ***
*** NO LONGER BE PRINTED IN THE _____. ***

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-15**

TIME : 0955 - 1000 (T+145 - T+150)
ISSUED TO : CHEMISTRY DIRECTOR, TSC
PREREQUISITIES : CONTAINMENT LEAK IS IN PROGRESS AND APPROACHING
150 GALLONS PER MINUTE LEAK RATE ; PERMISSION OF THE
LEAD FACILITY CONTROLLER

MESSAGE

"THIS IS AN EXERCISE : The post-trip chemistry sample collected at about 0915 (T+105) has a total I-131 Dose Equivalent of 310 μ Ci/g."

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-16**

TIME : 1000 - 1015 (T+150 - T+165)
ISSUED TO : TSC SECURITY DIRECTOR
PREREQUISITIES : SITE ASSEMBLY HAS BEEN INITIATED, SECURITY DIRECTOR
REQUESTS SECURITY COMPUTER PRINTOUT OF BADGES
ISSUED ON SITE

MESSAGE

"THIS IS AN EXERCISE : Attached is a Security Computer printout of those badges which have been issued today, sorted by department."

CONTROLLER NOTE : This personnel sort represents the initial condition for the simulated assembly, prior to personnel using the GSEP Card Readers.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CM-17

TIME: 1020 (T+170)
ISSUED TO: EXERCISE SECURITY SHIFT SUPERVISOR
PREREQUISITE: PERMISSION OF LEAD ONSITE CONTROLLER

MESSAGE

"THIS IS AN EXERCISE : This is _____, driving a mobile patrol. I am calling to let you know that I just had an accident. My car hit a patch of ice and slid into the Fuel Handling Building roll-up door. I am not hurt and there is only minor damage to my car. The roll-up door is cracked and has been knocked off its track on the north side. The door is about off about 10 inches to a height of about 8 feet."

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-18**

TIME : 1030 - 1045 (T180 - 195)
ISSUED TO : TSC SECURITY DIRECTOR
PREREQUISITIES : SITE ASSEMBLY HAS BEEN INITIATED

MESSAGE

"THIS IS AN EXERCISE : Attached is a Security Computer printout of those badges which have been issued today AND which have not carded into a GSEP Card Reader since the initiation of the Station Assembly. This list is sorted by department."

CONTROLLER NOTE : This personnel sort represents an intermediate condition during the simulated assembly, showing some persons who have not carded into the GSEP Card Reader. Issue this message approximately fifteen (15) minutes AFTER the station assembly is initiated.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-19**

TIME : 1030 (T+180)

ISSUED TO : ACTING STATION DIRECTOR or STATION DIRECTOR

PREREQUISITIES : ISSUE IN FACILITY HAVING COMMAND-AND CONTROL ;
PERMISSION OF THE LEAD ONSITE CONTROLLER

MESSAGE

"THIS IS AN EXERCISE : You are directed to declare a SITE EMERGENCY condition based on EAL FS1 (Loss or Potential Loss of the RCS and Fuel Cladding Fission Product Barriers). This is based on a known RCS leak of greater than 150 gallons per minute [greater than the capacity of one Charging Pump] and a total I-131 Dose Equivalent in excess of 300 μ Ci/g. Complete and issue the attached NARS form."

UTILITY MESSAGE NO. _____

STATE OF ILLINOIS
NUCLEAR ACCIDENT REPORTING SYSTEM FORM
AUGUST 1994

STATE MESSAGE NO. _____

STATUS

- (A) ACTUAL
- (B) EXERCISE
- (C) DRILL
- (D) TERMINATION

2. STATION

- (A) DRESDEN
- (B) LASALLE
- (C) QUAD CITIES
- (D) ZION
- (E) BYRON
- (F) BRAIDWOOD
- (G) CLINTON

3. ON-SITE ACCIDENT CLASSIFICATION

- (A) UNUSUAL EVENT
- (B) ALERT
- (C) SITE AREA EMERGENCY
- (D) GENERAL EMERGENCY
- (E) RECOVERY
- (F) NOT APPLICABLE

4. ACCIDENT CLASSIFIED

TIME: 1030
 DATE: 11/15/95
 EALR: FS1

ACCIDENT TERMINATED

TIME: NA
 DATE: _____

5. RELEASE TO ENVIRONMENT

- (A) NONE
- (B) POTENTIAL
- (C) OCCURRING
- (D) TERMINATED

6. TYPE OF RELEASE

- (A) NOT APPLICABLE
- (B) RADIOACTIVE GAS
- (C) RADIOACTIVE LIQUID

7. WIND DIRECTION:

FROM 77 (DEGREE)
 DOWNWIND SECTOR: M

8. WIND SPEED (COMPLETE ONE OF THE FOLLOWING:)

- (A) METERS/SEC.: 3.9
- (B) MILES/HR.: _____

THIS IS AN EXERCISE

9. RECOMMENDED ACTIONS

- (A) NONE
 - (B) PREPARE FOR POSSIBLE ACTION INVOLVING THE PUBLIC
 - (C) INITIATE PUBLIC NOTIFICATION PROCEDURES
- INSTRUCT THE PUBLIC TO TAKE THE FOLLOWING ACTIONS:

SHELTER	EVACUATE	UTILITY ONLY
(D)	(H)	0 - 2 MILE RADIUS
(E)	(I)	0 - ___ MILE RADIUS
(F)	(J)	2 - 5 MILES FOR SECTORS _____
(G)	(K)	5 - 10 MILES FOR SECTORS _____

(L) SHELTER	SUB-AREAS: _____	(STATE USE ONLY)
(M) EVACUATE	SUB-AREAS: _____	(STATE USE ONLY)

- (N) RECOMMEND POTASSIUM IODIDE (KI) IN ACCORDANCE WITH PROCEDURES (STATE USE ONLY)
- (O) CONFINE MILK-PRODUCING ANIMALS ON STORED FEED AND PROTECTED WATER OUT TO _____ MILE RADIUS (STATE USE ONLY)
- (P) COMMENCE RETURN OF PUBLIC (STATE USE ONLY)
- (Q) OTHER _____

10. ADDITIONAL INFORMATION:

CONTAINMENT LEAK > 150 gpm AM
I-131 DEQ > 300 uCi/g

11. MESSAGE TRANSMITTED BY:

 (NAME)

 (ORGANIZATION)

 (OUTSIDE PHONE NUMBER)

12. MESSAGE TRANSMITTED:

CURRENT TIME: _____
 CURRENT DATE: _____

13. MESSAGE RECEIVED BY:

 (NAME)

 (ORGANIZATION)

UTILITY USE ONLY

APPROVED BY: _____
 (INITIALS)

 (TIME)
 (BPO ONLY) NDO NOTIFIED: _____
 (NAME)

 (TIME/DATE)

OUTSIDE PHONE NUMBERS

BPO 708-691-4744
 IEMA 217-782-7860
 IDNS 217-785-0600
 WDEG 800-843-0003 (ZION ONLY)
 IOWA EMD 515-281-3231 (QUAD CITIES ONLY)

INITIAL ROLL CALL	FINAL ROLL CALL
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-20**

TIME : 1045 - 1100 (T+195 - T+210)
ISSUED TO : TSC SECURITY DIRECTOR
PREREQUISITIES : STATION ASSEMBLY HAS BEEN INITIATED

MESSAGE

"THIS IS AN EXERCISE : Attached is a Security Computer printout showing those persons whose badges were issued today AND who have not carded into a GSEP Card Reader since the initiation of the station assembly. The list is sorted by department.

CONTROLLER NOTE : This personnel sort represents the final condition of the assembly drill and shows that all personnel on site are accounted for. Controllers are to ensure that Security is aware that accountability has been established and that search and rescue efforts are NOT needed.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-21**

TIME : 1230 (T+300)

ISSUED TO : STATION DIRECTOR, MANAGER OF EMERGENCY OPERATIONS (CEOF), or MANAGER OF EMERGENCY OPERATIONS (EOF)

PREREQUISITIES : ISSUE IN FACILITY HAVING COMMAND-AND-CONTROL ; PERMISSION OF THE LEAD OFFSITE CONTROLLER

MESSAGE

"THIS IS AN EXERCISE : You are directed to declare a GENERAL EMERGENCY condition based on EAL FG1. This is based on loss of the third fission product barrier due to a breach of containment. Complete and issue the attached NARS form."

UTILITY MESSAGE NO. _____

STATE OF ILLINOIS
NUCLEAR ACCIDENT REPORTING SYSTEM FORM

STATE MESSAGE NO. _____

AUGUST 1994

1. STATUS

- (A) ACTUAL
- (B) EXERCISE
- (C) DRILL
- (D) TERMINATION

2. STATION

- (A) DRESDEN
- (B) LASALLE
- (C) QUAD CITIES
- (D) ZION
- (E) BYRON
- (F) BRAIDWOOD
- (G) CLINTON

3. ON-SITE ACCIDENT CLASSIFICATION

- (A) UNUSUAL EVENT
- (B) ALERT
- (C) SITE AREA EMERGENCY
- (D) GENERAL EMERGENCY
- (E) RECOVERY
- (F) NOT APPLICABLE

4. ACCIDENT CLASSIFIED

TIME: 1230
 DATE: 11/15/95
 EALS: FG1

ACCIDENT TERMINATED

TIME: NA
 DATE: _____

5. RELEASE TO ENVIRONMENT

- (A) NONE
- (B) POTENTIAL
- (C) OCCURRING
- (D) TERMINATED

6. TYPE OF RELEASE

- (A) NOT APPLICABLE
- (B) RADIOACTIVE GAS
- (C) RADIOACTIVE LIQUID

7. WIND DIRECTION:

FROM 72 (DEGREES)
 DOWNWIND SECTOR: M

8. WIND SPEED (COMPLETE ONE OF THE FOLLOWING:)

- (A) METERS/SEC.: 5.5
- (B) MILES/HR.: _____

9. RECOMMENDED ACTIONS

- (A) NONE
- (B) PREPARE FOR POSSIBLE ACTION INVOLVING THE PUBLIC
- (C) INITIATE PUBLIC NOTIFICATION PROCEDURES

INSTRUCT THE PUBLIC TO TAKE THE FOLLOWING ACTIONS:

SHELTER	EVACUATE	UTILITY ONLY
<input type="checkbox"/> (D)	<input checked="" type="checkbox"/> (K)	0 - 2 MILE RADIUS
<input type="checkbox"/> (E)	<input type="checkbox"/> (L)	0 - _____ MILE RADIUS
<input type="checkbox"/> (F)	<input type="checkbox"/> (J)	2 - 5 MILES FOR SECTORS _____
<input checked="" type="checkbox"/> (G)	<input type="checkbox"/> (I)	5 - 10 MILES FOR SECTORS <u>LMN</u>

<input type="checkbox"/> (L) SHELTER	SUB-AREAS: _____	(STATE USE ONLY)
<input type="checkbox"/> (M) EVACUATE	SUB-AREAS: _____	(STATE USE ONLY)

- (N) RECOMMEND POTASSIUM IODIDE (KI) IN ACCORDANCE WITH PROCEDURES (STATE USE ONLY)
- (O) CONFINED MILK-PRODUCING ANIMALS ON STORED FEED AND PROTECTED WATER OUT TO _____ MILE RADIUS (STATE USE ONLY)
- (P) COMMENCE RETURN OF PUBLIC (STATE USE ONLY)
- (Q) OTHER _____

10. ADDITIONAL INFORMATION: LOSS OF COOLANT IN CONTAINMENT WITH UNMONITORED RELEASE IN PROGRESS

11. MESSAGE TRANSMITTED BY:
 _____ (NAME)
 _____ (ORGANIZATION)
 _____ (OUTSIDE PHONE NUMBER)

12. MESSAGE TRANSMITTED:
 CURRENT TIME: _____
 CURRENT DATE: _____

13. MESSAGE RECEIVED BY:
 _____ (NAME)
 _____ (ORGANIZATION)

UTILITY USE ONLY

APPROVED BY: _____ (INITIALS)

(BPO ONLY) NDO NOTIFIED: _____ (TIME)
 _____ (NAME)
 _____ (TIME/DATE)

OUTSIDE PHONE NUMBERS

- BPO 708-691-4744
- IEMA 217-782-7860
- IDNS 217-785-0800
- WDEG 800-943-0003 (ZION ONLY)
- IOWA EMD 515-281-3231 (QUAD CITIES ONLY)

INITIAL ROLL CALL	FINAL ROLL CALL
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CM-22**

TIME : 1400 (T+390)
ISSUED TO : CONTROL ROOM, TSC, OSC, ENVIRONS TEAMS, CEOF, EOF
PREREQUISITIES : PERMISSION OF LEAD ONSITE AND OFFSITE CONTROLLERS

MESSAGE

"THIS IS AN EXERCISE : The Byron Exercise is now terminated. A short verbal critique of exercise performance in this facility will follow shortly."

CONTROLLER NOTE : Exercise activities may continue until 1500 (T+450) in the JPIC only, in order to complete demonstration of FEMA objectives for public information. Termination of the JPIC after 1400 hours will be at the discretion of the Lead JPIC Controller with the concurrence of the Lead Offsite Controller.

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGES

- * SIMULATOR CONTROLLER GUIDANCE
- * PLANT STATUS UPDATE SHEETS [10 MINUTE]
- * CONTROL ROOM PANEL ALARMS
- * CONTROL ROOM MESSAGES [RESPONSES TO OPERATOR /NSO ACTIONS]
- * AREA RADIATION MONITOR PANELS
- * WRGM RESULTS
- * CONTROL ROOM INJECT MESSAGES

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CONTROLLER GUIDANCE : Control Room / Simulator

1. All procedures in force should be used by Participants.
2. Do not direct Participants to complete forms or documentation. All documents which are prepared shall be marked "FOR GSEP EXERCISE USE ONLY".
3. Appropriate notifications to **offsite** agencies shall actually be made to the agency (when participating) or to those numbers provided (when simulated). Controllers shall not permit exercise notification to be made non-participating offsite agencies.
4. Simulator panels should be set up with appropriate initial conditions prior to participants entering the area. Appropriate Out of Service tags and other panel aids should be in place as part of the exercise preparations. Out of Service cards should be used only **within** the simulator.
5. Control Room participants are expected to react to information displayed on appropriate simulator panels. Information which duplicates information sources (chart recorders, ARM meter faces, computer print outs [A-Model], SPDS and computer displays, etc.) that are not available in the simulator may be posted at the applicable times, and in the appropriate locations, for participants to read. Controllers should verbally provide participants information for those Control Room panels which are not duplicated in the simulator and for the alternate Unit.
6. If a simulator failure occurs, controllers should continue the exercise using pre-determined plant data from the Exercise Manual. Information should be given verbally to participants whenever possible.
7. Plant pages should generally be made **only** within the simulator, and exercise information should not be broadcast to the station. **The sole exception to this guidance is the page announcement to staff the TSC and OSC, which must be made to the station. For those simulators without direct station page ability : Participants shall be directed to contact the actual Control Room as necessary to make the announcement to staff the TSC and OSC.**
8. At appropriate times, the Simulator participants should sound the plant assembly siren **only** within the simulator. **The sole exception to this guidance is when a Station Assembly Drill is conducted as part of an exercise.** Participants shall be directed to contact the actual Control Room to activate the Station Assembly siren when an assembly is part of the exercise conditions.
9. The ability to use the exercise GSEP program to initiate ERDS when necessary is not available in the simulator(s). Participants should be directed to contact a facility Controller when ERDS is desired. Controllers shall then contact the Lead TSC Controller to initiate ERDS.
10. If evacuation of Control Room personnel becomes appropriate during the exercise, participants should be directed to formulate an appropriate evacuation plan. **Unless directed otherwise by the Lead Facility Controller, an actual evacuation of the Control Room should not be performed.**

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

IN - PLANT EQUIPMENT AVAILABILITY

LEGEND

R	Running	ENG	Equipment Energized
RS	Running Slow Speed	DE	Equipment De-Energized
RH	Running High Speed	DMG	Equipment Damaged and Unavailable
AV	Equipment Available		
OOS	Equipment Out of Service		

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-1**

TIME : 0730 (T+000)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : EXERCISE HAS BEEN INITIATED

MESSAGE

The following Control Room Alarm(s) are present on the Control Room Panels :

Unit 1 , Panels : ALL
FW PUMP 1C - TRIP (16-L1) HTR 14 LEVEL HI/LOW (17-B4) GROSS FAILED FUEL : ALERT (RM-11 1PS206)

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 0730 (T+000)

INITIAL CONDITIONS : UNIT 1

Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	R	R	R	R	
RCFC	RH	RH	RH	AV	
CV Pumps	R	AV			PDP - OOS
SI Pumps	AV	AV			
RH Pumps	AV	AV			
CS Pumps	AV	AV			
CC Pumps	R	OOS			0 - AV
Aux Feed Pumps	AV	AV			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - OPEN B - OPEN	SATs	142-1 ENG 142-2 ENG
Rod Positions	Shutdown : Full Out Control : 200 Steps	UATs	141-1 ENG 141-2 ENG
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 ENG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A AV 1B AV

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0730 (0)

PLANT STATUS-1

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	30.33	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	561.83	DEGF	PRT PRESSURE	-0.00	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	84.73	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.30	GPM
PRZR PRESSURE	2239.26	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.48	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	571.14	571.14	571.14	571.19	DEGF
COLD LEG:	552.46	552.54	552.59	552.17	DEGF
TAVE:	561.77	561.81	561.83	561.64	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	980.40	980.21	980.09	981.03	PSIG
S/G NR LEVEL	66.00	66.00	66.00	66.00	PC
S/G WR LEVEL	60.73	60.75	60.76	60.67	PC
S/G STM FL	0.00	990.52	980.34	1063.93	KBH
S/G FEED FL	992.50	976.73	965.56	1047.64	KBH
GENERATOR OUTPUT	303.17	MW	COND PRESS	0.00	INHGA
CST LEVEL	89.20	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.36	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 Exercise
November 15, 1995

Area and Process
Radiation Monitors
Grid 1

TIME = 0730 (T+000)

AREA RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value mR/h	Alarm Status
4AA122	U1 Main Steam Line	Rm R13	0.094	Normal
5AA122	U2 Main Steam Line	Rm R41	0.108	Normal
4AA123	U1 Main Steam Line	Rm R13	0.084	Normal
5AA123	U2 Main Steam Line	Rm R41	0.077	Normal
4AB222	U1 Main Steam Line	Rm R20	0.122	Normal
5AB222	U2 Main Steam Line	Rm R34	0.095	Normal
4AB223	U1 Main Steam Line	Rm R20	0.129	Normal
5AB223	U2 Main Steam Line	Rm R34	0.105	Normal
4AC322	U1 Main Steam Line	Rm R20	0.131	Normal
5AC322	U2 Main Steam Line	Rm R34	0.085	Normal
4AC323	U1 Main Steam Line	Rm R20	0.209	Normal
5AC323	U2 Main Steam Line	Rm R34	0.093	Normal
4AD422	U1 Main Steam Line	Rm R13	0.333	Normal
5AD422	U2 Main Steam Line	Rm R41	0.173	Normal
4AD423	U1 Main Steam Line	Rm R13	0.105	Normal
5AD423	U2 Main Steam Line	Rm R41	0.11	Normal

PROCESS RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value μ Ci/cc	Alarm Status
0PS101	Liq. Radwaste Effluent		1.00E-08	Normal
0PS105	TB Fire & Oil Sump		8.90E-08	Normal
0PS106	RW Evap Conds. Return 0A		1.00E-08	Normal
0PS107	RW Evap Conds. Return 0B		1.00E-08	Normal
0PS108	RW Evap Conds. Return 0C		1.00E-08	Normal
0PS109	CC Heat Exchg 0 Water Outlet		4.48E-07	Normal
0PS110	Station Blowdown		9.91E-07	Normal
0PS116	Blowdown Afterfilter 0A Outlet		2.57E-06	Normal
0PS117	Blowdown Afterfilter 0B Outlet		7.80E-09	Normal
0PS118	Blowdown Afterfilter 0C Outlet		7.81E-09	Normal
0PS119	Blowdown Afterfilter 0D Outlet		4.33E-07	Normal
0PS141	Condensate Polisher Hi/Low Sumps		1.00E-09	Normal
1PS102	U1 RCFC Sx Water Outlet, 1A / 1C		7.81E-09	Normal
2PS102	U1 RCFC Sx Water Outlet, 2A / 2C		8.45E-08	Normal
1PS103	U1 RCFC Sx Water Outlet, 1B / 1D		7.80E-09	Normal
2PS103	U1 RCFC Sx Water Outlet, 2B / 2D		1.11E-08	Normal
1PS106	U1 Gross Failed Fuel, Low Energy		2.00E+00	Normal
2PS106	U2 Gross Failed Fuel, Low Energy		2.09E+00	Normal
1PS206	U1 Gross Failed Fuel, High Energy		2.20E+00	Alarm
2PS206	U2 Gross Failed Fuel, High Energy		4.24E-02	Normal
1PS107	U1 BTR Chiller Surge Tank Return		1.00E-08	Normal
2PS107	U2 BTR Chiller Surge Tank Return		1.00E-08	Normal
1PS108	U1 Steam Generator Blowdown		2.00E-06	Normal
2PS108	U2 Steam Generator Blowdown		1.06E-06	Normal
1PS109	U1 CC Heat Exch Water Outlet 1		1.34E-07	Normal
2PS109	U2 CC Heat Exch Water Outlet 2		2.43E-07	Normal
1PS127	U1 SJAЕ Gland Steam Exhaust, Gas		1.00E-06	Normal
2PS127	U2 SJAЕ Gland Steam Exhaust, Gas		1.06E-06	Normal

Rad Monitors in units of mR/h.
Process Monitors are in units
of μ Ci/cc.

<<< *** THIS IS AN EXERCISE *** >>>

TIME = 0730 (T+000)

PROCESS RADIATION MONITORS , GRID 2

RM-11 Code	Description	Value	Alarm Status
0PA231	Ctl Rm Outside Air Intake A - Part	5E-14	Normal
0PB131	Ctl Rm Outside Air Intake A - Gas	2.68E-06	Normal
0PC331	Ctl Rm Outside Air Intake A - Iodine	2.04E-14	Normal
0PA232	Ctl Rm Outside Air Intake A - Gas	1.16E-12	Normal
0PB132	Ctl Rm Outside Air Intake A - Part	2.76E-06	Normal
0PC332	Ctl Rm Outside Air Intake A - Iodine	3.67E-14	Normal
0PA233	Ctl Rm Outside Air Intake B - Part	3.22E-15	Normal
0PB133	Ctl Rm Outside Air Intake B - Gas	3.31E-06	Normal
0PC333	Ctl Rm Outside Air Intake B - Iodine	3.67E-14	Normal
0PA234	Ctl Rm Outside Air Intake B - Part	3.23E-15	Normal
0PB134	Ctl Rm Outside Air Intake B - Gas	3.98E-06	Normal
0PC334	Ctl Rm Outside Air Intake B - Iodine	3.67E-14	Normal
0PA235	CR Turb Bldg Air Intake A - Part	1.21E-13	Normal
0PB135	CR Turb Bldg Air Intake A - Gas	2.24E-06	Normal
0PC335	CR Turb Bldg Air Intake A - Iodine	6.24E-15	Normal
0PA236	CR Turb Bldg Air Intake A - Part	3.23E-15	Normal
0PB136	CR Turb Bldg Air Intake A - Gas	1.94E-06	Normal
0PC336	CR Turb Bldg Air Intake A - Iodine	3.67E-14	Normal
0PA237	CR Turb Bldg Air Intake B - Part	3.22E-15	Normal
0PB137	CR Turb Bldg Air Intake B - Gas	2.01E-06	Normal
0PC337	CR Turb Bldg Air Intake B - Iodine	1.11E-14	Normal
0PA238	CR Turb Bldg Air Intake B - Part	3.99E-14	Normal
0PB128	CR Turb Bldg Air Intake B - Gas	1.98E-06	Normal
0PC338	CR Turb Bldg Air Intake B - Iodine	3.67E-14	Normal
1PA201	U1 Containmt Purge Effl Particulate	1.01E-14	Normal
1PB101	U1 Containmt Purge Effl Gas	2.33E-06	Normal
1PC301	U1 Containmt Purge Effl Iodine	3.67E-14	Normal
2PA201	U2 Containmt Purge Effl Particulate	3.25E-15	Normal
2PB101	U2 Containmt Purge Effl Gas	1.97E-06	Normal
2PC301	U2 Containmt Purge Effl Iodine	3.61E-13	Normal
1PA211	U1 Containmc nt Atmos. Particulate	3.23E-15	Normal
2PA211	U2 Containment Atmos. Particulate	5E-13	Normal
1PB111	U1 Containment Atmos. Low Gas	5.64E-06	Normal
2PB111	U2 Containment Atmos. Low Gas	4.08E-06	Normal
1PC311	U1 Containment Atmos. Iodine	5E-12	Normal
2PC311	U2 Containment Atmos. Iodine	2.66E-12	Normal
1PD411	U1 Containment Atmos. High Gas	0	Normal
2PD411	U2 Containment Atmos. High Gas	0.00281	Normal
1PA213	U1 RHR/CS Cubicle 1A Particulate	6.41E-13	Normal
2PA213	U2 RHR/CS Cubicle 2A Particulate	4.68E-13	Normal

TIME = 0730 (T+000)

PROCESS RADIATION MONITORS , GRID 2

RM-11 Code	Description	Value	Alarm Status
1PB113	U1 RHR/CS Cubicle 1A Gas	8.37E-07	Normal
2PB113	U2 RHR/CS Cubicle 2A Gas	1.56E-06	Normal
1PA214	U1 RHR/CS Cubicle 1A Particulate	6.95E-13	Normal
2PA214	U2 RHR/CS Cubicle 2A Particulate	5.5E-13	Normal
1PB114	U1 RHR/CS Cubicle 1A Gas	1.95E-06	Normal
2PB114	U2 RHR/CS Cubicle 2A Gas	1.65E-06	Normal
1PA215	U1 RHR Hx Cubicle 1A Particulate	6.51E-13	Normal
2PA215	U2 RHR Hx Cubicle 2A Particulate	1.01E-13	Normal
1PB115	U1 RHR Hx Cubicle 1A Gas	1.6E-06	Normal
2PB115	U2 RHR Hx Cubicle 2A Gas	2.12E-06	Normal
1PA216	U1 RHR Hx Cubicle 1B Particulate	7.44E-13	Normal
2PA216	U2 RHR Hx Cubicle 2B Particulate	3.56E-13	Normal
1PB116	U1 RHR Hx Cubicle 1B Gas	2.17E-06	Normal
2PB116	U2 RHR Hx Cubicle 2B Gas	1.6E-06	Normal
1PA217	U1 Cent Chg Pump 1A Particulate	7.48E-15	Normal
2PA217	U2 Cent Chg Pump 2A Particulate	3.23E-15	Normal
1PB117	U1 Cent Chg Pump 1A Gas	1.48E-06	Normal
2PB117	U2 Cent Chg Pump 2A Gas	3.36E-06	Normal
1PA218	U1 Cent Chg Pump 1B Particulate	1E-12	Normal
2PA218	U2 Cent Chg Pump 2B Particulate	1.5E-12	Normal
1PB118	U1 Cent Chg Pump 1B Gas	4.01E-06	Normal
2PB118	U2 Cent Chg Pump 2B Gas	1.67E-06	Normal
1PA228	Aux. Building Vent Effluent Particulate	2.09E-14	Normal
1PB128	Aux. Building Vent Effluent Low Gas	2.11E-06	Normal
1PC328	Aux. Building Vent Effluent Iodine	1.01E-14	Normal
1PD428	Aux. Building Vent Effluent High Gas	0.00131	Normal
2PA228	Aux. Building Vent Effluent Particulate	3.23E-15	Normal
2PB128	Aux. Building Vent Effluent Low Gas	2.28E-06	Normal
2PC328	Aux. Building Vent Effluent Iodine	3.67E-14	Normal
2PD428	Aux. Building Vent Effluent High Gas	0.00116	Normal
1PA130	Wide Range Gas Monitor U1 Low Gas	5.16E-07	Normal
1PB230	Wide Range Gas Monitor U1 Mid Gas	3.96E-05	Normal
1PC330	Wide Range Gas Monitor U1 High Gas	0.00874	Normal
2PA130	Wide Range Gas Monitor U2 Low Gas	2.83E-07	Normal
2PB230	Wide Range Gas Monitor U2 Mid Gas	1.97E-05	Normal
2PC330	Wide Range Gas Monitor U2 High Gas	0.00169	Normal
1PF430	Wide Range Gas Monitor U1 μ Ci/sec	34.9	Normal
2PF430	Wide Range Gas Monitor U2 μ Ci/sec	23.9	Normal

Process Radiation Monitors
RM-11 , Grid 3

TIME = 0730 (T+000)

PROCESS RADIATION MONITORS , GRID 3

RM-11 Code	Description		Value	Alarm Status
0PA202	Gas Decay Tank Effluent	Low Gas	7.90E-06	Normal
0PB102	Gas Decay Tank Effluent	High Gas	4.52E-07	Normal
0PA203	Lab Fume Hood	Particulate	2.01E-14	Normal
0PB103	Lab Fume Hood	Gas	7.62E-06	Normal
0PC303	Lab Fume Hood	Iodine	3.67E-14	Normal
0PA211	RW Evap. Cubicle	Particulate	6.35E-13	Normal
0PB111	RW Evap. Cubicle	Gas	2.46E-06	Normal
0PS112	Recycle Evap. Cubicle	Particulate	5.90E-13	Normal
0PA213	Gas Decay Tank Cub.	Particulate	3.23E-15	Normal
0PB113	Gas Decay Tank Cub.	Gas	1.68E-06	Normal
0PS114	Drumming Station	Particulate	1.47E-12	Normal
0PS115	Laundry Room	Particulate	7.71E-13	Normal
0PA221	Aux. Bldg Vent Exhst 0A	Particulate	4.99E-13	Normal
0PB121	Aux. Bldg Vent Exhst 0A	Gas	5.88E-06	Normal
0PC321	Aux. Bldg Vent Exhst 0A	Iodine	3.67E-14	Normal
0PA222	Aux. Bldg Vent Exhst 0B	Particulate	9.67E-13	Normal
0PB122	Aux. Bldg Vent Exhst 0B	Gas	2.91E-06	Normal
0PC322	Aux. Bldg Vent Exhst 0B	Iodine	1.51E-14	Normal
0PA224	Fuel Building Vent Exhst	Particulate	1.02E-12	Normal
0PB124	Fuel Building Vent Exhst	Gas	1.78E-06	Normal
0PC324	Fuel Building Vent Exhst	Iodine	2.49E-15	Normal
0PA225	Misc Tank Vent Effluent	Particulate	4.68E-15	Normal
0PB125	Misc Tank Vent Effluent	Gas	2.49E-06	Normal
0PC325	Misc Tank Vent Effluent	Iodine	1.17E-14	Normal
0PA226	RW Area Vent Effluent	Particulate	6.25E-14	Normal
0PB126	RW Area Vent Effluent	Gas	1.80E-06	Normal
0PC326	RW Area Vent Effluent	Iodine	5.73E-15	Normal
0PA240	Vol. Reduction Area Vent	Particulate	2.06E-15	Normal
0PB140	Vol. Reduction Area Vent	Gas	1.03E-06	Normal
0PC340	Vol. Reduction Area Vent	Iodine	1.84E-14	Normal
0PA260	TSC Vent System	Particulate	4.10E-15	Normal
0PB160	TSC Vent System	Gas	2.00E-06	Normal
0PC360	TSC Vent System	Iodine	1.28E-15	Normal
1PA221	U1 Pipe Tunnel	Particulate	3.23E-15	Normal
2PA221	U2 Pipe Tunnel	Particulate	5.41E-13	Normal
1PB121	U1 Pipe Tunnel	Gas	7.12E-06	Normal
2PB121	U2 Pipe Tunnel	Gas	4.09E-06	Normal
1PC321	U1 Pipe Tunnel	Iodine	3.08E-14	Normal
2PC321	U2 Pipe Tunnel	Iodine	3.67E-14	Normal

All values are in units of
μCi/cc unless noted.

<<< *** THIS IS AN EXERCISE *** >>>

TIME = 0730 (T+000)					
RM-11 Code	Description		Value	Alarm Status	
	Elev.	Location			
3AS101	Aux. Building	346 P13	0.156	Normal	
3AS202	Aux. Building	346 S18	0.33	Normal	
3AS303	Aux. Building	346 P25	0.13	Normal	
3AS104	Aux. Building	364 P11	0.12	Normal	
3AS205	Aux. Building	364 P18	0.13	Normal	
3AS106	Aux. Building	384 M23	0.21	Normal	
3AS207	Aux. Building	383 M24	0.119	Normal	
3AS308	Aux. Building	383 S18	0.16	Normal	
3AS409	Aux. Building	383 L11	0.114	Normal	
3AS110	Aux. Building	401 M13	0.19	Normal	
3AS411	Aux. Building	401 V17	0.1	Normal	
3AS412	Aux. Building	401 V19	0.105	Normal	
3AS213	Aux. Building	401 N23	0.321	Normal	
3AS314	Aux. Building	426 N25	0.13	Normal	
3AS115	Aux. Building	426 V18	0.17	Normal	
3AS416	Aux. Building	426 P18	0.14	Normal	
3AS117	Aux. Building	451 Q18	0.118	Normal	
3AS331	Aux. Building	401 HRSS Room	0.14	Normal	
3AS232	Aux. Building	426 Chem Lab	0.14	Normal	
3AS135	Aux. Building	383 Drumming St.	0.13	Normal	
3AS137	FHB Criticality	426 Z17	0.84	Normal	
3AS238	FHB Criticality	401 AA16	0.18	Normal	
3AS141	RW Building	417 Dry Storage	0.107	Normal	
3AS142	RW Building	401 H43	0.303	Normal	
3AS243	RW Building	Truck Bay	1.87	Normal	
3AS144	RW Building	J43 Low Storage	3.2	Normal	
3AS245	RW Building	K43 High Storage	149	Normal	
3AS146	Vol. Reduction	401 L37	0.61	Normal	
3AS247	Vol. Reduction	401 K39	0.314	Normal	
3AS348	Vol. Reduction	401 K38	0.48	Normal	
3AS249	Vol. Reduction	401 J37	0.115	Normal	
3AS350	Vol. Reduction	417 J38	0.311	Normal	
3AS155	FHB incident	426 X15	0.225	Normal	
3AS156	FHB incident	426 X21	0.149	Normal	
3SA173	TSC #1	435 GI01	0.118	Normal	
3AS274	TSC #2	451 HH01	0.121	Normal	
4AS101	U1 Containmt	426 R07	2.81	Normal	
5AS101	U2 Containmt	426 R26	3.34	Normal	
4AS202	U1 Containmt	401 R17	0.986	Normal	
5AS202	U2 Containmt	401 R37	0.681	Normal	
4AS303	U1 Containmt	401 incore Seal Rm	4.87	Normal	
5AS303	U2 Containmt	401 incore Seal Rm	4.16	Normal	
4AS210	U1 Control Rm	P17	0.127	Normal	
5AS310	U2 Control Rm	L17	0.116	Normal	
4AS111	U1 Containmt	FH incident	38.2	Normal	
5AS111	U2 Containmt	FH incident	19.5	Normal	
4AS112	U1 Containmt	FH incident	23.8	Normal	
5AS112	U2 Containmt	FH incident	18.1	Normal	
4AS113	U1 VCT Cube	426 Aux. S15	153.6	Normal	
5AS113	U2 VCT Cube	426 Aux. S23	174	Normal	
4AS120	U1 Containmt	High Range	1460	Normal	
5AS120	U2 Containmt	High Range	1350	Normal	
4AS121	U1 Containmt	High Range	1260	Normal	
5AS121	U2 Containmt	High Range	1480	Normal	
4AA124	U1 Steam Tnl	377 R20	5.4	Normal	
5AA124	U2 Steam Tnl	377 R24	2.66	Normal	
4AB224	U1 Steam Tnl	377 R13	0.194	Normal	
5AB224	U2 Steam Tnl	377 R41	0.46	Normal	
4AA125	U1 Pipe Penr	364 Aux. R05	16.7	Normal	
5AA125	U2 Pipe Penr	364 Aux. R28	25.2	Normal	
4AB225	U1 Pipe Penr	364 Aux. R07	15.9	Normal	
5AB225	U2 Pipe Penr	364 Aux. R26	15.1	Normal	
4AA126	U1 Pipe Penr	383 Aux. R07	15.5	Normal	
5AA126	U2 Pipe Penr	383 Aux. R26	20.1	Normal	
4AB226	U1 Pipe Penr	383 Aux. R05	22.9	Normal	
5AB226	U2 Pipe Penr	383 Aux. R28	18.4	Normal	
4AA127	U1 Pipe Penr	401 Aux. R07	10.7	Normal	
5AA127	U2 Pipe Penr	401 Aux. R26	14	Normal	
4AB227	U1 Pipe Penr	401 Aux. R05	7.04	Normal	
5AB227	U2 Pipe Penr	401 Aux. R28	8.69	Normal	

All Values are in Units of
mR/h unless noted.

Byron 1995 GSEP Exercise ; November 15, 1995

TREND 10 MIN X24		GROSS FAILED FUEL		11-15-95 07:30:00	
NAME	TYPE	CHANNEL ID	DESCRIPTION	VALUE	UNITS
1PS206	LIQ	PRM-1RE-PR006	GROSS FAILED FUEL, HIGH	2.15E+0	UC/ML
					ALARM
2.15E+0	Y	Y	Y	Y	Y
2.14E+0	Y	Y	Y	Y	Y
2.11E+0	Y	Y	Y	Y	Y
2.08E+0	Y	Y	Y	Y	Y
2.03E+0	Y	Y	Y	Y	Y
1.97E+0	Y	Y	Y	Y	Y
1.90E+0	Y	Y	Y	Y	Y
1.82E+0	Y	Y	Y	Y	Y
1.27E+0	Y	Y	Y	Y	Y
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V
1.00E-2	G	G	G	V	V

RM-11 POINT TREND
 FAILED FUEL MONITOR
 INITIAL CONDITIONS
 (T+000)

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-2

TIME : 0730 (T+000)
ISSUED TO : UNIT 2 NSO
PREREQUISITE : EXERCISE HAS BEEN INITIATED

MESSAGE

The following Control Room Alarm(s) are present on the Control Room Panels :

Unit 2 , Panels : ALL
NO ALARMS PRESENT

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 0730 (T+000)

INITIAL CONDITIONS : UNIT 2

Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	R	R	R	R	
RCFC	RH	RH	RH	AV	
CV Pumps	R	AV			PDP - OOS
SI Pumps	AV	AV			
RH Pumps	AV	AV			
CS Pumps	AV	AV			
CC Pumps	AV	AV			0 - AV
Aux Feed Pumps	AV	AV			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - OPEN B - OPEN	SATs	242-1 ENG 242-2 ENG
Rod Positions	Bank D @ 220 Steps ; All Other Rods Full Out	UATs	241-1 ENG 241-2 ENG
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 ENG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Unit 1 Bus 142		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	2A AV 2B AV

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-3**

TIME : 0730 (T+000)
ISSUED TO : CONTROL ROOM A-MODEL PRINTER
PREREQUISITE : EXERCISE HAS BEEN INITIATED

MESSAGE

"THIS IS AN EXERCISE : The following message has been printed on the A-Model Printer :

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0740 (10)

PLANT STATUS-2

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	30.33	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	561.78	DEGF	PRT PRESSURE	0.00	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	84.45	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.30	GPM
PRZR PRESSURE	2239.26	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.48	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	571.10	571.10	571.10	571.15	DEGF
COLD LEG:	552.41	552.49	552.54	552.12	DEGF
TAVE:	561.72	561.76	561.78	561.59	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	979.99	979.81	979.69	980.63	PSIG
S/G NR LEVEL	66.00	66.00	66.00	66.00	PC
S/G WR LEVEL	60.73	60.75	60.76	60.67	PC
S/G STM FL	0.00	990.47	980.33	1063.61	KBH
S/G FEED FL	992.59	976.82	965.54	1047.53	KBH
GENERATOR OUTPUT	303.17	MW	COND PRESS	0.00	INHGA
CST LEVEL	89.15	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.37	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CS FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0750 (20)

PLANT STATUS-3

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	30.32	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	561.76	DEGF	PRT PRESSURE	-0.00	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	84.11	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.30	GPM
PRZR PRESSURE	2239.19	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.41	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	571.07	571.07	571.07	571.12	DEGF
COLD LEG:	552.38	552.46	552.52	552.09	DEGF
TAVE:	561.69	561.73	561.76	561.57	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	979.78	979.60	979.48	980.42	PSIG
S/G NR LEVEL	66.00	66.00	66.00	66.00	PC
S/G WR LEVEL	60.73	60.75	60.76	60.67	PC
S/G STM FL	0.00	990.51	980.17	1063.66	KBH
S/G FEED FL	992.52	976.78	965.38	1047.83	KBH
GENERATOR OUTPUT	303.17	MW	COND PRESS	0.00	INHGA
CST LEVEL	89.11	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.37	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0800 (30

PLANT STATUS-4

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	30.30	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	561.68	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10KI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	84.36	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.30	GPM
PRZR PRESSURE	2239.12	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.33	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	570.99	570.99	570.99	571.04	DEGF
COLD LEG:	552.30	552.39	552.44	552.01	DEGF
TAVE:	561.61	561.65	561.68	561.49	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	979.15	978.97	978.85	979.79	PSIG
S/G NR LEVEL	66.00	66.00	66.00	66.00	PC
S/G WR LEVEL	60.74	60.76	60.77	60.67	PC
S/G STM FL	0.00	990.54	980.55	1063.64	KBH
S/G FEED FL	992.54	976.83	965.45	1047.55	KBH
GENERATOR OUTPUT	303.16	MW	COND PRESS	0.00	INHGA
CST LEVEL	89.06	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.38	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CS FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CH-4**

TIME : 0805 (T+035)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MAIN TURBINE TRIP HAS OCCURRED

MESSAGE

ISSUE the following information VERBALLY :

The Unit 1 Main Turbine has tripped.

The Unit 1 Reactor has not tripped.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-5

TIME : 0805 (T+035)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MAIN TURBINE TRIP HAS OCCURRED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1

TURBINE THRUST BEARING WEAR (TURBINE SUPERVISORY PANEL)
TURBINE STOP VALVE CLOSED (1-18-A4)
TURBINE EMERGENCY TRIP OIL HEADER PRESS LOW (1-18-B4)
TURBINE AUTO STOP OIL PRESS LOW (1-18-B4)
TURBINE THRUST BEARING FAILURE (1-18-D2)
RELIEF VALVE 1RY455A OPEN (1-12-B2)
GENERATOR REVERSE POWER GENERATOR (1-19-A2)
GENERATOR LOCKOUT RELAY 86G1B TRIP (1-19-E2)
PERMANENT MAGNET GENERATOR SUPPLY BREAKER TRIP (1-19-A8)
GENERATOR VOLTAGE REGULATOR TRIP (1-19-B8)
GENERATOR STABILIZER TRIP (1-19-D8)
BUS 143 UAT 141-1 FD BREAKER 1431 (1-21-A1)
BUS 144 UAT 141-2 FD BREAKER 1441 (1-22-A1)
BUS 156 UAT 141-2 FD BREAKER 1561 (1-20-B7)
BUS 157 UAT 141-1 FD BREAKER 1571 (1-20-B5)
345KV OCB 3-4 TRIP (0-35-B2)
345KV OCB 4-5 TRIP (0-35-B1)

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-6**

TIME : 0805 - 0810 (T+035 - T+040)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MAIN TURBINE TRIP HAS OCCURRED ; FAILURE OF REACTOR
AUTOMATIC TRIP

MESSAGE

ISSUE the following information VERBALLY :

PARTICIPANT ACTIONS	RESULTS OR OBSERVATIONS
Unit 1 NSO manually trips the Reactor using the Manual Trip Breakers.	The Reactor is successfully tripped.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-7

TIME : 0805 - 0810 (T+035 - T+040)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : REACTOR HAS BEEN MANUALLY TRIPPED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1

MANUAL RX TRIP (1-11-A1)
REACTOR TRIP BREAKER A/B (1-10-A8)
REACTOR TURBINE TRIP (1-11-A9)
LOOSE PARTS MONITORING SYSTEM IMPACT NOISE LEVEL (1-13-E9)
ROD AT BOTTOM RB1/RB2 (1-10-E6)

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 0805 (T+035) UNIT 1

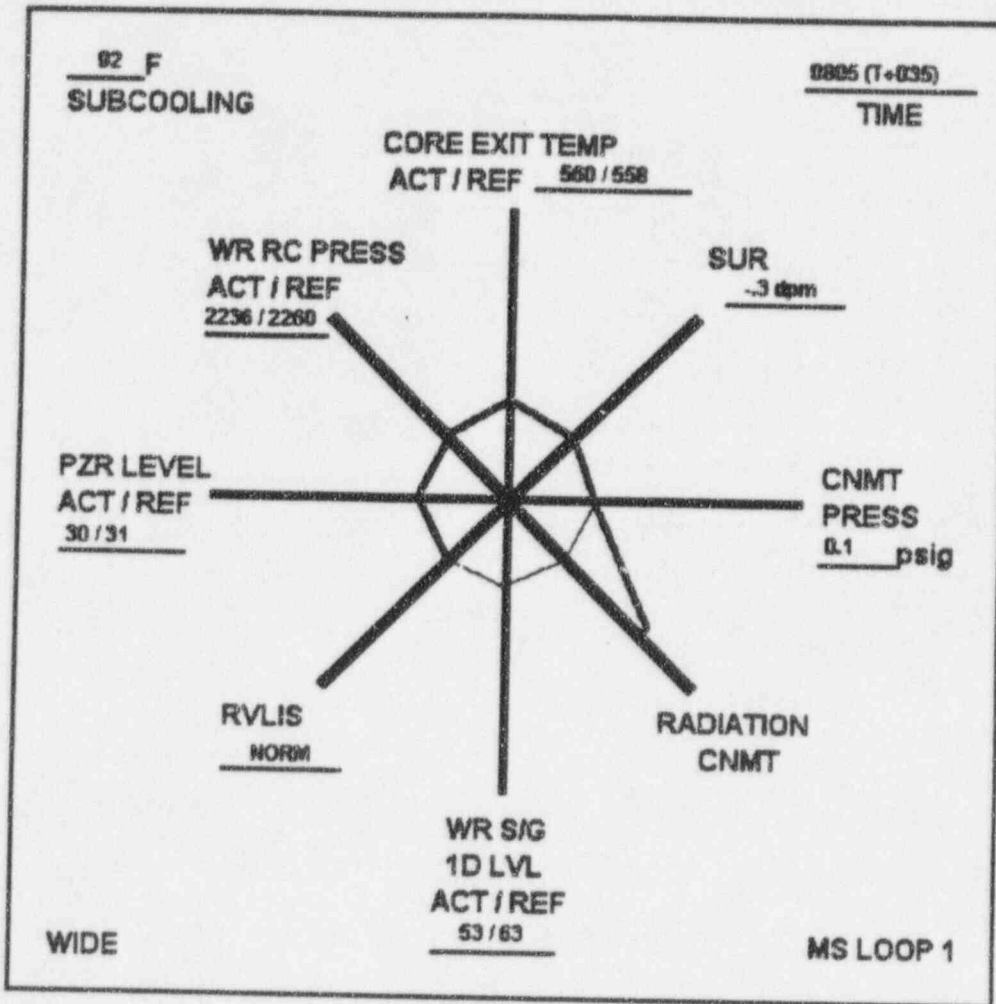
Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	R	R	R	R	
RCFC	RH	RH	RH	AV	
CV Pumps	R	AV			PDP - OOS
SI Pumps	AV	AV			
RH Pumps	AV	AV			
CS Pumps	AV	AV			
CC Pumps	R	OOS			0 - AV
Aux Feed Pumps	R	R			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers (AFTER MANUAL TRIP)	A - CLOSED B - CLOSED	SATs	142-1 ENG 142-2 ENG
Rod Positions (AFTER MANUAL TRIP)	All Rods Full In	UATs	141-1 ENG 141-2 RNG
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 ENG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A AV 1B AV

THIS IS AN EXERCISE

Byron 1995 GSEP Exercise ; November 15, 1995

BYRON STATION SPDS DISPLAY



K:\BYRON95\EXERCISE\SPDS\0805.BMP

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0810 (40)

PLANT STATUS-5

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	0.00	PC
AUCT HI TAVE	0.00	DEGF	PRT PRESSURE	0.00	PSIG
AVG LOHI CETs	0.00	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	0.00	DEGF	CHARGING FLOW	0.00	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	0.00	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	0.00	PSIG	RVLIS-PLENUM	0.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	0.00	0.00	0.00	0.00	DEGF
COLD LEG:	0.00	0.00	0.00	0.00	DEGF
TAVE:	0.00	0.00	0.00	0.00	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	0.00	0.00	0.00	0.00	PSI
S/G NR LEVEL	0.00	0.00	0.00	0.00	PC
S/G WR LEVEL	0.00	0.00	0.00	0.00	PC
S/G STM FL	0.00	0.00	0.00	0.00	PC
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	0.00	0.00	KBH
CST LEVEL	0.00	PC	COND PRESS	0.00	INHGA

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.00	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	0.00	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	0.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	0.00	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-8**

TIME : 0810 - 0820 (T+040 - T+050)
ISSUED TO : UNIT 1 SUPERVISOR or UNIT 1 NSO
PREREQUISITE : MAIN TURBINE TRIP HAS OCCURRED

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is ___(person name)___, at Bulk Power Operations. Do you have a problem with Byron Unit 1 ? We are seeing a loss of station output."

CONTROLLER NOTE : 1. Issue this message after 0825 (T+055) IF participants have not contacted the Load Dispatcher with the information about the U1 Reactor trip.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0820 (50)

PLANT STATUS-6

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	554.82	DEGF	PRT PRESSURE	0.00	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	113.41	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.87	GPM
PRZR PRESSURE	2256.57	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2264.55	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	555.17	555.14	555.17	555.17	DEGF
COLD LEG:	554.70	554.74	554.78	554.76	DEGF
TAVE:	554.79	554.80	554.82	554.79	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1065.32	1065.65	1065.65	1065.96	PSIG
S/G NR LEVEL	40.31	40.82	41.00	38.76	PC
S/G WR LEVEL	55.23	55.37	55.43	54.71	PC
S/G STM FL	0.00	19.66	17.96	21.73	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	88.02	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.40	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0830 (60)

PLANT STATUS-7

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.61	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	57.25	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.40	GPM
PRZR PRESSURE	2241.65	PSIG	RVLIS-HEAD	100.00	PC
RCS WR FRESSURE	2249.45	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.82	558.83	558.81	558.91	DEGF
COLD LEG:	558.32	558.30	558.33	558.36	DEGF
TAVE:	558.56	538.54	558.56	558.62	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1097.03	1097.22	1097.22	1097.92	PSIG
S/G NR LEVEL	39.84	40.82	40.51	37.78	PC
S/G WR LEVEL	54.76	55.09	54.97	54.11	PC
S/G STM FL	0.00	36.85	37.99	41.61	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	87.64	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.38	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-9

TIME : 0830 (T+060)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : RM-11 SINGLE CHANNEL FAILURE HAS OCCURRED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1 RM-11
You hear the RM-11 audible alarm

PARTICIPANT ACTIONS	RESULTS OR OBSERVATIONS
NSO checks the RM-11.	The Grid 4 Status Block is flashing RED .
NSO selects Grid 4.	Channel 3AS155 (Fuel Handling Building, Fuel Handling Incident, 426 elev. at X15) is flashing RED .
NSO selects 3AS155.	The Channel display is outlined in white with a solid red box color.
NSO trends 3AS155.	The display shows the bar graph at maximum position (full right, exceeds the high alarm setpoint of 5 mR/h).

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-10**

TIME : 0830 (T+060)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : 1A FUEL HANDLING BUILDING BOOSTER FAN HAS STARTED

MESSAGE

ISSUE the following information VERBALLY :

The Fuel Handling Building Booster Fan (10VA04CA) has started.

CONTROLLER NOTE : If Participants attempt to manually secure FHB Booster Fan prior to seizing at 0840 (T+070), ISSUE the fan seizing message BEFORE the fan can be secured.

TIME = 0830 (T+060)

AREA RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value mR/h	Alarm Status
4AA122	U1 Main Steam Line	Rm R13	0.094	Normal
5AA122	U2 Main Steam Line	Rm R41	0.108	Normal
4AA123	U1 Main Steam Line	Rm R13	0.084	Normal
5AA123	U2 Main Steam Line	Rm R41	0.077	Normal
4AB222	U1 Main Steam Line	Rm R20	0.122	Normal
5AB222	U2 Main Steam Line	Rm R34	0.095	Normal
4AB223	U1 Main Steam Line	Rm R20	0.129	Normal
5AB223	U2 Main Steam Line	Rm R34	0.105	Normal
4AC322	U1 Main Steam Line	Rm R20	0.131	Normal
5AC322	U2 Main Steam Line	Rm R34	0.085	Normal
4AC323	U1 Main Steam Line	Rm R20	0.209	Normal
5AC323	U2 Main Steam Line	Rm R34	0.093	Normal
4AD422	U1 Main Steam Line	Rm R13	0.333	Normal
5AD422	U2 Main Steam Line	Rm R41	0.173	Normal
4AD423	U1 Main Steam Line	Rm R13	0.105	Normal
5AD423	U2 Main Steam Line	Rm R41	0.11	Normal

PROCESS RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value $\mu\text{Ci/cc}$	Alarm Status
0PS101	Liq. Radwate Effluent		1.00E-08	Normal
0PS105	TB Fire & Oil Sump		8.90E-08	Normal
0PS106	RW Evap Conds. Return 0A		1.00E-08	Normal
0PS107	RW Evap Conds. Return 0B		1.00E-08	Normal
0PS108	RW Evap Conds. Return 0C		1.00E-08	Normal
0PS109	CC Heat Exchg 0 Water Outlet		4.48E-07	Normal
0PS110	Station Blowdown		9.91E-07	Normal
0PS116	Blowdown Afterfilter 0A Outlet		2.57E-06	Normal
0PS117	Blowdown Afterfilter 0B Outlet		7.80E-09	Normal
0PS118	Blowdown Afterfilter 0C Outlet		7.81E-09	Normal
0PS119	Blowdown Afterfilter 0D Outlet		4.33E-07	Normal
0PS141	Condensate Polisher Hi/Low Sumps		1.00E-09	Normal
1PS102	U1 RCFC Sx Water Outlet, 1A / 1C		7.81E-09	Normal
2PS102	U1 RCFC Sx Water Outlet, 2A / 2C		8.45E-08	Normal
1PS103	U1 RCFC Sx Water Outlet, 1B / 1D		7.80E-09	Normal
2PS103	U1 RCFC Sx Water Outlet, 2B / 2D		1.11E-08	Normal
1PS106	U1 Gross Failed Fuel, Low Energy		2.00E+00	Normal
2PS106	U2 Gross Failed Fuel, Low Energy		2.09E+00	Normal
1PS206	U1 Gross Failed Fuel, High Energy		3.15E+00	Hi Alarm
2PS206	U2 Gross Failed Fuel, High Energy		4.24E-02	Normal
1PS107	U1 BTR Chiller Surge Tank Return		1.00E-08	Normal
2PS107	U2 BTR Chiller Surge Tank Return		1.00E-08	Normal
1PS108	U1 Steam Generator Blowdown		2.00E-06	Normal
2PS108	U2 Steam Generator Blowdown		1.06E-06	Normal
1PS109	U1 CC Heat Exch Water Outlet 1		1.34E-07	Normal
2PS109	U2 CC Heat Exch Water Outlet 2		2.43E-07	Normal
1PS127	U1 SJAЕ Gland Steam Exhaust, Gas		1.00E-06	Normal
2PS127	U2 SJAЕ Gland Steam Exhaust, Gas		1.06E-06	Normal

Rad Monitors in units of mR/h.
Process Monitors are in units
of $\mu\text{Ci/cc}$.

TIME = 0830 (T+060)					
RM-11 Code	Description		Value	Alarm Status	
	Elev.	Location			
3AS101	Aux. Building	348 P13	0.158	Normal	
3AS202	Aux. Building	348 S18	0.33	Normal	
3AS303	Aux. Building	348 P25	0.13	Normal	
3AS104	Aux. Building	364 P11	0.12	Normal	
3AS205	Aux. Building	364 P18	0.13	Normal	
3AS306	Aux. Building	364 M23	0.21	Normal	
3AS207	Aux. Building	383 M24	0.119	Normal	
3AS308	Aux. Building	383 S18	0.16	Normal	
3AS409	Aux. Building	383 L11	0.114	Normal	
3AS110	Aux. Building	401 M13	0.19	Normal	
3AS411	Aux. Building	401 V17	0.1	Normal	
3AS412	Aux. Building	401 V19	0.105	Normal	
3AS213	Aux. Building	401 N23	0.321	Normal	
3AS314	Aux. Building	426 N25	0.13	Normal	
3AS115	Aux. Building	426 V18	0.17	Normal	
3AS416	Aux. Building	426 P18	0.14	Normal	
3AS117	Aux. Building	451 Q18	0.116	Normal	
3AS331	Aux. Building	401 HRSS Room	0.14	Normal	
3AS232	Aux. Building	426 Chem Lab	0.14	Normal	
3AS135	Aux. Building	383 Drumming St.	0.13	Normal	
3AS137	FHB Criticality	426 Z17	0.84	Normal	
3AS236	FHB Criticality	401 AA16	0.18	Normal	
3AS141	RW Building	417 Dry Storage	0.107	Normal	
3AS142	RW Building	401 H43	0.303	Normal	
3AS243	RW Building	Truck Bay	1.87	Normal	
3AS144	RW Building	J43 Low Storage	3.2	Normal	
3AS245	RW Building	K43 High Storage	1.49	Normal	
3AS146	Vol. Reduction	401 L37	0.61	Normal	
3AS247	Vol. Reduction	401 K39	0.314	Normal	
3AS348	Vol. Reduction	401 K36	0.48	Normal	
3AS249	Vol. Reduction	401 J37	0.115	Normal	
3AS350	Vol. Reduction	417 J36	0.311	Normal	
3AS155	FHB Incident	426 X15	OSH	Hi Alarm	
3AS156	FHB Incident	426 X21	0.149	Normal	
3SA173	TSC #1	435 G101	0.118	Normal	
3AS274	TSC #2	451 H101	0.121	Normal	
4AS101	U1 Containmt	426 R07	2.81	Normal	
5AS101	U2 Containmt	426 R26	3.34	Normal	
4AS202	U1 Containmt	401 R17	0.986	Normal	
5AS202	U2 Containmt	401 R37	0.681	Normal	
4AS303	U1 Containmt	401 Incore Seal Rm	4.87	Normal	
5AS303	U2 Containmt	401 Incore Seal Rm	4.16	Normal	
4AS210	U1 Control Rm	P17	0.127	Normal	
5AS310	U2 Control Rm	L17	0.116	Normal	
4AS111	U1 Containmt	FH Incident	3.2	Normal	
5AS111	U2 Containmt	FH Incident	3.2	Normal	
4AS112	U1 Containmt	FH Incident	3.2	Normal	
5AS112	U2 Containmt	FH Incident	3.2	Normal	
4AS113	U1 VCT Cube	426 Aux. S15	153.2	Normal	
5AS113	U2 VCT Cube	426 Aux. S23	174	Normal	
4AS120	U1 Containmt	High Range	1480	Normal	
5AS120	U2 Containmt	High Range	1350	Normal	
4AS121	U1 Containmt	High Range	1260	Normal	
5AS121	U2 Containmt	High Range	1480	Normal	
4AA124	U1 Steam Tnl	377 R20	5.4	Normal	
5AA124	U2 Steam Tnl	377 R34	2.86	Normal	
4AB224	U1 Steam Tnl	377 R13	0.194	Normal	
5AB224	U2 Steam Tnl	377 R41	0.46	Normal	
4AA125	U1 Pipe Penr	364 Aux. R05	16.7	Normal	
5AA125	U2 Pipe Penr	364 Aux. R28	25.2	Normal	
4AB225	U1 Pipe Penr	364 Aux. R07	15.9	Normal	
5AB225	U2 Pipe Penr	364 Aux. R26	15.1	Normal	
4AA126	U1 Pipe Penr	383 Aux. R07	15.5	Normal	
5AA126	U2 Pipe Penr	383 Aux. R26	20.1	Normal	
4AB226	U1 Pipe Penr	383 Aux. R05	22.9	Normal	
5AB226	U2 Pipe Penr	383 Aux. R28	18.4	Normal	
4AA127	U1 Pipe Penr	401 Aux. R07	10.7	Normal	
5AA127	U2 Pipe Penr	401 Aux. R26	14	Normal	
4AB227	U1 Pipe Penr	401 Aux. R05	7.04	Normal	
5AB227	U2 Pipe Penr	401 Aux. R28	8.89	Normal	

All Values are in Units of
mR/h unless noted.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0840 (70)

PLANT STATUS-8

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx PCWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.01	DEGF	PRT PRESSURE	0.00	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	88.86	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.54	GPM
PRZR PRESSURE	2244.12	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2251.73	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.23	558.23	558.23	558.29	DEGF
COLD LEG:	557.80	557.78	557.81	557.82	DEGF
TAVE:	557.97	557.97	557.98	558.01	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1093.28	1093.28	1093.28	1093.56	PSIG
S/G NR LEVEL	40.72	42.34	41.33	38.74	PC
S/G WR LEVEL	55.19	55.71	55.38	54.57	PC
S/G STM FL	0.00	18.06	18.53	19.50	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	86.96	PC			INHGA

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.38	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-11

TIME : 0840 (T+070)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : 1A FUEL HANDLING BUILDING BOOSTER FAN MOTOR HAS SEIZED

MESSAGE

Provide ONE of the following, depending on the position of the FHB Fan Control :

IF THE FHB FAN CONTROL SWITCH IS IN THE AFTER/START POSITION :

Unit 0

1. Alarm 0-34-C8 (FH CHAR BSTR FAN A/B TRIP FLOW HIGH LOW) is received
2. Fan run indication on the panel shows an **AMBER** light.

OR

IF THE FHB FAN CONTROL SWITCH IS IN THE AFTER/TRIP POSITION :

No indication is received on the 34 Panel.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-12

TIME : 0845 (T+075)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : FAILURE OF SOURCE RANGE MONITOR

MESSAGE

ISSUE the following information VERBALLY :

The N-31 Source Range Monitor no longer has indication.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0850 (80)

PLANT STATUS-9

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.16	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	86.45	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.37	GPM
PRZR PRESSURE	2241.23	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2248.93	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.37	558.37	558.37	558.43	DEGF
COLD LEG:	557.95	557.93	557.96	557.97	DEGF
TAVE:	558.12	558.11	558.13	558.16	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1094.57	1094.56	1094.56	1094.84	PSIG
S/G NR LEVEL	44.06	46.11	44.54	42.59	PC
S/G WR LEVEL	56.22	56.86	56.36	55.76	PC
S/G STM FL	0.00	18.08	18.53	19.52	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	86.17	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.38	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-13

TIME : 0900 - 0905 (T+090 - T+095)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK HAS STARTED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1
RX CAVITY SUMP FLOW HIGH (1-01-A2) CONTAINMENT FLOOR DRAINS FLOW HIGH (1-01-A1) CONTAINMENT VENT ISOLATION (1-05-C7) CONTAINMENT INTERNAL PRESSURE HIGH (0-33-D6) CHARGING LINE FLOW HIGH (1-09-D3)

- CONTROLLER NOTES :
1. The 1-01-A1 (Containment Floor Drains) alarm will clear and come in again about 3-5 minutes after being cleared.
 2. IF THE OPERATOR checks for sump flow : The Reactor Cavity Sump Flow Chart Recorder (located on the back panel) is indicating flow greater than normal (normal = zero gpm) and flow appears to be increasing.

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-14**

TIME : 0900 - 1059 (T+090 - T+209)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK IS IN PROGRESS

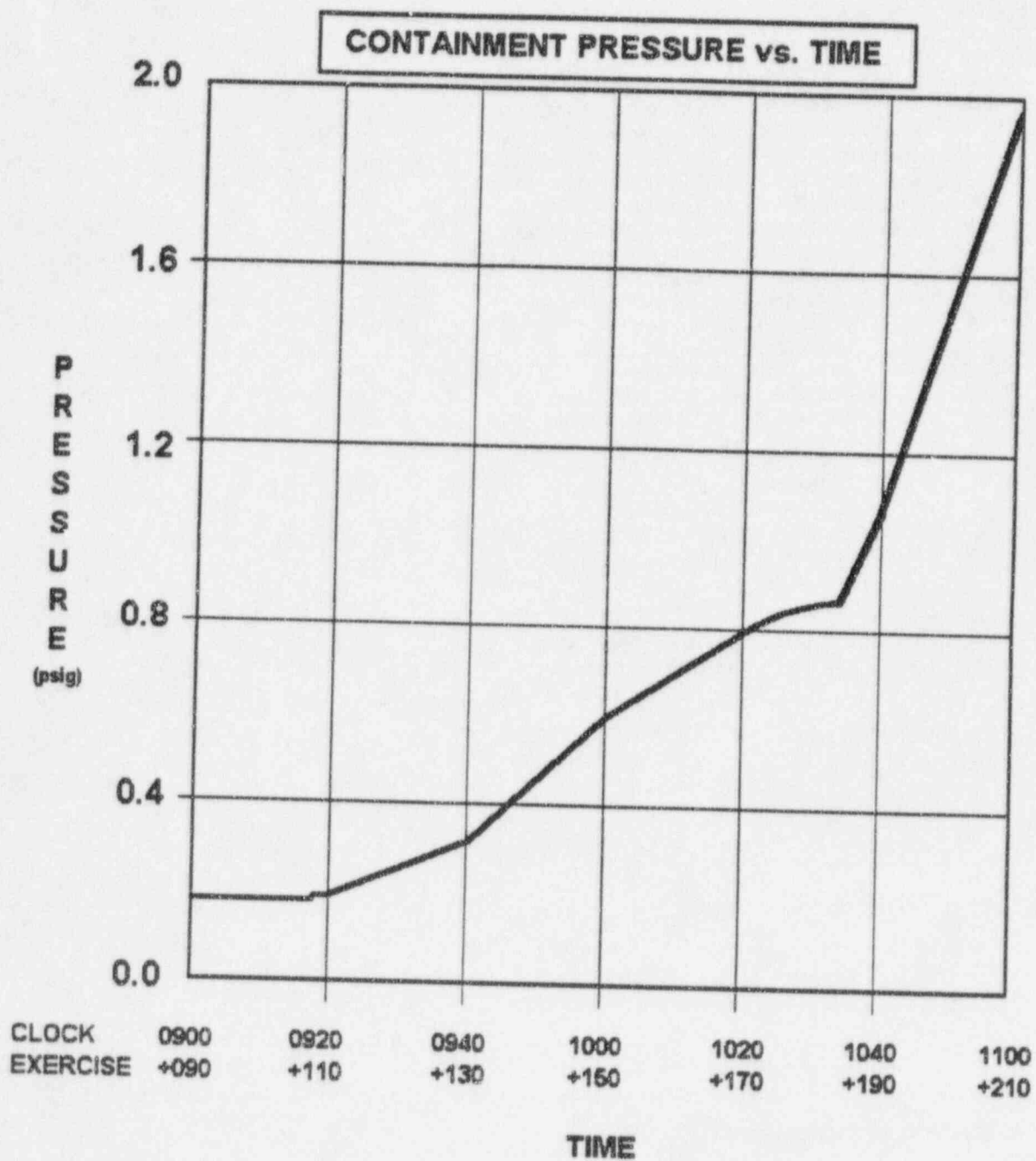
MESSAGE

ISSUE the following information VERBALLY :

Use the attached graph to provide information to participants about containment pressure.

Byron 1995 GSEP Exercise ; November 15, 1995

CONTROL ROOM #14



K:\CONTROL\EXERCISE\PRS0900.BMP

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0900 (90)

PLANT STATUS-10

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.15	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HL CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	83.80	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.29	GPM
PRZR PRESSURE	2239.88	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.57	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.36	558.36	558.36	558.42	DEGF
COLD LEG:	557.93	557.91	557.94	557.96	DEGF
TAVE:	558.11	558.10	558.11	558.15	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1094.26	1094.36	1094.36	1094.65	PSIG
S/G NR LEVEL	47.34	49.82	47.69	46.37	PC
S/G WR LEVEL	57.24	58.02	57.34	56.95	PC
S/G STM FL	0.00	19.66	19.23	21.34	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGGA
CST LEVEL	85.39	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.39	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	19.72	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-15

TIME : 0905 (T+095)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK IS IN PROGRESS

MESSAGE

ISSUE the following alarm has been received :

Unit 1
U1 CONTAINMENT VENT ISOLATION (1-05-C7)

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0910 (100)

PLANT STATUS-11

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.26	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	98.13	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	69.23	GPM
PRZR PRESSURE	2238.83	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2246.53	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.46	558.46	558.46	558.52	DEGF
COLD LEG:	558.05	558.03	558.05	558.07	DEGF
TAVE:	558.22	558.21	558.22	558.26	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1095.51	1095.50	1095.50	1095.79	PSIG
S/G NR LEVEL	50.74	53.70	50.97	50.29	PC
S/G WR LEVEL	58.29	59.24	58.37	58.16	PC
S/G STM FL	0.00	18.57	19.45	20.13	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	84.60	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.15	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	108.42	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	20.32	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-16

TIME : 0918 - 0920 (T+108 - T+110)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK IS IN PROGRESS

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1
VCT LEVEL LOW (1-09-A2) PZR PRESSURE LOW - SI RX TRIP (1-11-C1) PZR PRESS CH-458 LOW (1-12-B1) PZR PRESS CH-455 / CH-458 LOW (1-12-B1) CONTAINMENT PHASE A ISOLATION TRAIN A/B (1-05-B7)

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0920 (110)

PLANT STATUS-12

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	0.00	PC
AUCT HI TAVE	0.00	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HI CETs	0.00	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	0.00	DEGF	CHARGING FLOW	0.00	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	0.00	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	0.00	PSIG	RVLIS-PLENUM	0.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	0.00	0.00	0.00	0.00	DEGF
COLD LEG:	0.00	0.00	0.00	0.00	DEGF
TAVE:	0.00	0.00	0.00	0.00	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	0.00	0.00	0.00	0.00	PSIG
S/G NR LEVEL	0.00	0.00	0.00	0.00	PC
S/G WR LEVEL	0.00	0.00	0.00	0.00	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CS' LEVEL	0.00	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.00	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	0.00	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	0.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	0.00	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0930 (120)

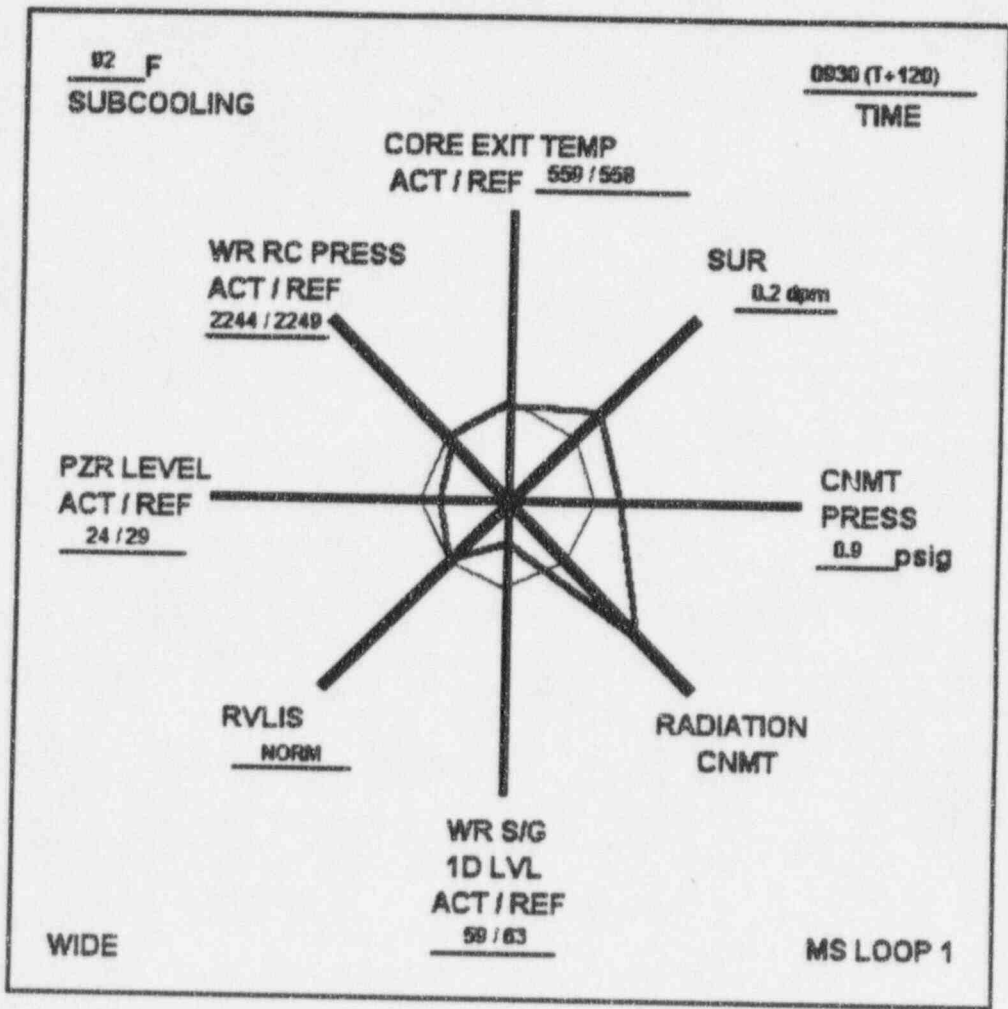
PLANT STATUS-13

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	0.00	PC
AUCT HI TAVE	0.00	DEGF	PRT PRESSURE	0.00	PSIG
AVG 10HI CETs	0.00	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	0.00	DEGF	CHARGING FLOW	0.00	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	0.00	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	0.00	PSIG	RVLIS-PLENUM	0.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	0.00	0.00	0.00	0.00	DEGF
COLD LEG:	0.00	0.00	0.00	0.00	DEGF
TAVE:	0.00	0.00	0.00	0.00	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	0.00	0.00	0.00	0.00	PSIG
S/G NR LEVEL	0.00	0.00	0.00	0.00	PC
S/G WR LEVEL	0.00	0.00	0.00	0.00	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	0.00	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.00	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	0.00	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	0.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	0.00	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise ; November 15, 1995

BYRON STATION SPDS DISPLAY



Byron 1995 GSEP Exercise
November 15, 1995

Time = 0940 (130)

PLANT STATUS-14

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.88	DEGF	PRT PRESSURE	0.04	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	49.28	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2238.61	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2246.21	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	559.09	559.07	559.09	559.14	DEGF
COLD LEG:	558.72	558.74	558.72	558.76	DEGF
TAVE:	558.82	558.83	558.82	558.89	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1098.79	1098.98	1099.03	1099.46	PSIG
S/G NR LEVEL	61.03	65.74	60.85	62.33	PC
S/G WR LEVEL	61.45	62.91	61.38	61.83	PC
S/G STM FL	0.00	28.67	30.73	33.07	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	82.30	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.55	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	114.96	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	30.92	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 0950 (140)

PLANT STATUS-15

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	558.00	DEGF	PRT PRESSURE	0.08	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	114.64	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2240.72	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2247.98	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.16	558.16	558.16	558.22	DEGF
COLD LEG:	557.83	557.82	557.83	557.86	DEGF
TAVE:	557.96	557.95	557.96	558.00	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1093.94	1093.92	1093.92	1094.56	PSIG
S/G NR LEVEL	55.35	60.40	55.37	56.30	PC
S/G WR LEVEL	59.64	61.22	59.65	59.92	PC
S/G STM FL	0.00	36.29	37.20	39.51	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	82.25	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.74	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	119.27	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	37.88	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-17

TIME : 1000 - 1005 (T+150 - T+155)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK HAS EXCEEDED CHARGING PUMP CAPACITY

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1

CONTAINMENT EQUIP DRAINS FLOW (1-01-A12)
PZR LEVEL CONTROL DEV LOW (1-12-B4)
PZR LEVEL LOW HEATERS OFF LETDOWN SECURED (1-12-A4)
PRESSURIZER HEATER GROUP C BREAKER TRIP (1-12-A5)
PZR HEATER SCR PHASE LOSS OR REVERSAL (1-12-C5)
PZR HEATER SCR COOLING FAN FAILURE (1-12-D5)
PZR PRESS CONTROL DEV LOW HEATERS ON (1-12-C1)

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-18

TIME : 1000 - 1100 (T+150 - T+210)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MANUAL SAFETY INJECTION HAS OCCURRED (PER PROCEDURE)

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1
MANUAL RX TRIP (1-11-A1)
CONTAINMENT PHASE A ISOLATION TRAIN A/B (1-05-B7)
VALVE 1SI8801A/B NOT CLOSED
RCFC 1A/B/C HIGH SPEED BREAKER TRIP (1-03-A5)
CENTRIFUGAL CHARGING PUMP 1B AUTOSTART (1-09-B3)
ESSENTIAL SERVICE WATER PUMP 1B AUTOSTART (1-02-B1)
SI PUMP 1A/1B AUTOSTART (1-05-B4)
RH PUMP 1A/1B AUTOSTART (1-06-A2)
FW PUMP 1B TRIP (1-16-B1)
DIESEL GENERATOR 1A TROUBLE (1-21-C8)
DIESEL GENERATOR 1B TROUBLE (1-22-C8)
CC PUMP 0 (DIV 12) AUTOSTART (1-02-B4)
DIESEL GENERATOR 1A RUNNING UNLOADED (1-21-D9)
DIESEL GENERATOR 1B RUNNING UNLOADED (1-22-D9)

CONTROLLER NOTE : 1. Several of the panel alarms contained in this message may only be received if they have been reset since the reactor was manually tripped.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1000 (150)

PLANT STATUS-16

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	74.71	PC
AUCT HI TAVE	557.96	DEGF	PRT PRESSURE	0.13	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	118.70	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2236.27	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2243.18	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.09	558.09	558.09	558.15	DEGF
COLD LEG:	557.78	557.77	557.78	557.83	DEGF
TAVE:	557.89	557.89	557.89	557.96	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1094.05	1094.06	1094.06	1094.51	PSIG
S/G NR LEVEL	52.99	58.43	53.31	53.79	PC
S/G WR LEVEL	59.04	60.76	59.16	59.29	PC
S/G STM FL	0.00	26.36	26.29	28.94	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHG
CST LEVEL	81.95	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	1.00	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	123.13	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	22.53	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.59	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 1000 (T+150) UNIT 1

Pump Type	A	B	C	D	Other	
Reactor Coolant Pumps	R	R	R	R		
RCFC	RS	RS	RS	RS		
CV Pumps	R	R			PDP - OOS	
SI Pumps	R	R				
RH Pumps	DMG	R				
CS Pumps	AV	AV				
CC Pumps	R	OOS				
Aux Feed Pumps	R	R				
						0 - R

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - CLOSED B - CLOSED	SATs	142-1 ENG 142-2 ENG
Rod Positions	All Rods In	UATs	141-1 AV / DE 141-2 AV / DE
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 ENG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142 Complete Containment Isolation		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A R UNLOADED 1B R UNLOADED

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1010 (160)

PLANT STATUS-17

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.03	PC
AUCT HI TAVE	558.03	DEGF	PRT PRESSURE	1.47	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	26.05	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2227.58	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2236.19	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	558.12	558.13	558.11	558.19	DEGF
COLD LEG:	557.94	557.96	557.93	557.97	DEGF
TAVE:	557.97	557.97	557.97	558.02	DEGF

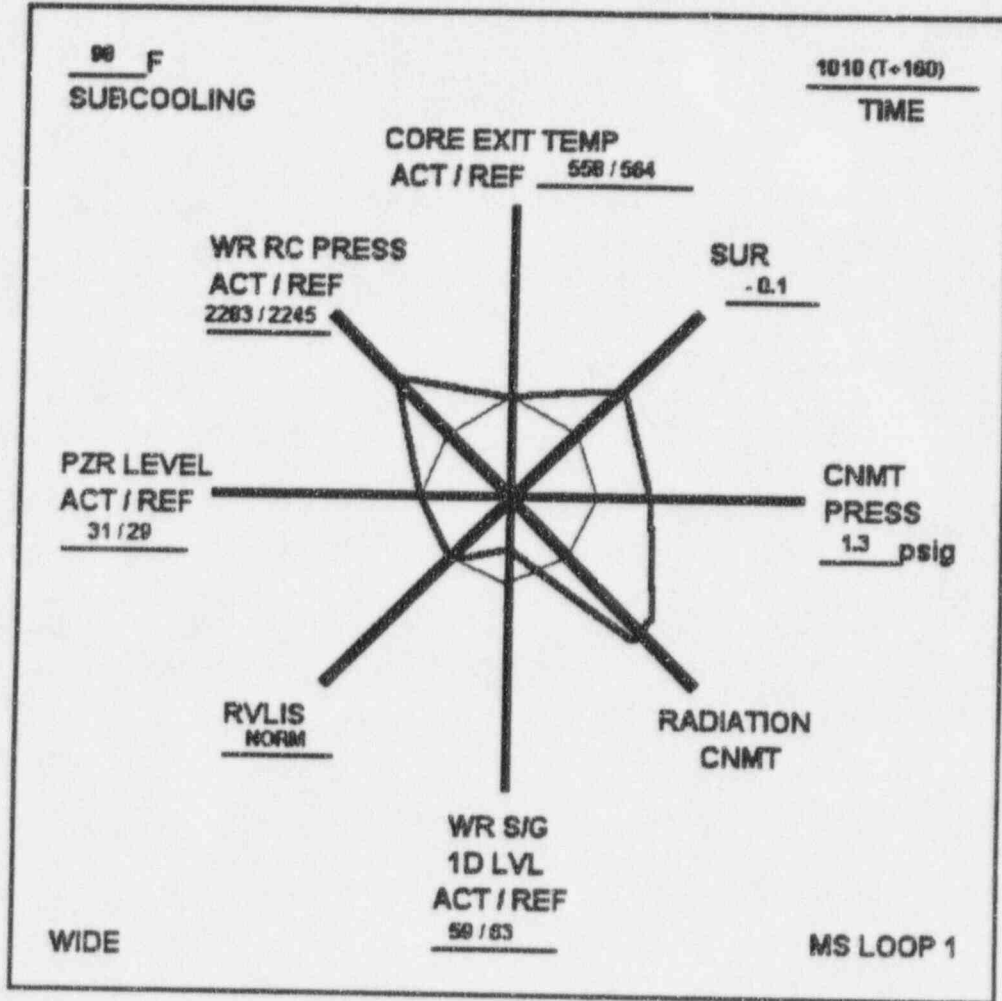
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1096.07	1096.10	1096.10	1096.34	PSIG
S/G NR LEVEL	53.90	59.68	54.56	54.81	PC
S/G WR LEVEL	59.80	61.64	60.01	60.01	PC
S/G STM FL	0.00	14.00	15.22	17.09	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	81.61	PC			INHGA

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	1.67	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	135.04	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	50.87	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	93.03	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise ; November 15, 1995

BYRON STATION SPDS DISPLAY



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<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1020 (170)

PLANT STATUS-18

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	557.88	DEGF	PRT PRESSURE	2.05	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	153.50	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2233.65	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2241.55	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	557.98	557.98	557.98	558.07	DEGF
COLD LEG:	557.72	557.71	557.71	557.77	DEGF
TAVE:	557.81	557.81	557.81	557.88	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1093.54	1093.53	1093.53	1093.97	PSIG
S/G NR LEVEL	53.26	59.70	54.37	54.06	PC
S/G WR LEVEL	60.18	62.21	60.54	60.42	PC
S/G STM FL	0.00	26.09	26.14	28.79	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	81.28	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.16	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	145.85	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	82.11	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	92.78	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1030 (180)

PLANT STATUS-19

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	554.52	DEGF	PRT PRESSURE	2.19	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	20.22	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2188.26	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2215.75	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	551.80	551.85	551.85	554.51	DEGF
COLD LEG:	551.39	551.39	551.34	553.54	DEGF
TAVE:	554.51	554.51	554.52	554.07	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	1051.85	1051.74	1051.48	1051.97	PSIG
S/G NR LEVEL	53.29	60.06	54.80	49.81	PC
S/G WR LEVEL	60.96	63.11	61.45	59.32	PC
S/G STM FL	0.00	2.57	2.21	104.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	80.95	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.45	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	151.65	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	92.40	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

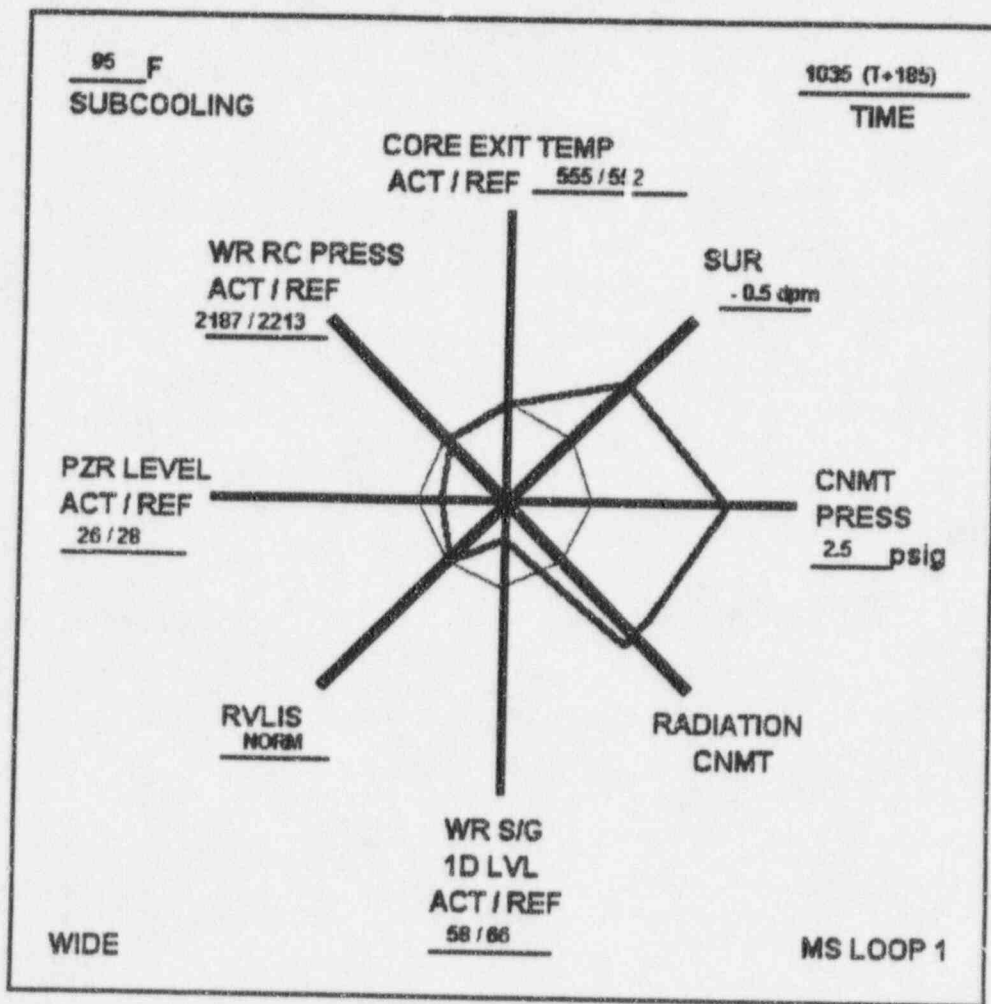
TIME : 1030 (T+180) UNIT 1

Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	AV	AV	AV	R	
RCFC	RS	RS	RS	RS	
CV Pumps	R	R			PDP - OOS
SI Pumps	R	R			
RH Pumps	DMG	AV			
CS Pumps	AV	AV			
CC Pumps	R	OOS			0 - R
Aux Feed Pumps	R	R			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - CLOSED B - CLOSED	SATs	142-1 ENG 142-2 ENG
Rod Positions	All Rods Full In	UATs	141-1 AV / DE 141-2 AV / DE
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 ENG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142 Containment Isolation Diesels Secured from C.R.		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A AV 1B AV

Byron 1995 GSEP Exercise ; November 15, 1995

BYRON STATION SPDS DISPLAY



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Byron 1995 GSEP Exercise
November 15, 1995

Time = 1040 (190)

PLANT STATUS-20

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT KI TAVE	547.96	DEGF	PRT PRESSURE	2.31	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	30.49	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2240.43	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2268.49	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	540.91	540.93	540.94	544.58	DEGF
COLD LEG:	541.05	541.05	541.04	544.47	DEGF
TAVE:	547.93	547.94	547.96	544.52	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	980.67	980.88	980.88	980.95	PSIG
S/G NR LEVEL	54.42	61.52	56.35	36.69	PC
S/G WR LEVEL	62.16	64.44	62.78	56.39	PC
S/G STM FL	0.00	0.00	0.00	22.46	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	80.61	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.56	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	154.81	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	91.75	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1050 (200)

PLANT STATUS-21

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	542.39	DEGF	PRT PRESSURE	2.42	PSIG
AVG - HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
COFE SUB COOLING	-99.99	DEGF	CHARGING FLOW	205.52	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2066.50	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2094.30	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	535.03	535.01	534.98	538.27	DEGF
COLD LEG:	535.34	535.39	535.34	537.44	DEGF
TAVE:	540.58	542.44	542.43	537.89	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	920.96	920.65	920.65	921.23	PSIG
S/G NR LEVEL	56.65	62.88	57.72	27.11	PC
S/G WR LEVEL	63.34	65.23	63.61	53.70	PC
S/G STM FL	0.00	17.16	16.73	92.49	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	80.28	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.61	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	156.78	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	91.43	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-19**

TIME : 1100 - 1300 (T+210 - T+330)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT LEAK IN PROGRESS, CONTAINMENT FAILURE OCCURS

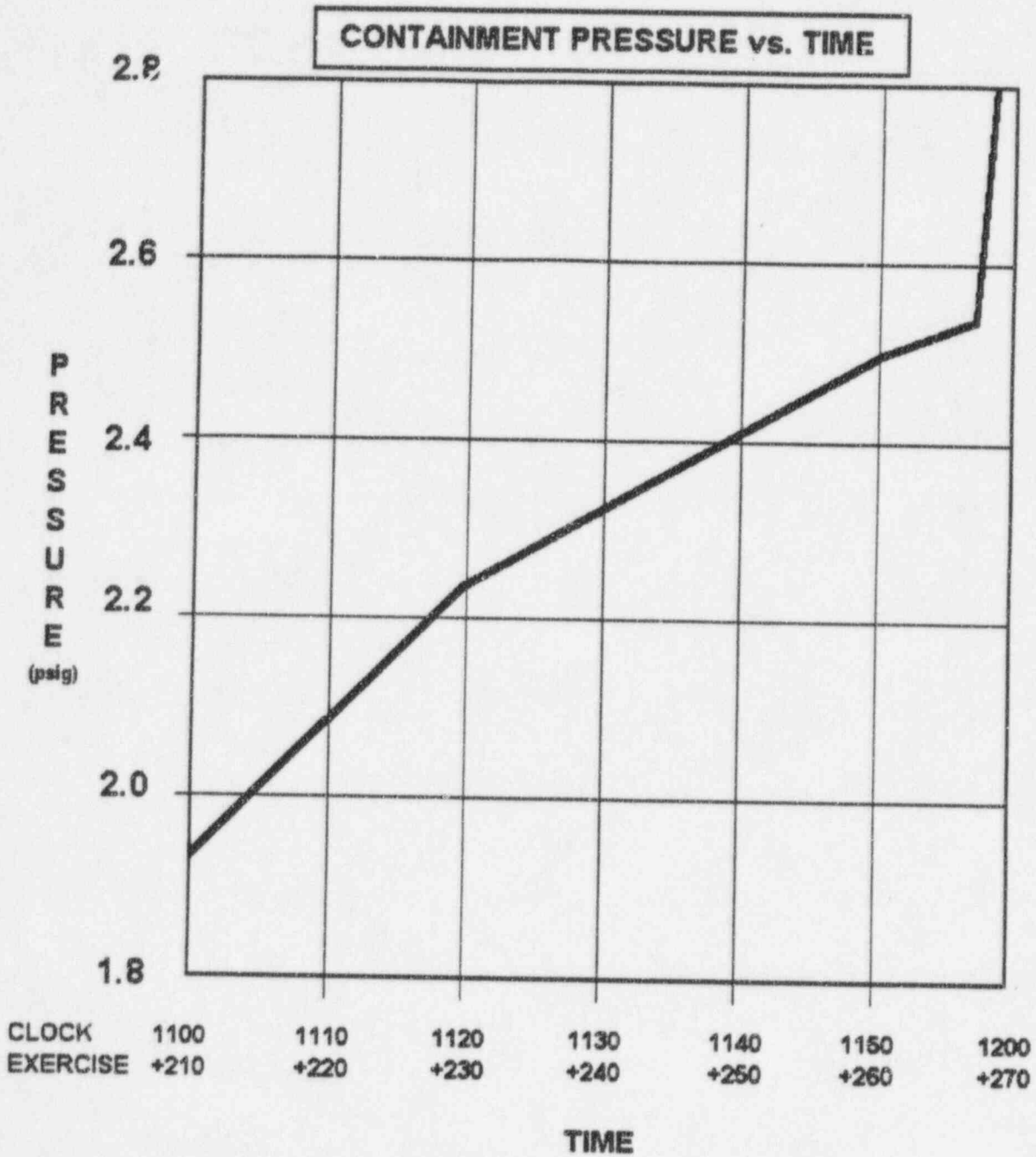
MESSAGE

ISSUE the following information VERBALLY :

Use the attached graph to provide information to participants about containment pressure.

Byron 1995 GSEP Exercise ; November 15, 1995

CONTROL ROOM #19

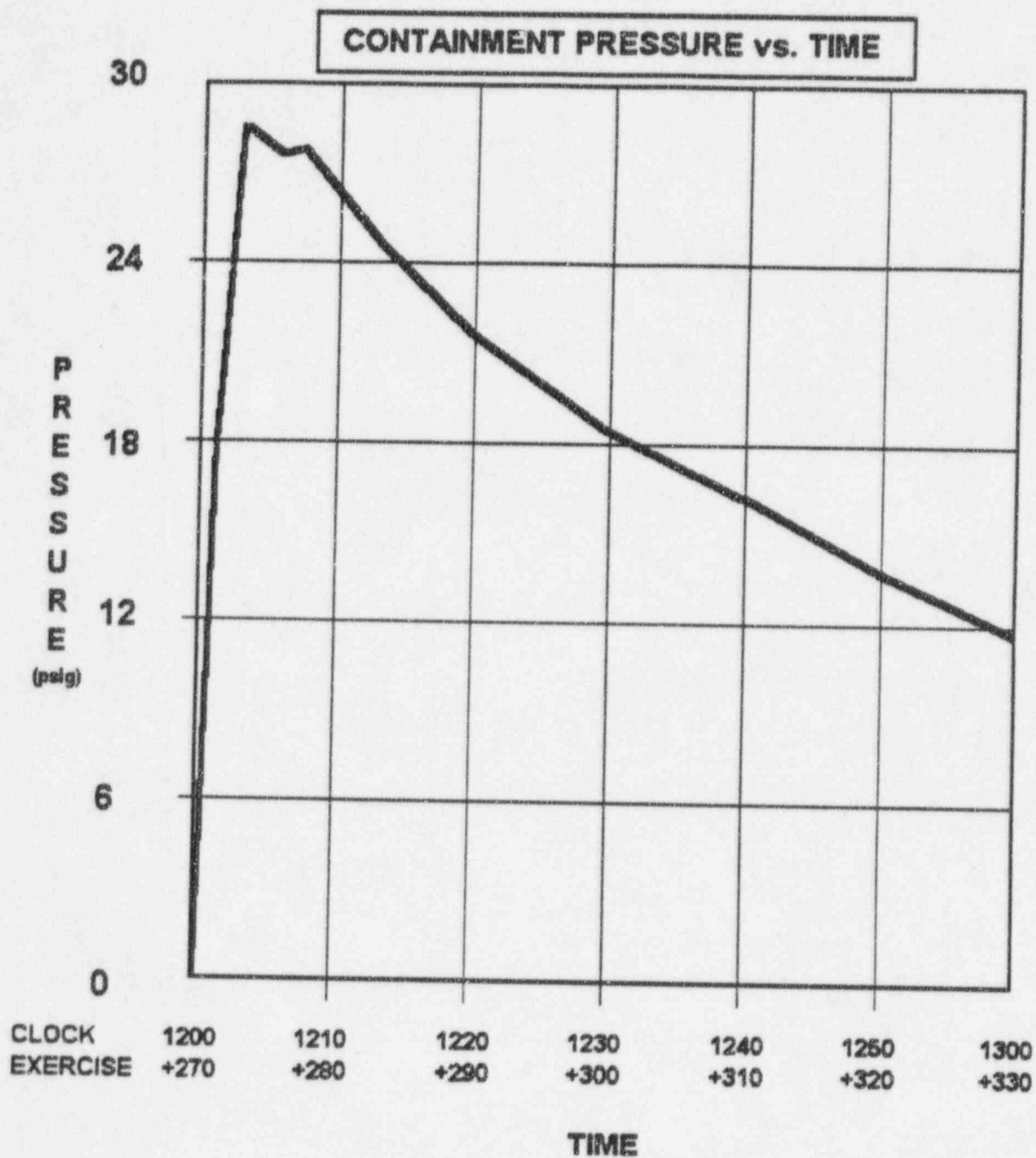


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<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise ; November 15, 1995

CONTROL ROOM #19B

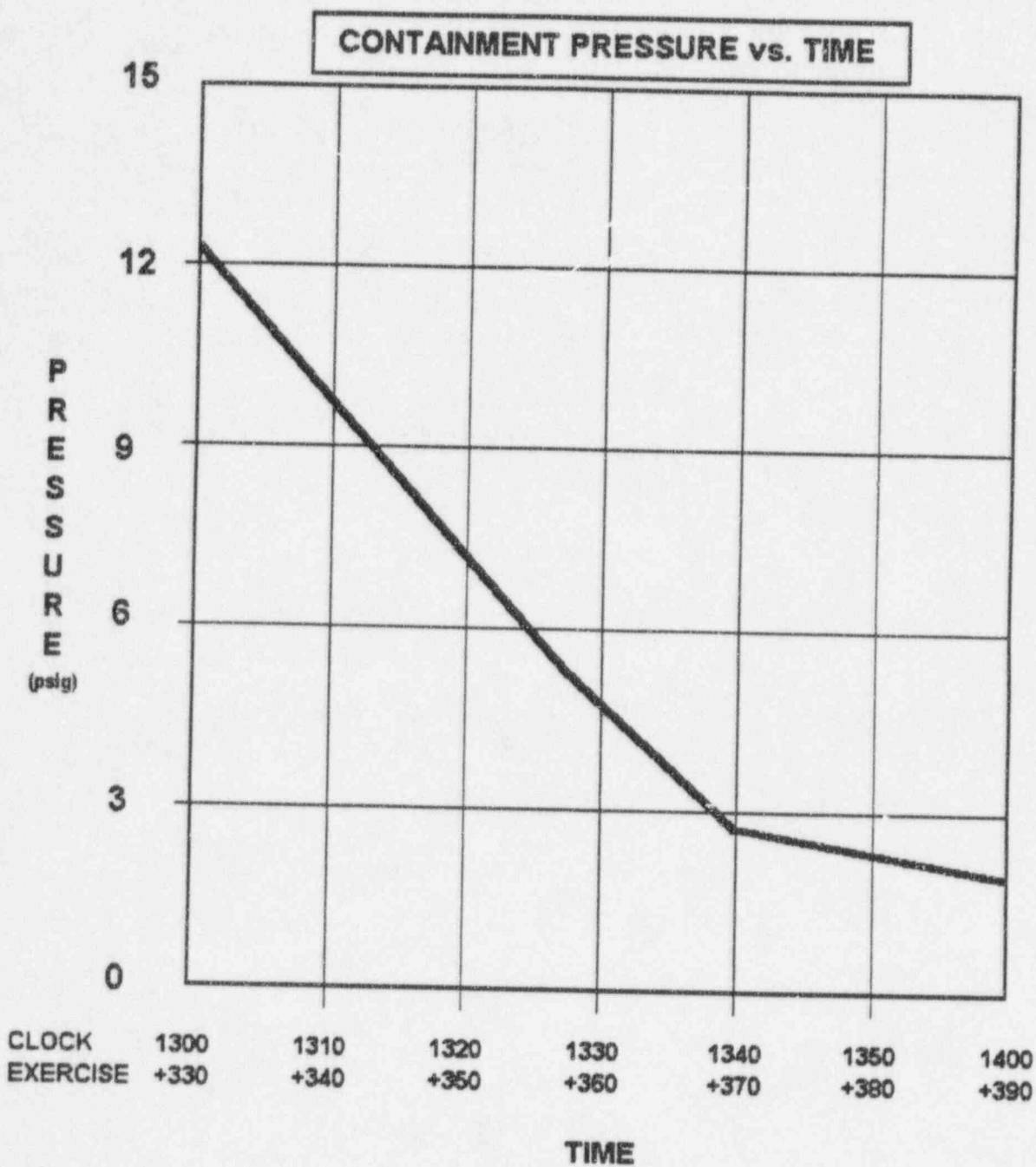


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<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise ; November 15, 1995

CONTROL ROOM #19C



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<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1100 (210)

PLANT STATUS-22

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	535.17	DEGF	PRT PRESSURE	2.51	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	294.68	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	2024.77	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	2052.42	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	519.11	519.04	519.14	522.68	DEGF
COLD LEG:	518.81	518.77	518.77	521.52	DEGF
TAVE:	530.00	535.20	535.17	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	801.26	800.57	800.57	801.35	PSIG
S/G NR LEVEL	58.20	60.97	55.86	33.67	PC
S/G WR LEVEL	64.52	65.29	63.72	57.19	PC
S/G STM FL	0.00	42.33	41.63	53.37	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	79.49	PC			INHGA

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.58	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	157.41	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	90.84	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 1110 (T+220) UNIT 1

Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	AV	AV	AV	R	
RCFC	RS	DE	RS	DE	
CV Pumps	R	DE			PDP - OOS
SI Pumps	R	DE			
RH Pumps	DMG	DE			
CS Pumps	AV	DE			
CC Pumps	R	OOS			0 - DE
Aux Feed Pumps	R	R			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - CLOSED B - CLOSED	SATs	142-1 ENG 142-2 ENG
Rod Positions	All Rods Full In	UATs	141-1 AV / DE 141-2 AV / DE
Primary PORVs	CLOSED	6.3 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 DMG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142 Containment Isolation		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A R 1B DMG

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-20

TIME : 1110 - 1115 (T+220 - T+225)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : ESF BUS 142 TRIP HAS OCCURRED

MESSAGE

ISSUE the following information VERBALLY :

Bus 142 has **TRIPPED**.

The 1B Diesel Generator has **FAILED** to start.

Control Room lighting has **DIMMED** significantly and the emergency lighting is **ON**.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-21

TIME : 1110 - 1115 (T+220 - T+225)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : B TRAIN ESF BUS 142 HAS TRIPPED ON OVERCURRENT ; 1B DIESEL
GENERATOR HAS FAILED TO START

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1
BUS 142 SAT 142-2 FD BREAKER 1422 TRIP (1-22-A7)
125V DC BUS 112 GROUND (1-22-D6)
125V DC BATT CHGR 112 FAILURE (1-22-E8)
BUS 142 VOLTAGE LOSS (1-22-C7)
SI PUMP 1B TRIP (1-05-A4)
RH PUMP 1B TRIP (1-06-A1)
ESSENTIAL SERVICE WATER PUMP 1B TRIP (1-02-A1)
DIESEL GENERATOR 1B RUNNING UNLOADED (1-22-D9)

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-22**

TIME : 1110 - 1115 (T+220 - T+225)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : B TRAIN ESF BUS 142 HAS TRIPPED

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Participant checks RM-11	Grids 1, 2 and 4 are flashing MAGENTA . (Grid 3 is colored GREEN).
Participant selects Grid 1.	The following monitors are colored MAGENTA :
4AA123 (U1 Main Steamline @ R13) 4AC323 (U1 Main Steamline @ R20)	4AB223 (U1 Main Steamline @ R20) 4AD423 (U1 Main Steamline @ R13)
Participant selects Grid 2.	The following monitors are colored MAGENTA :
0PA233 (C.R. Outside Air B-Part) 0PA234 (C.R. Outside Air B-Part) 0PA237 (C.R. Turbine Air B-Part) 0PA238 (C.R. Turbine Air B-Part) 0PC333 (C.R. Outside Air B-Iodine) 0PC334 (C.R. Outside Air B-Iodine)	0PB133 (C.R. Outside Air B-Gas) 0PB134 (C.R. Outside Air B-Gas) 0PB137 (C.R. Turbine Air B-Gas) 0PB138 (C.R. Turbine Air B-Gas) 0PC337 (C.R. Turbine Air B-Iodine) 0PC338 (C.R. Turbine Air B-Iodine)
Participant selects Grid 4.	The following monitors are colored MAGENTA :
3AS156 (FHB Incident, 426 El.) 4AS112 (U1 Containment FH Incident) 4AS121 (U1 Containment High Range) 4AB224 (U1 Steam Tunnel 377 El.) 4AB225 (U1 Pipe Pen. Aux Bldg 364 El.)	4AA124 (U1 Steam Tunnel 377 El.) 4AA125 (U1 Pipe Pen. Aux Bldg 364 El.) 4AA126 (U1 Pipe Pen. Aux Bldg 383 El.) 4AA127 (U1 Pipe Pen. Aux Bldg 401 El.) 4AB226 (U1 Pipe Pen. Aux Bldg 383 El.) 4AB227 (U1 Pipe Pen. Aux Bldg 401 El.)

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1110 (220)

PLANT STATUS-23

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	2.60	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	320.39	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	1932.08	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	1957.39	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	500.02	500.12	499.93	503.62	DEGF
COLD LEG:	499.83	499.84	499.83	502.53	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	675.10	676.15	676.15	676.86	PSIG
S/G NR LEVEL	58.42	57.08	52.18	51.66	PC
S/G WR LEVEL	65.57	65.10	63.57	63.64	PC
S/G STM FL	0.00	36.32	35.34	46.77	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	78.46	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.53	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	156.82	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	90.19	PC			

<<< *** THIS IS AN EXERCISE *** >>>

TIME = 1110 (T+220)

AREA RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value mR/h	Alarm Status
4AA122	U1 Main Steam Line	Rm R13	0.094	Normal
5AA122	U2 Main Steam Line	Rm R41	0.108	Normal
4AA123	U1 Main Steam Line	Rm R13	DE-ENG	Normal
5AA123	U2 Main Steam Line	Rm R41	0.077	Normal
4AB222	U1 Main Steam Line	Rm R20	0.122	Normal
5AB222	U2 Main Steam Line	Rm R34	0.095	Normal
4AB223	U1 Main Steam Line	Rm R20	DE-ENG	Normal
5AB223	U2 Main Steam Line	Rm R34	0.105	Normal
4AC322	U1 Main Steam Line	Rm R20	0.131	Normal
5AC322	U2 Main Steam Line	Rm R34	0.085	Normal
4AC323	U1 Main Steam Line	Rm R20	DE-ENG	Normal
5AC323	U2 Main Steam Line	Rm R34	0.093	Normal
4AD422	U1 Main Steam Line	Rm R13	0.333	Normal
5AD422	U2 Main Steam Line	Rm R41	0.173	Normal
4AD423	U1 Main Steam Line	Rm R13	DE-ENG	Normal
5AD423	U2 Main Steam Line	Rm R41	0.11	Normal

PROCESS RADIATION MONITORS , GRID 1

RM-11 Code	Description		Value $\mu\text{Ci/cc}$	Alarm Status
0PS101	Liq. Radwaste Effluent		1.00E-08	Normal
0PS105	TB Fire & Oil Sump		8.90E-08	Normal
0PS106	RW Evap Conds. Return 0A		1.00E-08	Normal
0PS107	RW Evap Conds. Return 0B		1.00E-08	Normal
0PS108	RW Evap Conds. Return 0C		1.00E-08	Normal
0PS109	CC Heat Exchg 0 Water Outlet		4.48E-07	Normal
0PS110	Station Blowdown		ISOL	Normal
0PS116	Blowdown Afterfilter 0A Outlet		ISOL	Normal
0PS117	Blowdown Afterfilter 0B Outlet		ISOL	Normal
0PS118	Blowdown Afterfilter 0C Outlet		ISOL	Normal
0PS119	Blowdown Afterfilter 0D Outlet		ISOL	Normal
0PS141	Condensate Polisher Hi/Low Sumps		1.00E-09	Normal
1PS102	U1 RCFC Sx Water Outlet, 1A / 1C		7.81E-09	Normal
2PS102	U1 RCFC Sx Water Outlet, 2A / 2C		8.45E-08	Normal
1PS103	U1 RCFC Sx Water Outlet, 1B / 1D		7.80E-09	Normal
2PS103	U1 RCFC Sx Water Outlet, 2B / 2D		1.11E-08	Normal
1PS106	U1 Gross Failed Fuel, Low Energy		ISOL	Normal
2PS106	U2 Gross Failed Fuel, Low Energy		2.09E+00	Normal
1PS206	U1 Gross Failed Fuel, High Energy		ISOL	Hi Alarm
2PS206	U2 Gross Failed Fuel, High Energy		4.24E-02	Normal
1PS107	U1 BTR Chiller Surge Tank Return		1.00E-08	Normal
2PS107	U2 BTR Chiller Surge Tank Return		1.00E-08	Normal
1PS108	U1 Steam Generator Blowdown		ISOL	Normal
2PS108	U2 Steam Generator Blowdown		1.06E-06	Normal
1PS109	U1 CC Heat Exch Water Outlet 1		1.34E-07	Normal
2PS109	U2 CC Heat Exch Water Outlet 2		2.43E-07	Normal
1PS127	U1 SJAE Gland Steam Exhaust, Gas		1.00E-06	Normal
2PS127	U2 SJAE Gland Steam Exhaust, Gas		1.06E-06	Normal

Rad Monitors in units of mR/h.
Process Monitors are in units
of $\mu\text{Ci/cc}$.

TIME = 1110 (T+220)

PROCESS RADIATION MONITORS , GRID 2

RM-11 Code	Description	Value	Alarm Status
0PA231	Ctl Rm Outside Air Intake A - Part	5E-14	Normal
0PB131	Ctl Rm Outside Air Intake A - Gas	2.68E-06	Normal
0PC331	Ctl Rm Outside Air Intake A - Iodine	2.04E-14	Normal
0PA232	Ctl Rm Outside Air Intake A - Gas	1.16E-12	Normal
0PB132	Ctl Rm Outside Air Intake A - Part	2.76E-06	Normal
0PC332	Ctl Rm Outside Air Intake A - Iodine	3.67E-14	Normal
0PA233	Ctl Rm Outside Air Intake B - Part	DE-ENG	Normal
0PB133	Ctl Rm Outside Air Intake B - Gas	DE-ENG	Normal
0PC333	Ctl Rm Outside Air Intake B - Iodine	DE-ENG	Normal
0PA234	Ctl Rm Outside Air Intake B - Part	DE-ENG	Normal
0PB134	Ctl Rm Outside Air Intake B - Gas	DE-ENG	Normal
0PC334	Ctl Rm Outside Air Intake B - Iodine	DE-ENG	Normal
0PA235	CR Turb Bldg Air Intake A - Part	1.21E-13	Normal
0PB135	CR Turb Bldg Air Intake A - Gas	2.24E-06	Normal
0PC335	CR Turb Bldg Air Intake A - Iodine	6.24E-15	Normal
0PA236	CR Turb Bldg Air Intake A - Part	3.23E-15	Normal
0PB136	CR Turb Bldg Air Intake A - Gas	1.94E-06	Normal
0PC336	CR Turb Bldg Air Intake A - Iodine	3.67E-14	Normal
0PA237	CR Turb Bldg Air Intake B - Part	DE-ENG	Normal
0PB137	CR Turb Bldg Air Intake B - Gas	DE-ENG	Normal
0PC337	CR Turb Bldg Air Intake B - Iodine	DE-ENG	Normal
0PA238	CR Turb Bldg Air Intake B - Part	DE-ENG	Normal
0PB138	CR Turb Bldg Air Intake B - Gas	DE-ENG	Normal
0PC338	CR Turb Bldg Air Intake B - Iodine	DE-ENG	Normal
1PA201	U1 Containmt Purge Effl Particulate	ISOL	Normal
1PB101	U1 Containmt Purge Effl Gas	ISOL	Normal
1PC301	U1 Containmt Purge Effl Iodine	ISOL	Normal
2PA201	U2 Containmt Purge Effl Particulate	3.25E-15	Normal
2PB101	U2 Containmt Purge Effl Gas	1.97E-06	Normal
2PC301	U2 Containmt Purge Effl Iodine	3.61E-13	Normal
1PA211	U1 Containment Atmos. Particulate	3.18E-10	Normal
2PA211	U2 Containment Atmos. Particulate	5E-13	Normal
1PB111	U1 Containment Atmos. Low Gas	0.0033	Hi Alarm
2PB111	U2 Containment Atmos. Low Gas	4.08E-06	Normal
1PC311	U1 Containment Atmos. Iodine	OSH	Hi Alarm
2PC311	U2 Containment Atmos. Iodine	2.66E-12	Normal
1PD411	U1 Containment Atmos. High Gas	OSH	Hi Alarm
2PD411	U2 Containment Atmos. High Gas	0.00281	Normal
1PA213	U1 RHR/CS Cubicle 1A Particulate	6.41E-13	Normal
2PA213	U2 RHR/CS Cubicle 2A Particulate	4.68E-13	Normal

All values are in units of
µCi/cc unless noted.

<<< *** THIS IS AN EXERCISE *** >>>

TIME = 1110 (T+220)

PROCESS RADIATION MONITORS , GRID 2

RM-11 Code	Description		Value	Alarm Status
1PB113	U1 RHR/CS Cubicle 1A	Gas	8.37E-07	Normal
2PB113	U2 RHR/CS Cubicle 2A	Gas	1.56E-06	Normal
1PA214	U1 RHR/CS Cubicle 1A	Particulate	6.95E-13	Normal
2PA214	U2 RHR/CS Cubicle 2A	Particulate	5.5E-13	Normal
1PB114	U1 RHR/CS Cubicle 1A	Gas	1.95E-06	Normal
2PB114	U2 RHR/CS Cubicle 2A	Gas	1.65E-06	Normal
1PA215	U1 RHR Hx Cubicle 1A	Particulate	6.51E-13	Normal
2PA215	U2 RHR Hx Cubicle 2A	Particulate	1.01E-13	Normal
1PB115	U1 RHR Hx Cubicle 1A	Gas	1.6E-06	Normal
2PB115	U2 RHR Hx Cubicle 2A	Gas	2.12E-06	Normal
1PA216	U1 RHR Hx Cubicle 1B	Particulate	7.44E-13	Normal
2PA216	U2 RHR Hx Cubicle 2B	Particulate	3.56E-13	Normal
1PB116	U1 RHR Hx Cubicle 1B	Gas	2.17E-06	Normal
2PB116	U2 RHR Hx Cubicle 2B	Gas	1.6E-06	Normal
1PA217	U1 Cent Chg Pump 1A	Particulate	7.48E-15	Normal
2PA217	U2 Cent Chg Pump 2A	Particulate	3.23E-15	Normal
1PB117	U1 Cent Chg Pump 1A	Gas	1.48E-06	Normal
2PB117	U2 Cent Chg Pump 2A	Gas	3.36E-06	Normal
1PA218	U1 Cent Chg Pump 1B	Particulate	1E-12	Normal
2PA218	U2 Cent Chg Pump 2B	Particulate	1.5E-12	Normal
1PB118	U1 Cent Chg Pump 1B	Gas	4.01E-06	Normal
2PB118	U2 Cent Chg Pump 2B	Gas	1.67E-06	Normal
1PA228	Aux. Building Vent Effluent	Particulate	3.1E-11	Normal
1PB128	Aux. Building Vent Effluent	Low Gas	0.0002	Normal
1PC328	Aux. Building Vent Effluent	Iodine	3.2E-11	Normal
1PD428	Aux. Building Vent Effluent	High Gas	0.003	Normal
2PA228	Aux. Building Vent Effluent	Particulate	1.04E-11	Normal
2PB128	Aux. Building Vent Effluent	Low Gas	0.000163	Normal
2PC328	Aux. Building Vent Effluent	Iodine	5.41E-12	Normal
2PD428	Aux. Building Vent Effluent	High Gas	0.0027	Normal
1PA130	Wide Range Gas Monitor	U1 Low Gas	5.16E-07	Normal
1PB230	Wide Range Gas Monitor	U1 Mid Gas	3.96E-05	Normal
1PC330	Wide Range Gas Monitor	U1 High GPs	0.00874	Normal
2PA130	Wide Range Gas Monitor	U2 Low Gas	2.83E-07	Normal
2PB230	Wide Range Gas Monitor	U2 Mid Gas	1.97E-05	Normal
2PC330	Wide Range Gas Monitor	U2 High Gas	0.00169	Normal
1PF430	Wide Range Gas Monitor	U1 μ Ci/sec	34.9	Normal
2PF430	Wide Range Gas Monitor	U2 μ Ci/sec	23.9	Normal

All values are in units of μ Ci/cc unless noted.

<<< *** THIS IS AN EXERCISE *** >>>

Process Radiation Monitors
RM-11 , Grid 3

TIME = 1110 (T+220)

PROCESS RADIATION MONITORS , GRID 3

RM-11 Code	Description		Value	Alarm Status
0PA202	Gas Decay Tank Effluent	Low Gas	7.90E-06	Normal
0PB102	Gas Decay Tank Effluent	High Gas	4.52E-07	Normal
0PA203	Lab Fume Hood	Particulate	2.01E-14	Normal
0PB103	Lab Fume Hood	Gas	7.62E-06	Normal
0PC303	Lab Fume Hood	Iodine	3.67E-14	Normal
0PA211	RW Evap. Cubicle	Particulate	6.35E-13	Normal
0PB111	RW Evap. Cubicle	Gas	2.46E-06	Normal
0PS112	Recycle Evap. Cubicle	Particulate	5.90E-13	Normal
0PA213	Gas Decay Tank Cub.	Particulate	3.23E-15	Normal
0PB113	Gas Decay Tank Cub.	Gas	1.68E-06	Normal
0PS114	Drumming Station	Particulate	1.47E-12	Normal
0PS115	Laundry Room	Particulate	7.71E-13	Normal
0PA221	Aux. Bldg Vent Exhst 0A	Particulate	5.50E-09	Normal
0PB121	Aux. Bldg Vent Exhst 0A	Gas	1.00E-05	Normal
0PC321	Aux. Bldg Vent Exhst 0A	Iodine	3.00E-09	Normal
0PA222	Aux. Bldg Vent Exhst 0B	Particulate	9.84E-09	Normal
0PB122	Aux. Bldg Vent Exhst 0B	Gas	7.35E-06	Normal
0PC322	Aux. Bldg Vent Exhst 0B	Iodine	4.92E-09	Alarm
0PA224	Fuel Building Vent Exhst	Particulate	1.28E-09	Normal
0PB124	Fuel Building Vent Exhst	Gas	8.50E-06	Normal
0PC324	Fuel Building Vent Exhst	Iodine	2.49E-15	Normal
0PA225	Misc Tank Vent Effluent	Particulate	4.68E-15	Normal
0PB125	Misc Tank Vent Effluent	Gas	2.49E-06	Normal
0PC325	Misc Tank Vent Effluent	Iodine	1.17E-14	Normal
0PA226	RW Area Vent Effluent	Particulate	6.25E-14	Normal
0PB126	RW Area Vent Effluent	Gas	1.80E-06	Normal
0PC326	RW Area Vent Effluent	Iodine	5.73E-15	Normal
0PA240	Vol. Reduction Area Vent	Particulate	2.06E-15	Normal
0PB140	Vol. Reduction Area Vent	Gas	1.03E-06	Normal
0PC340	Vol. Reduction Area Vent	Iodine	1.84E-14	Normal
0PA260	TSC Vent System	Particulate	4.10E-15	Normal
0PB160	TSC Vent System	Gas	2.00E-06	Normal
0PC360	TSC Vent System	Iodine	1.28E-15	Normal
1PA221	U1 Pipe Tunnel	Particulate	1.00E-06	Hi Alarm
2PA221	U2 Pipe Tunnel	Particulate	5.41E-13	Normal
1PB121	U1 Pipe Tunnel	Gas	OSH	Hi Alarm
2PB121	U2 Pipe Tunnel	Gas	4.09E-06	Normal
1PC321	U1 Pipe Tunnel	Iodine	8.94E-05	Hi Alarm
2PC321	U2 Pipe Tunnel	Iodine	3.67E-14	Normal

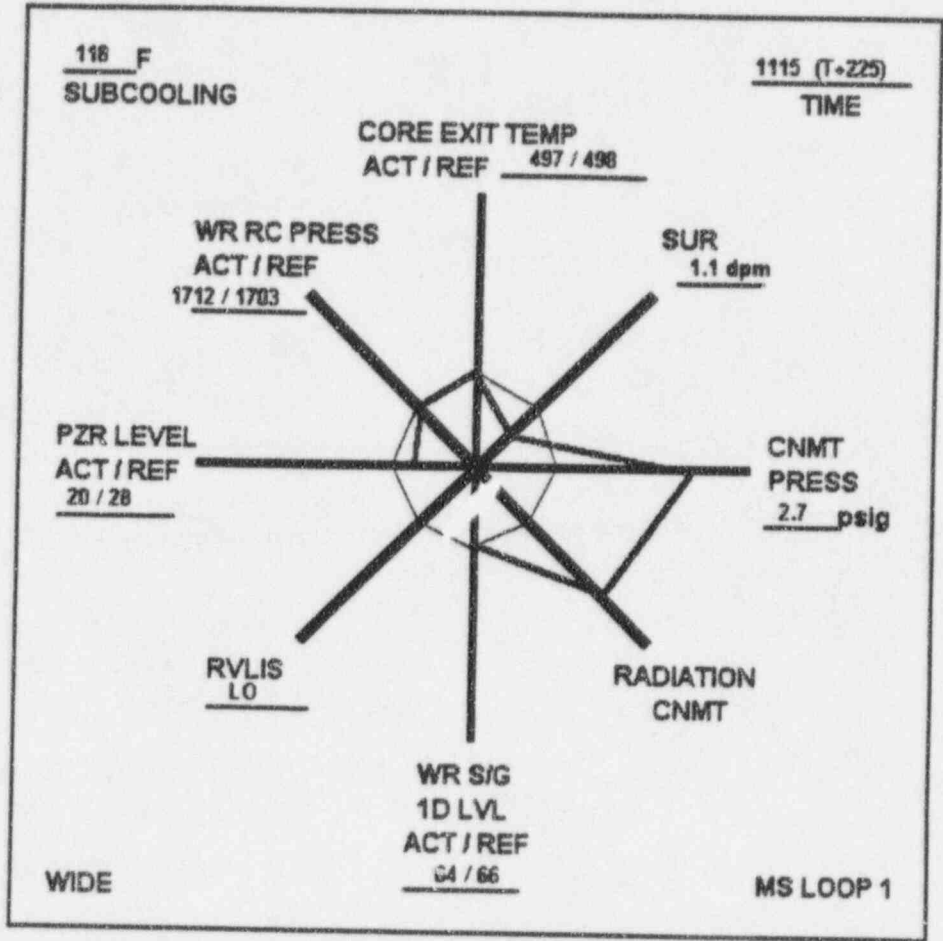
All values are in units of
µCi/cc unless noted.

<<< *** THIS IS AN EXERCISE *** >>>

TIME = 1110 (T+220)					
RM-11 Code	Description		Value	Alarm Status	
	Elev.	Location			
3AS101	Aux. Building	346 P13	2.45	Normal	
3AS202	Aux. Building	346 S18	3.04	Alarm	
3AS303	Aux. Building	346 P25	2.35	Normal	
3AS104	Aux. Building	364 P11	2.73	Alarm	
3AS205	Aux. Building	364 P18	2.57	Alarm	
3AS306	Aux. Building	364 M23	4.88	Alarm	
3AS207	Aux. Building	363 M24	4.13	Alarm	
3AS308	Aux. Building	363 S18	2.58	Alarm	
3AS409	Aux. Building	363 L11	2.55	Alarm	
3AS110	Aux. Building	401 M13	2.88	Alarm	
3AS411	Aux. Building	401 V17	2.96	Alarm	
3AS412	Aux. Building	401 V19	3.06	Alarm	
3AS213	Aux. Building	401 N23	4.31	Alarm	
3AS314	Aux. Building	426 N25	4.5	Alarm	
3AS115	Aux. Building	426 V18	4.87	Alarm	
3AS416	Aux. Building	426 P18	4.83	Alarm	
3AS117	Aux. Building	451 Q18	2.56	Alarm	
3AS331	Aux. Building	401 HRSS Room	0.84	Normal	
3AS232	Aux. Building	426 Chem Lab	0.82	Normal	
3AS135	Aux. Building	363 Drumming St.	1.05	Normal	
3AS137	FHB Criticality	426 Z17	35.3	Normal	
3AS238	FHB Criticality	401 AA16	73.2	Alarm	
3AS141	RW Building	417 Dry Storage	0.107	Normal	
3AS142	RW Building	401 H43	0.303	Normal	
3AS243	RW Building	Truck Bay	1.87	Normal	
3AS144	RW Building	J43 Low Storage	3.2	Normal	
3AS245	RW Building	K43 High Storage	1.49	Normal	
3AS146	Vol. Reduction	401 L37	0.61	Normal	
3AS247	Vol. Reduction	401 K39	0.314	Normal	
3AS348	Vol. Reduction	401 K38	0.48	Normal	
3AS249	Vol. Reduction	401 J37	0.115	Normal	
3AS350	Vol. Reduction	417 J38	0.311	Normal	
3AS155	FHB Incident	426 X15	OSH	Hi Alarm	
3AS156	FHB Incident	426 X21	DE-ENG	Normal	
3SA173	TSC #1	435 G101	0.118	Normal	
3AS274	TSC #2	451 HH01	0.121	Normal	
4AS101	U1 Containmt	426 R07	182	Alarm	
5AS101	U2 Containmt	426 R26	3.34	Normal	
4AS202	U1 Containmt	401 R17	102	Hi Alarm	
5AS202	U2 Containmt	401 R37	0.681	Normal	
4AS303	U1 Containmt	401 Incore Seal Rm	35000	Hi Alarm	
5AS303	U2 Containmt	401 Incore Seal Rm	4.16	Normal	
4AS210	U1 Control Rm	P17	0.127	Normal	
5AS310	U2 Control Rm	L17	0.116	Normal	
4AS111	U1 Containmt	FH Incident	OSH	Hi Alarm	
5AS111	U2 Containmt	FH Incident	19.5	Normal	
4AS112	U1 Containmt	FH Incident	DE-ENG	Normal	
5AS112	U2 Containmt	FH Incident	18.1	Normal	
4AS113	U1 VCT Cube	426 Aux. S15	315	Normal	
5AS113	U2 VCT Cube	426 Aux. S23	174	Normal	
4AS120	U1 Containmt	High Range	200000	Normal	
5AS120	U2 Containmt	High Range	1350	Normal	
4AS121	U1 Containmt	High Range	DE-ENG	Normal	
5AS121	U2 Containmt	High Range	1480	Normal	
4AA124	U1 Steam Tnl	377 R20	DE-ENG	Normal	
5AA124	U2 Steam Tnl	377 R34	2.86	Normal	
4AB224	U1 Steam Tnl	377 R13	DE-ENG	Normal	
5AB224	U2 Steam Tnl	377 R41	0.46	Normal	
4AA125	U1 Pipe Pentr	364 Aux. R05	DE-ENG	Normal	
5AA125	U2 Pipe Pentr	364 Aux. R28	25.2	Normal	
4AB225	U1 Pipe Pentr	364 Aux. R07	DE-ENG	Normal	
5AB225	U2 Pipe Pentr	364 Aux. R26	15.1	Normal	
4AA126	U1 Pipe Pentr	383 Aux. R07	DE-ENG	Normal	
5AA126	U2 Pipe Pentr	383 Aux. R26	20.1	Normal	
4AB226	U1 Pipe Pentr	383 Aux. R05	DE-ENG	Normal	
5AB226	U2 Pipe Pentr	383 Aux. R28	18.4	Normal	
4AA127	U1 Pipe Pentr	401 Aux. R07	DE-ENG	Normal	
5AA127	U2 Pipe Pentr	401 Aux. R26	14	Normal	
4AB227	U1 Pipe Pentr	401 Aux. R05	DE-ENG	Normal	
5AB227	U2 Pipe Pentr	401 Aux. R28	8.89	Normal	

All Values are in Units of
mR/h unless noted.

BYRON STATION SPDS DISPLAY



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**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-23**

TIME : 1120 - 1130 (T+230 - T+240)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : NSO HAS NOT STARTED 0A AUXILIARY BUILDING FANS AFTER TEH
BUS 142 TRIP

MESSAGE

"THIS IS AN EXERCISE : In order to maintain Control Room fidelity with the offsite exercise scenario, you are DIRECTED to start the 0A Aux. Building Fans."

CONTROLLER NOTE : 1. This action is necessary to provide flow to the Wide Range Monitors (WRGMs) so that a portion of the environmental release is monitored.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1120 (230)

PLANT STATUS-24

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	2.71	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	286.27	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	1626.53	PSIG	RVLIS-PLENUM	100.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	483.91	483.82	483.91	487.42	DEGF
COLD LEG:	482.98	482.94	482.98	486.49	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	579.51	580.73	580.73	581.38	PSIG
S/G NR LEVEL	59.62	54.80	50.03	69.56	PC
S/G WR LEVEL	67.08	65.56	64.07	70.30	PC
S/G STM FL	0.00	28.62	27.81	43.87	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	77.44	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.80	PSIG
SI FLW TRAIN A	34.61	GPM	CNMT TEMP	162.65	DEGF
SI FLW TRAIN B	34.61	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	89.55	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1130 (240)

PLANT STATUS-25

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	2.82	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	154.58	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	1709.28	PSIG	RVLIS-PLENUM	100.00	PC

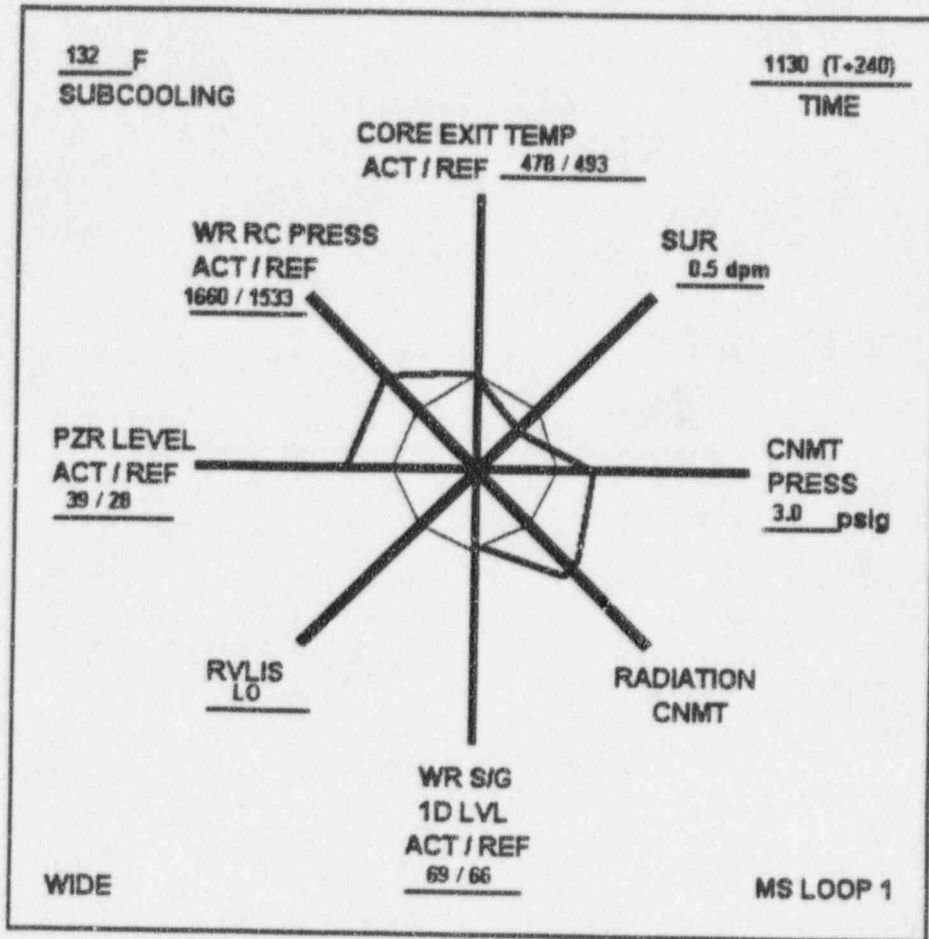
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	474.14	474.14	474.14	477.35	DEGF
COLD LEG:	475.39	475.40	475.41	476.65	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	529.08	529.43	529.43	530.12	PSIG
S/G NR LEVEL	61.38	54.30	49.63	66.68	PC
S/G WR LEVEL	68.34	66.17	64.70	69.39	PC
S/G STM FL	0.00	17.62	16.93	72.53	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	77.01	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	3.00	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	165.96	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	88.85	PC			

<<< *** THIS IS AN EXERCISE *** >>>

BYRON STATION SPDS DISPLAY



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Byron 1995 GSEP Exercise
November 15, 1995

Time = 1140 (250)

PLANT STATUS-26

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	2.93	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	149.46	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	1609.25	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	470.19	470.19	470.19	473.04	DEGF
COLD LEG:	471.16	471.16	471.16	472.42	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	508.82	508.81	508.81	509.20	PSIG
S/G NR LEVEL	63.48	54.72	50.10	59.19	PC
S/G WR LEVEL	69.52	66.70	65.25	67.49	PC
S/G STM FL	0.00	4.92	4.74	57.88	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	76.63	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	3.10	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	167.80	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	88.56	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise ; November 15, 1995

TREND 10 MIN X24 HIGH RANGE CONTAINMENT 11-15-95 11:40:25

NAME	TYPE	CHANNEL ID	DESCRIPTION	VALUE	UNITS	UNITS
4AS120	DHRM	ARM-1RE-AR020	HI RNG CNTMT 426', 1AR020	2.41E+2	UC/ML	R/HR

2.41E+2	Y	Y	Y	Y	Y	Y	V
2.34E+2	Y	Y	Y	Y	Y	Y	V
2.20E+2	Y	Y	Y	Y	Y	Y	V
2.00E+2	Y	Y	Y	Y	Y	Y	V
1.86E+2	G	G	G	G	G	G	V
1.71E+2	G	G	G	G	G	G	V
1.51E+2	G	G	G	G	G	G	V
1.22E+2	G	G	G	G	G	G	V
1.04E+2	G	G	G	G	G	G	V
7.04E+1	G	G	G	G	G	G	V
2.77E+1	G	G	G	G	G	G	V
1.09E+1	G	G	G	G	G	G	V
5.89E+0	G	G	G	G	G	G	V
2.97E+0	G	G	G	G	G	G	V
2.89E+0	G	G	G	G	G	G	V
2.88E+0	G	G	G	G	G	G	V
2.88E+0	G	G	G	G	G	G	V
2.86E+0	G	G	G	G	G	G	V
2.86E+0	G	G	G	G	G	G	V
2.85E+0	G	G	G	G	G	G	V
2.83E+0	G	G	G	G	G	G	V
2.81E+0	G	G	G	G	G	G	V
2.78E+0	G	G	G	G	G	G	V
2.74E+0	G	G	G	G	G	G	V
2.64E+0	G	G	G	G	G	G	V

RM-11 POINT TREND
CONTAINMENT RADIATION
1140 (T+250)

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Byron 1995 GSEP Exercise
November 15, 1995

Time = 1150 (260)

PLANT STATUS-27

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	3.04	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	151.77	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	100.00	PC
RCS WR PRESSURE	1580.04	PSIG	RVLIS-PLENUM	100.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	468.48	468.47	468.47	471.45	DEGF
COLD LEG:	469.61	469.61	469.61	470.88	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	501.67	501.62	501.62	502.01	PSIG
S/G NR LEVEL	65.70	56.54	51.93	54.42	PC
S/G WR LEVEL	70.45	67.38	65.94	66.35	PC
S/G S'IM FL	0.00	6.21	6.05	53.80	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	76.25	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	3.14	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	168.79	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	-99.99	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	0.00	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	88.25	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-24

TIME : 1155 (T+265)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MAX RATE CONTAINMENT LEAK HAS OCCURRED ; CONTAINMENT
SPRAY FAILURE HAS OCCURRED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1

PRESSURIZER PRESSURE LOW SET POINT REACTOR TRIP (1-12-A1)
PZR PRESSURE LOW - SI RX TRIP (1-12-B1)
CONTAINMENT PRESSURE HIGH HIGH (1-03-D4)
UNIT 1 AREA FIRE (0-37-A4)
STEAMLINE ISOLATION (VLV 1MS001A OR D NOT OPEN) (1-15-E8)
STEAMLINE ISOLATION (VLV 1MS001B OR C NOT OPEN) (1-15-E8)
MSIV 1A/1B/1C/1D ACCUMULATOR PRESS LOW (1-13-B5 through E5)
RCP 1A/1B/1C/1D FLOW LOW (1-13-A3 through D3)
TRN A/B RV LEVEL SYS SENSOR UNCOVERED (1-09-D6)
CONTAINMENT SPRAY ACTUATION (1-03-A4)
ACCUMULATOR 1A/1B/1C/1D PRESS LOW (1-05-A2 through D2)
ACCUMULATOR 1A/1B/1C/1D LEVEL LOW (1-05-A1 through D1)
CS PUMP 1A AUTOSTART FAILURE (1-03-B2)
CS TRN A/B DISCHARGE STOP VALVE FAIL TO OPEN (1-03-C1, 1-03-C2)
CS PUMP 1B AUTOSTART FAILURE (1-03-B2)

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-25**

TIME : 1155 - 1205 (T+265 - T+275)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : MAX RATE COOLANT LEAK IS IN PROGRESS

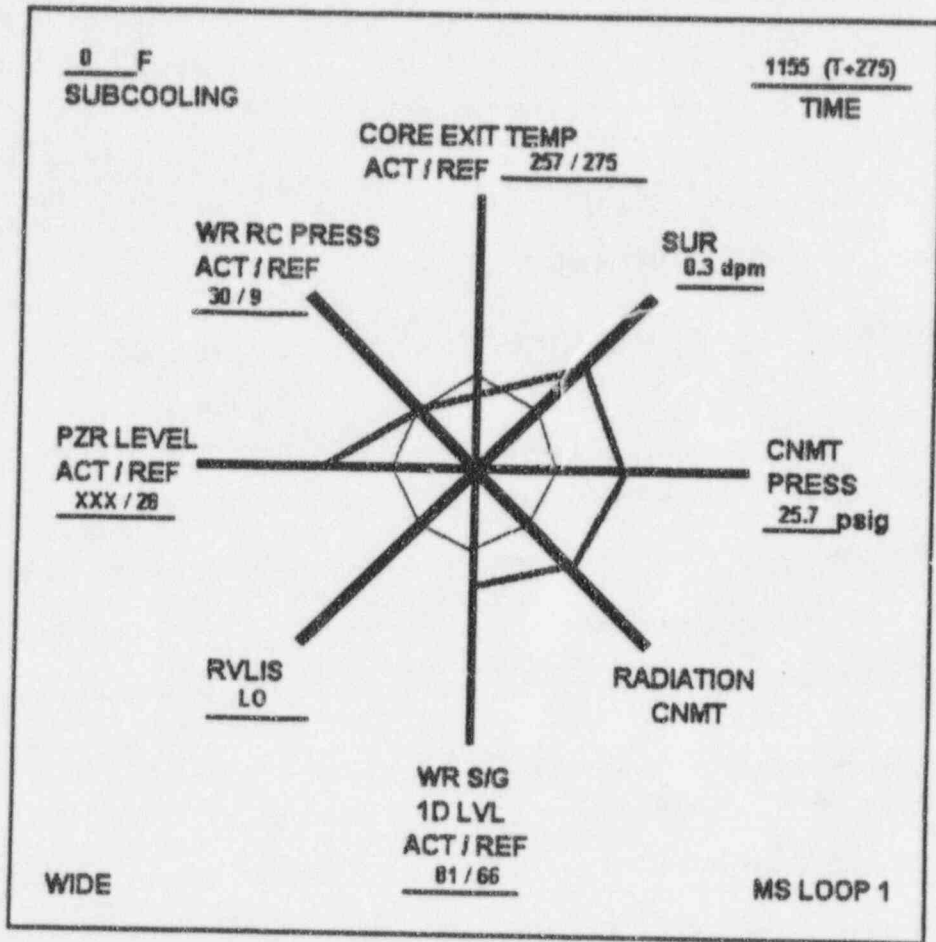
MESSAGE

Issue the following information VERBALLY :

All MSIVs **have** isolated.

Containment Sprays **are not** operating

BYRON STATION SPDS DISPLAY



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Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-26

TIME : 1158 (T+268)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : CONTAINMENT HATCH FAILURE HAS OCCURRED

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 1, RM-11
You hear the RM-11 audible alarm.

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATION
Participant checks the RM-11.	The Grid 4 Status Block is flashing RED .
Participant selects Grid 4.	The following monitor channels are flashing RED : 3AS117 (Aux. Bldg. 451) 3AS137 (FHB Criticality, U1) 3AS238 (FHB Criticality, U2)
Participant trends any of 3AS117, 3AS137, or 3AS238.	The bar graph for each monitor is colored RED and runs completely across the screen.

CONTROLLER NOTE : 1. Monitor 3AS156 (FHB Incident) would also be in an alarm (RED) condition except that it loses power when Bus 142 trips. 3AS156 is colored PURPLE.

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL ROOM MESSAGE
CR-27

TIME : 1158 (T+268)
ISSUED TO : UNIT 1 NSO READING CONTAINMENT PRESSURE
PREREQUISITE : CONTAINMENT HATCH FAILURE HAS OCCURRED

MESSAGE

ISSUE the following information VERBALLY :

Containment pressure has taken a sudden drop.

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1200 (270)

PLANT STATUS-28

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	3.38	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	244.34	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	25.33	PSIG	RVLIS-PLENUM	0.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	267.16	266.82	267.36	267.16	DEGF
COLD LEG:	225.66	227.12	225.71	225.66	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	451.15	464.70	464.08	471.66	PSIG
S/G NR LEVEL	78.98	67.99	62.70	61.09	PC
S/G WR LEVEL	83.06	79.45	77.78	77.26	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	75.86	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	24.49	PSIG
SI FLW TRAIN A	0.00	GPM	CNMT TEMP	252.13	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	4.87	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	87.81	PC			

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

IN PLANT EQUIPMENT AVAILABILITY

TIME : 1200 (T+280) UNIT 1

Pump Type	A	B	C	D	Other
Reactor Coolant Pumps	AV	AV	AV	R	
RCFC	RS	DE	RS	DE	
CV Pumps	R	DE			PDP - OOS
SI Pumps	R	DE			
RH Pumps	DMG	DE			
CS Pumps	DMG	DE			
CC Pumps	R	OOS			0 - DE
Aux Feed Pumps	R	R			

Reactor Systems	Status	Electrical Equipment	Status
Rx Trip Breakers	A - CLOSED B - CLOSED	SATs	142-1 ENG 142-2 ENG
Rod Positions	All Rods Full In	UATs	141-1 AV / DE 141-2 AV / DE
Primary PORVs	CLOSED	6.9 kV Busses	156 ENG 157 ENG 158 ENG 159 ENG
Secondary PORVs	CLOSED	4 kV Busses	141 ENG 142 DMG 143 ENG 144 ENG
Primary Safeties	CLOSED	125V AC Instrument	111 ENG 112 ENG 113 ENG 114 ENG
Secondary Safeties	CLOSED	120V DC Busses	111 ENG 112 ENG 113 ENG 114 ENG
Other Information : Unit 0 CC Pump is aligned to Bus 142 Personnel Hatch damaged w/release in progress		250V DC Busses	U1 ENG U2 ENG
		Diesel Generators	1A R 1B DMG

THIS IS AN EXERCISE

Byron 1995 GSEP Exercise
November 15, 1995

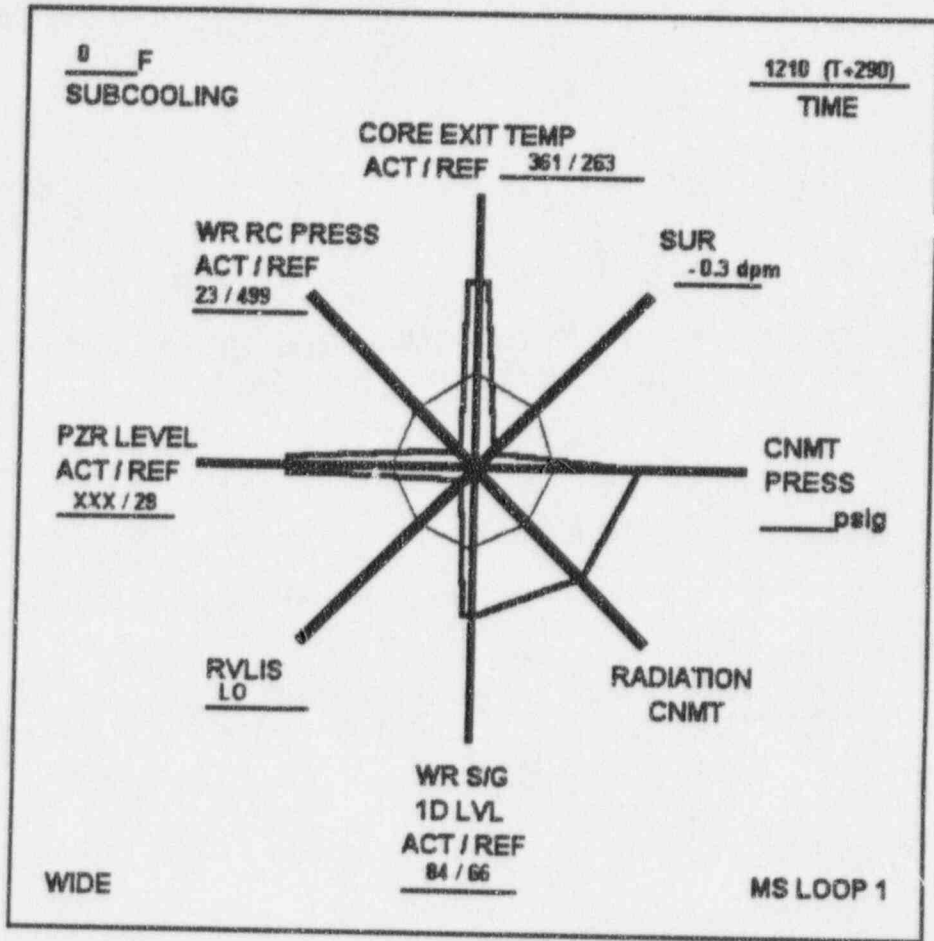
Time = 1210 (280)

PLANT STATUS-29

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	3.86	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	244.56	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	21.44	PSIG	RVLIS-PLEN/M	0.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	260.49	261.27	258.46	261.27	DEGF
COLD LEG:	231.01	231.16	231.25	231.01	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	420.02	430.70	416.75	412.97	PSIG
S/G NR LEVEL	81.74	71.03	65.68	65.21	PC
S/G WR LEVEL	84.31	80.84	79.24	79.18	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHG
CST LEVEL	75.48	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	21.04	PSIG
SI FLW TRAIN A	7.61	GPM	CNMT TEMP	238.38	DEGF
SI FLW TRAIN B	7.61	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	5.55	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	87.24	PC			

<<< *** THIS IS AN EXERCISE *** >>>

BYRON STATION SPDS DISPLAY



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**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL ROOM MESSAGE
CR-28**

TIME : 1215 (T+285)
ISSUED TO : UNIT 1 NSO
PREREQUISITE : HIGH DIFFERENTIAL PRESSURE IS RECEIVED ON RIVER SCREEN
HOUSE TRAVELING SCREEN(S)

MESSAGE

The following Control Room Alarm(s) have been received :

Unit 0
TRAV SCRN CONT PANEL TROUBLE (0-38-D11)

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1220 (290)

PLANT STATUS-30

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	4.29	PSIG
AVG 10HI CET's	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	244.75	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	17.15	PSIG	RVLIS-PLENUM	0.00	PC

W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	282.79	286.11	282.58	286.11	DEGF
COLD LEG:	180.73	180.45	180.73	180.34	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	412.00	420.90	403.10	396.67	PSIG
S/G NR LEVEL	81.47	71.01	65.80	65.70	PC
S/G WR LEVEL	83.39	80.02	78.59	78.64	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	75.34	PC			INHGA

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	16.93	PSIG
SI FLW TRAIN A	11.38	GPM	CNMT TEMP	240.16	DEGF
SI FLW TRAIN B	11.38	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	5.97	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	86.62	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1230 (300)

PLANT STATUS-31

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	4.70	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	244.91	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	13.62	PSIG	RVLIS-PLENUM	0.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	277.93	280.46	277.78	277.78	DEGF
COLD LEG:	170.71	170.76	170.71	170.71	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	411.49	420.68	399.63	393.92	PSIG
S/G NR LEVEL	79.92	69.67	64.84	64.68	PC
S/G WR LEVEL	81.85	78.54	77.27	77.28	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	75.33	PC			INHGA
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FLLF1-917		GPM	CNMT PRESS	13.48	PSIG
SI FLW TRAIN A	12.80	GPM	CNMT TEMP	236.39	DEGF
SI FLW TRAIN B	12.80	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	6.29	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWS1 LEVEL	85.98	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1240 (310)

PLANT STATUS-32

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.01	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	245.04	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	10.92	PSIG	RVLIS-PLENUM	0.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	271.31	272.61	272.61	272.43	DEGF
COLD LEG:	164.70	164.59	164.76	164.70	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	410.50	420.20	395.42	389.15	PSIG
S/G NR LEVEL	78.37	68.33	63.89	63.65	PC
S/G WR LEVEL	80.36	77.11	75.98	75.97	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	75.31	PC			INHGA
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	10.76	PSIG
SI FLW TRAIN A	14.87	GPM	CNMT TEMP	228.81	DEGF
SI FLW TRAIN B	14.87	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	0.00	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	6.58	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	85.33	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1250 (320)

PLANT STATUS-33

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.27	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	74.02	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	8.69	PSIG	RVLIS-PLENUM	15.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	157.08	155.16	155.91	155.91	DEGF
COLD LEG:	138.33	138.31	138.33	138.33	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	409.20	418.98	389.38	383.77	PSIG
S/G NR LEVEL	76.76	66.91	62.89	62.60	PC
S/G WR LEVEL	78.84	75.63	74.63	74.61	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHG
CST LEVEL	75.30	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	7.97	PSIG
SI FLW TRAIN A	171.10	GPM	CNMT TEMP	219.05	DEGF
SI FLW TRAIN B	170.55	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	8.29	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	74.32	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1300 (330)

PLANT STATUS-34

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.47	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	73.99	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	6.45	PSIG	RVLIS-PLENUM	15.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	134.15	134.55	134.55	134.11	DEGF
COLD LEG:	139.74	138.90	138.43	139.74	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	407.67	417.43	382.21	377.63	PSIG
S/G NR LEVEL	74.88	65.27	61.68	61.35	PC
S/G WR LEVEL	77.12	73.99	73.11	73.06	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	75.28	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	5.46	PSIG
SI FLW TRAIN A	171.05	GPM	CNMT TEMP	206.47	DEGF
SI FLW TRAIN B	170.51	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	12.76	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	58.88	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1310 (340)

PLANT STATUS-35

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.61	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	73.96	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	4.97	PSIG	RVLIS-PLENUM	15.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	127.06	128.24	127.06	126.44	DEGF
COLD LEG:	134.30	133.51	133.51	134.30	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	406.22	416.17	374.96	371.13	PSIG
S/G NR LEVEL	73.08	63.69	60.53	60.12	PC
S/G WR LEVEL	75.49	72.43	71.66	71.58	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	75.16	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	3.97	PSIG
SI FLW TRAIN A	170.94	GPM	CNMT TEMP	193.34	DEGF
SI FLW TRAIN B	170.40	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	17.19	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	43.61	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1320 (350)

PLANT STATUS-36

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.70	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	74.27	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	4.56	PSIG	RVLIS-PLENUM	15.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	181.27	181.69	181.69	181.57	DEGF
COLD LEG:	163.95	163.68	163.84	163.95	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	404.70	414.77	367.57	365.50	PSIG
S/G NR LEVEL	71.45	62.27	59.50	59.08	PC
S/G WR LEVEL	74.04	71.02	70.36	70.24	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	KBH
CST LEVEL	74.92	PC			INHGA
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	3.09	PSIG
SI FLW TRAIN A	180.48	GPM	CNMT TEMP	180.97	DEGF
SI FLW TRAIN B	179.52	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	18.19	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	41.32	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1330 (360)

PLANT STATUS-37

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.75	PSIG
AVG 10HI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	74.26	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	3.25	PSIG	RVLIS-PLENUM	15.00	PC

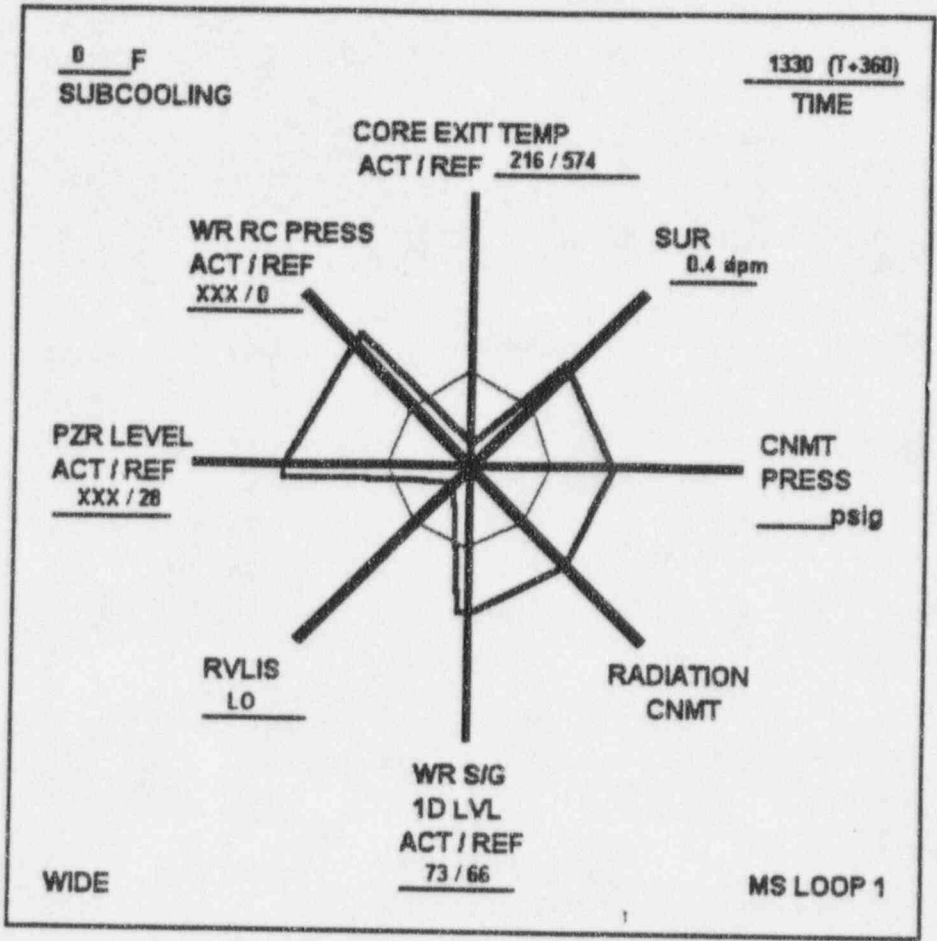
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	196.77	196.71	195.15	196.16	DEGF
COLD LEG:	177.04	177.74	177.41	177.04	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF

SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	403.04	413.21	359.63	360.41	PSIG
S/G NR LEVEL	70.03	61.03	58.67	58.21	PC
S/G WR LEVEL	72.84	69.88	69.31	69.15	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	74.63	PC			

ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.53	PSIG
SI FLW TRAIN A	180.49	GPM	CNMT TEMP	170.32	DEGF
SI FLW TRAIN B	179.49	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	18.47	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	41.32	PC			

<<< *** THIS IS AN EXERCISE *** >>>

BYRON STATION SPDS DISPLAY



K:\BYRON95\EXERCISE\SPDS1330.BMP

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1340 (370)

PLANT STATUS-38

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	0.00	PC	PRT LEVEL	76.44	PC
AUCT HI TAVE	-99.99	DEGF	PRT PRESSURE	5.75	PSIG
AVG LOHI CETs	-99.99	DEGF	VCT LEVEL	0.00	PC
CORE SUB COOLING	-99.99	DEGF	CHARGING FLOW	74.26	GPM
PRZR LEVEL	0.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	-99.99	PSIG	RVLIS-HEAD	0.00	PC
RCS WR PRESSURE	3.28	PSIG	RVLIS-PLENUM	15.00	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	194.07	193.15	194.07	194.07	DEGF
COLD LEG:	178.36	179.88	178.36	178.36	DEGF
TAVE:	-99.99	-99.99	-99.99	-99.99	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	401.40	411.45	350.96	355.17	PSIG
S/G NR LEVEL	68.84	59.98	58.04	57.47	PC
S/G WR LEVEL	71.85	68.91	68.42	68.26	PC
S/G STM FL	0.00	0.00	0.00	0.00	KBH
S/G FEED FL	0.00	0.00	0.00	0.00	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	0.00	INHGA
CST LEVEL	74.31	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	2.14	PSIG
SI FLW TRAIN A	180.51	GPM	CNMT TEMP	161.11	DEGF
SI FLW TRAIN B	179.49	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	-99.99	GPM	RECIRC SUMP LVL	108.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	18.72	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	41.32	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron 1995 GSEP Exercise
November 15, 1995

Time = 1350 (380)

PLANT STATUS-39

PRIMARY	VALUE	UNITS	PRIMARY	VALUE	UNITS
Rx POWER	74.71	PC	PRT LEVEL	-0.00	PC
AUCT HI TAVE	0.00	DEGF	PRT PRESSURE	561.83	PSIG
AVG 10HI CETs	84.73	DEGF	VCT LEVEL	-99.99	PC
CORE SUB COOLING	69.30	DEGF	CHARGING FLOW	-99.99	GPM
PRZR LEVEL	100.00	PC	LETDOWN FLOW	0.00	GPM
PRZR PRESSURE	100.00	PSIG	RVLIS-HEAD	2239.26	PC
RCS WR PRESSURE	571.14	PSIG	RVLIS-PLENUM	2247.48	PC
W.R. RCS TEMP	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
HOT LEG:	571.14	571.14	571.19	552.46	DEGF
COLD LEG:	552.54	552.59	552.17	561.77	DEGF
TAVE:	561.81	561.83	561.64	980.40	DEGF
SECONDARY	LOOP1A	LOOP1B	LOOP1C	LOOP1D	UNITS
SG PRESS	980.21	980.09	981.03	66.00	PSIG
S/G NR LEVEL	66.00	66.00	66.00	60.73	PC
S/G WR LEVEL	60.75	60.76	60.67	0.00	PC
S/G STM FL	990.52	980.34	1063.93	992.50	KBH
S/G FEED FL	976.73	965.56	1047.64	303.17	KBH
GENERATOR OUTPUT	0.00	MW	COND PRESS	89.20	INHGA
CST LEVEL	0.10	PC			
ECCS	VALUE	UNITS	CONTAINMENT	VALUE	UNITS
CV FL1F1-917		GPM	CNMT PRESS	0.00	PSIG
SI FLW TRAIN A	108.36	GPM	CNMT TEMP	0.00	DEGF
SI FLW TRAIN B	0.00	GPM	CNMT HYDROGEN	0.00	PC
RHR FLW TRAIN A	19.72	GPM	RECIRC SUMP LVL	0.00	INCHES
RHR FLW TRAIN B	0.00	GPM	CNMT FLW WTR LVL	93.59	INCHES
CS FLOW TRAIN A	0.00	GPM			
CST FLOW TRAIN B	0.00	GPM			
RWST LEVEL	0.00	PC			

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

IN-PLANT MESSAGES

- * OSC CONTROLLER GUIDANCE
- * IN-PLANT CONTROL MESSAGES [OPERATIONS, MAINTENANCE]
- * RADIATION MONITORING DATA
- * PLANT AREA RADIATION LEVEL MAPS
- * AIR SAMPLING DATA
- * PORTAL MONITOR & FRISKER RESPONSE
- * FACILITY HABITABILITY

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

**CONTROLLER GUIDANCE :
OSC**

1. All procedures in force should be used by Participants.
2. Do not direct Participants to complete forms or documentation. All documents which are prepared shall be marked "**FOR GSEP EXERCISE USE ONLY**".
3. **Participants may not manipulate, perform work on, or otherwise affect active or operating plant systems or equipment.**
4. Participants must have procedures, blueprints, and tools available in order to complete work. Participants must establish, by contacting or going to Stores, that needed parts are available.
5. Whenever possible, participants should be allowed to return equipment to service in the time that is actually taken (ie. when working on mock-ups). When using actual plant areas and equipment to simulate work, controllers should attempt to determine realistic times for the completion of repairs. OSC team members should not be permitted to return to the OSC until the full repair time has elapsed. Equipment will not be returned to service until its repair time has elapsed. **In order to maintain exercise fidelity, the Lead Facility Controller may be required to extend the repair time which is actually demonstrated by individual OSC teams.**
6. Actual **Out of Service** cards will not be used in the plant.
7. Controllers who accompany teams from the OSC shall **always** stay with team members. Should it become necessary to split an OSC team, additional controllers may be needed. If an OSC team leaves an area due to personnel safety concerns, or as part of a station assembly, the controller must remain with that team until returning to the OSC.
8. If evacuation of OSC personnel becomes appropriate during the exercise, participants should be directed to formulate an appropriate evacuation plan. **Unless directed otherwise by the Lead Facility Controller, an actual evacuation of the OSC should not be performed.**
9. Refer to information in the Controllers Manual for information pertaining to area radiation levels, portal monitor performance, personnel frisker performance, air sampling results, contamination/smear results, and facility habitability.

<<< *** THIS IS AN EXERCISE *** >>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-1**

TIME: 0730 - 1430 (T +000 - T -420)
ISSUED TO: ALL PARTICIPANTS
PREREQUISITE: NONE

MESSAGE

Attached is habitability information throughout the exercise for the onsite Emergency Response Facilities (Simulator Control Room, TSC, OSC) and for the Main Access Facility (Guardhouse).

<<<*THIS IS AN EXERCISE***>>>**

Byron 1995 GSEP Exercise
November 15, 1995

IP-1A

ISSUED TO: RPT PERFORMING HABITABILITY SURVEYS
CP SURVEY RESULTS

MESSAGE

ALL DATA IS IN "mR/h", Data for Window Open and Closed

TIME	CONTROL ROOM	TSC	OSC	GATE HOUSE
0730 - 1158 (T+000 - 268)	< 1	< 1	< 1	< 1
1159 - 1212 (T+269 - 282)	< 1	< 1	1.0	< 1
1213 - 1227 (T+282 - 297)	< 1	< 1	1.0	< 1
1228 - 1242 (T+298 - 312)	< 1	< 1	1.0	< 1
1243 - 1257 (T+313 - 327)	< 1	< 1	1.0	< 1
1258 - 1312 (T+328 - 342)	< 1	< 1	< 1	< 1
1313 - 1327 (T+343 - 357)	< 1	< 1	< 1	< 1
1328 - 1342 (T+358 - 372)	< 1	< 1	< 1	< 1
1343 - 1400 (T+373 - 390)	< 1	< 1	< 1	< 1

Byron 1995 GSEP Exercise
November 15, 1995

IP-1B

ISSUED TO:

RPT PERFORMING HABITABILITY SURVEYS
GM SURVEY RESULTS (BACKGROUND VALUES)

MESSAGE

ALL DATA IS IN "cpm"

TIME	CONTROL ROOM	TSC	OSC	GATE HOUSE
0730 - 1158 (T+000 - 268)	200	200	200	200
1159 - 1212 (T+269 - 282)	250	450	4300	300
1213 - 1227 (T+282 - 297)	210	410	4050	250
1228 - 1242 (T+298 - 312)	200	350	3900	210
1243 - 1257 (T+313 - 327)	200	310	3450	200
1258 - 1312 (T+328 - 342)	200	250	3350	200
1313 - 1327 (T+343 - 357)	200	210	3000	200
1328 - 1342 (T+358 - 372)	200	200	2800	200
1343 - 1400 (T+373 - 390)	200	200	2700	200

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-2**

TIME: 0730 - 1430 (T +000 - t -420)

ISSUED TO: ALL PARTICIPANTS

PREREQUISITE: NONE

MESSAGE

Attached is operability information for all Personnel Contamination Monitors (PCMs, "portal monitors") and personnel friskers (GM pancakes) throughout the exercise. Participants should assume that all monitoring equipment is OPERABLE unless directed otherwise by Controllers.

<<<*THIS IS AN EXERCISE***>>>**

**Byron 1995 GSEP Exercise
November 15, 1995**

IP-2

ISSUED TO: IN-PLANT PERSONNEL

PREREQUISITE: USING IPM (PM7 PORTAL OR WHOLE BODY) OR FRISKER

MESSAGE

TIME: 0730 - 1158 (T+000 - T+268)	
PORTAL MONITOR (PM7) WHOLE BODY FRISKER (IPM7) GM HAND FRISKER	All Locations : monitors are AVAILABLE

TIME: 1159 - 1400 (T+269 - T+390)	
PORTAL MONITORS : #217 @ 364 Aux #241 @ 383 Aux #244 @ 346 Aux #138 @ 401 Aux Exit #186 @ 401 Aux Exit #188 @ 401 Aux Exit #258 @ 401 Aux Exit #145 @ 401 Aux Exit #146 @ 401 Aux Exit #224 @ 426 FHB #242 @ 426 FHB	Inoperative (High Background Fault)

GM Frisker Locations	1158 - 1259 (T+268 - 329)	1300 - 1400 (T+330 - 390)
426 Aux and Above	120,000 cpm	87,000 cpm
401 Aux	45,000 cpm	30,700 cpm
383 Aux	47,000 cpm	33,500 cpm
364 Aux	51,000 cpm	36,00 cpm
364 Aux : Area 5 / PP	Frisker : Off Scale High	Frisker : Off Scale High
346 Aux	43,000 cpm	31,000 cpm
330 Aux	3900 cpm	2800 cpm
F.H.B.	Frisker : Off Scale High	Frisker : Off Scale High

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-3

TIME: 0730 - 1430 (T +000 - T +420)
ISSUED TO: ALL PARTICIPANTS
PREREQUISITE: NONE

MESSAGE

Attached is information for use in providing frisker results for plant smears (contamination surveys) and in-plant air sampling cartridges throughout the exercise. Data is supplied in NET (background subtracted) form.

CONTROLLER NOTE: Results may only be provided at "operable" frisker instruments. Net results which are not greater than 10% of the background level should be reported as equal to the background value.

<<<***THIS IS AN EXERCISE***>>>

Byron 1995 GSEP Exercise
November 15, 1995

IP-3

ISSUED TO: RADIATION PROTECTION TECHNICIAN COLLECTING IN-PLANT SMEARS AND/OR AIR SAMPLES

MESSAGE

In-Field GM Frisker Results for Collected Samples :
Values are given as "net" (counts about background)

TIME: 0730 - 1158 (T+000 - T+268*)	
LOCATION: ALL LOCATIONS	ALL SMEAR AND AIR SAMPLE RESULTS ARE "AS READ" (0 cpm)

TIME: 1159 - 1400 (T+269 - T+390)	
LOCATION: ALL TURBINE BUILDING LOCATIONS	ALL SMEAR AND AIR SAMPLE RESULTS ARE "AS READ" (0 cpm)

TIME: 1159 - 1400 (T+269 - T+390)	
LOCATION: Aux Building elevations 383, 364, 346 and 330	ALL SMEAR AND AIR SAMPLE RESULTS ARE "AS READ" (0 cpm)

TIME: 1159 - 1400 (T+269 - T+390)	
LOCATION: Aux Building elevations 401 & 426	Smear results = 140 cpm Air sample cartridges (30 ft ³ vol) = 175 cpm

TIME: 1159 - 1400 (T+269 - T+390)	
LOCATION: Fuel Handling Building	Smear results = 60,000 cpm Air sample cartridges (30 ft ³ vol) = 30,000 cpm

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-4

TIME: 0730 - 1200 (T +000 - T +270)

ISSUED TO: MECHANICAL MAINTENANCE

PREREQUISITES: DISPATCHED TO INVESTIGATE THE UNIT 1 PERSONNEL
HATCH

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Examines the containment personnel hatch.	The outer door appears normal but will not close or latch.
Examines the locking mechanism.	A key appears to have sheared on a locking gear.
Participant begins repairs as directed by nuclear work request (NWR) or OSC.	The door is successfully dis-assembled.
Participant checks stores for availability of replacement gear(s).	A replacement gear for the broken part(s) is not available in Stores.

- CONTROLLER NOTE(S):
1. Any feasible repair path may be initiated but a repair of the door cannot be permitted prior to 1200 hours (T +270).
 2. Controller should be aware of extremely high dose rates present in this area from 1200 to 1330 hours (T +270 - T +360) due to the release.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-5

TIME: 0730 - 1400 (T +000 - T +390)

ISSUE TO: MM WORK ANALYST

PREREQUISITES: DISPATCHED TO INVESTIGATE INNER FUEL DOOR
HANDLING BUILDING

MESSAGE

PARTICIPANT ACTION (S)	RESULTS OR OBSERVATIONS
Examines inner roll up door.	The door is in the open position, at a height of approximately twenty (20) feet.
Attempts to close door.	The door is bound and will not move downward or upward.
Examines door track.	The track appears normal on both sides (within 8-10 feet of the floor).
Examines door track at 20'.	The track is twisted at a height of between 21 and 22 feet. (Requires a means to get to the required height in order to closely examine the track).

- CONTROLLER NOTE(S):
1. Any feasible repair path may be initiated but a repair of the door cannot be permitted prior to 1200 hours (T+270).
 2. Controller should be aware of extremely high dose rates present in this area from 1200 to 1330 hours (T+270 - T+360) due to the release.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-6

TIME: 0810 - 0930 (T +040 - T +120)

ISSUED TO: EQUIPMENT OPERATOR AT MAIN POWER TRANSFORMER
(REACTOR BUILDING EXTERIOR 1 EAST/1 WEST)

PREREQUISITE: DISPATCHED TO PERFORM 1-BOS MP-1 FOLLOWING MAIN
TURBINE TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain procedure 1 BOS MP-1	Procedure is obtained.
Simulate performance of 1 BOS MP-1 Step F.2.	All actions taken per procedure function properly.
At Step F.2.d. install jumpers.	Jumper(s) install successfully.
At Step F.2, reads temperature gauge.	The temperature is greater than 25°C. 1. The (BOP is completed at this time).

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-7

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT AT 345 KV SWITCHBOARD
PREREQUISITE: DISPATCHED FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Equipment obtains IBOPSY-5 & BAP 330-9T1.	Results are as described by procedures.
Simulate Step F.6 for MPT disconnects,	
Step F.7 for MPT disconnects,	
Step F.8 for MPT disconnects.	

CONTROLLER NOTE(S): 1. If required, close MPT ground disconnect per load dispatcher instructions.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-8

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT OPERATOR AT AUX. ELECTRIC ROOM
PREREQUISITE: DISPATCHED TO RESET THE GENERATOR TRIP RELAY(S)
8661A/B FOLLOWING THE MAIN TURBINE TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Reset 86G1A at 1PA23J	86G1A is reset at 1PA.
Reset 86G1B at 1PA23J	86G1B is reset at 1PA.
Notifies are reset U-1 that 86G1A/B	Acknowledges radio transmission

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-9

TIME: 0810 - 0900 (T +040 - T +090)

ISSUED TO: U1 NSO AND EQUIPMENT ATTENDENT AT FEEDWATER PUMP

PREREQUISITE: DISPATCHED FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP FW-2a	Procedure is obtained.
Simulate F.1.a.3-8	Results are as described by procedure.
If required, do BOP FW-9 prerequisite C.4.	Prerequisite C.4 is performed satisfactorily.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-10

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT ATTENDANT AT U1 FEEDWATER PUMPS
PREREQUISITE: DISPATCHED TO START STARTUP FEEDWATER PUMP
FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP-FW-5A	EA obtains 1BOP-FW-5A.
Simulates performance step F.3. - F.13	Steps are satisfactory per 1BOP-FW-5A.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-11

TIME: 0810 - 0900 (T +040 - T +090)

ISSUED TO: EQUIPMENT ATTENDANT AT CENTRIFUGAL CHARGING PUMP

PREREQUISITE: DISPATCHED FOLLOWING PUMP STARTUP FROM CONTROL ROOM

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Arrives at Centrifugal charging pump.	Area appears normal.
Equipment Attendant checks oil levels.	Oil levels are "as read".
Equipment Attendant checks equipment condition.	Equipment condition is satisfactory/normal.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-12

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT ATTENDANT (EA) AT
CONDENSATE/CONDENSATE BOOSTER PUMP
PREREQUISITE: DISPATCHED FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP CD/CB-2	Equipment attendant obtains 1BOP CD/CB-2
Simulate performing 1BOP CD/CB-2 Step 7	1BOP CD/CB-2 Step 7 is performed per procedure.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-13

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT ATTENDANT (EA) AT HOGGER (VACUUM PUMP)
PREREQUISITE: DISPATCHED TO START/ALIGN HOGGER FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP OG-1	EA obtains 1BOP OG-1
Simulate performance of Step F.2	Results are per procedure.
If needed, performs step F.4 to U-1	

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-14

TIME: 0810 - 0900 (T +040 - T +090)

ISSUED TO: EQUIPMENT ATTENDANT (EA) AT STEAM JET AIR
EJECTORS (SJAE)

PREREQUISITE: DISPATCHED TO SHUT DOWN/ISOLATE STEAM JET AIR
EJECTORS (SJAEs) FOLLOWING MAIN TURBINE TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP OG-5.	EA obtains procedure.
Simulate performing Steps F.2.b. - F.2.e.	Steps are completed as described by the procedure.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-15

TIME: 0810 - 0900 (T +040 - T +090)
ISSUED TO: EQUIPMENT ATTENDANT (EA) AT THE HEATER DRAIN PUMP
PREREQUISITE: DISPATCHED FOLLOWING THE REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain procedure 1BOP HD-2.	EA obtains procedure.
Simulate Step F.1.f.	Steps F.1.f are performed per procedure.
Simulate Step F.2.e for 2nd pump shutdown.	If required F.2.e. are performed per procedure.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-16

TIME: 0810 - 0900 (T +040 - T +090)

ISSUED TO: OUTSIDE EQUIPMENT ATTENDANT AT CIRC WATER PUMP HOUSE

PREREQUISITE: DISPATCHED TO VERIFY LEVEL FOLLOWING REACTOR TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP CW-25	EA obtains 1BOP-CW-25
Simulate Step(s) F.2.L.	Tower conditions are normal for the current conditions.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-17

TIME: 0830 - TERMINATION (T+060 - T+400)
ISSUED TO: INSTRUMENT MAINTENANCE AT MAIN TURBINE CONTROL
PREREQUISITE: DISPATCHED TO INVESTIGATE CAUSE OF THE FAILURE TO
AUTO-TRIP THE REACTOR

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
SSPS Test is initiated by System Engineering and Operations	a. Test results are as expected UNTIL the step where a Turbine Trip signal is simulated. b. The Reactor Trip signal is not received (1PA09J and 1PA10J).
Replace A403 Card	The card is replaced.
Perform SSPS Test with new A403 card.	The Reactor Trip signal is not received again (1PA09J and 1PA10J).
Participant examines wiring.	Finds a jumper in the P-8 module is twisted and is not correctly seated (loose on one end).
Participant replaces jumper.	The jumper is replaced.
Perform SSPS Test with new P-8 jumper.	ALL test results are as expected.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-18

TIME: 0830 - TERMINATION (T+060 - T+400)

ISSUED TO: INSTRUMENT MAINTENANCE AT THE TURBINE THRUST BEARING

PREREQUISITE: DISPATCHED TO INVESTIGATE THE TURBINE TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Participant walks down the Turbine area.	Oil is observed on the floor and on pressure switch 1PS-T0044.
Remove cover on 1PS-T0044.	Observe oil on all switch components.
Measure switch contacts.	All 3 switches indicate a TRIP SAFE condition.
Examine switch for the source of the oil.	Locate a small hole (tear) in the switch diaphragm.

<<<***THIS IS AN EXERCISE***>>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-19**

TIME: 0840 - TERMINATION (T+070 - T+400)

ISSUED TO: INSTRUMENT MAINTENANCE IN CONTROL ROOM

PREREQUISITE: DISPATCHED TO INVESTIGATE HIGH SIGNAL ON AREA RADIATION MONITOR 0-AR-055 (FUEL HANDLING BUILDING)

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Checks the status of RM-11 Grid 4 and monitor 0-AR-055.	a. Grid 4 is RED and the display for 0-AR-055 is RED. b. The RM-11 appears to be functioning correctly.
Examine the Control Room Alarm Typer printout.	Find the following alarm entries : 0828 Check Source Test Requested 0828 Check Source Energized 0829 Check Source Deenergized
Select RM-23 Channel 018 for 0-AR-055.	The observed count rate is higher than normal (about 1000 counts per second).
Perform Check Source Test for 0-AR-055.	a. Find the following Alarm Typer messages : Check Source Test Requested Check Source Energized b. The observed count rate on RM-23 channel 018 does not change.
Observe the RM-23 channel for 0-AR-055 after the completion of the 1-minute check source test.	The observed count rate on RM-23 channel 018 does not change.

CONTROLLER NOTE : 1. For a complete description of the RM-11 display results, see RM-11 data in the Control Room Section (#4).

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-20

TIME: 0840 - TERMINATION (T+070 - T+400)
ISSUED TO: ELECTRICAL MAINTANENCE AT THE 1A FHB BOOSTER FAN
PREREQUISITE: DISPATCHED TO INVESTIGATE THE FAILURE OF THE FAN

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Enter fan area.	Fan appears normal.
Mechanic meggers fan motor from switch gear.	The motor meggers as "short to ground".
Mechanic splits power leads from the motor and meggers	The cable meggers as "short to ground".

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-21

TIME: 0840 - 0930 (T +070 - T +120)
ISSUED TO: EQUIPMENT ATTENDANT (EA) AT FUEL HANDLING BUILDING
BOOSTER FAN BREAKERS
PREREQUISITE: DISPATCHED PER ANNUNCIATOR 0-34-C8 RESPONSE

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
EA arrives at MCC 131 x 5-E-11	The ON/OFF lever is in the TRIPPED position.
EA resets the MCC. <u>IF THE FAN IS IN AFTER/TRIP POSITION</u> <u>IF THE FAN IS IN PULL-TO-LOCK POSITION</u>	Provide one result as appropriate: The breaker closes and immediately trips open. The breaker closes and stays closed.
EA has Unit 1 NSO restart the fan	The breaker trips open again.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-22

TIME: 1000 - 1100 (T +150 - T +210)
ISSUED TO: EQUIPMENT OPERATOR AT UNIT 1A/B DIESEL GENERATORS
PREREQUISITE: DISPATCHED TO VERIFY PROPER OPERATION FOLLOWING
AUTO-START SIGNAL

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOP DG-11	Procedure is obtained.
Simulate Step F.2.d	All indications are normal following the auto-start.
Simulate Step F.4.o	

CONTROLLER NOTE(S): 1. The 1A/B Diesels receive a valid auto start signal following the Unit 1 Safety Injection.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-23

TIME: 1000 - 1030 (T +150 - T +180)

ISSUED TO: EQUIPMENT OPERATOR AT UNIT 1A/B DIESEL
GENERATORS

PREREQUISITE: DISPATCHED TO SECURE DIESELS PER BEP-1 STEP 11.C

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Obtain 1BOPD/G-1	Procedure is obtained.
Simulate Steps F.1 thru F.12	All steps are accomplished as expected.
Notify Unit 1 NSO	

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-24

TIME: 1000 - 1100 (T +150 - T +210)

ISSUED TO: EQUIPMENT ATTENDANT AT 1A RHR PUMP

PREREQUISITE: DISPATCHED FOLLOWING 1A RHR FAILURE TO AUTOSTART DURING SAFETY INJECTION

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
1. Enters U1 CS/RHR Room.	Hears 1B RHR Pump and 1A CS Pump running.
2. Participant reads 1A RHR suction pressure gauge.	Suction pressure reads 30 psig.
3. Participant reads 1A RHR discharge pressure.	Discharge pressure reads 20 psig.
4. Participant examines 1A RHR Pump.	A. Pump casing is cold to the touch. B. The pump appears normal.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-25

TIME: 1015 - TERMINATION (T+165 - T+400)
ISSUED TO: INSTRUMENT MAINTENANCE AT THE CONTROL ROOM
PREREQUISITE: DISPATCHED TO INVESTIAGE THE FAILURE OF THE N31 SOURCE RANGE MONITOR FAILURE

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Examine Control Room panel(s).	Finds the following conditions : a. The "LOSS OF DETECTOR VOLTS" alarm is up. b. The alarm indicator light is ON for detector N31 and is OFF for detector N32.
Examine condition of the detector fuses.	The Instrument and Control power fuse lights are LIT for both detectors N31 and N32 drawers.
Inspect the N32 internals.	a. There is a strong odor of burned materials. b. A dark colored resin is observed on the High Voltage Power Supply.
Participant replaces and tests the High Voltage Power Supply.	Detector N31 is returned to service.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-26

TIME: 1020 - TERMINATION (T+170 - T+400)
ISSUED TO: ELECTRICAL MAINTENANCE AT 1A RHR PUMP
PREREQUISITE: DISPATCHED TO INVESTIGATE THE PUMP FAILURE TO START
DURING THE MANUAL SAFETY INJECTION

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Mechanic troubleshoots 1A RHR pump motor.	All interlocks are MADE-UP.
Mechanics removes pump breaker from the cubicle.	The breaker racks out hard.
Mechanics performs visual inspection of the pump breaker.	a. Observes that housing contact pins are out of alignment. b. Observes that the housing switch is cracked and damaged.
Mechanic replaces pump breaker and tests the motor.	The 1A RHR Pump operates normally and can be returned to service.

<<<***THIS IS AN EXERCISE***>>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-27**

TIME: 1020 - TERMINATION (T+170 - T+390)

ISSUED TO: MECHANICAL MAINTENANCE AT THE FUEL HANDLING BUILDING
TRAIN BAY OUTER ROLL UP DOOR

PREREQUISITE: DISPATCHED TO INVESTIGATE AND/OR REPAIR DAMAGE TO THE
OUTER TRACKWAY DOOR

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Examines Outer Trackway Door.	The Outer Door is pushed off the track on the north side of the door, to a height of about ten (10) feet. There is a gap of between five and ten (5-10) inches between the door and track. Several door panels are cracked.
Mechanic attempts to raise the door.	The door will raise to a height of about eight (8) inches.
Mechanic attempts to lower the door (after first opening).	The door will not lower.
Mechanic attempts to use plastic and tape to cover the opening.	The tape will not hold the weight of the plastic that is used (the hole IS NOT covered).

- CONTROLLER NOTE(S):**
1. Any feasible repair path may be initiated but a repair of the door cannot be permitted prior to 1200 hours (T +270).
 2. Controller should be aware of extremely high dose rates present in this area from 1200 to 1330 hours (T +270 - T +360) due to the release.

<<<*THIS IS AN EXERCISE***>>>**

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-28

TIME: 1110 - 1400 (T +220 - T +390)
ISSUED TO: MECHANICAL MAINTENANCE AT THE 1B DIESEL GENERATOR
PREREQUISITES: DISPATCHED TO REPAIR DIESEL AND RETURN TO SERVICE

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Enters Diesel Generator Room	1. The room is quiet (no running generator). 2. Local alarm panel is flashing. 3. Generator appears normal.
Examines 1B Diesel Generator	All equipment on the Generator appears to be NORMAL, except for the air system.
Examines the starting air line	1. The air inlet to the engine appears to be blocked. 2. The Over-Speed Shutdown butterfly valve is not latched.
Latch Butterfly Valve	Valve will not stay latched.

CONTROLLER NOTE(S): 1. Any feasible repair path may be initiated and the Diesel Generator repaired and returned to service.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-29

TIME: 1120 - TERMINATION (T+230 - T+400)
ISSUED TO: ELECTRICAL MAINTENANCE AT BUS 142
PREREQUISITE: DISPATCHED TO INVESTIGATE BUS TRIP

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Participant enters the Bus 142 room.	Observes an obvious, pungent, odor of electrical burning (no smoke or fire is evident).
Mechanic meggers Bus 142.	The bus meggers as shorted and grounded.
Mechanics racks out breakers on Bus 142 to inspect.	All breakers except Breaker ACB-1421 are undamaged. Breaker ACB-1421 is hard to rack out.
Perform visual inspection of the Breaker 1421 cubicle.	The bottles are cracked and burnt.

CONTROLLER NOTE : Electrical Maintenance is permitted to change the damaged breaker but will be unable to return Bus 142 to service prior to 1400 (T+400).

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-30

TIME: 1155 - 1300 (T +275 - T +330)
ISSUED TO: EQUIPMENT ATTENDANT AT CLOSED COOLING VALVE
PREREQUISITE: DISPATCHED TO CLOSE 1CC9412B VALVE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Enters area.	Area appears normal.
Close valve 1CC9412B.	Valve closes.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-31

TIME: 1200 - 1300 (T +280 - T +340)
ISSUED TO: OPERATOR AT REACTOR WATER STORAGE TANK (RWST)
PREREQUISITE: DISPATCHED TO CLOSE 1CV112E

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Participant enters the RWST area.	The area appears normal.
Participant manually closes valve 1CV112E.	The valve closes/indicates as closed.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-32

TIME: 1200 - 1400 (T+278 - T+390)

ISSUED TO: OPERATOR OR MECHANIC AT THE 007A CONTAINMENT SPRAY VALVE

PREREQUISITE: DISPATCHED TO MANUALLY OPEN VALVE

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Participant arrives at valve.	Valve appears normal.
Participant turns valve.	Valve will turn.
Participant checks flow through the valve.	There is no (zero) flow through the valve.

CONTROLLER NOTE: 1. Continuing attempts to open the valve manually will not result in flow; even after the valve is in the full open position there will be no containment spray activation.

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-33

TIME: 1230 - 1245 (T +300 - T +315)

ISSUED TO: OUTSIDE EQUIPMENT ATTENDANT (EA) AT THE RIVER SCREEN HOUSE

PREREQUISITE: DISPATCHED TO INVESTIGATE THE HIGH DIFFERENTIAL PRESSURE ALARM ON THE TRAVELING SCREENS

MESSAGE

PARTICIPANTS ACTION(S)	RESULTS OR OBSERVATIONS
Operator enters River Screen House.	The Travelling Screens are covered with debris (tree branches and leaves, etc.) and are not moving. All other equipment appears to be normal. The river appears to be unusually high and full of debris. The trash cart appears to be full.
Operator reads the differential pressure on the travelling screens.	The pressure is 15 inches of water.
Operator examines the travelling screens.	The screens appear to be bound.
Operator examines the screen motor.	The motor is operating and appears to be normal.
Operator clears the travelling screens.	The screens are cleared. The screens remain bound and do not move.

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995

IN-PLANT CONTROL MESSAGES
IP-34

TIME: 1245 - TERMINATION (T +345 - T +390)
ISSUED TO: MECHANICAL MAINTENANCE AT RIVER SCREEN HOUSE
PREREQUISITE: DISPATCHED TO REPAIR PIN ON TRAVELLING SCREEN

MESSAGE

PARTICIPANT ACTION(S)	RESULTS OR OBSERVATIONS
Mechanic removes cover(s) on the travelling screens.	The screen motor is operating and is turning the screens but the shear pin has broken.
Mechanic contacts Stations/Stores for replacement shear pin.	A replacement pin is available if one can be located at the Station.
Mechanic replaces shear pin.	Shear pin is replaced. (Participants may need to show availability of specialized tools and/or equipment, such as hoists in order to make repairs to the shear pin and restore the travelling screens).

CONTROLLER NOTE(S):

<<<***THIS IS AN EXERCISE***>>>

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-35**

**CONTROLLER MAPS:
IN-PLANT AREA RADIATION LEVELS**

<<<*THIS IS AN EXERCISE***>>>**

IN-PLANT RADIATION LEVELS

LOCATION	TIME									
	PRIOR TO 1158	1158 TO 1212	1213 TO 1227	1228 TO 1242	1243 TO 1257	1258 TO 1312	1313 TO 1327	1328 TO 1342	1343 TO 1357	1358 TO 1412
426 AUX BLDG AND ABOVE	AS RD	31.00	29.14	28.21	24.18	21.70	21.08	20.15	19.53	19.22
401 AUX BLDG	AS RD	11.00	10.34	10.01	8.58	7.70	7.48	7.15	6.93	6.82
383 AUX BLDG	AS RD	12.00	11.28	10.92	9.36	8.40	8.16	7.80	7.56	7.44
364 AUX BLDG	AS RD	13.00	12.22	11.83	10.14	9.10	8.84	8.45	8.19	8.06
364 AREA 5 & PP ROOMS	AS RD	130.00	122.20	118.30	101.40	91.00	88.40	84.50	81.90	80.60
346 AUX BLDG	AS RD	11.00	10.34	10.01	8.58	7.70	7.48	7.15	6.93	6.82
330 AUX BLDG	AS RD	1.00	0.94	0.91	0.78	0.70	0.68	0.65	0.63	0.62
FHB ALL ELEVATIONS (WC)	AS RD	2400.00	1650.00	1050.00	712.50	525.00	487.50	412.50	375.00	300.00
FHB INTERIOR WIN OPEN	AS RD	2850.00	1959.38	1246.88	846.09	623.44	578.91	489.84	445.31	356.25
WEST TO SYARD (WIN CLS)	AS RD	1600.00	1100.00	700.00	475.00	350.00	325.00	275.00	250.00	200.00
OUTSIDE SYARD WIN OPEN	AS RD	1900.00	1306.25	831.25	564.06	415.63	385.94	328.56	296.88	237.50
OUTSIDE - ALL OTHER (WC)	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
OTHER OUTSIDE WIN OPEN	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
TURB BLDG ALL ELEV	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
OSC & SERVICE BLDG	AS RD	1.00	0.94	0.91	0.78	0.70	0.68	0.65	0.63	0.62
TECH SUPPORT CENTER	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
RAD WASTE VR	AS RD	1.00	0.94	0.91	0.78	0.70	0.68	0.65	0.63	0.62
CONTROL ROOM/SIM	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
SECURITY BLDG	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
CNMT RAD (AVERAGE)	7000	100000	94000	91000	78000	70000	68000	65000	63000	62000

ALL READINGS ARE IN MREM/HR

"AS RD" = AS READ

IN-PLANT RADIATION LEVELS

BACKGROUND COUNTS PER MIN LOCATION	TIME									
	PRIOR TO 1158	1158 TO 1212	1213 TO 1227	1228 TO 1242	1243 TO 1257	1258 TO 1312	1313 TO 1327	1328 TO 1342	1343 TO 1357	1358 TO 1412
426 AUX BLDG AND ABOVE	AS RD	135000	125000	123000	105000	94000	92000	88000	85000	83500
401 AUX BLDG	AS RD	48000	45000	43500	37000	33500	32500	31000	30000	30000
383 AUX BLDG	AS RD	52000	50000	48000	41000	36500	35500	34000	33000	32000
364 AUX BLDG	AS RD	57000	53000	51500	45000	40000	38500	36500	35500	35000
364 AREA 5 & PP ROOMS	AS RD	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH
346 AUX BLDG	AS RD	48000	45000	43500	37000	33500	32500	31000	30000	30000
330 AUX BLDG	AS RD	4350	4100	4000	3400	3050	3000	2800	2750	2700
FHB ALL ELEVATIONS	AS RD	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH
OUTSIDE WEST TO SYARD	AS RD	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH	OSH
OUTSIDE - ALL OTHER	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
TURB BLDG ALL ELEV	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
OSC & SERVICE BLDG	AS RD	4350	4100	4000	3400	3050	2950	2800	2750	2700
TECH SUPPORT CENTER	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
RAD WASTE VR	AS RD	4350	4100	4000	3400	3050	2950	2800	2750	2700
CONTROL ROOM/SIM	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD
SECURITY BLDG	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD	AS RD

"AS RD" = AS READ

"OSH" = OFF SCALE HIGH

**BYRON 1995 GSEP EXERCISE
NOVEMBER 15, 1995**

**IN-PLANT CONTROL MESSAGES
IP-36**

Drill and Exercise Dosimetry Worksheet

This worksheet may be used by exercise controllers to estimate and track participant's cumulative doses. Doses are assigned on the basis of average exposure rate over a ten minute period, and summed for all exposure periods:

Exposure mR/h	Dose mrem	Exposure mR/h	Dose mrem	Exposure mR/h	Dose mrem
1	0.2	25	4.2	300	50
5	0.8	50	8.3	400	67
10	1.7	75	13	500	83
15	2.5	100	17	600	100
20	3.3	200	33	700	117

Job: _____
 Dosimeter Alarm Setpoint : _____ mR

NAME _____
 STARTING DOSE _____

TIME	10 MIN DOSE	SUM	10 MIN DOSE	SUM
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Job: _____
 Dosimeter Alarm Setpoint: _____ mR

NAME _____
 STARTING DOSE _____

TIME	10 MIN DOSE	SUM	10 MIN DOSE	SUM
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

<<<***THIS IS AN EXERCISE***>>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CHEMISTRY INFORMATION

- * CONTROLLER GROUND RULES
- * INITIAL CONDITIONS / BASELINE CHEMISTRY
- * HIGH RADIATION SAMPLING SYSTEM RESULTS
 - + REACTOR COOLANT SYSTEM
 - + REACTOR DRYWELL
- * GRAB SAMPLE RESULTS
- * OTHER CHEMISTRY RESULTS

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CHEM-1**

TIME : 0730 - As Requested (T+000 - T+390)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITES : HISTORICAL UNIT 1 DATA IS REQUESTED

MESSAGE

Attached is the counting room chemistry report for the power change RCS sample collected at 0320 (T-250) on November 15th.

UNIT 1 REACTOR COOLANT LIQUID (UNDILUTED)

CONFIGURATION FILE.....: #1#DIA1:(CRU.ARCHIVE_UNAPP)21801A_SAMP_5052.CNF;1

DETECTOR SERIAL NUMBER.....: 21-801A GEOMETRY.....:
 METHOD UNCERTAINTY (%).....: 5.0000 AVE UNC IN EFF (%).....:
 ENERGY CALIB GAIN.....: 5.0017E-01 FWHM CALIB GAIN.....:
 ENERGY CALIB OFFSET.....: 1.0426E-01 FWHM CALIB OFFSET.....:

ANALYST'S INITIALS.....: PJE
 ANALYSIS DATE/TIME.....: NOV-15-1995 / 4:25:00
 COLLECTOR'S INITIALS.....: SAM
 SAMPLE COLLECTION DATE/TIME..: NOV-15-1995 / 3:20:00
 DURATION OF DECAY.....: 65
 COUNT LIVE TIME.....: 17
 COUNT REAL TIME.....: 17.4829
 DEAD TIME (%).....: #VALUE!
 SAMPLE MASS (GRAMS).....: 10
 MWT.....:
 SAMPLE POINT.....: U1 HRSS PANEL
 REMARK.....:

Summary of Nuclide Activity :

Total Number of Lines in Spectrum 114
 Number of Unidentified Lines 20
 Number of Lines Tentatively Identified by NID 94 82.5 (%)

NUCLIDE	HLIFE	DECAY	Activation Products		Decay Corr 1-SIG ERR	1-Sigma %ERROR
			Wtd Mean Uncorrected UCI/GRAM	Wtd Mean Decay Corr UCI/GRAM		
CR-51	27.70D	0.999302	4.13E-03	4.13E-03	0.00084067	13.59
MN-54	312.14D	0.9999384	4.26E-03	4.26E-03	0.00013596	14.93
MN-56	2.58H	0.8352411	3.61E-03	4.32E-03	0.00039895	10.91
CO-58	70.82D	0.9997269	3.65E-04	3.66E-04	0.00071982	16.73
FE-59	44.51D	0.9995662	4.10E-03	4.10E-03	0.00094281	15.82
CO-60	5.72Y	0.99999	1.24E-04	1.24E-04	0.00029479	11.47
ZN65	243.90D	0.999921	4.10E-03	4.10E-03	4.7812E-07	23.14
TOTAL ACTIVITY =			2.07E-02	2.14E-02		

SAMPLE ID.....: GSEP2218 ACQUISITION DATE.....: NOV-15-1995 / 4:25:00
PAGE 2 OF 2

Nuclide Type :		Fission Products				
NUCLIDE	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
			Uncorrected	Decay Corr		
			UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m	1.86H	0.7790897	5.35E-04	6.87E-04	0.00060729	13.36
BR-84	31.8M	0.4184218	7.42E-03	1.78E-02	0.00070041	22.8
KR-85	10.74Y	0.9999951	1.20E-03	1.20E-03	0.00038453	19.47
KR-85M	4.4H	0.899852	2.59E-03	2.87E-03	0.00023787	11.88
KR-87	1.27H	0.6937814	1.21E-03	1.75E-03	0.00071724	9.98
KR-88	2.79H	0.8466911	4.25E-03	5.02E-03	0.00071163	6.82
SR-91	9.50H	0.8523004	4.29E-02	4.51E-02	0.00076187	16
Y-91	58.80D	0.9996711	4.91E-02	4.92E-02	0.00080294	23.63
MOTC-99M	65.92H	0.9929918	6.52E-02	6.56E-02	0.00069153	20.17
TC-99M	6.01H	0.9258526	5.31E-02	5.74E-02	0.0009002	6.04
RU-103	36.8D	0.9994744	4.51E-02	4.51E-02	0.00076472	15.89
RU-105	4.50H	0.9019646	2.71E-02	3.00E-02	0.00012949	24.32
RU-106	1.00Y	0.999947	1.11E-02	1.11E-02	0.00027195	6.16
TE-129	1.15H	0.6678125	3.06E-02	4.58E-02	0.00030911	24.3
TE-132	78.20H	0.9940801	1.70E-01	1.71E-01	0.00057389	12.02
I-131	8.07D	0.9975971	1.57E-01	1.57E-01	0.00060632	23.07
XE-131m	11.96D	0.9983835	1.64E-03	1.65E-03	8.236E-05	6.43
I-133	8.7D	0.9977788	3.07E-01	3.08E-01	0.00042844	23.16
XE-133	5.28D	0.9963363	2.80E-02	2.81E-02	0.00086443	21.49
XE-133m	2.25D	0.9914385	4.31E-03	4.35E-03	0.0006707	7.58
CS-134	2.07Y	0.9999743	1.33E-02	1.33E-02	0.00090956	24.5
I-134	52.60M	0.5900046	2.00E-01	3.39E-01	0.00063273	10.23
I-135	6.61H	0.9321667	2.49E-01	2.67E-01	0.00070011	5.68
XE-135	9.16H	0.9505744	7.74E-03	8.15E-03	0.00032523	11.87
XE-137	6.37H	0.929703	2.46E-04	2.65E-04	0.00039229	23.16
CS-136	13.10D	0.9985243	5.30E-03	5.31E-03	0.00064548	15.04
CS-137	30.02Y	0.9999982	8.39E-03	8.39E-03	0.0003025	7.01
BA-140	12.79D	0.9984885	6.56E-02	6.57E-02	0.00052283	23.57
LA-140	40.22H	0.9885221	6.50E-02	6.58E-02	6.4014E-05	22.88
CE-144	284.29D	0.999932	3.48E-01	3.48E-01	0.00084317	24.54

TOTAL ACTIVITY = 1.97E+00 2.17E+00

GRAND TOTAL ACTIVITY = 1.99E+00 2.19E+00

I-131 D.E. = 2.76 E-01

REVIEWED BY : _____

APPROVED BY : _____

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-2

TIME : 0730 - As Requested (T+000 - T+390)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITES : HISTORICAL UNIT 1 DATA IS REQUESTED

MESSAGE

Attached is the counting room chemistry report for the RCS sample requested at 0535 (T-115) on November 15th.

UNIT 1 REACTOR COOLANT LIQUID (UNDILUTED)

CONFIGURATION FILE.....: #1#DIA1:(CRU.ARCHIVE_UNAPP)21801A_SAMP_5052.CNF;1

DETECTOR SERIAL NUMBER.....:	21-801A	GEOMETRY.....:
METHOD UNCERTAINTY (%):.....:	5.0000	AVE UNC IN EFF (%):.....:
ENERGY CALIB GAIN.....:	5.0017E-01	FWHM CALIB GAIN.....:
ENERGY CALIB OFFSET.....:	1.0426E-01	FWHM CALIB OFFSET.....:
ANALYST'S INITIALS.....:	PJE	
ANALYSIS DATE/TIME.....:	NOV-15-1995 /	6:40:00
COLLECTOR'S INITIALS.....:	SAM	
SAMPLE COLLECTION DATE/TIME..:	NOV-15-1995 /	5:35:00
DURATION OF DECAY.....:	65	
COUNT LIVE TIME.....:	17	
COUNT REAL TIME.....:	19.0118	
DEAD TIME (%):.....:	#VALUE!	
SAMPLE MASS (GRAMS).....:	10	
MWT.....:		
SAMPLE POINT.....:	U1 HRSS PANEL	
REMARK.....:		

Summary of Nuclide Activity :

Total Number of Lines in Spectrum	114	
Number of Unidentified Lines	36	
Number of Lines Tentatively Identified by NID	78	68.4 (%)

NUCLIDE	HLIFE	DECAY	Activation Products		Decay Corr 1-SIG ERR	1-Sigma %ERROR
			Wtd Mean Uncorrected UCI/GRAM	Wtd Mean Decay Corr UCI/GRAM		
CR-51	27.70D	0.999302	3.32E-02	3.32E-02	0.00040093	20.01
MN-54	312.14D	0.9999384	3.33E-02	3.33E-02	0.00047346	6.44
MN-56	2.58H	0.8352411	2.79E-02	3.34E-02	0.00081504	18.99
CO-58	70.82D	0.9997269	2.63E-03	2.63E-03	0.00095921	17.24
FE-59	44.51D	0.9995662	3.32E-02	3.32E-02	0.00037707	13.42
CO-60	5.72Y	0.99999	9.67E-04	9.67E-04	0.00092689	8.2
ZN65	243.90D	0.999921	3.32E-02	3.32E-02	0.00074637	11.97
TOTAL ACTIVITY =			1.64E-01	1.70E-01		

SAMPLE ID.....: GSEP2218 ACQUISITION DATE.....: NOV-15-1995 / 6:40:00
PAGE 2 OF 2

Nuclide Type :		Fission Products				
NUCLIDE	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
			Uncorrected	Decay Corr		
			UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m	1.86H	0.7790897	1.38E-03	1.77E-03	0.00074297	22.84
BR-84	31.8M	0.4164218	6.16E-02	1.48E-01	0.00055613	23.51
KR-85	10.74Y	0.9999951	1.20E-03	1.20E-03	0.00089951	11.68
KR-85M	4.4H	0.899852	3.07E-03	3.41E-03	0.00030453	24.86
KR-87	1.27H	0.6937814	1.96E-03	2.83E-03	0.00037276	5.92
KR-88	2.79H	0.8466911	4.38E-03	5.17E-03	0.0003058	15.03
SR-91	9.50H	0.9523004	3.47E-01	3.65E-01	3.7441E-05	23.35
Y-91	58.80D	0.9996711	3.98E-01	3.98E-01	0.00062205	12.66
MOTC-99M	65.92H	0.9929918	5.27E-01	5.31E-01	0.00052139	20.38
TC-99M	6.01H	0.9256526	4.30E-01	4.64E-01	0.00041108	13.32
RU-103	36.8D	0.9994744	3.65E-01	3.65E-01	0.00070404	17.44
RU-105	4.50H	0.9019646	2.16E-01	2.39E-01	0.0004309	6.47
RU-106	1.00Y	0.999947	8.38E-02	8.38E-02	0.00064334	14.52
TE-129	1.15H	0.6678125	2.48E-01	3.71E-01	0.00049256	16.99
TE-132	78.20H	0.9940801	1.41E+00	1.42E+00	0.00073835	23.94
I-131	8.07D	0.9975971	1.26E+00	1.26E+00	0.00046762	19.08
XE-131m	11.96D	0.9983835	2.73E-03	2.73E-03	0.00052325	5.83
I-133	8.7D	0.9977788	2.51E+00	2.52E+00	0.0002153	18.99
XE-133	5.26D	0.9963363	2.84E-02	2.85E-02	0.00026259	6.47
XE-133m	2.25D	0.9914385	5.38E-03	5.43E-03	0.00085843	21.92
CS-134	2.07Y	0.9999743	1.11E-01	1.11E-01	0.00088736	24.64
I-134	52.60M	0.5900046	1.66E+00	2.81E+00	0.00071966	24.33
I-135	6.61H	0.9321667	2.07E+00	2.22E+00	0.00026247	23.86
XE-135	9.16H	0.9505744	8.77E-03	9.23E-03	0.00097748	5.73
XE-137	6.37H	0.929703	3.47E-04	3.73E-04	1.9338E-05	7.6
CS-136	13.10D	0.9985243	4.43E-02	4.43E-02	9.6539E-05	11.36
CS-137	30.02Y	0.9999982	6.95E-02	6.95E-02	0.0005432	5.33
BA-140	12.79D	0.9984885	5.30E-01	5.31E-01	0.00023056	16.59
LA-140	40.22H	0.9885221	5.25E-01	5.31E-01	0.00076799	18.38
CE-144	284.29D	0.999932	2.82E+00	2.82E+00	0.00096838	18.33

TOTAL ACTIVITY = 1.57E+01 1.74E+01

GRAND TOTAL ACTIVITY = 1.59E+01 1.75E+01

I-131 DE = 2.17E00

REVIEWED BY : _____

APPROVED BY : _____

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
CHEM-3**

TIME : 0800 - 0810 (T+030 - T+040)

ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR

PREREQUISITES : DATA ON I-131 RESULTS FROM CONFIRMATORY RCS SAMPLE
(REQUESTED AT 0630, T-060) IS REQUESTED

MESSAGE

Attached is the counting room chemistry report for the power change RCS sample collected at approximately 0700 (T-030).

UNIT 1 REACTOR COOLANT LIQUID (UNDILUTED)

CONFIGURATION FILE.....: #1#DIA1:(CRU.ARCHIVE_UNAPP)21801A_SAMP_5052.CNF;1

DETECTOR SERIAL NUMBER.....: 21-801A GEOMETRY.....
 METHOD UNCERTAINTY (%).....: 5.0000 AVE UNC IN EFF (%).....
 ENERGY CALIB GAIN.....: 5.0017E-01 FWHM CALIB GAIN.....
 ENERGY CALIB OFFSET.....: 1.0426E-01 FWHM CALIB OFFSET.....

ANALYST'S INITIALS.....: PJE
 ANALYSIS DATE/TIME.....: NOV-15-1995 / 8:00:00
 COLLECTOR'S INITIALS.....: SAM
 SAMPLE COLLECTION DATE/TIME..: NOV-15-1995 / 7:00:00
 DURATION OF DECAY.....: 80
 COUNT LIVE TIME.....: 17
 COUNT REAL TIME.....: 20.1239
 DEAD TIME (%).....: #VALUE!
 SAMPLE MASS (GRAMS).....: 10
 MWT.....
 SAMPLE POINT.....: U1 HRSS PANEL
 REMARK.....:

Summary of Nuclide Activity :

Total Number of Lines in Spectrum 114
 Number of Unidentified Lines 20
 Number of Lines Tentatively Identified by NID 94 82.5 (%)

Nuclide Type	Activation Products		Wtd Mean		Decay Corr 1-SIG ERR	1-Sigma %ERROR
	HLIFE	DECAY	Uncorrected UCI/GRAM	Decay Corr UCI/GRAM		
CR-51	27.70D	0.999302	4.73E-02	4.73E-02	0.00022606	12.23
MN-54	312.14D	0.9999384	4.74E-02	4.74E-02	0.00041629	16.94
MN-56	2.58H	0.8352411	3.97E-02	4.75E-02	0.00036043	24.97
CO-58	70.82D	0.9997269	3.73E-03	3.73E-03	0.00026209	9.07
FE-59	44.51D	0.9995662	4.73E-02	4.73E-02	0.00030238	23.33
CO-60	5.72Y	0.99999	1.38E-03	1.38E-03	0.00015711	8.02
ZN65	243.90D	0.999921	4.73E-02	4.73E-02	0.00048585	20.09
TOTAL ACTIVITY =			2.34E-01	2.42E-01		

SAMPLE ID.....: GSEP2218 ACQUISITION DATE.....: NOV-15-1995 / 8:00:00
PAGE 2 OF 2

Nuclide Type :

Fission Products

NUCLIDE	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
			Uncorrected	Decay Corr		
			UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m	1.86H	0.7790897	1.79E-03	2.30E-03	0.00020516	6.22
BR-84	31.6M	0.4164218	8.79E-02	2.11E-01	0.00043767	16.15
KR-85	10.74Y	0.9999951	1.20E-03	1.20E-03	0.00073391	23.56
KR-85M	4.4H	0.899852	3.31E-03	3.68E-03	0.00049556	6.25
KR-87	1.27H	0.6937814	2.33E-03	3.36E-03	0.00084491	7.06
KR-88	2.79H	0.8466911	4.44E-03	5.25E-03	0.00088347	21.05
SR-91	9.50H	0.9523004	4.95E-01	5.20E-01	0.00051977	22.42
Y-91	58.80D	0.9996711	5.67E-01	5.67E-01	0.00083694	20.19
MOTC-99M	65.92H	0.9929918	7.51E-01	7.56E-01	0.00048899	16.92
TC-99M	6.01H	0.9256526	6.13E-01	6.62E-01	0.00082227	18.91
RU-103	36.8D	0.9994744	5.20E-01	5.20E-01	1.7352E-06	17.43
RU-105	4.50H	0.9019646	3.07E-01	3.41E-01	0.00070178	12.49
RU-106	1.00Y	0.999947	1.19E-01	1.19E-01	0.00086011	11.98
TE-129	1.15H	0.6678125	3.53E-01	5.29E-01	0.00095045	17.14
TE-132	78.20H	0.9940801	2.01E+00	2.03E+00	0.00053197	19.23
I-131	8.07D	0.9975971	1.80E+00	1.80E+00	0.00060636	9.86
XE-131m	11.96D	0.9983835	3.25E-03	3.26E-03	0.00092263	13.1
I-133	8.7D	0.9977788	3.59E+00	3.59E+00	0.00078307	19.93
XE-133	5.26D	0.9963363	2.86E-02	2.87E-02	0.00018537	20.1
XE-133m	2.25D	0.9914385	5.91E-03	5.96E-03	0.00086783	8.77
CS-134	2.07Y	0.9999743	1.58E-01	1.58E-01	0.00038159	21.47
I-134	52.60M	0.5900046	2.37E+00	4.01E+00	0.0002484	19.31
I-135	6.61H	0.9321667	2.95E+00	3.17E+00	0.00050428	20.14
XE-135	9.16H	0.9505744	9.27E-03	9.76E-03	0.00090841	20.07
XE-137	6.37H	0.929703	3.96E-04	4.26E-04	0.0002508	11.8
CS-136	13.10D	0.9985243	6.32E-02	6.33E-02	0.00023068	19.77
CS-137	30.02Y	0.9999982	9.92E-02	9.92E-02	0.0006784	21.39
BA-140	12.79D	0.9984885	7.55E-01	7.56E-01	0.00022728	12.07
LA-140	40.22H	0.9885221	7.48E-01	7.57E-01	0.00023222	22.8
CE-144	284.29D	0.999932	4.02E+00	4.02E+00	0.00026287	22.17

TOTAL ACTIVITY = 2.24E+01 2.47E+01

GRAND TOTAL ACTIVITY = 2.27E+01 2.50E+01

I 131 D. E = 3.09E 00

REVIEWED BY : _____

APPROVED BY : _____

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-4

TIME : 0945 - 1100 (T+135 - T+210)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITES : A POST-TRIP RCS SAMPLE IS REQUESTED FOLLOWING THE
0805 (T+035) UNIT 1 TRIP

MESSAGE

Attached is the counting room chemistry report for the post-Trip RCS sample collected at time
_____ (see below) .

CONTROLLER NOTE : Issue this message eighty (80) minutes after a post-SCRAM sample
is requested by the Control Room, Unit 1 Chemist, or TSC Chemistry
Director.

UNIT 1 REACTOR COOLANT LIQUID (UNDILUTED)

CONFIGURATION FILE.....: #1#DIA1:[CRU.ARCHIVE_UNAPP]21801A_SAMP_5052.CNF;1

DETECTOR SERIAL NUMBER.....:	21-801A	GEOMETRY.....:
METHOD UNCERTAINTY (%):.....:	5.0000	AVE UNC IN EFF (%):.....:
ENERGY CALIB GAIN.....:	5.0017E-01	FWHM CALIB GAIN.....:
ENERGY CALIB OFFSET.....:	1.0426E-01	FWHM CALIB OFFSET.....:
ANALYST'S INITIALS.....:	PJE	
ANALYSIS DATE/TIME.....:	NOV-15-1995 /	10:00:00
COLLECTOR'S INITIALS.....:	SAM	
SAMPLE COLLECTION DATE/TIME..:	NOV-15-1995 /	8:30:00
DURATION OF DECAY.....:	90	
COUNT LIVE TIME.....:	17	
COUNT REAL TIME.....:	17.7491	
DEAD TIME (%):.....:	0	
SAMPLE MASS (GRAMS).....:	10	
MWT.....:		
SAMPLE POINT.....:	U1 HRSS PANEL	
REMARK.....:		

Summary of Nuclide Activity :

Total Number of Lines in Spectrum	114	
Number of Unidentified Lines	28	
Number of Lines Tentatively Identified by NID	86	75.4 (%)

Nuclide Type :

Activation Products

NUCLIDE	HLIFE	DECAY	Wtd Mean		Decay Corr 1-SIG ERR	1-Sigma %ERROR
			Uncorrected UCI/GRAM	Decay Corr UCI/GRAM		
CR-51	27.70D	0.999302	3.12E+00	3.12E+00	0.00094311	15.71
MN-54	312.14D	0.9999384	3.12E+00	3.12E+00	0.00074478	18.42
MN-56	2.58H	0.8352411	2.81E+00	3.12E+00	0.00082594	19.7
CO-58	70.82D	0.9997269	2.43E-01	2.44E-01	0.00025811	7.98
FE-59	44.51D	0.9995662	3.12E+00	3.12E+00	0.00022105	7.11
CO-60	5.72Y	0.99999	9.05E-02	9.05E-02	0.0001599	17.53
ZN65	243.90D	0.999921	3.12E+00	3.12E+00	0.0004541	23.89
TOTAL ACTIVITY =			1.54E+01	1.59E+01		

SAMPLE ID.....: GSEP2218 ACQUISITION DATE.....: NOV-15-1995 / 10:00:00
PAGE 2 OF 2

NUCLIDE	HLIFE	DECAY	Fission Products		Decay Corr 1-SIG ERR	1-Sigma %ERROR
			Wtd Mean Uncorrected UCI/GRAM	Wtd Mean Decay Corr UCI/GRAM		
KR-83m	1.86H	0.7790897	6.97E-02	8.95E-02	0.00013946	22.83
BR-84	31.8M	0.4164218	4.55E+00	1.09E+01	0.0009471	19.22
KR-85	10.74Y	0.9999951	1.32E-03	1.32E-03	2.8392E-05	5.97
KR-85M	4.4H	0.899852	4.25E-02	4.73E-02	0.00048814	9.42
KR-87	1.27H	0.8937814	6.28E-02	9.06E-02	0.00064425	13.48
KR-88	2.79H	0.8466911	1.48E-02	1.75E-02	0.00019391	16.33
SR-91	9.50H	0.9523004	3.27E+01	3.43E+01	0.00063062	16.25
Y-91	58.80D	0.9996711	3.74E+01	3.75E+01	1.7936E-05	12.31
MOTC-99M	65.92H	0.9929918	4.96E+01	4.99E+01	0.00079075	8.32
TC-99M	6.01H	0.9256526	4.05E+01	4.37E+01	0.00057258	15.11
RU-103	36.8D	0.9994744	3.43E+01	3.43E+01	0.00089174	24.95
RU-105	4.50H	0.9019646	2.03E+01	2.25E+01	0.00029076	19.63
RU-106	1.00Y	0.999947	7.80E+00	7.80E+00	0.00047765	8.42
TE-129	1.15H	0.6678125	1.82E+01	2.73E+01	6.011E-05	16.01
TE-132	78.20H	0.9940801	1.04E+02	1.05E+02	0.00094463	13.4
I-131	8.07D	0.9975971	9.27E+01	9.29E+01	0.00082775	15.74
XE-131m	11.96D	0.9983835	9.03E-02	9.05E-02	0.00070249	12.79
I-133	8.7D	0.9977788	1.85E+02	1.86E+02	0.00061153	6.25
XE-133	5.26D	0.9963363	6.34E-02	6.36E-02	0.00068246	17.48
XE-133m	2.25D	0.9914385	9.24E-02	9.32E-02	0.00022711	18.44
CS-134	2.07Y	0.9999743	8.19E+00	8.19E+00	0.00090526	19.42
I-134	52.60M	0.5900046	1.22E+02	2.08E+02	0.0003553	16.48
I-135	6.61H	0.9321667	1.53E+02	1.64E+02	0.0004546	21.92
XE-135	9.16H	0.9505744	9.22E-02	9.70E-02	0.00023703	7.32
XE-137	6.37H	0.929703	8.50E-03	9.15E-03	0.00091211	5.95
CS-136	13.10D	0.9985243	3.27E+00	3.28E+00	0.00064633	21.79
CS-137	30.02Y	0.9999982	5.14E+00	5.14E+00	0.00057175	11.63
BA-140	12.79D	0.9984865	4.99E+01	4.99E+01	0.00041911	10.92
LA-140	40.22H	0.9885221	1.94E+01	4.99E+01	0.00083823	13.52
CE-144	284.29D	0.999932	2.65E+02	2.65E+02	0.00091412	20.38

TOTAL ACTIVITY = 1.28E+03 1.41E+03

GRAND TOTAL ACTIVITY = 1.30E+03 1.42E+03

I-131 D.E. = 1.60E+02

REVIEWED BY : _____

APPROVED BY : _____

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-5

TIME : 1100 - TERMINATION (T+210 - T+390)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITIES : RCS SAMPLE IS REQUESTED AFTER 0900 (T+090) ; SAMPLE TO
BE COLLECTED USING HIGH RADIATION SAMPLING SYSTEM
(HRSS)

MESSAGE

Attached is the counting room chemistry report for the RCS sample collected at _____ (insert time approximately 55 minutes after a sampling request is made).

Additional Team Information :

Time Arrived at HRSS Room
Time Sample Collected
Time Sample Counted

Time Requested +30 minutes
Time Requested +55 minutes
Time Requested +75 minutes

- CONTROLLER NOTES :
1. Issue the OSC Debriefing form which is attached to this message to the OSC Supervisor approximately eighty (80) minutes after the sampling request is made.
 2. Issue the Chemistry report which is attached to this message to the participating Chemist, approximately two hours after an RCS or HRSS sample is requested by the Control Room, Nuclear Engineers, Unit 1 Chemist, or the TSC Chemistry Director.

EMERGENCY TEAM DEBRIEFING FORM
(To be completed by OSC Director)

Team # _____

Team Leader _____

Time of Arrival at OSC: _____

Task Completed: Yes No

Status: DILUTED RCS SAMPLE OBTAINED FROM PRIMARY
SAMPLE ROOM

Problems Encountered: NONE

Unusual Radiation Levels Encountered: HRSS PANEL CONTACT DOSE
RATE = 220 mR/h

Follow-up Actions Needed: SAMPLE BEING COUNTED AT HIGH LEVEL LAB

Total Time in Plant: 0 Hr. 55 Min.

Highest Personnel Exposure Received: 23 mrem

Team Debriefed by: _____ Time: _____ Date: 11/15/95

- (1) Contact Operations Director, Radiation Protection Director, and Maintenance Director with this information.
- (2) Update the individuals Exposure Tracking Placard and the Team Tracking Status Board.

OSC Supervisor

OR

OSC Director

(Final)

APPROVED

JAN 01 1994

B.O.S.R.

UNIT 1 REACTOR COOLANT LIQUID (UNDILUTED)

CONFIGURATION FILE.....: #1#DIA1:[CRU.ARCHIVE_UNAPP]21801A_SAMP_5052.CNF;1

DETECTOR SERIAL NUMBER.....:	21-801A	GEOMETRY.....:
METHOD UNCERTAINTY (%):.....:	5.0000	AVE UNC IN EFF (%):.....:
ENERGY CALIB GAIN.....:	5.0017E-01	FWHM CALIB GAIN.....:
ENERGY CALIB OFFSET.....:	1.0426E-01	FWHM CALIB OFFSET.....:
ANALYST'S INIT: \LS.....:	PJE	
ANALYSIS DATE/TIME.....:	NOV-15-1995 /	12:15:00
COLLECTOR'S INITIALS.....:	SAM	
SAMPLE COLLECTION DATE/TIME..:	NOV-15-1995 /	11:00:00
DURATION OF DECAY.....:	75	
COUNT LIVE TIME.....:	17	
COUNT REAL TIME.....:	19.0778	
DEAD TIME (%).....:	0	
SAMPLE MASS (GRAMS).....:	1	
MWT.....:		
SAMPLE POINT.....:	U1 HRSS PANEL	
REMARK.....:		

Summary of Nuclide Activity :

Total Number of Lines in Spectrum	114	
Number of Unidentified Lines	20	
Number of Lines Tentatively Identified by NID	94	82.5 (%)

Nuclide Type :

Activation Products

NUCLIDE	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
			Uncorrected	Decay Corr		
			UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
CR-51	27.70D	0.999302	5.46E+00	5.46E+00	0.00042184	6.7
MN-54	312.14D	0.9999384	5.46E+00	5.46E+00	0.00066361	15.58
MN-56	2.58H	0.8352411	4.56E+00	5.46E+00	0.00053855	12.09
CO-58	70.82D	0.9997289	4.26E-01	4.26E-01	3.9547E-05	17.03
FE-59	44.51D	0.9995662	5.46E+00	5.46E+00	0.0006398	19.52
CO-60	5.72Y	0.99999	1.58E-01	1.58E-01	0.00038163	8.55
ZN65	243.90D	0.999921	5.46E+00	5.46E+00	0.00026038	13.6
TOTAL ACTIVITY =			2.70E+01	2.79E+01		

SAMPLE ID.....: GSEP2218 ACQUISITION DATE.....: NOV-15-1995 / 12:15:00
PAGE 2 OF 2

Nuclide Type :		Fission Products				
NUCLIDE	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
			Uncorrected	Decay Corr		
			UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m	1.86H	0.7790897	1.38E-01	1.77E-01	0.00090714	10.46
BR-84	31.8M	0.4164218	8.94E+00	2.15E+01	0.00023597	18.25
KR-85	10.74Y	0.9999951	1.45E-03	1.45E-03	0.00023917	6.26
KR-85M	4.4H	0.899852	8.20E-02	9.12E-02	0.00095922	19.57
KR-87	1.27H	0.6937814	1.24E-01	1.78E-01	0.00014685	13.49
KR-88	2.79H	0.8466911	2.52E-02	2.97E-02	0.00030497	10.98
SR-91	9.50H	0.9523004	5.72E+01	6.01E+01	0.0003468	8.56
Y-91	58.80D	0.9996711	6.55E+01	6.56E+01	0.000734	21.58
MOTC-99M	65.92H	0.9929918	8.68E+01	8.74E+01	0.00053317	14.86
TC-99M	6.01H	0.9256526	7.08E+01	7.65E+01	0.00077547	6.4
RU-103	36.8D	0.9994744	6.01E+01	6.01E+01	2.6451E-05	24.79
RU-105	4.50H	0.9019646	3.55E+01	3.93E+01	0.00061113	7.8
RU-106	1.00Y	0.999947	1.37E+01	1.37E+01	7.683E-05	20.17
TE-129	1.15H	0.6678125	3.58E+01	5.37E+01	0.00032912	15.43
TE-132	78.20H	0.9940801	2.05E+02	2.06E+02	0.00048988	11.23
I-131	8.07D	0.9975971	1.82E+02	1.82E+02	0.00045153	18.93
XE-131m	11.96D	0.9983835	1.78E-01	1.78E-01	0.00010646	20.97
I-133	8.7D	0.9977788	3.64E+02	3.65E+02	0.00050739	10.15
XE-133	5.26D	0.9963363	9.83E-02	9.87E-02	0.00082417	13.33
XE-133m	2.25D	0.9914385	1.79E-01	1.81E-01	0.00094248	11.26
CS-134	2.07Y	0.9999743	1.61E+01	1.61E+01	0.0001983	20.04
I-134	52.60M	0.5900046	2.41E+02	4.08E+02	0.00037454	17.27
I-135	6.61H	0.9321667	3.00E+02	3.22E+02	0.00063053	18.5
XE-135	9.16H	0.9505744	1.76E-01	1.85E-01	0.00094313	17.94
XE-137	6.37H	0.929703	1.67E-02	1.79E-02	0.00074037	12.17
CS-136	13.10D	0.9985243	6.43E+00	6.44E+00	0.00014354	23.79
CS-137	30.02Y	0.9999982	1.01E+01	1.01E+01	0.00054764	16.74
BA-140	12.79D	0.9984885	8.73E+01	8.74E+01	0.00088868	24.07
LA-140	40.22H	0.9885221	8.64E+01	8.74E+01	0.00070345	20.93
CE-144	284.29D	0.999932	4.64E+02	4.64E+02	0.0003951	15.71

TOTAL ACTIVITY = 2.40E+03 2.63E+03

GRAND TOTAL ACTIVITY = 2.42E+03 2.66E+03

I-131 DE. = 3.14E+02

REVIEWED BY : _____

APPROVED BY : _____

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-6

TIME : 1100 - 1200 (T+210 - T+270)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITIES : CONTAINMENT AIR SAMPLE (CASP) IS REQUESTED AFTER 0900 (T+090) ; SAMPLE TO BE COLLECTED USING HIGH RADIATION SAMPLING SYSTEM (HRSS)

MESSAGE

Attached is the counting room chemistry report for the CASP sample collected at _____ (insert time approximately 55 minutes after a sampling request is made).

Additional Team Information :

Time Arrived at CASP
Time Sample Collected
Time Sample Counted

Time Requested +30 minutes
Time Requested +55 minutes
Time Requested +75 minutes

- CONTROLLER NOTES :
1. This message contains data which represents results for a CASP sample collected **between 1000 - 1100 hours (T+150 - T+210)**.
 2. Issue the OSC Debriefing form which is attached to this message to the OSC Supervisor approximately eighty (80) minutes after the sampling request is made.
 3. Issue the Chemistry report which is attached to this message to the participating Chemist, approximately two hours after an RCS or HRSS sample is requested by the Control Room, Nuclear Engineers, Unit 1 Chemist, or the TSC Chemistry Director.

EMERGENCY TEAM DEBRIEFING FORM
(To be completed by OSC Director)

Team # _____	Team Leader _____
	Time of Arrival at OSC: _____
Task Completed: <input checked="" type="radio"/> Yes / <input type="radio"/> No	
Status: <u>SAMPLE BEING ANALYZED AT HIGH LEVEL LAB</u>	
Problems Encountered: <u>NONE</u>	
Unusual Radiation Levels Encountered: <u>CASP CONTACT RAD LEVELS AT 10 MR/h</u>	
Follow-up Actions Needed: <u>SAMPLE ANALYSIS</u>	
Total Time in Plant: <u>0</u> Hr. <u>55</u> Min.	
Highest Personnel Exposure Received: <u>2</u> mrem	
Team Debriefed by: _____	Time: _____ Date: _____
(1) Contact Operations Director, Radiation Protection Director, and Maintenance Director with this information.	
(2) Update the individuals Exposure Tracking Placard and the Team Tracking Status Board.	
_____ OSC Supervisor	OR _____ OSC Director

(Final)

APPROVED

JAN 01 1994

B.O.S.R.

CASP SAMPLE ISOTOPIC ANALYSIS REPORT

ANALYSIS : IODINE CI:KS AI:KS % DT : 1
 COLLECTION START DATE, TIME....: 11/15/95 10:00
 COLLECTION STOP DATE, TIME.....: 11/15/95 10:25
 AVERAGE SAMPLE FLOW (CFM).....: 1.6
 SPECTRAL FILE NAME.....: SY:IOD10.SPC
 SAMPLE IDENTIFICATION: DW2 CASP SAMPLE
 SAMPLE SHELF HEIGHT.....: 3 CM
 EFFICIENCY FILE NAME.....: SY:J3CHAR.EFF
 DETECTOR NUMBER.....: 21-801A
 RADIONUCLIDE LIBRARY.....: IOD.LIB

ACQUIRE DATE : 15-Nov-95 FWHM (1332) : 2.084
 PRESENT TIME : 600 SEC TOLERANCE : 1.25KEV
 REAL TIME : 600 SEC HALF LIFE RATIO: 8
 LIVE TIME : 600 SEC ABUNDANCE LIM: 85

ENERGY CALIBRATION FWHM CALIBRATION
 CALIB DATE : JUN-14-95 12:19:36 CALIB DATE : JUN-14-95
 KEV/CHANNEL: 0.5 SLOPE : 0.0274
 OFFSET: 0.0539 OFFSET : 1.0283

*** POST-NID PEAK SEARCH REPORT ***

NUCLIDE IDENTIFICATION SYSTEM (REV SEP 88)
 SUMMARY OF NUCLIDE ACTIVITY

NUMBER OF PEAKS IN SPECTRUM 102
 IDENTIFIED PEAKS 88
 IDENTIFIED IN SUMMARY REPORT 80 90.9 %

Nuclide Type :	Fission Products	Wtd Mean		Decay Corr	1-Sigma	
		Uncorrected	Decay Corr			
NUCLIDE	HLIFE	DECAY	UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m	1.86H	0.7790897	1.05E-04	1.35E-04	0.00084134	11.77
KR-85	10.74Y	0.9999951	1.10E-06	1.10E-06	4.31858E-05	10.75
KR-85M	4.4H	0.899852	6.25E-05	6.95E-05	0.000869471	24.82
KR-87	1.27H	0.6937814	9.43E-05	1.36E-04	0.000231013	7.6
KR-88	2.79H	0.8468911	1.92E-05	2.27E-05	0.000407791	21.3
I-131	8.07D	0.9975971	5.11E-02	5.12E-02	0.000270604	24.7
XE-131m	11.96D	0.9983835	1.36E-04	1.36E-04	0.000785946	10.29
I-133	8.7D	0.9977788	1.02E-01	1.02E-01	2.33228E-05	21.68
XE-133	5.26D	0.9963363	7.49E-05	7.52E-05	0.000845598	13.09
XE-133m	2.25D	0.9914385	1.37E-04	1.38E-04	0.000838631	18.87
I-134	52.60M	0.5900046	6.75E-02	1.14E-01	0.000963495	18.67
I-135	6.61H	0.9321867	8.42E-02	9.04E-02	0.000679612	6.46
XE-135	9.16H	0.9505744	1.34E-04	1.41E-04	0.000779234	24.33
XE-137	6.37H	0.929703	1.27E-05	1.37E-05	0.000717723	19.94
GRAND TOTALS			3.06E-01	3.59E-01		

*** POST-NID PEAK SEARCH COMPLETED ***

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-7

TIME : 1201 - 1300 (T+271 - T+330)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITIES : CONTAINMENT AIR SAMPLE (CASP) IS REQUESTED AFTER 1000 (T+150) ; SAMPLE TO BE COLLECTED USING HIGH RADIATION SAMPLING SYSTEM (HRSS)

MESSAGE

Attached is the counting room chemistry report for the CASP sample collected at _____ (insert time approximately 55 minutes after a sampling request is made).

Additional Team Information :

Time Arrived at CASP
Time Sample Collected
Time Sample Counted

Time Requested +30 minutes
Time Requested +55 minutes
Time Requested +75 minutes

- CONTROLLER NOTES :
1. This message contains data which represents results for a CASP sample collected **between 1101 - 1200 hours (T+211 - T+270)**.
 2. Issue the OSC Debriefing form which is attached to this message to the OSC Supervisor approximately eighty (80) minutes after the sampling request is made.
 3. Issue the Chemistry report which is attached to this message to the participating Chemist, approximately two hours after an RCS or HRSS sample is requested by the Control Room, Nuclear Engineers, Unit 1 Chemist, or the TSC Chemistry Director.

EMERGENCY TEAM DEBRIEFING FORM
(To be completed by OSC Director)

Team # _____	Team Leader _____
	Time of Arrival at OSC: _____
Task Completed: <u>Yes</u> / No	
Status: <u>SAMPLE BEING ANALYZED AT HIGH LEVEL LAB</u>	
Problems Encountered: <u>NONE</u>	
Unusual Radiation Levels Encountered: <u>CASP CONTACT RAD AT 18 MR/Hr</u>	
Follow-up Actions Needed: <u>SAMPLE ANALYSIS</u>	
Total Time in Plant: <u>1</u> Hr. <u>0</u> Min.	
Highest Personnel Exposure Received: <u>6</u> mrem	
Team Debriefed by: _____	Time: _____ Date: _____
(1) Contact Operations Director, Radiation Protection Director, and Maintenance Director with this information.	
(2) Update the individuals Exposure Tracking Placard and the Team Tracking Status Board.	
_____ OSC Supervisor	_____ OSC Director

(Final)

APPROVED

JAN 01 1994

R O S P

CASP SAMPLE ISOTOPIC ANALYSIS REPORT

ANALYSIS : IODINE CI:KS AI:KS % DT : 1
 COLLECTION START DATE, TIME....: 11/15/95 11:00
 COLLECTION STOP DATE, TIME.....: 11/15/95 11:45
 AVERAGE SAMPLE FLOW (CFM).....: 1.6
 SPECTRAL FILE NAME.....: SY:IOD10.SPC
 SAMPLE IDENTIFICATION: DW2 CASP SAMPLE
 SAMPLE SHELF HEIGHT.....: 3 CM
 EFFICIENCY FILE NAME.....: SY:03CHAR.EFF
 DETECTOR NUMBER.....: 21-801A
 RADIONUCLIDE LIBRARY.....: IOD.LIB

ACQUIRE DATE : 15-Nov-95 FWHM (1332) : 2.084
 PRESENT TIME : 600 SEC TOLERANCE : 1.25KEV
 REAL TIME : 600 SEC HALF LIFE RATIO: 8
 LIVE TIME : 600 SEC ABUNDANCE LIM: 85

ENERGY CALIBRATION FWHM CALIBRATION
 CALIB DATE : JUN-14-95 12:19:36 CALIB DATE : JUN-14-95
 KEV/CHANNEL: 0.5 SLOPE : 0.0274
 OFFSET: 0.0539 OFFSET : 1.0283

*** POST-NID PEAK SEARCH REPORT ***

NUCLIDE IDENTIFICATION SYSTEM (REV SEP 88)
 SUMMARY OF NUCLIDE ACTIVITY

NUMBER OF PEAKS IN SPECTRUM 102
 IDENTIFIED PEAKS 88
 IDENTIFIED IN SUMMARY REPORT 80 90.9 %

NUCLIDE	HLIFE	DECAY	Fission Products		Decay Corr 1-SIG ERR	1-Sigma %ERROR
			Wtd Mean Uncorrected UCI/GRAM	Wtd Mean Decay Corr UCI/GRAM		
KR-83m	1.86H	0.7790897	8.77E-03	1.13E-02	0.000884211	22.42
KR-85	10.74Y	0.9999951	9.19E-05	9.19E-05	0.000723313	17.05
KR-85M	4.4H	0.899852	5.21E-03	5.79E-03	4.52491E-05	13.59
KR-87	1.27H	0.6937814	7.86E-03	1.13E-02	0.000441016	11.63
KR-88	2.79H	0.8466911	1.60E-03	1.89E-03	0.000395797	12.76
I-131	8.07D	0.9975971	4.26E+00	4.27E+00	0.000391221	8.54
XE-131m	11.96D	0.9983835	1.13E-02	1.13E-02	0.00099124	11.39
I-133	8.7D	0.9977788	8.52E+00	8.54E+00	0.000891875	23.27
XE-133	5.26D	0.9963363	6.24E-03	6.27E-03	0.000214714	7.88
XE-133m	2.25D	0.9914385	1.14E-02	1.11E-02	0.000547188	9.64
I-134	52.60M	0.5900046	5.63E+00	9.54E+00	4.75533E-05	5.99
I-135	6.61H	0.9321667	7.02E+00	7.53E+00	0.000420104	7.51
XE-135	9.16H	0.9505744	1.12E-02	1.17E-02	0.000398016	22.23
XE-137	6.37H	0.929703	1.06E-03	1.14E-03	0.00056844	20.79
GRAND TOTALS			2.55E+01	2.99E+01		

*** POST-NID PEAK SEARCH COMPLETED ***

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-8

TIME : 1301 - 1400 (T+331 - T+390)
ISSUED TO : UNIT 1 CHEMIST or TSC CHEMISTRY DIRECTOR
PREREQUISITIES : CONTAINMENT AIR SAMPLE (CASP) IS REQUESTED AFTER 1100 (T+210) ; SAMPLE TO BE COLLECTED USING HIGH RADIATION SAMPLING SYSTEM (HRSS)

MESSAGE

Attached is the counting room chemistry report for the CASP sample collected at _____ (insert time approximately 55 minutes after a sampling request is made).

Additional Team Information :

Time Arrived at CASP
Time Sample Collected
Time Sample Counted

Time Requested +30 minutes
Time Requested +55 minutes
Time Requested +75 minutes

- CONTROLLER NOTES :
1. This message contains data which represents results for a CASP sample collected **between 1201 - 1300 hours (T+271 - T+330)**. **Samples collected after 1300 will not be analyzed prior to the termination of the exercise.**
 2. Issue the OSC Debriefing form which is attached to this message to the OSC Supervisor approximately eighty (80) minutes after the sampling request is made.
 3. Issue the Chemistry report which is attached to this message to the participating Chemist, approximately two hours after an RCS or HRSS sample is requested by the Control Room, Nuclear Engineers, Unit 1 Chemist, or the TSC Chemistry Director.

EMERGENCY TEAM DEBRIEFING FORM
(To be completed by OSC Director)

Team # _____

Team Leader _____

Time of Arrival at OSC: _____

Task Completed: Yes / No

Status: SAMPLE BEING ANALYZED AT HIGH LEVEL LAB

Problems Encountered: NONE

Unusual Radiation Levels Encountered: CASP CONTACT RAD LEVELS
AT 220 mR/hr

Follow-up Actions Needed: SAMPLE ANALYSIS

Total Time in Plant: 1 Hr. 05 Min.

Highest Personnel Exposure Received: 36 mrem

Team Debriefed by: _____ Time: _____ Date: _____

- (1) Contact Operations Director, Radiation Protection Director, and Maintenance Director with this information.
- (2) Update the individuals Exposure Tracking Placard and the Team Tracking Status Board.

OSC Supervisor

OR

OSC Director

(Final)

APPROVED

JAN 01 1994

B.O.S.R.

CASP SAMPLE ISOTOPIC ANALYSIS REPORT

ANALYSIS : IODINE CI:KS AI:KS % DT : 1
 COLLECTION START DATE, TIME....: 11/15/95 11:00
 COLLECTION STOP DATE, TIME.....: 11/15/95 11:45
 AVERAGE SAMPLE FLOW (CFM).....: 1.6
 SPECTRAL FILE NAME.....: SY:IOD10.SPC
 SAMPLE IDENTIFICATION: DW2 CASP SAMPLE
 SAMPLE SHELF HEIGHT.....: 3 CM
 EFFICIENCY FILE NAME.....: SY:O3CHAR.EFF
 DETECTOR NUMBER.....: 21-801A
 RADIONUCLIDE LIBRARY.....: IOD.LIB

ACQUIRE DATE : 15-Nov-95 FWHM (1332) : 2.084
 PRESENT TIME : 600 SEC TOLERANCE : 1.25KEV
 REAL TIME : 600 SEC HALF LIFE RATIO: 8
 LIVE TIME : 600 SEC ABUNDANCE LIM: 85

ENERGY CALIBRATION FWHM CALIBRATION
 CALIB DATE : JUN-14-95 12:19:36 CALIB DATE : JUN-14-95
 KEV/CHANNEL: 0.5 SLOPE : 0.0274
 OFFSET: 0.0539 OFFSET : 1.0283

*** POST-NID PEAK SEARCH REPORT ***

NUCLIDE IDENTIFICATION SYSTEM (REV SEP 88)
 SUMMARY OF NUCLIDE ACTIVITY

NUMBER OF PEAKS IN SPECTRUM 102
 IDENTIFIED PEAKS 88
 IDENTIFIED IN SUMMARY REPORT 80 90.9 %

Nuclide Type : Fission Products

NUCLIDE	HLIFE	DECAY	Wtd Mean Uncorrected UCI/GRAM	Wtd Mean Decay Corr UCI/GRAM	Decay Corr 1-SIG ERR	1-Sigma %ERROR
KR-83m	1.86H	0.7790897	4.39E-04	5.63E-04	0.000120764	11.48
KR-85	10.74Y	0.9999951	4.60E-06	4.60E-06	0.000962032	23.57
KR-85M	4.4H	0.899852	2.60E-04	2.89E-04	0.000984392	5.14
KR-87	1.27H	0.6937814	3.93E-04	5.66E-04	0.000694002	17.31
KR-88	2.79H	0.8466911	8.00E-05	9.44E-05	0.000888138	22.05
I-131	8.07D	0.9975971	2.13E-01	2.13E-01	0.000984486	17.39
XE-131m	11.96D	0.9983835	5.65E-04	5.66E-04	0.000339722	24.15
I-133	8.7D	0.9977788	4.26E-01	4.27E-01	2.36988E-05	12.84
XE-133	5.26D	0.9983363	3.12E-04	3.13E-04	0.00076603	7.52
XE-133m	2.25D	0.9914385	5.70E-04	5.75E-04	0.00026921	13.98
I-134	52.60M	0.5900046	1.81E-01	4.77E-01	0.000681218	6.5
I-135	6.61H	0.9321667	3.51E-01	3.77E-01	0.000508285	6.52
XE-135	9.16H	0.9505744	5.58E-04	5.87E-04	0.000669572	16.49
XE-137	6.37H	0.929703	5.29E-05	5.69E-05	0.000224047	9.84
GRAND TOTALS			1.27E+00	1.50E+00		

*** POST-NID PEAK SEARCH COMPLETED ***

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
CHEM-9

TIME : 1300 - 1400 (T+330 - T+390)
ISSUED TO : TSC CHEMISTRY DIRECTOR
PREREQUISITIES : IODINE AIR SAMPLE COLLECTED IN FUEL HANDLING BUILDING
BETWEEN 1200 AND 1300 (T+270 - T+330)

MESSAGE

Attached is the counting room chemistry report for the iodine air cartridge which was collected in the Fuel Handling Building between 1200 hours (T+270) and 1300 hours (T+330).

CONTROLLER NOTE : Issue this message approximately eighty (80) minutes after an air sample is requested. In order to obtain this result, an actual team must have demonstrated the collection of the sample. **Results will not be available prior to exercise termination for samples collected after 1300 (T+330).**

AIR SAMPLE ISOTOPIC ANALYSIS REPORT

ANALYSIS : IODINE CI:KS AI:KS % DT : 1

COLLECTION START DATE, TIME.....: NOV-15-1995, 12:20.35
 COLLECTION STOP DATE, TIME.....: NOV-15-1995, 1230.48
 AVERAGE SAMPLE FLOW (CFM).....: 1.6
 SPECTRAL FILE NAME.....: SY:IOD10.SPC
 SAMPLE IDENTIFICATION.....: DW2 CASP SAMPLE
 SAMPLE SHELF HEIGHT.....: 3 CM
 EFFICIENCY FILE NAME.....: SY:Q3CHAR.EFF
 DETECTOR NUMBER.....: 21-801A
 RADIONUCLIDE LIBRARY.....: IOD.LIB

.....
 ACQUIRE DATE : NOV-15-1995, 12:52.09 FWHM (1332) : 2.084
 PRESENT TIME : 600 SEC TOLERANCE : 1.25KEV
 REAL TIME : 600 SEC HALF LIFE RATIO: 8
 LIVE TIME : 600 SEC ABUNDANCE LIM: 85

ENERGY CALIBRATION FWHM CALIBRATION

CALIB DATE : JUN-14-95 12:19:36 CALIB DATE : JUN-14-95
 KEV/CHANNEL: 0.5 SLOPE : 0.0274
 OFFSET: 0.0539 OFFSET : 1.0283

*** POST-MID PEAK SEARCH REPORT ***

NUCLIDE IDENTIFICATION SYSTEM (REV SEP 88)
 SUMMARY OF NUCLIDE ACTIVITY

NUMBER OF PEAKS IN SPECTRUM 102
 IDENTIFIED PEAKS 88
 IDENTIFIED IN SUMMARY REPORT 80 90.9 %

Nuclide Type :	Fission Product:	HLIFE	DECAY	Wtd Mean	Wtd Mean	Decay Corr	1-Sigma
				Uncorrected	Decay Corr		
NUCLIDE				UCI/GRAM	UCI/GRAM	1-SIG ERR	%ERROR
KR-83m		1.86H	0.7790897	2.70E-03	3.47E-03	0.00040121	9.01
KR-85		10.74Y	0.9999951	2.38E-05	2.38E-05	0.00087761	24.79
KR-85M		4.4H	0.899852	1.97E-03	2.19E-03	0.0004873	16.27
KR-87		1.27H	0.6937814	2.04E-03	2.94E-03	0.00079904	8.13
KR-88		2.79H	0.8466911	5.24E-04	6.19E-04	0.00058344	11.22
I-131		8.07D	0.9975971	2.03E+00	2.03E+00	0.00064557	18.25
XE-131m		11.96D	0.9983835	5.03E-03	5.04E-03	0.00068144	6.08
I-133		8.7D	0.9977788	4.06E+00	4.07E+00	0.00091975	21.22
XE-133		5.26D	0.9963363	2.38E-03	2.39E-03	0.00096941	19.76
XE-133m		2.25D	0.9914385	4.98E-03	5.02E-03	0.0007626	24.47
I-134		52.60M	0.5900046	1.22E+00	2.07E+00	0.00081262	19.28
I-135		6.61H	0.9321667	3.02E+00	3.24E+00	0.00045713	19.59
XE-135		9.18H	0.9505744	4.54E-03	4.77E-03	7.6114E-05	8.48
XE-137		6.37H	0.929703	4.23E-04	4.55E-04	0.00048426	13.54
GRAND TOTALS				1.04E+01	1.14E+01		

*** POST-MID PEAK SEARCH COMPLETED ***

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

METEOROLOGY AND ENVIRONMENTAL INFORMATION

- * ENVIRONS TEAM CONTROLLER GUIDANCE
- * MURRAY & TRETTEL 12-HOUR FORECAST(S)
- * 1-MINUTE METEOROLOGY [POINT HISTORY]
- * 1-MINUTE WRGM RELEASE DATA [POINT HISTORY]
- * ONSITE RADIOLOGICAL CONDITIONS
- * COMED [ONSITE] MONITORING MAP DATA
- * IDNS [OFFSITE] MONITORING MAP DATA

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

METEOROLOGICAL FORECAST

GENERAL CONDITIONS :

The early winter has been characterized by intervals of both unusually warm and unusually cool conditions, though the overall averages are close to the expected temperatures. Precipitation has been normal and river levels are near normal for November. A series of cold fronts with light rainfall moved through the northern Illinois region between Friday, November 10, and Tuesday morning November 14, producing locally icy conditions and reports of light snow.

NOVEMBER 15, 1995, FORECAST, 0730 THROUGH 0859 :

A strong low pressure system moved into the northern Illinois area overnight, bringing freezing rain. Heavy ice accumulation has been reported overnight in Minnesota and Wisconsin, and along a line north of Interstate 80 in Illinois and east of Freeport, Illinois. Additional icing is expected to end by mid-morning. Surface winds are light from the east at 1-3 mph. Today's forecast is for cloudy to mostly cloudy skies with afternoon temperatures between 30°F and 40°F. Winds will become more easterly and will stabilize by 0900 from out of the east with a slow change to a northeasterly flow over the remainder of the day. See attached Point History data for current information.

NOVEMBER 15, 1995, FORECAST, 0900 THROUGH 1059 :

A mild low pressure system remains over north central Illinois. Skies are cloudy throughout the area, with light winds [2-4 mph] out of the east. Winds will slowly increase in speed throughout the morning to near 5 mph. A high temperature of near 32°F is expected this afternoon. See attached Point History data for current information.

NOVEMBER 15, 1995, FORECAST, 1100 THROUGH 1330 :

A low pressure system has slid southward through Illinois. Skies are partly cloudy throughout the area, with winds at 5-8 mph out of the east. Winds will remain steady throughout the afternoon. A high temperature of near 32°F is expected this afternoon. See attached Point History data for current information.

Winds will remain out of the east-northeast after six p.m. (1800 hours) this evening, increasing in speed to near 10 mph. Partly-cloudy to clear skies are expected overnight and clear skies for Wednesday (November 15th) morning. An overnight low of 18°F to 20°F is expected.

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

MURRAY & TRETTEL 12-HOUR FORECAST DATA DAY 1

TIME	WIND DIRECTION	WIND SPEED (m/s)	STABILITY CLASS
1600	40	4.4	A
1700	40	4.4	A
1800	42	4.3	A
1900	45	4.3	A
2000	47	4.4	A
2100	49	4.5	A
2200	53	4.2	A
2300	60	3.5	A
0000 11/15/95	67	3.2	A
0100	74	2.5	B
0200	80	2.3	B
0300	83	2.2	B
0400	88	2.0	B
0500	88	1.9	B
0600	86	1.9	B
0700	91	1.6	B
0730	86	1.6	B

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

MURRAY & TRETTEL 12-HOUR FORECAST DATA DAY 2

TIME	WIND DIRECTION	WIND SPEED (m/s)	STABILITY CLASS
0800	86	1.4	B
0900	81	1.9	B
1000	77	2.9	B
1100	75	4.5	C
1200	73	5.4	D
1300	73	5.5	D
1400	73	6.2	D
1500	70	6.3	D
1600	70	6.2	D
1700	70	6.3	C
1800	68	6.3	C
1900	68	6.2	C
2000	62	6.0	C
2100	62	6.0	C
2200	62	6.1	D
2300	58	6.1	D
0000 11/16/95	58	6.2	D

<<< *** THIS IS AN EXERCISE *** >>>

Byron Nuclear Generating Station
1995 GSEP Exercise
November 15, 1995

CONTROLLER GUIDANCE :
OSC / Environs Teams

1. Take no action which jeopardizes the safety of any individual(s).
2. Data tables are provided for a variety of ComEd and IDNS monitoring locations. A lower range of 1 mR/h is assumed for CP instruments and values of less than 1.0 are not marked; a one-meter closed-window measurement is assumed. Values for measurements for which data is not provided are "as read (AR)" for all instruments : controllers should direct environs teams to use and report actual instrument values at those locations.
3. Actual air samples will be collected as requested, using particulate cartridges to simulate silver zeolite. An adequate inventory of silver zeolite cartridges should be demonstrated to be available. If changes to fixed air samplers are requested, the environs team should demonstrate their ability to access the air sampler housing. Air sample information should be reported as of the time the sample collection was started. Air sample results for all locations not actually in the plume should be reported as "as read" (locations may be affected by plume shine).
4. PC's will not be worn outside of the protective ("double") fence. Should the use of PC's be requested, the required equipment will be located, inspected, and returned to storage.
5. If respiratory protection equipment is requested, the equipment will be located and inspected. One radio communication will be made from inside the environs vehicle wearing the respirator. No respiratory protection equipment will be worn outside of the environs vehicle.
6. Use of potassium iodide (KI) shall be simulated. If the use of KI is directed, participants must demonstrate that an adequate supply of KI is available.
7. The replacement of environmental TLDs will be actually performed until the point that the actual TLD ~~could be~~ removed. No actual environmental TLDs should be removed from their permanent location(s).
8. All environmental samples should be collected as requested.
9. Care should be taken to ensure that numerical data is presented with the same degree of precision as the measuring instrument can deliver. All numbers should be rounded to agree with the meter scale(s) in use by the field team member.
10. Meal arrangements will be handled through the Lead Controller for the facility (TSC or EOF) which has command and control of the environs team(s).

<<< *** THIS IS AN EXERCISE *** >>>

17-HOUR OBSERVATION FORECAST DATA 11/15/95

TIME	WIND DIRECTION	WIND SPEED	PRECIPITATION	CLOUD COVER
0730	E	SLIGHT WIND	DRIZZLING RAIN	CLOUDY
0800	E	SLIGHT WIND	DRIZZLING RAIN	CLOUDY
0900	E-NE	SLIGHT WIND	DRIZZLING RAIN	CLOUDY
1000	E-NE	SLIGHT WIND	DRIZZLING RAIN	CLOUDY
1100	E-NE	SLIGHT WIND	NONE	CLOUDY
1200	E-NE	BREEZY WIND	NONE	CLOUDY
1300	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1400	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1500	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1600	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1700	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1800	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
1900	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
2000	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
2100	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
2200	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
2300	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY
0000 11/16/95	E-NE	BREEZY WIND	NONE	PARTLY CLOUDY

THIS IS AN EXERCISE

Byron 1995 GSEP Exercise
November 15, 1995

ENVIRONS TEAM MESSAGE
ET-1

TIME : 0900 - 1000 (T+090 - T+150)
ISSUED TO : ENVIRONS TEAM AT ENVIRONS VAN (OUTSIDE NEAR MAIN GATEHOUSE)
PREREQUISITE : DISPATCHED TO VANS BY OSC AND TSC

MESSAGE

"THIS IS AN EXERCISE : There is a thick coating of ice on the GSEP vans. It continues to drizzle, though it does NOT appear to be continuing to form ice. A considerable amount of effort is needed to clear the vehicle windshields, mirrors, and windows from ice. The parking lot area is very slippery."

- CONTROLLER NOTE(S) :
1. Environs teams should show that they have sturdy ice scrapers available which would be adequate to remove the heavy accumulation of ice which would be expected from a severe storm. A lack of scrapers should be considered a deficiency in vehicle preparedness and reported following the exercise. The Environs teams SHOULD NOT be held in place because of a lack of ice scrapers.
 2. Teams should show the operability of vehicle wipers and spray.
 3. If actual conditions do not require them, vehicles ARE NOT required to travel with lights on, etc., to simulate travel under hazardous conditions.

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-2**

TIME : 0930 - 1100 (T+120 - T+210)

ISSUED TO : ENVIRONS TEAM IN GSEP VAN

PREREQUISITE : HAVE LEFT TEAM STAGING AREA IN TRANSIT TO MONITORING POINTS

MESSAGE

"THIS IS AN EXERCISE : The roads are 100% wet and are mostly ice-covered. Travel is possible using lower speeds and cautious, defensive, driving. All roads are passable though few to no vehicles are seen."

- CONTROLLER NOTES :
1. AFTER 1020 (T+170) inform team members that it is no longer drizzling, though it remains heavily overcast with a lot of moisture in the air.
 2. When teams reach their initial monitoring point, REPORT that the wind speed is near calm conditions.

Byron 1995 GSEP Exercise
November 15, 1995

ENVIRONS TEAM MESSAGE
ET-3

TIME : 1000 - TERMINATION (T+150 - T+390)
ISSUED TO : ENVIRONS TEAM IN SECTORS L AND M AND N
PREREQUISITE : DISPATCHED BY TSC OR EOF

MESSAGE

"THIS IS AN EXERCISE : As you approach _____(any location listed below)____, you notice a damaged electrical pole which is leaning or broken, with broken electrical cable on the ground. You hear a crackling noise coming from the line (where it is connected to the pole) indicating that it may still be "live".

Locations :

West Oregon Trail Road west of South Gale Road	L
Limkin Road between TLD 212-1 and TLD 211-2	M
East end of West Midtown Road (near TLD 213-1)	N

- CONTROLLER NOTES :
1. No wire is simulated to be across the road or otherwise preventing travel through the area.
 2. No wire is simulated to be damaged at a designated environmental monitoring point and the simulated line failures should not be permitted to affect the collection of environmental samples.

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-4**

TIME : 1035 - 1230 (T+185 - T+300)
ISSUED TO : ENVIRONS TEAM AT ROUTE 72 BRIDGE INTO BYRON
PREREQUISITE : DISPATCHED BY TSC

MESSAGE

PROVIDE the appropriate information according to the time :

1035 - 1044 (T+185 - T+194) :

"THIS IS AN EXERCISE : All lanes across the Route 72 Bridge over the Rock River into Byron are blocked by a multi-vehicle accident. The accident is located about fifty (50) yards to the west of the Rt. 72 intersection with German Church Road. The vehicles consist of a white Chevrolet Suburban, a blue 2-door Ford Taurus sedan, a red Dodge Spirit, and a black Ford Ranger pick-up truck. Eight persons are visible around the vehicles, inspecting the damage. No emergency vehicles are on the scene."

1045 - 1144 (T+195 - T+254) :

"THIS IS AN EXERCISE : All lanes across the Route 72 Bridge over the Rock River into Byron are blocked by a multi-vehicle accident. The accident is located about fifty (50) yards to the west of the Rt. 72 intersection with German Church Road. The vehicles consist of a white Chevrolet Suburban, a blue 2-door Ford Taurus sedan, a red Dodge Spirit, and a black Ford Ranger pick-up truck. Two (2) Byron police cars and one (1) Ogle County Sheriff's car are on the scene."

1145 - 1230 (T+255 - T+300) :

"THIS IS AN EXERCISE : All lanes across the Route 72 Bridge over the Rock River into Byron are blocked by a multi-vehicle accident. The accident is located about fifty (50) yards to the west of the Rt. 72 intersection with German Church Road. The vehicles consist of a white Chevrolet Suburban, a blue 2-door Ford Taurus sedan, a red Dodge Spirit, and a black Ford Ranger pick-up truck. Two (2) Byron police cars are on the scene, along with two (2) tow trucks."

- CONTROLLER NOTES :**
1. The team(s) are not present at the bridge when the accident occurs.
 2. IF ASKED : there are no injured persons at the accident scene.
 3. Use of the Route 72 bridge is restored AFTER 1230 (> T+300).

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-5**

TIME : 1040 (T+190)
ISSUED TO : ENVIRONS TEAM OUTSIDE OF PLANT BUILDINGS
PREREQUISITE : DISPATCHED BY TSC

MESSAGE

"THIS IS AN EXERCISE : You hear the offsite sirens sounding. The sound continues for three (3) minutes.

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-6**

TIME : 1230 (T+300)
ISSUED TO : ENVIRONS TEAM OUTSIDE OF PLANT BUILDINGS
PREREQUISITE : DISPATCHED BY TSC

MESSAGE

"THIS IS AN EXERCISE : You hear the offsite sirens sounding. The sound continues for three (3) minutes.

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-7**

TIME : 1230 (T+300)
ISSUED TO : ENVIRONS TEAM OUTSIDE OF PLANT BUILDINGS
PREREQUISITE : DISPATCHED BY TSC

MESSAGE

"THIS IS AN EXERCISE : The wind has noticeably picked up speed and is now brisk and breezy. Some widely scattered patches of blue sky are visible and it appears that conditions may be starting to become less overcast and cloudy."

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-8**

TIME: 1200 - 1400 (T+270 T+390)

**ISSUED TO: ENVIRONS TEAM WITHIN 1 MILE OF BYRON STATION
(ONSITE TEAM(S))**

PREREQUISITE: DISPATCHED BY TSC OR EOF

MESSAGE

"THIS IS AN EXERCISE : ATTACHED is environmental monitoring data for areas within 1 mile of Byron Station."

Byron Exercise Field Data 11/15/95 for locations WITHIN ONE MILE of station.									
Notes:									
1. For locations not specified here, obtain results by interpolation between data at specified locations or from plume profile plot.									
2. Notation for Point Locations:									
"TLD 110-1" denotes ComEd TLD location 110-1.									
"AIR 24" denotes ComEd air sampler 24.									

Byron Exercise Field Data 11/15/95										
Time: 11:58 to 12:12										
							Count Rate of Sample Collected in This Time Interval and Measured in Normal Background			
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil	Foliage	
						Cartridge (cpm)	Filter (cpm)	(cpm)	(cpm)	
J1	2.40	2.40	2.40	2.40	9,500	As Read	As Read	As Read	As Read	
K1	5.50	5.50	5.50	5.50	21,500	As Read	As Read	As Read	As Read	
K2	0.85	0.85	0.85	0.85	3,500	As Read	As Read	As Read	As Read	
L1	27.0	27.0	27.0	27.0	105,000	As Read	As Read	As Read	As Read	
L3	7.00	7.00	7.00	7.00	30,000	As Read	As Read	As Read	As Read	
M1	2,150.	1,400.	2,650.	1,200.	> 250,000	> 250,000	> 250,000	11,500	6,000	
M11	170.	110.	210.	95.0	> 250,000	> 250,000	> 250,000	900	450	
N1	65.0	65.0	65.0	65.0	> 250,000	As Read	As Read	As Read	As Read	
N11	2.30	2.30	2.30	2.30	9,500	350	350	As Read	As Read	
P1	12.5	12.5	12.5	12.5	50,000	As Read	As Read	As Read	As Read	
P2	4.25	4.25	4.25	4.25	17,000	As Read	As Read	As Read	As Read	
Q1	3.80	3.80	3.80	3.80	15,500	As Read	As Read	As Read	As Read	
R1	0.35	0.35	0.35	0.35	1,400	As Read	As Read	As Read	As Read	
TLD 110-1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 110-2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-3	0.10	0.10	0.10	0.10	350	As Read	As Read	As Read	As Read	
TLD 111-4	0.10	0.10	0.10	0.10	450	As Read	As Read	As Read	As Read	
TLD 112-3	190.	125.	245.	105.	> 250,000	> 250,000	> 250,000	1,300	650	
TLD 112-4	230.	150.	285.	130.	> 250,000	> 250,000	> 250,000	1,150	600	
TLD 113-1	2.30	2.30	2.30	2.30	9,000	As Read	As Read	As Read	As Read	
TLD 113-2	0.90	0.90	0.90	0.90	3,500	As Read	As Read	As Read	As Read	
TLD 114-1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 314-1	0.75	0.75	0.75	0.75	3,000	As Read	As Read	As Read	As Read	
AIR 24	1.75	1.75	1.75	1.75	7,000	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95										
Time: 12:13 to 12:27										
Count Rate of Sample Collected in This Time Interval and Measured in Normal Background										
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
J1	1.55	1.55	1.55	1.55	6,000	As Read	As Read	As Read	As Read	
K1	3.45	3.45	3.45	3.45	13,500	As Read	As Read	As Read	As Read	
K2	0.55	0.55	0.55	0.55	2,100	As Read	As Read	As Read	As Read	
L1	17.0	17.0	17.0	17.0	70,000	As Read	As Read	As Read	As Read	
L3	4.50	4.50	4.50	4.50	18,000	As Read	As Read	As Read	As Read	
M1	1,350.	900.	1,700.	750.	> 250,000	> 250,000	> 250,000	19,000	9,500	
M11	110.	70.0	135.	60.0	> 250,000	> 250,000	> 250,000	1,450	750	
N1	40.5	40.5	40.5	40.5	160,000	As Read	As Read	As Read	As Read	
N11	1.45	1.45	1.50	1.45	6,000	As Read	250	As Read	As Read	
P1	8.00	8.00	8.00	8.00	30,000	As Read	As Read	As Read	As Read	
P2	2.70	2.70	2.70	2.70	11,000	As Read	As Read	As Read	As Read	
Q1	2.45	2.45	2.45	2.45	9,500	As Read	As Read	As Read	As Read	
R1	0.20	0.20	0.20	0.20	900	As Read	As Read	As Read	As Read	
TLD 110-2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-3	0.05	0.05	0.05	0.05	As Read	As Read	As Read	As Read	As Read	
TLD 111-4	0.05	0.05	0.05	0.05	300	As Read	As Read	As Read	As Read	
TLD 112-3	120.	80.0	155.	65.0	> 250,000	> 250,000	> 250,000	2,100	1,050	
TLD 112-4	150.	95.0	180.	80.0	> 250,000	> 250,000	> 250,000	1,850	950	
TLD 113-1	1.45	1.45	1.45	1.45	6,000	As Read	As Read	As Read	As Read	
TLD 113-2	0.60	0.60	0.60	0.60	2,350	As Read	As Read	As Read	As Read	
TLD 114-1	As Read	As Head	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 314-1	0.50	0.50	0.50	0.50	1,950	As Read	As Read	As Read	As Read	
AIR 24	1.10	1.10	1.10	1.10	4,500	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95									
Time: 12:28 to 12:42									
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background			
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate		
						Cartridge (cpm)	Filter (cpm)	Soil (cpm)	Foliage (cpm)
J1	0.85	0.85	0.85	0.85	3,500	As Read	As Read	As Read	As Read
K1	1.95	1.95	1.95	1.95	8,000	As Read	As Read	As Read	As Read
K2	0.30	0.30	0.30	0.30	1,200	As Read	As Read	As Read	As Read
L1	9.50	9.50	9.50	9.50	40,000	As Read	As Read	As Read	As Read
L3	2.55	2.55	2.55	2.55	10,000	As Read	As Read	As Read	As Read
M1	750.	495.	950.	425.	> 250,000	> 250,000	> 250,000	22,500	11,500
M11	60.0	39.0	75.0	33.5	245,000	> 250,000	> 250,000	1,750	850
N1	23.0	23.0	23.0	23.0	90,000	As Read	As Read	As Read	As Read
N11	0.85	0.85	0.85	0.85	3,500	As Read	As Read	As Read	As Read
P1	4.50	4.50	4.50	4.50	18,000	As Read	As Read	As Read	As Read
P2	1.55	1.55	1.55	1.55	6,000	As Read	As Read	As Read	As Read
Q1	1.40	1.40	1.40	1.40	5,500	As Read	As Read	As Read	As Read
R1	0.10	0.10	0.10	0.10	500	As Read	As Read	As Read	As Read
TLD 111-3	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 111-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 112-3	70.0	45.0	90.0	37.0	> 250,000	> 250,000	> 250,000	2,500	1,250
TLD 112-4	85.0	55.0	100.	46.0	> 250,000	> 250,000	> 250,000	2,250	1,100
TLD 113-1	0.85	0.85	0.85	0.85	3,500	As Read	As Read	As Read	As Read
TLD 113-2	0.35	0.35	0.35	0.35	1,350	As Read	As Read	As Read	As Read
TLD 314-1	0.30	0.30	0.30	0.30	1,100	As Read	As Read	As Read	As Read
AIR 24	0.65	0.65	0.65	0.65	2,500	As Read	As Read	As Read	As Read

Byron Exercise Field Data 11/15/95										
Time: 12:43 to 12:57										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
J1	0.45	0.45	0.45	0.45	1,850	As Read	As Read	As Read	As Read	
K1	1.05	1.05	1.05	1.05	4,000	As Read	As Read	As Read	As Read	
K2	0.15	0.15	0.15	0.15	650	As Read	As Read	As Read	As Read	
L1	5.00	5.00	5.00	5.00	20,500	As Read	As Read	As Read	As Read	
L3	1.35	1.35	1.35	1.35	5,500	As Read	As Read	As Read	As Read	
M1	410.	260.	500.	225.	> 250,000	> 250,000	> 250,000	24,000	12,000	
M11	32.0	20.5	40.0	18.0	130,000	> 250,000	> 250,000	1,850	950	
N1	12.0	12.0	12.0	12.0	50,000	As Read	As Read	As Read	As Read	
N11	0.45	0.45	0.45	0.45	1,750	As Read	As Read	As Read	As Read	
P1	2.40	2.40	2.40	2.40	9,500	As Read	As Read	As Read	As Read	
P2	0.80	0.80	0.80	0.80	3,000	As Read	As Read	As Read	As Read	
Q1	0.75	0.75	0.75	0.75	3,000	As Read	As Read	As Read	As Read	
R1	0.05	0.05	0.05	0.05	250	As Read	As Read	As Read	As Read	
TLD 111-3	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 112-3	36.0	23.5	47.0	19.5	145,000	> 250,000	> 250,000	2,500	1,350	
TLD 112-4	44.5	28.0	55.0	24.5	175,000	> 250,000	> 250,000	2,350	1,200	
TLD 113-1	0.45	0.45	0.45	0.45	1,750	As Read	As Read	As Read	As Read	
TLD 113-2	0.20	0.20	0.20	0.20	700	As Read	As Read	As Read	As Read	
TLD 314-1	0.15	0.15	0.15	0.15	600	As Read	As Read	As Read	As Read	
AIR 24	0.35	0.35	0.35	0.35	1,350	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95										
Time: 12:58 to 13:12										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
J1	0.30	0.30	0.30	0.30	1,150	As Read	As Read	As Read	As Read	
K1	0.65	0.65	0.65	0.65	2,500	As Read	As Read	As Read	As Read	
K2	0.10	0.10	0.10	0.10	400	As Read	As Read	As Read	As Read	
L1	3.20	3.20	3.20	3.20	12,500	As Read	As Read	As Read	As Read	
L3	0.85	0.85	0.85	0.85	3,500	As Read	As Read	As Read	As Read	
M1	255.	160.	320.	140.	> 250,000	> 250,000	> 250,000	24,500	12,500	
M11	20.0	13.0	25.0	11.0	80,000	> 250,000	> 250,000	1,900	950	
N1	7.50	7.50	7.50	7.50	30,000	As Read	As Read	As Read	As Read	
N11	0.30	0.30	0.30	0.30	1,100	As Read	As Read	As Read	As Read	
P1	1.50	1.50	1.50	1.50	6,000	As Read	As Read	As Read	As Read	
P2	0.50	0.50	0.50	0.50	2,000	As Read	As Read	As Read	As Read	
Q1	0.45	0.45	0.45	0.45	1,800	As Read	As Read	As Read	As Read	
R1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-3	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 112-3	22.5	15.0	29.5	12.0	90,000	> 250,000	> 250,000	2,500	1,350	
TLD 112-4	27.5	17.5	34.0	15.0	110,000	> 250,000	> 250,000	2,400	1,200	
TLD 113-1	0.25	0.25	0.25	0.25	1,100	As Read	As Read	As Read	As Read	
TLD 113-2	0.10	0.10	0.10	0.10	450	As Read	As Read	As Read	As Read	
TLD 314-1	0.10	0.10	0.10	0.10	350	As Read	As Read	As Read	As Read	
AIR 24	0.20	0.20	0.20	0.20	850	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95										
Time: 13:13 to 13:27										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
J1	0.20	0.20	0.20	0.20	850	As Read	As Read	As Read	As Read	
K1	0.50	0.50	0.50	0.50	1,950	As Read	As Read	As Read	As Read	
K2	0.10	0.10	0.10	0.10	300	As Read	As Read	As Read	As Read	
L1	2.45	2.45	2.45	2.45	10,000	As Read	As Read	As Read	As Read	
L3	0.65	0.65	0.65	0.65	2,500	As Read	As Read	As Read	As Read	
M1	195.	125.	245.	105.	> 250,000	> 250,000	> 250,000	24,500	12,500	
M11	15.5	10.0	19.0	8.50	60,000	> 250,000	> 250,000	1,900	950	
N1	6.00	6.00	6.00	6.00	23,000	As Read	As Read	As Read	As Read	
N11	0.20	0.20	0.20	0.20	850	As Read	As Read	As Read	As Read	
P1	1.15	1.15	1.15	1.15	4,500	As Read	As Read	As Read	As Read	
P2	0.40	0.40	0.40	0.40	1,550	As Read	As Read	As Read	As Read	
Q1	0.35	0.35	0.35	0.35	1,400	As Read	As Read	As Read	As Read	
R1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 111-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 112-3	17.0	11.5	22.5	9.50	70,000	> 250,000	> 250,000	2,500	1,350	
TLD 112-4	21.0	13.5	26.0	11.5	85,000	> 250,000	> 250,000	2,450	1,200	
TLD 113-1	0.20	0.20	0.20	0.20	850	As Read	As Read	As Read	As Read	
TLD 113-2	0.10	0.10	0.10	0.10	350	As Read	As Read	As Read	As Read	
TLD 314-1	0.05	0.05	0.05	0.05	300	As Read	As Read	As Read	As Read	
AIR 24	0.15	0.15	0.15	0.15	650	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95										
Time: 13:28 to 13:42										
Count Rate of Sample Collected in This Time Interval and Measured in Normal Background										
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine		Particulate		Foliage (cpm)
						Cartridge (cpm)	Filter (cpm)	Soil (cpm)	Foliage (cpm)	
J1	0.15	0.15	0.15	0.15	600	As Read	As Read	As Read	As Read	As Read
K1	0.35	0.35	0.35	0.35	1,350	As Read	As Read	As Read	As Read	As Read
K2	0.05	0.05	0.05	0.05	As Read	As Read	As Read	As Read	As Read	As Read
L1	1.70	1.70	1.70	1.70	7,000	As Read	As Read	As Read	As Read	As Read
L3	0.45	0.45	0.45	0.45	1,800	As Read	As Read	As Read	As Read	As Read
M1	135.	85.0	170.	75.0	> 250,000	> 250,000	> 250,000	24,500	12,000	As Read
M11	10.5	7.00	13.5	6.00	45,000	215,000	215,000	1,900	950	As Read
N1	4.00	4.00	4.00	4.00	16,000	As Read	As Read	As Read	As Read	As Read
N11	0.15	0.15	0.15	0.15	600	As Read	As Read	As Read	As Read	As Read
P1	0.80	0.80	0.80	0.80	3,000	As Read	As Read	As Read	As Read	As Read
P2	0.25	0.25	0.25	0.25	1,050	As Read	As Read	As Read	As Read	As Read
Q1	0.25	0.25	0.25	0.25	950	As Read	As Read	As Read	As Read	As Read
R1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 112-3	12.0	8.00	15.5	6.50	50,000	> 250,000	> 250,000	2,500	1,350	As Read
TLD 112-4	14.5	9.50	18.0	8.00	60,000	> 250,000	> 250,000	2,400	1,200	As Read
TLD 113-1	0.15	0.15	0.15	0.15	600	As Read	As Read	As Read	As Read	As Read
TLD 113-2	0.05	0.05	0.05	0.05	As Read	As Read	As Read	As Read	As Read	As Read
TLD 314-1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
AIR 24	0.10	0.10	0.10	0.10	450	As Read	As Read	As Read	As Read	As Read

Byron Exercise Field Data 11/15/95										
Time: 13:43 to 13:57										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
J1	0.15	0.15	0.15	0.15	550	As Read	As Read	As Read	As Read	
K1	0.30	0.30	0.30	0.30	1,200	As Read	As Read	As Read	As Read	
K2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
L1	1.55	1.55	1.55	1.55	6,000	As Read	As Read	As Read	As Read	
L3	0.40	0.40	0.40	0.40	1,650	As Read	As Read	As Read	As Read	
M1	115.	75.0	145.	65.0	> 250,000	> 250,000	> 250,000	24,000	12,000	
M11	12.5	7.50	15.0	7.00	50,000	230,000	250,000	1,850	950	
N1	3.10	3.10	3.10	3.10	12,500	As Read	As Read	As Read	As Read	
N11	0.10	0.10	0.10	0.10	400	As Read	As Read	As Read	As Read	
P1	0.60	0.60	0.60	0.60	2,500	As Read	As Read	As Read	As Read	
P2	0.20	0.20	0.20	0.20	850	As Read	As Read	As Read	As Read	
Q1	0.20	0.20	0.20	0.20	750	As Read	As Read	As Read	As Read	
R1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 112-3	10.0	6.50	13.5	5.50	40,000	> 250,000	> 250,000	2,500	1,350	
TLD 112-4	9.00	6.00	11.5	5.00	35,000	205,000	220,000	2,350	1,200	
TLD 113-1	0.10	0.10	0.10	0.10	400	As Read	As Read	As Read	As Read	
TLD 113-2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 314-1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
AIR 24	0.10	0.10	0.10	0.10	450	As Read	As Read	As Read	As Read	

Byron Exercise Field Data 11/15/95										
Time: 13:58 to 14:12										
Count Rate of Sample Collected in This Time Interval and Measured in Normal Background										
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine Cartridge (cpm)	Particulate Filter (cpm)	Soil (cpm)	Foliage (cpm)	
J1	0.15	0.15	0.15	0.15	500	As Read	As Read	As Read	As Read	
K1	0.30	0.30	0.30	0.30	1,150	As Read	As Read	As Read	As Read	
K2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
L1	1.45	1.45	1.45	1.45	6,000	As Read	As Read	As Read	As Read	
L3	0.40	0.40	0.40	0.40	1,600	As Read	As Read	As Read	As Read	
M1	100.	60.0	120.	55.0	> 250,000	> 250,000	> 250,000	23,500	12,000	
M11	11.0	6.50	13.0	6.00	45,000	200,000	215,000	1,850	900	
N1	2.50	2.50	2.50	2.50	10,000	As Read	As Read	As Read	As Read	
N11	0.05	0.05	0.05	0.05	300	As Read	As Read	As Read	As Read	
P1	0.50	0.50	0.50	0.50	2,050	As Read	As Read	As Read	As Read	
P2	0.15	0.15	0.15	0.15	700	As Read	As Read	As Read	As Read	
Q1	0.15	0.15	0.15	0.15	650	As Read	As Read	As Read	As Read	
R1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 112-3	8.50	5.50	11.0	4.65	35,000	205,000	220,000	2,500	1,300	
TLD 112-4	7.50	4.65	9.00	4.15	30,000	125,000	135,000	2,300	1,150	
TLD 113-1	0.05	0.05	0.05	0.05	300	As Read	As Read	As Read	As Read	
TLD 113-2	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 314-1	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
AIR 24	0.10	0.10	0.10	0.10	500	As Read	As Read	As Read	As Read	

**Byron 1995 GSEP Exercise
November 15, 1995**

**ENVIRONS TEAM MESSAGE
ET-9**

TIME: 1200 - 1400 (T+270 - T+390)

**ISSUED TO: ENVIRONS TEAM BETWEEN 1 AND 10 MILES OF BYRON
STATION (OFFSITE TEAM(S))**

PREREQUISITE: DISPATCHED BY TSC OR EOF

MESSAGE

"THIS IS AN EXERCISE : ATTACHED is environmental monitoring data for areas between 1 and 10 miles of Byron Station."

Byron Exercise Field Data 11/15/95 for locations BEYOND ONE MILE from station.											
Notes:											
1. If an arrival time is specified, measured results will be "as read" before the specified arrival time.											
2. For locations not specified here, obtain results by interpolation between data at specified locations or from plume profile plot.											
3. Notation for Point Locations:											
"TLD 212-1" denotes ComEd TLD location 212-1.											
"AIR 07" denotes ComEd air sampler 07.											
"RS-L" denotes Illinois Department of Nuclear Safety Reuter-Stokes detector in sector L.											

Byron Exercise Field Data 11/15/95											
Time: 11:58 to 12:12											
NOTE: Measured results will be "as read" before the specified arrival time.											
							Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	Arrival Time	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
							Cartridge (cpm)	Filter (cpm)			
L12	12:03	1.15	0.70	1.20	0.65	4,500	25,000	25,000	550	250	
L13	12:09	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
L14	12:11	As Read	As Read	0.05	As Read	As Read	4,000	4,000	As Read	As Read	
M12	12:05	8.50	5.00	9.00	4.75	35,000	165,000	175,000	3,500	1,750	
M13	12:10	17.5	10.5	19.0	10.0	70,000	> 250,000	> 250,000	7,000	3,500	
M14	12:12	As Read	As Read	As Read	As Read	As Read	350	400	As Read	As Read	
M16	12:12	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N12	12:08	19.5	11.0	20.5	11.0	75,000	> 250,000	> 250,000	7,000	3,500	
N13	12:10	7.00	4.00	7.50	3.80	25,000	140,000	150,000	3,000	1,500	
N14	12:12	As Read	As Read	As Read	As Read	As Read	500	550	As Read	As Read	
RS-L	12:06	4.10	2.40	4.35	2.30	16,500	70,000	75,000	1,500	750	
RS-M	12:09	37.0	21.5	39.5	20.5	150,000	> 250,000	> 250,000	13,000	6,500	

Byron Exercise Field Data 11/15/95										
Time: 12:13 to 12:27										
NOTE: If an arrival time is specified, measured results will be "as read" before the specified arrival time.										
							Count Rate of Sample Collected in This Time Interval and Measured in Normal Background			
Point	Arrival Time	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine		Foliage	
							Cartridge (cpm)	Filter (cpm)	Soil (cpm)	Foliage (cpm)
L12		0.80	0.50	0.95	0.45	3,000				
L14		As Read	As Read	0.05	As Read	As Read	17,000	18,000	300	450
M12		6.00	3.65	7.00	3.25	23,500	4,500	4,500	As Read	As Read
M13		12.0	7.50	14.0	7.00	50,000	110,000	120,000	6,000	3,000
M14		4.25	2.50	4.65	2.35	17,000	220,000	235,000	11,500	5,500
M15	12:21	4.65	2.75	5.00	2.60	18,500	110,000	115,000	2,250	1,150
M16		15.5	9.00	16.5	8.50	60,000	115,000	125,000	2,450	1,200
M17	12:26	0.30	0.20	0.35	0.15	1,250	> 250,000	> 250,000	5,500	2,500
M18	12:25	4.30	2.55	4.70	2.40	17,000	12,000	12,500	As Read	As Read
M19	12:27	As Read	As Read	As Read	As Read	As Read	110,000	120,000	2,300	1,150
M20	12:27	0.15	0.10	0.20	0.10	650	300	300	As Read	As Read
M21	12:27	As Read	As Read	As Read	As Read	As Read	8,000	8,500	As Read	As Read
M24	12:27	As Read	As Read	As Read	As Read	As Read	550	600	As Read	As Read
N12		13.0	8.00	15.0	7.50	55,000	As Read	As Read	As Read	As Read
N13		4.80	2.95	5.50	2.65	19,000	220,000	235,000	11,500	5,500
N14		0.10	0.10	0.15	0.05	500	95,000	105,000	5,000	2,500
N16	12:21	0.15	0.10	0.20	0.10	650	11,000	12,000	As Read	As Read
N17	12:21	As Read	As Read	As Read	As Read	As Read	8,000	8,500	As Read	As Read
N19	12:25	As Read	As Read	As Read	As Read	As Read	1,100	1,150	As Read	As Read
N20	12:27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N21	12:27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 212-1	12:21	5.50	3.20	6.00	3.05	22,000	As Read	As Read	As Read	As Read
TLD 212-4	12:21	6.00	3.65	6.50	3.45	25,000	120,000	130,000	2,500	1,250
TLD 213-4	12:20	As Read	As Read	As Read	As Read	As Read	135,000	145,000	3,000	1,400
							As Read	As Read	As Read	As Read
RS-L		2.80	1.70	3.25	1.55	11,000				
RS-M		25.5	15.5	29.0	14.0	100,000	45,000	50,000	2,450	1,250
							> 250,000	> 250,000	21,500	10,500

Byron Exercise Field Data 11/15/95										
Time: 12:28 to 12:42										
NOTE: If an arrival time is specified, measured results will be "as read" before the specified arrival time.										
							Count Rate of Sample Collected in This Time Interval and Measured in Normal Background			
Point	Arrival Time	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)
							Cartridge (cpm)	Filter (cpm)		
L12		0.50	0.35	0.70	0.30	2,050	10,000	10,500	1,100	550
L14		As Read	As Read	0.10	As Read	As Read	2,500	3,000	As Read	As Read
M12		3.80	2.55	5.00	2.10	15,000	65,000	70,000	7,000	3,500
M13		8.00	5.00	10.5	4.30	30,000	130,000	140,000	14,000	7,000
M14		3.00	1.90	3.65	1.65	12,000	75,000	80,000	4,000	1,850
M15		3.30	2.05	4.00	1.80	13,000	80,000	85,000	4,000	2,000
M16		10.5	6.50	12.0	6.00	40,000	170,000	185,000	9,000	4,500
M17		0.25	0.15	0.30	0.15	950	9,500	10,000	450	As Read
M18		3.05	1.90	3.70	1.70	12,000	80,000	85,000	4,000	1,950
M19		0.15	0.10	0.15	0.05	500	12,000	12,500	As Read	As Read
M20		2.20	1.30	2.45	1.20	9,000	70,000	75,000	1,600	800
M21		2.55	1.50	2.80	1.40	10,000	70,000	75,000	1,400	700
M22	12:34	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
M23	12:37	0.10	0.10	0.20	0.05	500	17,000	18,000	350	As Read
M24		2.25	1.35	2.55	1.25	9,000	90,000	95,000	1,800	900
M25	12:39	As Read	As Read	As Read	As Read	As Read	500	500	As Read	As Read
M26	12:40	As Read	As Read	As Read	As Read	As Read	1,300	1,400	As Read	As Read
M27	12:40	0.55	0.35	0.70	0.30	2,200	35,000	40,000	700	350
M28	12:41	0.10	0.05	0.15	0.05	400	19,000	20,500	400	As Read
M29	12:42	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
M30	12:42	As Read	As Read	As Read	As Read	As Read	2,500	2,500	As Read	As Read
M31	12:42	0.95	0.55	1.05	0.50	3,500	35,000	35,000	700	350
M32	12:42	0.05	As Read	0.10	As Read	250	11,500	12,000	As Read	As Read
N12		8.50	5.50	11.0	4.60	35,000	130,000	140,000	14,000	7,000
N13		3.15	2.10	4.20	1.70	12,500	60,000	60,000	6,000	3,000
N14		0.10	0.10	0.15	0.05	450	7,500	8,000	400	As Read
N16		0.10	0.10	0.15	0.05	500	5,500	5,500	250	As Read

Time: 12:28 to 12:42							Count Rate of Sample Collected In This Time Interval and Measured in Normal Background			
Point	Arrival Time	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)
							Cartridge (cpm)	Filter (cpm)		
N17		As Read	As Read	As Read	As Read	As Read	750	800	As Read	As Read
N19		As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N20		As Read	As Read	As Read	As Read	As Read	As Read	250	As Read	As Read
N21		As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N22	12:36	As Read	As Read	As Read	As Read	As Read	3,500	3,500	As Read	As Read
N23	12:35	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N25	12:40	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N27	12:42	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
iLD 212-1		3.80	2.35	4.50	2.10	15,000	80,000	85,000	4,000	2,100
TLD 212-4		4.35	2.70	5.00	2.40	17,500	95,000	100,000	4,500	2,350
TLD 213-4		As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
AIR 07	12:35	As Read	As Read	As Read	As Read	As Read	5,000	5,500	As Read	As Read
RS-L		1.80	1.15	2.30	1.00	7,000	30,000	30,000	3,000	1,500
RS-M		16.0	10.5	20.5	9.00	65,000	245,000	> 250,000	25,000	13,000

Byron Exercise Field Data 11/15/95										
Time: 12:43 to 12:57										
NOTE: If an arrival time is specified, measured results will be "as read" before the specified arrival time.										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine		Particulate		Foliage (cpm)
						Cartridge (cpm)	Filter (cpm)	Soil (cpm)		
L12	0.35	0.25	0.55	0.20	1,400	5,500	6,000	1,200	600	
L14	As Read	As Read	0.10	As Read	As Read	1,500	1,600	250	As Read	
M12	2.50	1.85	3.80	1.35	10,000	35,000	40,000	8,000	4,000	
M13	5.00	3.70	7.50	2.75	20,500	70,000	75,000	15,500	7,500	
M14	2.00	1.35	2.80	1.10	8,000	45,000	45,000	4,500	2,300	
M15	2.20	1.50	3.05	1.20	9,000	45,000	50,000	5,000	2,450	
M16	6.50	4.30	8.50	3.65	25,000	100,000	110,000	11,000	5,500	
M17	0.15	0.10	0.25	0.10	650	5,500	6,000	550	250	
M18	2.05	1.40	2.85	1.10	8,000	45,000	50,000	5,000	2,400	
M19	0.10	0.10	0.20	0.05	450	8,000	8,500	400	As Read	
M20	1.60	1.00	2.00	0.85	6,500	45,000	50,000	2,500	1,250	
M21	1.80	1.15	2.20	1.00	7,000	45,000	50,000	2,350	1,150	
M22	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M23	0.10	0.10	0.20	0.05	500	11,500	12,000	550	300	
M24	1.65	1.10	2.15	0.90	6,500	60,000	65,000	3,000	1,500	
M25	As Read	As Read	As Read	As Read	As Read	350	400	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	1,100	1,200	As Read	As Read	
M27	0.45	0.30	0.65	0.25	1,800	25,000	25,000	1,200	600	
M28	0.10	0.10	0.25	0.05	450	15,500	16,500	700	350	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.05	As Read	As Read	7,000	7,500	As Read	As Read	
M31	0.75	0.50	1.00	0.40	3,000	35,000	40,000	1,400	700	
M32	1.35	0.85	1.60	0.75	5,500	55,000	55,000	1,300	650	
N12	5.50	3.90	8.00	2.95	22,000	75,000	80,000	15,500	8,000	
N13	2.10	1.55	3.25	1.10	8,500	30,000	35,000	7,000	3,500	
N14	0.10	0.10	0.15	As Read	350	4,500	4,500	500	As Read	
N16	0.10	0.05	0.15	As Read	350	3,000	3,500	350	As Read	

Time: 12:43 to 12:57						Count Rate of Sample Collected In This Time Interval and Measured in Normal Background			
Point	3ft WO	3ft WC	6in WO	6in WC	GM Background	Iodine Cartridge	Particulate Filter	Soil	Foliage
	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	(cpm)	(cpm)	(cpm)	(cpm)	(cpm)
N17	As Read	As Read	As Read	As Read	As Read	450	450	As Read	As Read
N19	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N21	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N22	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N23	As Read	As Read	As Read	As Read	As Read	2,250	2,400	As Read	As Read
N25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 212-1	2.50	1.65	3.35	1.35	10,000	50,000	50,000	5,000	2,500
TLD 212-4	2.85	1.90	3.80	1.55	11,500	55,000	60,000	6,000	3,000
TLD 213-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
AIR J7	As Read	As Read	0.05	As Read	As Read	3,500	3,500	As Read	As Read
RS-L	1.15	0.85	1.70	0.60	4,500	15,500	16,500	3,500	1,650
RS-M	10.5	7.50	15.5	5.50	40,000	135,000	145,000	30,000	14,500

Byron Exercise Field Data 11/15/95										
Time: 12:58 to 13:12										
Count Rate of Sample Collected in This Time Interval and Measured in Normal Background										
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
L12	0.30	0.25	0.50	0.15	1,100	3,500	4,000	1,250	650	
L14	As Read	As Read	0.10	As Read	As Read	900	1,000	250	As Read	
M12	1.95	1.55	3.35	1.05	8,000	23,500	25,000	8,500	4,000	
M13	3.95	3.05	6.50	2.10	16,000	45,000	50,000	16,000	8,000	
M14	1.35	1.05	2.20	0.75	5,500	24,000	25,000	5,000	2,500	
M15	1.50	1.10	2.40	0.80	6,000	25,000	30,000	5,500	2,500	
M16	4.25	3.00	6.50	2.30	17,000	55,000	60,000	12,000	6,000	
M17	0.15	0.10	0.25	0.05	500	3,000	3,500	600	300	
M18	1.40	1.05	2.30	0.75	5,500	25,000	30,000	5,500	2,500	
M19	0.10	0.10	0.20	As Read	400	4,500	5,000	500	As Read	
M20	1.10	0.75	1.60	0.60	4,500	25,000	30,000	3,000	1,500	
M21	1.20	0.85	1.70	0.65	5,000	30,000	30,000	3,000	1,450	
M23	0.10	0.10	0.25	0.05	450	6,500	7,000	700	350	
M24	1.20	0.85	1.80	0.65	4,500	35,000	40,000	3,500	1,800	
M25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	700	750	As Read	As Read	
M27	0.35	0.25	0.60	0.20	1,400	15,000	16,000	1,500	750	
M28	0.10	0.10	0.25	0.05	500	9,500	10,000	850	450	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.10	As Read	As Read	4,500	5,000	250	As Read	
M31	0.55	0.40	0.85	0.30	2,250	23,000	25,000	1,850	950	
M32	1.00	0.65	1.35	0.55	4,000	35,000	40,000	1,950	1,000	
N12	4.20	3.20	7.00	2.20	16,500	45,000	50,000	16,500	8,000	
N13	1.65	1.30	2.85	0.85	6,500	21,000	22,500	7,000	3,500	
N14	0.10	0.05	0.15	As Read	300	2,450	2,500	550	250	
N16	0.05	0.05	0.15	As Read	300	1,750	1,900	350	As Read	
N17	As Read	As Read	As Read	As Read	As Read	As Read	250	As Read	As Read	
N19	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	

Time: 12:58 to 13:12						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
N21	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N22	As Read	As Read	As Read	As Read	As Read	1,300	1,400	As Read	As Read	
N25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
TLD 212-1	1.65	1.25	2.60	0.90	6,500	25,000	30,000	5,500	3,000	
TLD 212-4	1.90	1.40	2.95	1.00	7,500	30,000	35,000	6,500	3,000	
TLD 213-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
AIR 07	As Read	As Read	0.05	As Read	As Read	2,050	2,200	As Read	As Read	
RS-L	0.90	0.70	1.50	0.45	3,500	10,000	11,000	3,500	1,750	
RS-M	8.00	6.00	13.0	4.20	30,000	90,000	95,000	30,000	15,500	

Byron Exercise Field Data 11/15/95										
Time: 13:13 to 13:27										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Follage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
L12	0.25	0.20	0.45	0.15	1,000	3,000	3,000	1,300	650	
L14	As Read	As Read	0.10	As Read	As Read	700	750	300	As Read	
M12	1.75	1.45	3.20	0.90	7,000	19,000	20,500	8,500	4,500	
M13	3.55	2.85	6.50	1.85	14,000	40,000	40,000	17,000	8,500	
M14	1.10	0.90	2.00	0.60	4,500	15,500	16,500	5,500	2,500	
M15	1.20	0.95	2.15	0.65	5,000	17,000	18,000	5,500	3,000	
M16	3.25	2.45	5.50	1.75	13,000	35,000	40,000	12,500	6,500	
M17	0.10	0.10	0.20	0.05	450	2,000	2,150	650	300	
M18	1.15	0.95	2.05	0.60	4,500	17,000	18,000	5,500	3,000	
M19	0.10	0.05	0.15	As Read	350	2,500	3,000	550	250	
M20	0.80	0.60	1.30	0.40	3,000	15,500	16,500	3,500	1,650	
M21	0.85	0.65	1.35	0.45	3,500	15,500	16,500	3,000	1,600	
M23	0.10	0.10	0.25	0.05	400	4,000	4,000	750	400	
M24	0.85	0.70	1.55	0.45	3,500	19,500	21,000	4,000	2,000	
M25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	400	400	As Read	As Read	
M27	3.30	0.25	0.55	0.15	1,150	8,000	9,000	1,650	800	
M28	0.10	0.10	0.30	0.05	500	5,500	5,500	950	500	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.10	As Read	As Read	2,500	3,000	300	As Read	
M31	0.45	0.35	0.80	0.25	1,700	13,000	14,000	2,100	1,050	
M32	0.70	0.50	1.10	0.40	3,000	20,500	22,000	2,350	1,150	
N12	3.70	2.95	6.50	1.95	15,000	40,000	40,000	17,000	8,500	
N13	1.50	1.20	2.70	0.75	6,000	16,500	18,000	7,500	3,500	
N14	0.10	0.05	0.15	As Read	300	1,600	1,750	550	300	
N16	0.05	0.05	0.15	As Read	250	1,150	1,250	400	As Read	
N17	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N19	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	

Time: 13:13 to 13:27						Count Rate of Sample Collected In This Time Interval and Measured in Normal Background			
Point	3ft WO	3ft WC	6in WO	6in WC	GM	Iodine	Particulate	Soil	Foliage
	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	Background (cpm)	Cartridge (cpm)	Filter (cpm)	(cpm)	(cpm)
N21	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N22	As Read	As Read	As Read	As Read	As Read	750	800	As Read	As Read
N25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 212-1	1.30	1.05	2.30	0.70	5,500	17,500	19,000	6,000	3,000
TLD 212-4	1.50	1.20	2.60	0.80	6,000	20,000	21,500	6,500	3,500
TLD 213-4	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
AIR 07	As Read	As Read	0.05	As Read	As Read	1,150	1,200	As Read	As Read
RS-L	0.80	0.65	1.40	0.40	3,000	8,000	8,500	3,500	1,850
RS-M	7.00	5.50	12.5	3.70	30,000	70,000	75,000	30,000	16,000

Byron Exercise Field Data 11/15/95										
Time: 13:28 to 13:42										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
L12	0.25	0.20	0.45	0.15	950	2,250	2,400	1,350	700	
L14	As Read	As Read	0.10	As Read	As Read	600	650	300	As Read	
M12	1.65	1.40	3.10	0.85	6,500	14,500	16,000	9,000	4,500	
M13	3.20	2.65	6.00	1.65	12,500	30,000	30,000	17,500	8,500	
M14	0.95	0.80	1.85	0.50	4,000	12,000	13,000	5,500	3,000	
M15	1.05	0.90	2.00	0.55	4,000	13,000	14,000	6,000	3,000	
M16	2.65	2.15	4.80	1.40	10,500	30,000	30,000	13,000	6,500	
M17	0.10	0.10	0.20	As Read	400	1,600	1,750	650	350	
M18	1.00	0.85	1.95	0.50	4,000	13,500	14,500	6,000	3,000	
M19	0.10	0.05	0.15	As Read	300	1,650	1,800	600	300	
M20	0.65	0.55	1.20	0.35	2,500	10,000	11,000	3,500	1,750	
M21	0.55	0.50	1.10	0.30	2,250	9,500	10,500	3,500	1,650	
M23	0.10	0.10	0.25	0.05	400	2,300	2,500	800	400	
M24	0.70	0.60	1.40	0.35	3,000	12,000	13,000	4,000	2,100	
M25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	250	300	As Read	As Read	
M27	0.25	0.25	0.55	0.15	1,000	5,500	5,500	1,750	850	
M28	0.10	0.10	0.30	0.05	500	3,500	4,000	1,000	500	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.10	As Read	As Read	1,650	1,800	350	As Read	
M31	0.40	0.35	0.75	0.20	1,600	9,000	9,500	2,250	1,150	
M32	0.55	0.45	1.00	0.30	2,250	12,500	13,500	2,500	1,300	
N12	3.35	2.75	6.00	1.75	13,500	30,000	30,000	17,500	9,000	
N13	1.30	1.15	2.60	0.70	5,500	13,000	14,000	7,500	4,000	
N14	0.10	0.05	0.15	As Read	300	1,400	1,500	600	300	
N16	0.05	0.05	0.15	As Read	As Read	850	950	400	As Read	
N17	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N19	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	

Time: 13:28 to 13:42						Count Rate of Sample Collected In This Time Interval and Measured in Normal Background			
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)
						Cartridge (cpm)	Filter (cpm)		
N21	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N22	As Read	As Read	As Read	As Read	As Read	450	500	As Read	As Read
N25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 212-1	1.15	0.95	2.15	0.60	4,500	13,000	14,500	6,000	3,000
TLD 212-4	1.30	1.05	2.45	0.65	5,000	15,000	16,000	7,000	3,500
AIR 07	As Read	As Read	0.05	As Read	As Read	700	750	As Read	As Read
RS-L	0.70	0.60	1.35	0.40	3,000	6,000	6,500	4,000	1,900
RS-M	6.50	5.00	11.5	3.30	25,000	55,000	60,000	35,000	16,500

Byron Exercise Field Data 11/15/95										
Time: 13:43 to 13:57										
Count Rate of Sample Collected in This Time Interval and Measured in Normal Background										
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Foliage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
L12	0.25	0.20	0.45	0.10	950	2,250	2,450	1,400	700	
L14	As Read	As Read	0.10	As Read	As Read	600	650	300	As Read	
M12	1.55	1.30	3.00	0.80	6,000	14,000	15,000	9,000	4,500	
M13	2.80	2.45	5.50	1.45	11,500	23,000	25,000	18,000	9,000	
M14	0.90	0.80	1.85	0.45	3,500	10,500	11,500	6,000	3,000	
M15	1.00	0.85	2.00	0.50	4,000	10,000	10,500	6,000	3,000	
M16	2.55	2.10	4.75	1.35	10,500	21,500	23,000	13,500	6,500	
M17	0.10	0.10	0.20	0.05	400	1,400	1,500	700	350	
M18	0.95	0.85	1.95	0.50	4,000	10,500	11,500	6,000	3,000	
M19	0.05	0.05	0.15	As Read	300	1,400	1,500	600	300	
M20	0.65	0.55	1.20	0.35	2,500	8,500	9,000	3,500	1,850	
M21	0.65	0.55	1.25	0.35	2,500	7,500	8,500	3,500	1,750	
M23	0.10	0.10	0.25	0.05	400	1,900	2,050	850	400	
M24	0.70	0.60	1.40	0.35	3,000	9,500	10,000	4,500	2,200	
M25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	As Read	250	As Read	As Read	
M27	0.25	0.25	0.55	0.10	1,000	4,500	4,500	1,800	900	
M28	0.15	0.10	0.30	0.05	500	2,500	3,000	1,050	550	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.10	As Read	As Read	1,450	1,550	400	As Read	
M31	0.40	0.35	0.75	0.20	1,500	7,500	8,500	2,400	1,200	
M32	0.65	0.50	1.10	0.35	2,500	9,500	10,500	3,000	1,400	
N12	2.95	2.55	6.00	1.50	11,500	23,500	25,000	18,000	9,000	
N13	1.20	1.05	2.45	0.60	5,000	9,500	10,500	8,000	4,000	
N14	0.05	0.05	0.15	As Read	300	1,050	1,100	600	300	
N16	0.05	0.05	0.10	As Read	As Read	600	650	400	As Read	
N17	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N19	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	

Time: 13:43 to 13:57						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background			
Point	3ft WO	3ft WC	6in WO	6in WC	GM Background	Iodine Cartridge	Particulate Filter	Soil	Foliage
	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	(cpm)	(cpm)	(cpm)	(cpm)	(cpm)
N22	As Read	As Read	As Read	As Read	As Read	300	350	As Read	As Read
N25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
N27	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read
TLD 212-1	1.05	0.90	2.10	0.55	4,500	10,000	11,000	6,500	3,000
TLD 212-4	1.20	1.05	2.35	0.60	5,000	11,500	12,500	7,000	3,500
AIR 07	As Read	As Read	0.05	As Read	As Read	500	550	250	As Read
RS-L	0.65	0.55	1.25	0.35	2,500	5,500	6,000	4,000	1,950
RS-M	5.50	4.75	11.0	2.85	22,000	45,000	50,000	35,000	17,000

Byron Exercise Field Data 11/15/95										
Time: 13:58 to 14:12										
						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO (mR/hr)	3ft WC (mR/hr)	6in WO (mR/hr)	6in WC (mR/hr)	GM Background (cpm)	Iodine	Particulate	Soil (cpm)	Follage (cpm)	
						Cartridge (cpm)	Filter (cpm)			
L12	0.25	0.20	0.50	0.15	1,050	3,000	3,000	1,450	700	
L14	As Read	As Read	0.10	As Read	As Read	750	800	300	As Read	
M12	1.65	1.35	3.15	0.85	6,500	14,500	16,000	9,500	4,500	
M13	2.70	2.40	5.50	1.35	10,500	16,000	17,500	18,000	9,000	
M14	0.95	0.80	1.90	0.50	4,000	9,000	9,500	6,000	3,000	
M15	0.90	0.80	1.95	0.45	3,500	9,000	9,500	6,500	3,000	
M16	2.30	1.95	4.50	1.20	9,000	19,000	20,500	14,000	7,000	
M17	0.10	0.10	0.20	0.05	450	1,650	1,750	700	350	
M18	1.00	0.85	2.00	0.55	4,000	10,000	10,500	6,000	3,000	
M19	0.10	0.10	0.20	As Read	350	1,250	1,350	650	300	
M20	0.60	0.50	1.20	0.30	2,350	6,500	7,000	4,000	1,900	
M21	0.55	0.45	1.10	0.25	2,100	5,000	5,000	3,500	1,800	
M23	0.10	0.10	0.25	0.05	400	1,850	2,000	850	450	
M24	0.60	0.55	1.35	0.30	2,500	6,500	7,000	4,500	2,250	
M25	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M26	As Read	As Read	As Read	As Read	As Read	As Read	250	As Read	As Read	
M27	0.25	0.25	0.55	0.15	1,000	4,000	4,000	1,850	950	
M28	0.10	0.10	0.30	0.05	500	1,600	1,750	1,100	550	
M29	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
M30	As Read	As Read	0.10	As Read	As Read	1,300	1,400	400	As Read	
M31	0.45	0.35	0.85	0.20	1,700	6,000	6,500	2,500	1,250	
M32	0.45	0.40	0.90	0.20	1,700	6,500	7,000	3,000	1,450	
N12	2.80	2.45	6.00	1.45	11,000	16,500	18,000	18,500	9,000	
N13	1.10	1.00	2.40	0.55	4,500	6,000	6,500	8,000	4,000	
N14	0.05	0.05	0.15	As Read	300	400	450	600	300	
N16	0.05	As Read	0.10	As Read	As Read	400	400	400	As Read	
N17	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N20	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	
N22	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	As Read	

Time: 13:58 to 14:12						Count Rate of Sample Collected in This Time Interval and Measured in Normal Background				
Point	3ft WO	3ft WC	6in WO	6in WC	GM Background	Iodine Cartridge	Particulate Filter	Soil	Foliage	
	(mR/hr)	(mR/hr)	(mR/hr)	(mR/hr)	(cpm)	(cpm)	(cpm)	(cpm)	(cpm)	
TLD 212-1	1.00	0.85	2.05	0.50	4,000	9,000	10,000	6,500	3,500	
TLD 212-4	1.10	1.00	2.30	0.55	4,500	10,000	11,000	7,500	3,500	
AIR 07	As Read	As Read	0.05	As Read	As Read	300	350	250	As Read	
RS-L	0.65	0.55	1.30	0.35	2,500	4,500	5,000	4,000	2,000	
RS-M	5.50	4.65	11.0	2.75	21,500	30,000	35,000	35,000	17,000	

Year One Dose Due to Surface Deposition									
(Based on EPA 400-R-92-001, Table 7-1,									
Radioactive Decay and Weathering Included,									
Dose = Effective Dose Equivalent)									
	Initial			Case 1	Case 1	Case 1	Case 1	Case 1	Case 1
	Exposure	Year One		Concen	Concen	Init Exp	Init Exp	Year One	Year One
Nuclide	mR/h per	mrem per		pCi/m ²	pCi/m ²	mR/h	mR/h	mrem	mrem
	pCi/m ²	pCi/m ²	Fraction	at SB	at 2 mi	at SB	at 2 mi	at SB	at 2 mi
Gross Activity				4.59E+09	1.02E+09				
Partic Activity			9.70E-02	4.45E+08	9.89E+07				
Iodine Activity			9.03E-01	4.14E+09	9.21E+08				
*Gross dep at SB taken as 4.5*gross dep at 2 mi based on plume mode calc at 2.25 hrs.									
**Gross dep at 2 mi based on puff calc at 7 hrs with release assumed to stop at 6 hrs.									
Abundances below based on composition at 7 hrs (puff run)									
Particulates									
Zr-95	1.28E-08	3.30E-05	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb-95	1.30E-08	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ru-103	8.20E-09	7.10E-06	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ru-106	3.40E-09	1.20E-05	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te-132	4.00E-09	3.20E-06	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-132	3.70E-08	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I-131	6.60E-09	1.30E-06	0.267	1.19E+08	2.64E+07	7.85E-01	1.74E-01	1.55E+02	3.43E+01
I-133	1.00E-08	2.10E-07	0.412	1.83E+08	4.08E+07	1.83E+00	4.08E-01	3.85E+01	8.56E+00
I-135	2.40E-08	1.60E-07	0.195	8.68E+07	1.93E+07	2.08E+00	4.63E-01	1.39E+01	3.09E+00
Cs-134	2.60E-08	1.00E-04	0.049	2.18E+07	4.85E+06	5.67E-01	1.26E-01	2.18E+03	4.85E+02
Cs-137	1.00E-08	4.50E-05	0.03	1.34E+07	2.97E+06	1.34E-01	2.97E-02	6.01E+02	1.34E+02
Ba-140	3.20E-09	1.10E-05	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La-140	3.50E-08	0.00E+00	0	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Iodines									
I-131	6.60E-09	1.30E-06	0.296	1.23E+09	2.73E+08	8.10E+00	1.80E+00	1.59E+03	3.51E+02
I-133	1.00E-08	2.10E-07	0.456	1.89E+09	4.20E+08	1.89E+01	4.20E+00	3.97E+02	8.82E+01
I-135	2.40E-08	1.60E-07	0.216	8.95E+08	1.99E+08	2.15E+01	4.77E+00	1.43E+02	3.18E+01
Total						5.39E+01	1.20E+01	5.12E+03	1.14E+03
Note: Case 1 is based on 7 hr gross deposition, 7 hr group compositions, relative release rates in 3rd 15-minute interval (25% removal efficiency).									

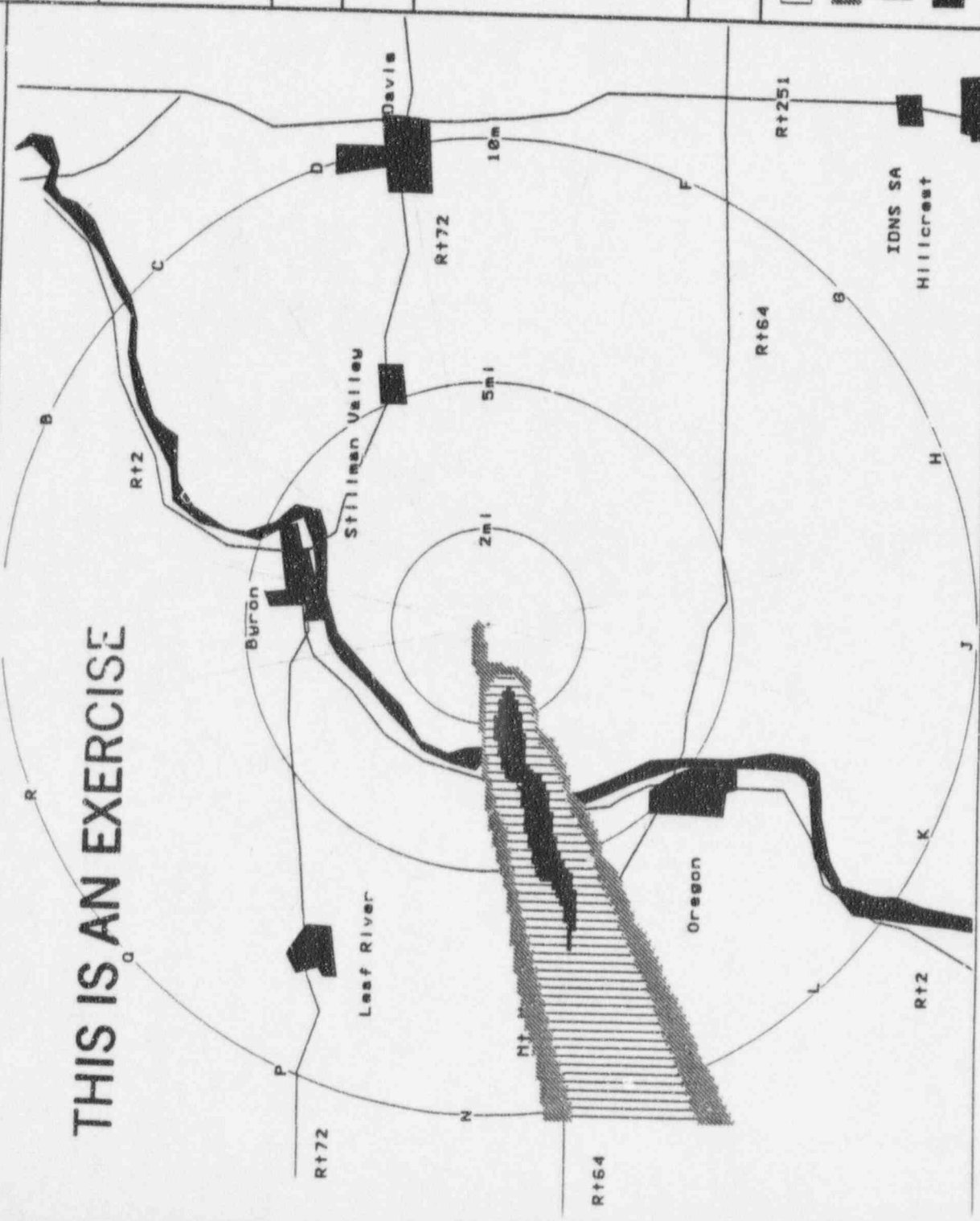
DATE = 08/29/95

Byron

TIME = 12:22:28

TOTAL EFFECTIVE DOSE EQUIVALENT

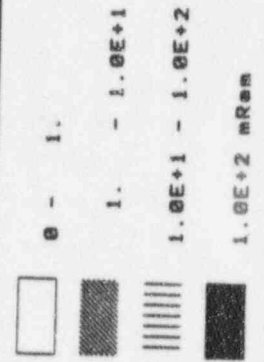
THIS IS AN EXERCISE



MAXIMUM VALUES

LOCAT	DEG	mRem
MX2	251	6.73E+02
MX5	254	1.48E+02
MX10	251	6.21E+01

LEGEND



FF DECAy = ON DEPOSITION = OFF FORECAST = 7.00 HRS
 LEASE HT. = 32.8 ft RELEASE PT. = Ground Level

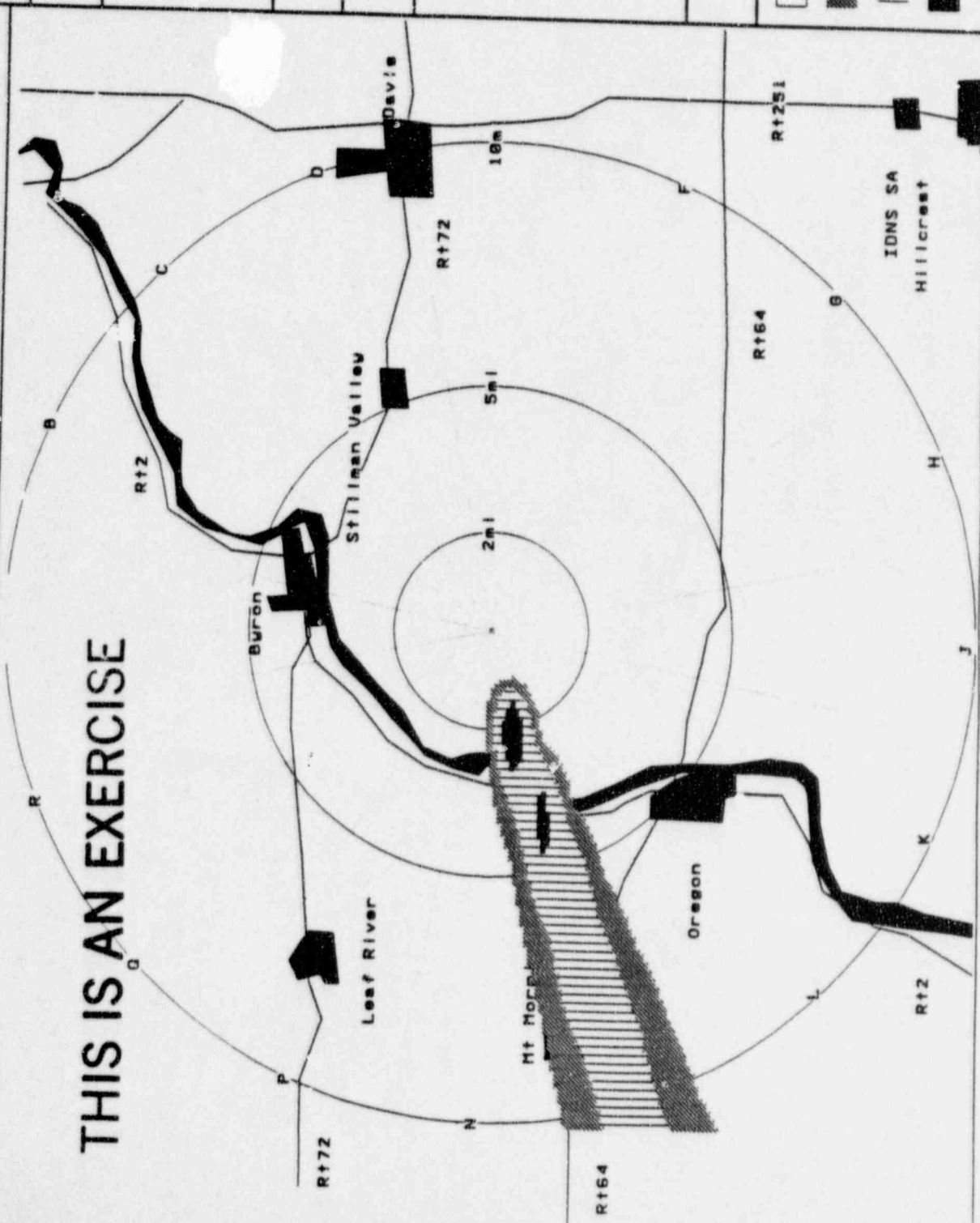
DATE = 08/29/95

Byron

TIME = 12:04:34

THYROID DOSE

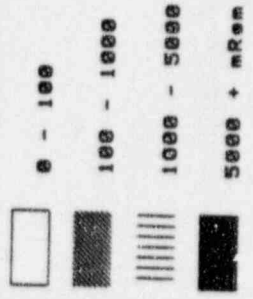
THIS IS AN EXERCISE



MAXIMUM VALUES

LOCAT	DEG	mRem
KX2	251	1.85E+04
MX5	254	4.11E+03
MX10	251	1.72E+03

LEGEND



OFF DECA Y = ON DEPOSITION = OFF FORECAST = 7.00 HRS
 LEASE HT. = 32.8 ft RELEASE PT. = Ground Level

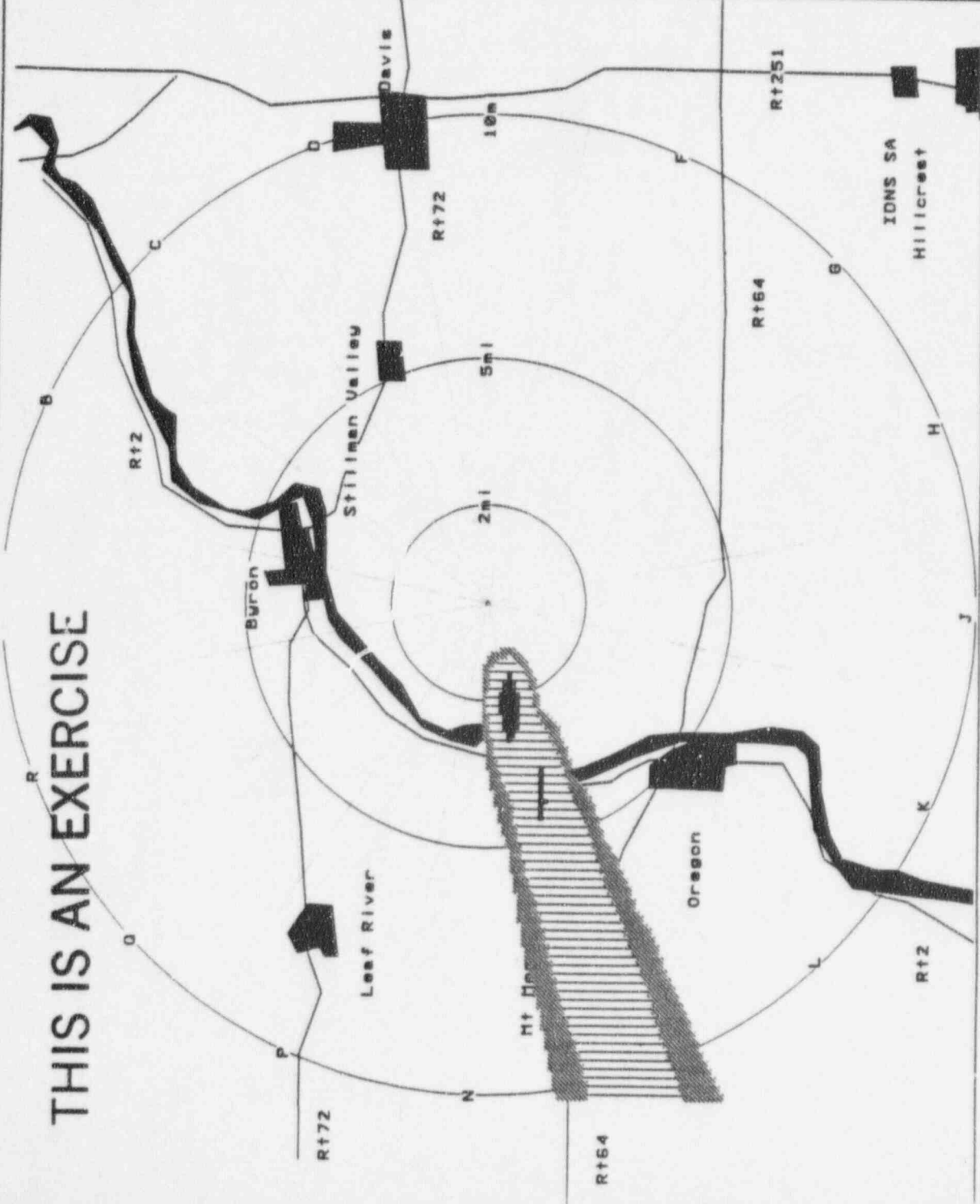
DATE = 08/29/95

Byron

TIME = 11:59:10

INTEGRATED DEPOSITION

THIS IS AN EXERCISE



MAXIMUM VALUES

LOCAT	DEB	uCi/m2
MX2	251	1.02E+03
MX5	254	2.25E+02
MX10	251	8.89E+01

LEGEND



UFF DECAy = ON DEPOSITION = OFF FORECAST = 7.00 HRS
 RELEASE HT. = 32.8 ft RELEASE PT. = Ground Level

Byron Nuclear Generating Station
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RESPONSE CELL MESSAGES

- * TELEDYNE BROWN
- * MOCK NRC INJECT MESSAGES

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
RC-1**

TIME : 0755 (T+025)
ISSUED TO : NUCLEAR DUTY OFFICER
PREREQUISITE : EXERCISE HAS BEEN INITIATED ; PAGE AT 0752 (T+022)

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is _____, Shift Engineer at Zion Station. I am calling to inform you that at 0745 (T+015) we have had a trip of the Unit 2 Generator, followed by an automatic Unit 2 reactor trip. All shutdown systems performed as designed and Unit 2 is now stable at zero (0) percent power. This event is currently not considered to be a cause for the declaration of a GSEP condition. Unit 1 was unaffected and continues to run at 100% power. We are performing routine post-trip activities and sampling, and are investigating the cause of the Unit 2 trip. We will get back to you when we have more information."

If questioned, respond with the following additional information :

- 1) There is severe icing in and around the station due to the continuing ice storm. There are no current indications that icing has anything to do with the trip.
- 2) All indications are that the availability of offsite power has not been affected.
- 3) There is no indication of any kind of abnormal release.

Byron 1995 GSEP Exercise
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CONTROL MESSAGE
RC-2

TIME : 0755 - 0800 (T+025 - T+030)
ISSUED TO : BYRON CONTROL ROOM
PREREQUISITES : ZION UNIT 2 MESSAGE HAS BEEN ISSUED TO THE NDO

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is _____, at Bulk Power Operations. We are calling to inform you that we just lost Zion Unit 2. Because of this, the system condition is RED. We are requesting that you to bring Byron Units 1 and 2 to 100% power as soon as possible.

Byron 1995 GSEP Exercise
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CONTROL MESSAGE
RC-3

TIME : 0900 - 0915 (T+090 - T+105)
ISSUED TO : NUCLEAR DUTY OFFICER
PREREQUISITES : ISSUE APPROXIMATELY ONE (1) HOUR AFTER THE INITIAL
CALL ON THE LOSS OF ZION UNIT 2

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is _____, Shift Engineer at Zion Station. I am calling to update you on our investigation into the unexpected trip of Zion 2. Unit 1 remains at 100% power and is apparently not affected by the problems on Unit 2. Unit 2 tripped at 0745 (T+015) and all systems performed as expected to shut the unit down. Our preliminary determination is that the cause of the trip was that an Electrical Maintenance mechanic bumped the Generator Lockout Relay (86 relay) while stringing cable in the Aux. Electric Room. Results from the post-trip sampling was normal. We are continuing to examine the cause of the trip. A decision will be made this afternoon about when Unit 2 will be restarted."

**Byron 1995 GSEP Exercise
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**CONTROL MESSAGE
RC-4**

TIME : 0900 - TERMINATION (T+090 - T+390)
ISSUED TO : N/A
PREREQUISITE : CALL IS MADE BY PARTICIPANTS TO TELEDYNE-BROWN
(ENVIRONMENTAL CONTRACTORS)

MESSAGE

When a call is made by participants to Teledyne-Brown, ask the following questions :

1. We can be at Byron by 2 pm this afternoon. When do you want our sampling technician to come and change-out TLDs and Air Samplers ? Where do you want our sampling technician to report ? Are you going to supply dosimetry for him ?
2. Should we expect environmental samples to be coming into our lab ? How many samples should we plan for ? When will the samples arrive ? Will the samples arrive contaminated ?
3. Do you want our courier(s) to pick up the samples ? Where and when should we meet your teams to pick them up ?
4. Are there any special kinds of analyses that you want performed on these samples ? Do you have any specific detection limits that you want used for the samples ? Where will you want the sample results sent ?
5. Who is authorizing our costs to receive and analyses these samples ?

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CONTROL MESSAGE
RC-5

TIME : 1050 (T+200)
ISSUED TO : TSC SECURITY DIRECTOR
PREREQUISITES : PERMISSION OF THE LEAD FACILITY CONTROLLER

MESSAGE

ISSUE the following information VERBALLY :

"THIS IS AN EXERCISE : This is Ogle County Sheriff's Deputy _____. There has been a serious multi-vehicle accident on the Route 72 bridge going into the town of Byron. Three (3) cars are reported to have slid on the ice, and they have blocked the bridge. Ambulances and Byron Police are on the scene. We will let you know when the bridge is re-opened."

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
RC-6**

TIME : 1210 (T+280)

ISSUED TO : TSC SECURITY DIRECTOR or EOF GOVERNMENTAL COMMUNICATOR

FREREQUISITIES : PERMISSION OF THE LEAD FACILITY CONTROLLER

MESSAGE

ISSUE tghе following information VERBALLY :

"THIS IS AN EXERCISE : This is Ogle County Sheriff's Deputy _____. I am calling to inform you that the Route 72 bridge over the Rock River into Byron has been re-opened."

Byron Nuclear Generating Station
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MOCK NRC SITE TEAM GENERAL GUIDANCE

1. Dress in normal office attire with no reference to CECo logos.
2. Ensure that all communications indicate "This is an Exercise".
3. Utilize the attached lists of concerns and questions for ideas for inquiries.
4. Ask questions to gain a full overview of the event. Other questions are allowed.
5. Prior to dispatch to the site, call the Response Cell for a briefing based on supplied information to the NRC. This should be done 30 minutes before reporting to the location.
6. Make note of the following:
 - a. On entrance to ERFs
 1. Escort, Non-escort by CECo, Security
 2. Safety equipment, Radiological equipment provided
 3. Arrival time vs. entrance time at ERF
 - b. Tour of ERF and Access to:
 1. NRC Office at ERF
 2. Type of personnel providing guided tour
 3. Introduction to ERF Management (yes/no)
 4. Clerical supplies provided
 5. Phone systems demonstrated
 6. Computer information self service
7. Request a briefing upon arrival at the site and the EOF.
8. Inform personnel what data you want in hard copy.
9. If assembly and evacuation are deemed appropriate, ascertain the number of people on-site, the selected relocation facility.
10. Determine if the maintenance repairs in progress have been prioritized to mitigate the consequences of the accident.
11. Assess the timeliness of the emergency classifications and Protective Action Recommendations in order to report back to the evaluation team after the Exercise has terminated.

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12. Request involvement in decision making. Ask what the utility recommends? NRC should be consulted in decisions prior to prioritizing work changing PARs and reclassification.
13. Attend all meetings of interest to your task.
14. Provide comments and information on NRC interface objectives to Lead Off-Site Controller or Lead TSC Controller at the end of the Exercise.

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MOCK NRC QUESTIONS AND CONCERNS
EOF

1. What were plant conditions prior to the Alert declaration?
2. Request Event Notification Worksheet if a continuous line has not been maintained.
3. Ask for verification of the magnitude of the discharge.
4. What are the radiation levels in the plant?
5. How many people were on-site and number of Rad Workers assembled?
6. Have any protective measures for the off-site public been recommended?
7. Are there any radiological concerns regarding workers in the area of the discharge release?
8. What is being done as precautionary measures?
9. What are background rad levels?
10. What are the Environs Teams readings?
11. Have you had any evidence of extensive fuel damage?
12. What is the Status of the Containment Drywell integrity? Electrical Equipment? Core Cooling?
13. Do you need any technical assistance from the NRC or any governmental agency?

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MOCK NRC QUESTIONS AND CONCERNS
TSC

1. Ask for documentation of the plant condition prior to the Site Emergency?
2. Ask for copies of the NARS and ENS forms. Ask questions for clarification.
3. Ask for what facilities the States have operational.
4. Ask if any other Government Agency may be needed for assistance.
5. Ask how the PARs were determined.
6. Ask for the status of Unit 2.
7. Ask for documentation of any phone calls to Bethesda.
8. What type of contamination have you found on your workers?
9. How do we arrange for lunches for our Site Team? Where can we order and set up an account?
10. How bad is the Iodine problem in the plant?
11. Is there potential for a major Iodine release?

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MOCK NRC OPERATIONS CONCERNS

Reactor Status

- a. Press, temperature, level and flow
- b. Ability to shutdown unit

ECCS Status

- a. Availability, Operability, and inventory
- b. List types of system
- c. Automatic vs Manual Actuations

CECo to State Interface Notifications

- a. (Who) CECo personnel, (where) ERF, when
- b. Concurrence
- c. Changes in Protective Action Recommendation
- d. Determine when decisions were made (time) and when notifications were made

Repair Work Priority

- a. Status, List and relationship to events
- b. Dose assessments, Safety, time, materials

Core Damage

- a. Status of assessment and type of assessment
- b. Yes/No and percent
- c. Number of assemblies, rods
- d. Type of damage thermal, mechanical

Offsite Power

- a. Status of switch yard, system grid
- b. Ability to obtain portable diesel generator

Onsite Power

- a. Status of Unit diesel(s)
- b. Status of ability to Cross tie
- c. Status of diesel surveillance

Balance of Plant Equipment Status

- a. OOS/BIS (date and time)
- b. Available Systems

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ERDs Operation

- a. Request historical printout of transmitted data
- b. Verify Unit 1/2 Operation

Recovery Determinations

- a. CECo procedure used
- b. Consultations with (STATE/FED/TSC/EOF)
- c. Plant/Environs/Personnel Protected

Assess status of vital equipment

Assess the status of vital shutdown equipment

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MOCK NRC RADIOLOGICAL CONCERNS

Release (Gaseous)

- a. Monitored Pathway or Unmonitored pathway
- b. Noble Gas &/or iodine
- c. Concentrations, Release Rates, Dose Rates
- d. Effect on Public
- e. Effect on Farm Animals
- f. Effect on crops
- g. Durations

Release (Liquids)

- a. Monitored Pathway or Unmonitored pathway
- b. Release to waterway, lake, ground
- c. Isotopes
- d. Concentrations, Release Rates
- e. Durations

Protective Measures (PARs)

- a. Basis
- b. PARs
- c. Sector and distances
- d. Reported by, at time, and date
- e. Public Notified via EBS
- f. Prompt Notification System activated

Safety of Station Personnel performing:

- a. Repair work
- b. Essential Personnel
- c. Nonessential Personnel in assembly areas
- d. Radiological concerns of all personnel
- e. Hazardous materials effect on station personnel
- f. Issue KI to Station Personnel, field teams

Site Assembly

- a. Initiated
- b. Number of essential, nonessential
- c. Relocation site/travel time, security
- d. Radiological concerns

Water Inventory

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- a. Reactor water storage tank inventory
- b. Condensate storage
- c. Ability to produce clean water
- d. Ability to ship in clean water

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MOCK NRC RADIOLOGICAL CONCERNS
Continued

Contamination Control

- a. In-Plant
- b. Off-Site

Containment Control (Primary/Secondary)

- a. Status of Last ILRT
- b. Status of Containment (press, temp Hydrogen)

Site Conditions

- a. Inside Security Fence
- b. Security Fence to Property Line

Site Surveys

- a. Radiological, Haze Mat, Security
- b. Locations and conditions
- c. Off-Site Assistance

Radwaste Systems

- a. Status, Capability, availability
- b. Off-Site Assistance (CECo, Vendor, Federal, State)

Meteorological conditions

- a. WS, WD, DT
- b. Effect Sectors
- c. Effect on PARs

Field Teams Activities

- a. Number, location, controlled by (TSC/EOF)
- b. State support with field teams
- c. Type of monitoring, sampling
- d. Plume determination, sectors, elevated vs ground
- e. Teams from other stations, utilities

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JOINT PUBLIC INFORMATION CENTER MESSAGES

- * JPIC CONTROLLER GUIDANCE
- * PUBLIC INFORMATION INJECT MESSAGES
- * RUMOR CONTROL INJECT MESSAGES

<<< *** THIS IS AN EXERCISE *** >>>

**Byron 1995 GSEP Exercise
November 15, 1995**

GROUND RULES FOR MOCK MEDIA PARTICIPANTS

The role of Mock Media is important if we are to realistically challenge the individuals who are acting as official spokespeople for the Company. Without the experience you are helping them to gain, they would be unprepared to deal with the real media in the eventuality of an actual event. Your demeanor should reflect the concern you would naturally feel if a nuclear emergency were unfolding and you should be persistent enough in your questioning to get the answers you require. This is NOT, however, a feeding frenzy. As in any professional situation, rude and obnoxious behavior is unnecessary and uncalled for, so maintain a professional demeanor throughout the exercise.

1. Professional media are taught to ask questions of who, what, why, where, when and how.
 - a. Who did it happen to?
 - b. What happened?
 - c. Why did it happen?
 - d. Where did it happen?
 - e. When did it happen?
 - f. How did it happen?
2. Remember, the media delivers its product to people, so people are the main focus, technical areas are secondary.
3. Approach the press conference as a learning experience. Your questions should reflect your desire to gain information, not confuse or trip up the spokesperson.
4. Be persistent. Keep asking questions that are not answered to your satisfaction.
5. Listen to the questions of the other media representatives, and the answers they receive, to eliminate redundancy.
6. Consider the image the spokesperson projects: frightened, secure, confident, confused, forthright, devious, concerned, aloof. The image conveyed can be as important as the message conveyed.
7. Keep in mind that your end result should be an informative, complete and interesting news story. If you do not feel as though you can generate that story, you are not getting enough useful information. Ask better questions or push for better answers. When the day is done, you should be confident in your understanding of the days events.

<<<***"THIS IS AN EXERCISE"***>>>

Byron 1995 GSEP Exercise
November 15, 1995

CONTROL MESSAGE
JPIC - 2

TIME: 09:00 A.M.
ISSUE TO: COMMUNICATION SERVICES, GENERAL OFFICE
PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": This is Bill Berry of WDUM talk radio and you are on the air live. So... what's going on with your Byron plant? We understand you've had some problems out there and had to notify the NRC about them.

(Evaluate the explanation for clarity and accuracy and comfort. Continue questioning.)

The big story this morning is the weather. Has the weather caused the problems you're having or been instrumental in any possible ramifications of that problem?

Is it possible that this condition will become more serious?

Will you call my producer with any updates you may have?

<<<****"THIS IS AN EXERCISE"****>>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
JPIC - 3**

TIME: 09:20 A.M.
ISSUE TO: COMMUNICATION SERVICES, GENERAL OFFICE
PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": This is John Scopes of the Morning Post Newspaper. One of our scanners picked up a report of an accident involving a security patrol at your Byron plant.

First, was anyone injured or killed in the accident?

Can you tell me the extent of damage done to the building?

Was the building a critical part of the plant?

What caused the accident? Whose fault was it?

Will you be issuing a press release?

<<<***"THIS IS AN EXERCISE"***>>>

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CONTROL MESSAGE
JPIC - 4

TIME: 09:45 A.M.
ISSUE TO: COMMUNICATION SERVICES, GENERAL OFFICE
PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": This is John Scopes again. I'm calling back to see if there is any new information you can give me concerning your activities at the plant. We have been picking up a lot of activity coming from your plant on our scanners and we're a little concerned that your not telling us everything.

Can you assure us that there is no danger to the public?

Are you confident of your ability to keep the plant running safely?

Is the NRC actively involved in directing your activities at the plant?

Will you keep me posted of any new events?

<<<****"THIS IS AN EXERCISE"****>>>

**Byron 1995 GSEP Exercise
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**CONTROL MESSAGE
JPIC - 5**

TIME: After Site Declaration
ISSUE TO: COMMUNICATION SERVICES, GENERAL OFFICE
PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": John Scopes again. I have just learned that the condition at Byron Station is worsening. My editor wants a story and he wants pictures. I'm getting ready to leave for Byron with a photographer and I would like a contact there to show me the layout and an answer some questions. It should be someone knowledgeable in operations and with enough clout to answer the tough questions.

(The reply should try to prevent you from going to the plant. Push for an interview of some kind, threaten to go to the site for pictures, try to get Communications Services to send you to the JPIC.)

<<<****"THIS IS AN EXERCISE"****>>>

**Byron 1995 GSEP Exercise
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**CONTROL MESSAGE
JPIC - 6**

TIME: 10:45 or after JPIC Activation

ISSUE TO: MEDIA MONITORING/RUMOR CONTROL AND ALL MOCK MEDIA

PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": WMAQ television Special Report: ComEd has declared an emergency at its nuclear plant near Byron, Illinois. A series of mishaps at the plant have combined to place the once highly regarded nuclear station in the worst state of emergency in the company's 35 years of nuclear power generation.

In an alarming sequence of calamity, the plant has continued its downward spiral throughout the morning calling into question the utility's ability to control the reactor and guarantee the safety of the population in the surrounding countryside.

A ComEd spokesperson has assured us there is no danger to the public but admitted under questioning that the situation could worsen.

The utility is beefing up its staff to address the emergency and is working with state and federal officials to regain control of the reactor and protect the general public.

Stay tuned to WMAQ for more information as soon as it becomes available.

<<<****"THIS IS AN EXERCISE"****>>>

**Byron 1995 GSEP Exercise
November 15, 1995**

**CONTROL MESSAGE
JPIC - 7**

TIME: 11:15 A.M.

**ISSUE TO: MEDIA MONITORING/RUMOR CONTROL AND ALL MOCK
MEDIA**

PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": WGN Special Report:

A WGN minicam and crew has been denied access to the troubled ComEd nuclear plant at Byron. In fact, Ogle County Sheriff's police have blockaded all roads leading to the plant and are refusing to let anyone pass. We are going live now to Jane Truelies in Ogle County.

Jane: Thank you Jim. As you can see behind us, the road has been blocked by the sheriffs department and no one is being allowed in except ComEd personnel. Despite assurances from the utility that there is no danger to the public, it would appear that extraordinary measures are being taken to isolate the plant. When we asked why we were not allowed to get closer, we were told, quote: "Because it's not safe..." Back to you Jim.

Jim: Thank you Jane for that report. Stay tuned to WGN for further updates as they become available.

<<<***"THIS IS AN EXERCISE"***>>>

Byron 1995 GSEP Exercise
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CONTROL MESSAGE
JPIC - 8

TIME: 11:45 A.M.
ISSUE TO: MEDIA MONITORING/RUMOR CONTROL AND ALL MOCK
MEDIA
PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": This is WDUM talk radio. Go ahead, you're on the air.

"Yeah, Bill? How ya doin? All I got to say about Byron is, I used to work for Edison, you know? And all I got to say is: ask them how many people they got rid of over the last couple years. They been firin, retirin, all kinda (beep). You can't do that without losin somethin. The old people are retirin and the young ones just quitin. How you goin to run a company with half the people it used to take? Answer me that. That's all I wanted to say.

"Well, thank you. I'd say that's a pretty good question. Next caller, please.

<<<*****THIS IS AN EXERCISE*****>>>

**Byron 1995 GSEP Exercise
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**CONTROL MESSAGE
JPIC - 9**

TIME: After the General is declared.

ISSUE TO: MEDIA MONITORING/RUMOR CONTROL AND ALL MOCK MEDIA

PREREQUISITE: PERMISSION OF THE LEAD JPIC CONTROLLER

MESSAGE

"THIS IS AN EXERCISE": WTTW News flash: In spite of assurances to the contrary, conditions at the ComEd nuclear power plant in Byron have just gotten worse as utility officials have just declared that a condition of general emergency exists. We at WTTW have learned that radiation is leaking from the plant at that it is virtually certain that some segment of the surrounding population will need to be evacuated. We are keeping programming live right while we await further updates. In the meantime, lets recap events as they have occurred since early this morning.

...Recaps.

<<<***"THIS IS AN EXERCISE"***>>>