



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

30 May 1984

To: Greg Rogers, Duke Power Co.
From: Steve Long, NRC
Subject: Data List for July Exercise

I have enclosed the list of data points we would like to have the McGuire Station transmit to NRC for the July exercise.

On the first sheet, we would like to have all but the 20 items which I have lined out. We would prefer that you blank-out these 20 values.

On the second sheet, we would like the 5 thermocouples already formatted, plus the 17 additional parameters that I have listed.

Please let me know if these parameters can be made available for the scenario we will use.

Thanks for your help. I hope to speak with you again, next week.

ERDS Exercise (McGuire), July 19, 1984

Director	Bob Baer
Deputy Director	Brian Sheron
Reactor Systems	Ernie Rossi
	Gary Holahan
Containment	
I & C	Tom Dunning
Electrical	Ignacio Villalva
Accident Sequence	
Regional Liason	George Lanik
ENS Communicator	Don Kirkpatrick
Info Coordinator	John Craig
Project Manager	Ralph Birkel
Team Coorkinator	John Hickman/Ray Priebe

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OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

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Charlotte, N. C. 28242

McGUIRE NUCLEAR STATION
PLANT DATA AND STATUS INFORMATION

PAGE _____
DATE _____
TIME _____

UNIT _____
PLANT STATUS _____

A. PRIMARY SYSTEM

1. (POINT ID) NC LOOP A, W. R. HOT LEG _____ °F
2. (POINT ID) NC LOOP B, W. R. HOT LEG _____ °F
3. (POINT ID) NC LOOP C, W. R. HOT LEG _____ °F
4. (POINT ID) NC LOOP D, W. R. HOT LEG _____ °F
5. (POINT ID) NC LOOP A, W. R. COLD LEG _____ °F
6. (POINT ID) NC LOOP B, W. R. COLD LEG _____ °F
7. (POINT ID) NC LOOP C, W. R. COLD LEG _____ °F
8. (POINT ID) NC LOOP D, W. R. COLD LEG _____ °F
9. (POINT ID) NC SYSTEM W. R. PRESSURE _____ PSIG
10. (POINT ID) PZR PRESSURE _____ PSIG
11. (POINT ID) PZR LEVEL _____ %
12. (POINT ID) REACTOR COOLANT PUMP A _____ ON/OFF
13. (POINT ID) REACTOR COOLANT PUMP B _____ ON/OFF
14. (POINT ID) REACTOR COOLANT PUMP C _____ ON/OFF
15. (POINT ID) REACTOR COOLANT PUMP D _____ ON/OFF
16. (POINT ID) SOURCE RANGE LEVEL, CH. 1 _____ CPS
17. (POINT ID) SOURCE RANGE LEVEL, CH. 2 _____ CPS
18. (POINT ID) REACTOR COOLANT BORON CONC. _____ PPM
19. (POINT ID) REACTOR THERMAL POWER _____ %
20. (POINT ID) POWER RANGE AVG. LEVEL QUADRANT 1 _____ %

B. SECONDARY SYSTEM

1. (POINT ID) STEAM GEN. A WIDE RANGE LEVEL _____ %
2. (POINT ID) STEAM GEN. B WIDE RANGE LEVEL _____ %
3. (POINT ID) STEAM GEN. C WIDE RANGE LEVEL _____ %
4. (POINT ID) STEAM GEN. D WIDE RANGE LEVEL _____ %
5. (POINT ID) STEAM GEN. A STEAM PRESSURE _____ PSIG
6. (POINT ID) STEAM GEN. B STEAM PRESSURE _____ PSIG
7. (POINT ID) STEAM GEN. C STEAM PRESSURE _____ PSIG
8. (POINT ID) STEAM GEN. D STEAM PRESSURE _____ PSIG
9. (POINT ID) TOTAL STEAM GEN. A FEEDWATER FLOW _____ MLB/HR
10. (POINT ID) TOTAL STEAM GEN. B FEEDWATER FLOW _____ MLB/HR
11. (POINT ID) TOTAL STEAM GEN. C FEEDWATER FLOW _____ MLB/HR
12. (POINT ID) TOTAL STEAM GEN. D FEEDWATER FLOW _____ MLB/HR
13. (POINT ID) AUX. FEEDWATER FLOW TO S/G A _____ MLB/HR
14. (POINT ID) AUX. FEEDWATER FLOW TO S/G B _____ MLB/HR
15. (POINT ID) AUX. FEEDWATER FLOW TO S/G C _____ MLB/HR
16. (POINT ID) AUX. FEEDWATER FLOW TO S/G D _____ MLB/HR

C. AUXILIARY/INJECTION SYSTEMS

1. (POINT ID) CHARG. PUMP DISCH. HEADER FLOW _____ GPM
2. (POINT ID) RESIDUAL HEAT REMOVAL IN RESIDUAL FLOW _____ GPM
3. (POINT ID) CENTRIFUGAL CHARGING PUMP A _____ ON/OFF
4. (POINT ID) CENTRIFUGAL CHARGING PUMP B _____ ON/OFF
5. (POINT ID) SAFETY INJECTION PUMP A _____ ON/OFF
6. (POINT ID) SAFETY INJECTION PUMP B _____ ON/OFF
7. (POINT ID) LEWDOWN H₂ OUTFLOW _____ GPM

D. CONTAINMENT SYSTEMS

1. (POINT ID) CONTAINMENT PRESS. _____ PSIG
2. (POINT ID) LOWER CONT. AMB. AIR TEMP A _____ °F
3. (POINT ID) UPPER CONT. AMB. AIR TEMP A _____ °F
4. (POINT ID) CONTAINMENT SUMP LEVEL TR. A _____ FT
5. (POINT ID) CONTAINMENT SUMP LEVEL TR. B _____ FT
6. (POINT ID) CONTAINMENT H₂ CONCEN. TR. A _____ %

E. ENVIRONMENTAL SYSTEMS

1. (POINT ID) EMF48 REACTOR COOLANT MONITOR _____ CPM
2. (POINT ID) EMF51A IN CONTAINMENT HI RANGE RAD MON. _____ R/HR
3. (POINT ID) EMF51B IN CONTAINMENT HI RANGE RAD MON. _____ R/HR
4. (POINT ID) EMF36 UNIT VENT GAS, HI RANGE _____ R/HR
5. (POINT ID) EMF36 UNIT VENT GAS, HI RANGE _____ CPM
6. (POINT ID) EMF36 UNIT VENT PARTICULATE, HI RANGE _____ CPM
7. (POINT ID) EMF37 UNIT VENT IODINE _____ CPM
8. (POINT ID) EMF24 STEAMLINE 1A RADIATION MONITOR _____ R/HR
9. (POINT ID) EMF25 STEAMLINE 1B RADIATION MONITOR _____ R/HR
10. (POINT ID) EMF26 STEAMLINE 1C RADIATION MONITOR _____ R/HR
11. (POINT ID) EMF27 STEAMLINE 1D RADIATION MONITOR _____ R/HR
12. (POINT ID) EMF49 LIQUID WASTE DISCHARGE, HI RANGE _____ CPM
13. (POINT ID) UPPER WIND SPEED _____ MPH
14. (POINT ID) LOWER WIND SPEED _____ MPH
15. (POINT ID) LOWER TO UPPER DELTA T _____ °C
16. (POINT ID) UPPER WIND DIRECTION _____ °
17. (POINT ID) LOWER WIND DIRECTION _____ °
18. (POINT ID) PRECIPITATION IN LAST 15 MIN. _____ IN
19. (POINT ID) AMBIENT AIR TEMPERATURE _____ °C
20. (POINT ID) UNIT VENT STACK FLOW _____ FT³/MIN

McGUIRE NUCLEAR STATION
PLANT DATA AND STATUS INFORMATION

PAGE _____
DATE _____
TIME _____

UNIT _____
PLANT STATUS _____

F. ADDITIONAL INFORMATION

POINT ID	IN CORE TEMP A08 T/C 1	IN CORE TEMP A10 T/C 2 (UPPER HEAD)	IN CORE TEMP C04 T/C 3	IN CORE TEMP C08 T/C 4	IN CORE TEMP C08 T/C 5	DIGITAL STATUS (IF ANY)	VALUE	UNITS
1. (POINT ID)								
2. (POINT ID)								
3. (POINT ID)								
4. (POINT ID)								
5. (POINT ID)								
6. (POINT ID)								
POINT ID	42 CHARACTER DESCRIPTION							
7. A 10P3	Reactor Coolant Flow - Loop A							
8. A 10P4	- Loop B							
9. A 10P5	- Loop C							
10. A 1101	- Loop D							
11. A 0856	RHR / Low Pressure Injection Flow							
12. A 0933	Condensate Storage Tank Level							
13. A 1218	Lower to Middle AT							
14. A 0085	Aux. Bldg. Vent. Radiation							
15. A 0097	Fuel Bldg. Vent. Radiation							
16. A 0139	Waste Gas Discharge Hi Range							
17. D 0402	RWST Level Lo / Not Lo							
18. D 0401	RWST Level Em Lo / Not Em Lo							
19. A 0638	Sigma B							
20. P 0596	Main Steam Released in Last 15 min - Loop A							
21. P 0597	- Loop B							
22. P 0598	- Loop C							
23. P 0599	- Loop D							
24.								
25.								
26.								
27.								
28.								
29.								
30.								
31.								
32.								
33.								
34.								
35.								

Parameter/Data Point List for McGuire Exercise

<u>NRC Parameter</u>	<u>McGuire Data Point(s)</u>
Pressurizer Level	Pressurizer Level (A1124)
Hot Leg Temperatures	Hot Leg W.R. Temp Loop A (A0965) Loop B (A0971) Loop C (A0977) Loop D (A0983)
Cold Leg Temperatures	Cold Leg W.R. Temp Loop A (A1061) Loop B (A1067) Loop C (A1073) Loop D (A1079)
Coolant Flow	Coolant Flow Loop A (A1083) Loop B (A1089) Loop C (A1095) Loop D (A1101)
Reactor Pressure	NC System W.R. Pressure (A0826)
Core Thermocouples	Core Thermocouples (A0070) (A0268) (A0274) (A0280) (A0286)
Core Criticality Status	Source Range Monitor (A1177)
Charging/Makeup Flow	Charging Flow (A0758)
Safety Injection Flow	SI Pump Status Train A (D3574) Train B (D3576)
RHR/Low Pressure Injection Flow	RHR Flow (A0856)

Containment Sump Level

Refueling Water Storage Tank Level

PORV Status

SRV Status

Containment Sump Level (A1041)

RWST Lo/Not Lo B/S (D0402)

Em Lo / Not B/S (D0401)

Steam Generator Levels

W.R Level S/G A (A1007)

S/G B (A1005)

S/G C (A0980)

S/G D (A0988)

Feedwater Flow

Main F/W Flow S/G A (P1412)

S/G B (P1414)

S/G C (P1416)

S/G D (P1418)

Aux F/W Flow S/G A (P1208)

S/G B (P1209)

S/G C (P1210)

S/G D (P1211)

Condensate Storage Tank Level

Condensate Tank Level (A0933)

Containment Pressure

Containment Temperature

Containment H₂ Conc.

Containment Pressure (A0785)

Containment Temp - Lower (A1228)

- Upper (A1204)

Containment H₂ Conc. (A0848)

Containment Radiation Level

Containment Radiation - Area I (A0P29)

- Area II (A0P35)

Coolant Radioactivity Level

Coolant Activity (A0115)

Process Radiation Monitor Levels

Steam Line Rad. Loop A (A1368)

Loop B (A1374)

Loop C (A1380)

Loop D (A1386)

Main Steam Released

Steam Released Last 15 min

Loop A {P0596}
Loop B {P0597}
Loop C {P0598}
Loop D {P0599}

Effluent Radiation Monitor Levels

Unit Vent N.G. Hi Hi Range (A1009)

N.G. Hi Range (A0018)

Plant Hi Range (A0019)

Iodine (A0049)

Flow (A0863)

Aux Bldg Vent (A0085)

Fuel Bldg Vent (A0097)

Waste Gas Discharge (A0139)

Liquid Waste Discharge (A0127)

Wind Speed

Wind Speed Upper (A1069)

Lower (A1183)

Wind Direction

Wind Direction Upper (A1075)

Lower (A1189)

Atmospheric Stability

Lower - Upper ΔT (A1200)

Lower - Middle ΔT (A1218)

Sigma σ (A0638)

Items Not on OAC

<u>NRC parameter</u>	<u>Solution</u>
Subcooling Margin	Calculate from P and T ₁
PORV Status	Use ENS Voice Link
SRV Status	Use ENS Voice Link
Reactor Vessel Level	* Not measured
Electric Power Availability	Use ENS Voice Link
Safety Injection Flows	* Use ENS Voice Link
Condenser Air Removal Rad.	Use ENS Voice Link (EMF-33)
Stability Class	Calculate

* Licensee is installing.

REACTOR COOLANT SYSTEM PARAMETERS

PRESSURIZER LEVEL (A1124)

HOT-LEG TEMPERATURES (A0965, A0971, A0977, A0981)

COLD-LEG TEMPERATURES (A1061, A1067, A1072, A1077)

SUBCOOLING MARGIN *calculate*

COOLANT FLOW (A1083, A1089, A1095, A1101)

7 PORV STATUS

7 REACTOR VESSEL LEVEL (*Not available on DAC*)

7 SAFETY VALVE STATUS

REACTOR PRESSURE (A0926)

7 CORE THERMOCOUPLES (A0070, A0268, A0274, A0280, A0286)

INDICATES LOSS OF RCS INTEGRITY.

INDICATES ABILITY TO REMOVE HEAT FROM CORE.

INDICATES ABILITY TO REMOVE HEAT FROM CORE.

INDICATES ABILITY TO REMOVE HEAT FROM CORE.

INDICATES ABILITY TO REMOVE HEAT FROM CORE.

INDICATES COOLANT LOSS, CONTROL OF RCS INTEGRITY AND ABILITY TO KEEP CORE COVERED.

DIRECT MEASURE OF PRECURSOR TO CORE DAMAGE.

INDICATES COOLANT LOSS, CONTROL OF RCS INTEGRITY, AND ABILITY TO KEEP CORE COVERED.

INDICATES RCS FAILURE AND POTENTIAL FISSION PRODUCT TRANSPORT.

DIRECT MEASURE OF PRECURSOR TO CORE DAMAGE.