

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION: NBR: 8110270333 DOC. DATE: 81/10/21 NOTARIZED: NO DOCKET #
 FACIL: 50-244 Robert Emmet Ginn Nuclear Plant, Unit 1, Rochester G. 05000244
 AUTH. NAME: AUTHOR AFFILIATION
 MAIER, J. E. Rochester Gas & Electric Corp.
 RECIP. NAME: RECIPIENT AFFILIATION
 CRUTCHFIELD, D. Operating Reactors Branch 5

SUBJECT: Forwards correction to Table 1 submitted in util 811012 ltr
 re: SEP Topic V-5, leak detection. Correction revises Item 8
 concerning containment atmosphere temp monitoring.

DISTRIBUTION CODE: A0355 COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 2
 TITLE: SEP Topics

NOTES: 1 copy: SEP Sect, Ldr.

05000244

ACTION:	RECIPIENT		COPIES		RECIPIENT	COPIES	
	ID CODE/NAME		LTR	ENCL		ID CODE/NAME	LTR
ACTION:	ORR #5. BCI	01	7	7			
INTERNAL:	CONT. SYS A	07	1	1	HYD/GEO BR	10	2
	I&EI	06	2	2	NRR/DE/ADMGE	13	1
	OR ASSESS BR	11	1	1	REG. FILE	04	1
	SEP BR	12	3	3			
EXTERNAL:	ACRS	14	16	16	LPDR	03	1
	NRCI PDRI	02	1	1	NSIC	05	1
	NTIS		1	1			

UCT 29 1981

TOTAL NUMBER OF COPIES REQUIRED: LTR

39
38

ENCL

39
38

[illegible][illegible]

1. 200 2. 200 3. 200 4. 200 5. 200 6. 200 7. 200 8. 200 9. 200 10. 200 11. 200 12. 200 13. 200 14. 200 15. 200 16. 200 17. 200 18. 200 19. 200 20. 200 21. 200 22. 200 23. 200 24. 200 25. 200 26. 200 27. 200 28. 200 29. 200 30. 200 31. 200 32. 200 33. 200 34. 200 35. 200 36. 200 37. 200 38. 200 39. 200 40. 200 41. 200 42. 200 43. 200 44. 200 45. 200 46. 200 47. 200 48. 200 49. 200 50. 200 51. 200 52. 200 53. 200 54. 200 55. 200 56. 200 57. 200 58. 200 59. 200 60. 200 61. 200 62. 200 63. 200 64. 200 65. 200 66. 200 67. 200 68. 200 69. 200 70. 200 71. 200 72. 200 73. 200 74. 200 75. 200 76. 200 77. 200 78. 200 79. 200 80. 200 81. 200 82. 200 83. 200 84. 200 85. 200 86. 200 87. 200 88. 200 89. 200 90. 200 91. 200 92. 200 93. 200 94. 200 95. 200 96. 200 97. 200 98. 200 99. 200 100. 200

Figure 1. The effect of the concentration of the *Agaricus bisporus* spores on the growth of *Agaricus bisporus* and *Agaricus bisporus* spores on the growth of *Agaricus bisporus*.

1. *Chlorophyll a* (Chl *a*)
 2. *Chlorophyll b* (Chl *b*)
 3. *Chlorophyll c* (Chl *c*)
 4. *Chlorophyll d* (Chl *d*)
 5. *Chlorophyll e* (Chl *e*)
 6. *Chlorophyll f* (Chl *f*)
 7. *Chlorophyll g* (Chl *g*)
 8. *Chlorophyll h* (Chl *h*)
 9. *Chlorophyll i* (Chl *i*)
 10. *Chlorophyll j* (Chl *j*)
 11. *Chlorophyll k* (Chl *k*)
 12. *Chlorophyll l* (Chl *l*)
 13. *Chlorophyll m* (Chl *m*)
 14. *Chlorophyll n* (Chl *n*)
 15. *Chlorophyll o* (Chl *o*)
 16. *Chlorophyll p* (Chl *p*)
 17. *Chlorophyll q* (Chl *q*)
 18. *Chlorophyll r* (Chl *r*)
 19. *Chlorophyll s* (Chl *s*)
 20. *Chlorophyll t* (Chl *t*)
 21. *Chlorophyll u* (Chl *u*)
 22. *Chlorophyll v* (Chl *v*)
 23. *Chlorophyll w* (Chl *w*)
 24. *Chlorophyll x* (Chl *x*)
 25. *Chlorophyll y* (Chl *y*)
 26. *Chlorophyll z* (Chl *z*)
 27. *Chlorophyll aa* (Chl *aa*)
 28. *Chlorophyll ab* (Chl *ab*)
 29. *Chlorophyll ac* (Chl *ac*)
 30. *Chlorophyll ad* (Chl *ad*)
 31. *Chlorophyll ae* (Chl *ae*)
 32. *Chlorophyll af* (Chl *af*)
 33. *Chlorophyll ag* (Chl *ag*)
 34. *Chlorophyll ah* (Chl *ah*)
 35. *Chlorophyll ai* (Chl *ai*)
 36. *Chlorophyll aj* (Chl *aj*)
 37. *Chlorophyll ak* (Chl *ak*)
 38. *Chlorophyll al* (Chl *al*)
 39. *Chlorophyll am* (Chl *am*)
 40. *Chlorophyll an* (Chl *an*)
 41. *Chlorophyll ao* (Chl *ao*)
 42. *Chlorophyll ap* (Chl *ap*)
 43. *Chlorophyll aq* (Chl *aq*)
 44. *Chlorophyll ar* (Chl *ar*)
 45. *Chlorophyll as* (Chl *as*)
 46. *Chlorophyll at* (Chl *at*)
 47. *Chlorophyll au* (Chl *au*)
 48. *Chlorophyll av* (Chl *av*)
 49. *Chlorophyll aw* (Chl *aw*)
 50. *Chlorophyll ax* (Chl *ax*)
 51. *Chlorophyll ay* (Chl *ay*)
 52. *Chlorophyll az* (Chl *az*)
 53. *Chlorophyll aza* (Chl *aza*)
 54. *Chlorophyll abz* (Chl *abz*)
 55. *Chlorophyll acz* (Chl *acz*)
 56. *Chlorophyll adz* (Chl *adz*)
 57. *Chlorophyll aez* (Chl *aez*)
 58. *Chlorophyll afz* (Chl *afz*)
 59. *Chlorophyll agz* (Chl *agz*)
 60. *Chlorophyll ahz* (Chl *ahz*)
 61. *Chlorophyll aiz* (Chl *aiz*)
 62. *Chlorophyll ajz* (Chl *ajz*)
 63. *Chlorophyll akz* (Chl *akz*)
 64. *Chlorophyll alz* (Chl *alz*)
 65. *Chlorophyll amz* (Chl *amz*)
 66. *Chlorophyll anz* (Chl *anz*)
 67. *Chlorophyll aoz* (Chl *aoz*)
 68. *Chlorophyll apz* (Chl *apz*)
 69. *Chlorophyll aqz* (Chl *aqz*)
 70. *Chlorophyll arz* (Chl *arz*)
 71. *Chlorophyll asz* (Chl *asz*)
 72. *Chlorophyll atz* (Chl *atz*)
 73. *Chlorophyll auz* (Chl *auz*)
 74. *Chlorophyll avz* (Chl *avz*)
 75. *Chlorophyll awz* (Chl *awz*)
 76. *Chlorophyll axz* (Chl *axz*)
 77. *Chlorophyll ayz* (Chl *ayz*)
 78. *Chlorophyll azz* (Chl *azz*)
 79. *Chlorophyll azaa* (Chl *aza*_{aa})
 80. *Chlorophyll abz* (Chl *abz*)
 81. *Chlorophyll acz* (Chl *acz*)
 82. *Chlorophyll adz* (Chl *adz*)
 83. *Chlorophyll aez* (Chl *aez*)
 84. *Chlorophyll afz* (Chl *afz*)
 85. *Chlorophyll agz* (Chl *agz*)
 86. *Chlorophyll ahz* (Chl *ahz*)
 87. *Chlorophyll aiz* (Chl *aiz*)
 88. *Chlorophyll ajz* (Chl *ajz*)
 89. *Chlorophyll akz* (Chl *akz*)
 90. *Chlorophyll alz* (Chl *alz*)
 91. *Chlorophyll amz* (Chl *amz*)
 92. *Chlorophyll anz* (Chl *anz*)
 93. *Chlorophyll aoz* (Chl *aoz*)
 94. *Chlorophyll apz* (Chl *apz*)
 95. *Chlorophyll aqz* (Chl *aqz*)
 96. *Chlorophyll arz* (Chl *arz*)
 97. *Chlorophyll asz* (Chl *asz*)
 98. *Chlorophyll atz* (Chl *atz*)
 99. *Chlorophyll auz* (Chl *auz*)
 100. *Chlorophyll avz* (Chl *avz*)
 101. *Chlorophyll awz* (Chl *awz*)
 102. *Chlorophyll axz* (Chl *axz*)
 103. *Chlorophyll ayz* (Chl *ayz*)
 104. *Chlorophyll azz* (Chl *azz*)
 105. *Chlorophyll azaa* (Chl *aza*_{aa})
 106. *Chlorophyll abz* (Chl *abz*)
 107. *Chlorophyll acz* (Chl *acz*)
 108. *Chlorophyll adz* (Chl *adz*)
 109. *Chlorophyll aez* (Chl *aez*)
 110. *Chlorophyll afz* (Chl *afz*)
 111. *Chlorophyll agz* (Chl *agz*)
 112. *Chlorophyll ahz* (Chl *ahz*)
 113. *Chlorophyll aiz* (Chl *aiz*)
 114. *Chlorophyll ajz* (Chl *ajz*)
 115. *Chlorophyll akz* (Chl *akz*)
 116. *Chlorophyll alz* (Chl *alz*)
 117. *Chlorophyll amz* (Chl *amz*)
 118. *Chlorophyll anz* (Chl *anz*)
 119. *Chlorophyll aoz* (Chl *aoz*)
 120. *Chlorophyll apz* (Chl *apz*)
 121. *Chlorophyll aqz* (Chl *aqz*)
 122. *Chlorophyll arz* (Chl *arz*)
 123. *Chlorophyll asz* (Chl *asz*)
 124. *Chlorophyll atz* (Chl *atz*)
 125. *Chlorophyll auz* (Chl *auz*)
 126. *Chlorophyll avz* (Chl *avz*)
 127. *Chlorophyll awz* (Chl *awz*)
 128. *Chlorophyll axz* (Chl *axz*)
 129. *Chlorophyll ayz* (Chl *ayz*)
 130. *Chlorophyll azz* (Chl *azz*)
 131. *Chlorophyll azaa* (Chl *aza*_{aa})
 132. *Chlorophyll abz* (Chl

1. The first group of variables includes the demographic characteristics of the respondents, such as age, gender, and education level. These variables are used to control for potential confounding factors that may influence the relationship between the independent and dependent variables.

2. The second group of variables represents the independent variables, which are the factors being manipulated or observed in the study. These variables are hypothesized to have a direct effect on the dependent variable.

3. The third group of variables consists of the dependent variable, which is the outcome or response being measured in the study. This variable is the primary focus of the research and is expected to be influenced by the independent variables.

4. The fourth group of variables includes control variables, which are used to account for other factors that may affect the dependent variable. These variables are typically measured and controlled for in the statistical analysis to isolate the effect of the independent variables.

5. The fifth group of variables represents the mediating variables, which are hypothesized to explain the mechanism through which the independent variables influence the dependent variable. These variables are measured and analyzed to provide a more detailed understanding of the underlying processes.

6. The sixth group of variables includes the moderating variables, which are hypothesized to influence the strength or direction of the relationship between the independent and dependent variables. These variables are measured and analyzed to identify conditions under which the relationship may vary.

7. The seventh group of variables consists of the interaction variables, which are used to test for potential interactions between the independent variables. These variables are measured and analyzed to determine if the effect of one independent variable on the dependent variable depends on the level of another independent variable.

8. The eighth group of variables includes the error term, which represents the unexplained variance in the dependent variable. This term is used in the statistical models to account for random noise and measurement error.

9. The ninth group of variables represents the control variables, which are used to account for other factors that may affect the dependent variable. These variables are typically measured and controlled for in the statistical analysis to isolate the effect of the independent variables.

10. The tenth group of variables includes the mediating variables, which are hypothesized to explain the mechanism through which the independent variables influence the dependent variable. These variables are measured and analyzed to provide a more detailed understanding of the underlying processes.

11. The eleventh group of variables consists of the moderating variables, which are hypothesized to influence the strength or direction of the relationship between the independent and dependent variables. These variables are measured and analyzed to identify conditions under which the relationship may vary.

12. The twelfth group of variables includes the interaction variables, which are used to test for potential interactions between the independent variables. These variables are measured and analyzed to determine if the effect of one independent variable on the dependent variable depends on the level of another independent variable.

13. The thirteenth group of variables represents the error term, which represents the unexplained variance in the dependent variable. This term is used in the statistical models to account for random noise and measurement error.

14. The fourteenth group of variables includes the control variables, which are used to account for other factors that may affect the dependent variable. These variables are typically measured and controlled for in the statistical analysis to isolate the effect of the independent variables.

15. The fifteenth group of variables consists of the mediating variables, which are hypothesized to explain the mechanism through which the independent variables influence the dependent variable. These variables are measured and analyzed to provide a more detailed understanding of the underlying processes.

16. The sixteenth group of variables includes the moderating variables, which are hypothesized to influence the strength or direction of the relationship between the independent and dependent variables. These variables are measured and analyzed to identify conditions under which the relationship may vary.

17. The seventeenth group of variables consists of the interaction variables, which are used to test for potential interactions between the independent variables. These variables are measured and analyzed to determine if the effect of one independent variable on the dependent variable depends on the level of another independent variable.

18. The eighteenth group of variables represents the error term, which represents the unexplained variance in the dependent variable. This term is used in the statistical models to account for random noise and measurement error.

19. The nineteenth group of variables includes the control variables, which are used to account for other factors that may affect the dependent variable. These variables are typically measured and controlled for in the statistical analysis to isolate the effect of the independent variables.

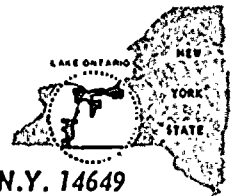
20. The twentieth group of variables consists of the mediating variables, which are hypothesized to explain the mechanism through which the independent variables influence the dependent variable. These variables are measured and analyzed to provide a more detailed understanding of the underlying processes.



ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

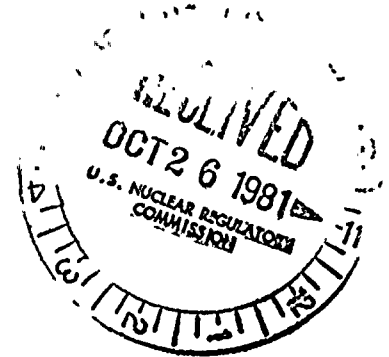
JOHN E. MAIER
VICE PRESIDENT

TELEPHONE
AREA CODE 716 546-2700



October 20, 1981

Director of Nuclear Reactor Regulation
Attention: Mr. Dennis M. Crutchfield, Chief
Operating Reactors Branch No. 5
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555



Subject: SEP Topic V-5, Reactor Coolant Pressure Boundary
Leak Detection
R. E. Ginna Nuclear Power Plant
Docket No. 50-244

Dear Mr. Crutchfield:

Rochester Gas and Electric submitted comments on the subject SEP topic by letter dated October 12, 1981. An error has been noted in Table 1 attached to that letter. Item 8, Containment Atmosphere Temperature Monitoring, does not have control room indication. This error has been corrected in the attached revised Table 1.

Since regulatory criteria do not require control room indication for this parameter, there is no effect on the conclusion noted in our October 12, 1981 letter.

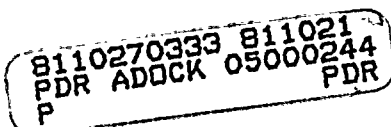
Very truly yours,

John E. Maier
John E. Maier

Attachment

xc: Roy Zimmerman, NRC

A035
S
1/1



14. 86 10
A 100% 200

REACTOR COOLANT PRESSURE BOUNDARY LEAKAGE DETECTION SYSTEMS

Plant: R. E. Ginna

Table 1:
RCPB to Containment

System	Incorporated	Leak Rate Sensitivity	Time Req'd to Achieve Sensitivity	Earthquake For Which Function Is Assured	Control Room Indication for Alarms & Indicators	Documentation Reference	Testable During Normal Operation
1) Sump Level Monitoring (Inventory)	Yes	(1)	(1)	Not Available	Yes	(1)	Yes
2) Sump Pump Actuators Monitoring (Time Meters)	Yes	(1)	(1)	Not Available	Yes	(1)	Yes
3) Airborne Particulate Radioactivity Monitoring	Yes	< 1 gpm (2)	(1)	Not Available	Yes	(1)	Yes
4) Airborne Gaseous Radioactivity Monitoring	Yes	2 gpm - 10 gpm	1 hr	Not Available	Yes	(1)	Yes
5) Condensated Flow Rate from Air Coolers	Yes	1 to 30 gpm	1 hr	Not Available	Yes	(1)	Yes
6) Containment Atmosphere Pressure Monitoring	Yes	(1)	1 hr	SSE	Yes	(1)	Yes
7) Containment Atmosphere Humidity Monitoring	Yes	2-10 gpm	(1)	Not Available	No	(1)	Yes
8) Containment Atmosphere Temperature Monitoring	Yes	Not Available	(1)	Not Available	No	(1)	Yes
9) CVCS Flowrate	Yes	0.25 gpm	1 hr	Not Available	Yes	(1)	Yes

(1) See references 2, 3, 5 and 7

(2) .013 gpm within twenty minutes assuming the presence of corrosion product activity per Technical Specifications 3.1.5.3.

